City of Seattle Information Technology Residential Survey

Focus Group Reports
(Extracted from Full Technical Report)

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Table of Contents

ACKNOWLEDGMENTS	3
BackgroundBackground	4
Methods	4
Key Findings	5
Technology check list	5
Cable TV	
Cell Phones	7
Computers and the Internet	7
Business and Economic Development	
Telecommuting	9
Communication With Government	10
Seattle Community Access Network (SCAN)	10
Computer safety and security	
Importance of Computer and Internet Access	11
Community Building and Civic Participation	
Focus Groups	13
DETAILED FINDINGS	16
Technology check list	16
Who does not have access?	22
Multivariate Analyses	
Cable TV	
Comparisons among demographic groups	
Cell Phones	
Computers and the Internet	
Home Internet access	
Computing practices	
Experience with Computers and Computer Use	50
Change over time	
Computer experience in different subgroups	
Business and Economic Development	
Telecommuting	
Communication With Government	
Seattle.govSeattle Channel	
What Residents Want to Know More About on Seattle.gov and Seattle Channel	
Seattle Community Access Network (SCAN)	
Online Financial Transactions	
Importance of Computer and Internet Access	
High-Speed Internet	
Training	97
Access for Adults and Children	
Community Building and Civic Participation	
Use of the Internet to Reach Government	
DETAILED FINDINGS FROM FOCUS GROUPS	116

Filipino immigrants focus group	
Latino immigrants focus groups	120
African American focus group	
African immigrants focus group	
Korean immigrants focus group	
Chinese immigrants focus group	
Graduate students focus group	
Vietnamese immigrants focus group	
APPENDIX I METHODS DETAIL	
Weights	3
Limitations	
Focus Group Methodology	
APPENDIX II – INSTRUMENTS	9
T 1 1	
1 elepnone survey	9
Telephone surveyPaper survey administered at focus groups	9
Paper survey administered at focus groupsFocus Group Protocols	<i>1</i>

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Detailed Findings from Focus Groups

Filipino immigrants focus group

Summary: The Filipino community focus group participants were older and few expressed much familiarity or comfort with computers, although survey results showed that almost half have a home computer, use the Internet and email, though not many use attachments. One woman remarked that once her son left home, she was able to put the computer away. In general, participants did not initially express a great deal of interest in getting online, but they were able to identify a number of benefits to being online so that by the end of the group, they were calling for several computers located throughout the city in settings where they are comfortable, such as the IDIC, with some form of user-friendly instruction so they could learn how to use it. Participants also noted the importance of having a computer at home so they could go practice what they learned. Participants remarked that although they could access computers at the public library, they would not know what to do once they sat down, and the language barrier makes it difficult to ask for help. In addition to specific uses for a computer, participants remarked that even though they are old, they want to learn.

About half want to make contact with the government by telephone or with a letter. Some selected online or web contact. Most people want to participate by giving their opinions to the City on things they care about, with most noting a preference for using the telephone, calling into a meeting, or attending a community meeting.

Participants want to know more about what's happening around the city, including community, cultural, and heroic events. They are interested in crime and safety in their neighborhood, and they want to know about alerts. They also expressed interest in finding out about benefits they might be eligible for.

Few participants want to get information from the City via email, because of lack of access. These participants look primarily to TV news, and less often to the postal mail or newspaper.

A focus group with members of Seattle's Filipino community was conducted on April 3, 2009 with the International Drop-In Center (IDIC) located on Beacon Hill. Twenty-eight individuals signed up to participate in the focus group, and 65 individuals attended and participated to varying degrees. Forty-five participants completed a brief written survey. Few participants were able to participate in the planned focus group activities, a dynamic method that relied on mutual interviewing among the community members. Instead, an impromptu traditional focus group was conducted with 15 remaining participants. Many, but not all, of the participants were seniors. Two thirds (68%) were 65 or older, and 27% were between 51 and 64. Half have at least a four-year college degree, and three-fourths (76%) have at least some college or a two-year degree. Nearly half report an annual household income of less than \$20,000, and 83% report less than \$40,000 per year.

Technology Access and Use

Survey results show that of the 39 participants who indicated having any home electronics, nearly two-thirds (64%) have a cell phone and slightly more (69%) subscribe to cable. Not quite half (44%) have a computer at home and about a quarter (23%) have home Internet access. Only one person reported having a mobile device.

Using a show of hands at the beginning of the focus group, only about one quarter indicated that they use computers. Most people reported that they do not use computers either because they do not know how or because they do not have access. Two indicated, rather adamantly, that they are not interested in computers. Several of those with computers indicated that they are out of date.

When asked if they feel left behind as the world becomes more digital, most agree that they do and they indicated that they would be interested in attending a class, with one person adding, "It's a chance to learn."

Survey: More than half (55%) of the 31 who answered the questions said they use computers and almost many (48%) said they use email, but only about half of those use attachments (19%) or check their email daily. Not quite half (45%) said they use the Internet. Four in ten (40%) of those who indicated how they use computers or the Internet said they don't use it. Most (59%) said they are not very or not at all skilled on the computer).

Survey: The most common use of computers in this group was searching the Internet (50%) or finding information about local businesses (20%) or about health issues (20%). Ten percent noted using computers for shopping online or getting information about the community.

Survey: Almost half (46%) of the 28 participants who responded to this question noted that they use a computer at home, and one-fourth use a computer at the library. Nearly as many (21%) use a friend's or relative's computer. *In mutual conversations*, participants indicated that publicly available computers should not be placed *only* at the library, that there should be more computers at various places around the city for residents' use, and that everyone should have the opportunity to learn how to use it.

Survey: Nearly three-fourths (71%) of the 21 survey respondent indicating how Internet comes to their home indicated high speed access. People are most often satisfied with the reliability of their access (93%), and customer service (80%), and less satisfied with the cost (58%) or speed of access (75%). When asked what one thing would most improve their Internet service, the most common response was "nothing" (44%), followed by "price" (30%). 44% of the respondents said they would not be willing to pay anything for fast or faster Internet access and as many indicated amounts up to \$20 per month.

Increasing Access

Mutual Interviewing/Focus Group: When asked what they would like to use a computer for, participants had many ideas, including: getting information, email, shopping, news, emergencies, job search, doing business (or taking care of the things I need to do), paying bills, staying in touch with the community, and the casino (although one person did not want access because of his gambling problem). In conversations with one another, one person remarked, "If they'll learn how to use computers or the Internet, it will help them to have every communication, but they do not have enough funds to purchase a computer and study at their own expense." Another noted, "They want to learn."

Mutual Interviewing/Focus Group: Participants indicated a number of factors that would help them use computer and the Internet. Many mentioned having computer access, especially access at home so that they can take the class and then go home and practice. Other suggested putting between three and five computers at the IDIC that they could use. They asked for a beginner's class and if possible, personal instruction – at least user-friendly instruction. Some agreed that online instruction would be acceptable if it is user-friendly. Several participants asked for a resource person – someone who is available on certain days to help answer questions. One person commented, and many agreed, that the cost of access needs to be minimal to be feasible for them. One person said, "We are seniors and we can't attend any computer class. We need a driver." Several commented that seniors might not have a need to use computers or an interest in computers because of their age.

Focus Group: With the understanding that many participants do not have home computer or Internet access, we asked about using publically available computers. Participants agreed that the library is too far away for them and too hard to get to, adding that the computers are too busy there because there are not enough of them. A greater problem, however, seemed to be that these individuals do not know what to do with a computer – one person mentioned that given his current level of knowledge, all he can do is go and sit at the computer and look at it. Another added that people who come to the IDIC are not comfortable going to the library and asking for help if English is not their first language – this person remarked that they stay away and won't go in.

Focus Group: One person – one of those who indicated an adamant lack of interest – commented, "We need it for educational purposes. Even though we are seniors, if we can just learn how to turn it on, it'll give us a big boost to learn, even if we are older! Just the benefits of being able to turn it on – then we can learn how to use it, with an instructor on certain days.²⁰" Participants broke into applause in response to this statement. With the idea that the City might look for ways to make computers accessible to this group, a participant shouted, "Make it quick! We're getting older!"

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²⁰ Paraphrase

Communicating with the Government

Survey: Nearly half (45%) of the survey respondents prefer to make contact with the government by telephone and nearly as many (42%) prefer to write a letter. Just over a quarter (27%) prefers to make contact on the web or via email and the same percentage prefers to make contact in person. Correspondingly, when asked how they prefer to give their opinions to the City on things they care about, respondents most often (48%) selected the telephone/calling into a meeting, or attending a community meeting (26%). Only one person checked "none."

Survey: Although only 19% of the survey respondents had visited Seattle.gov and most did not know much about the City's website, several people noted in *mutual interviewing* what they would like to find on it, including:

- Special announcements updated daily, including happenings around the city
- Committee meetings updated daily
- Alerts
- Community events, including cultural presentations
- Heroic events
- Crimes and safety in my neighborhood
- Benefits available to seniors from any level of government
- How to find jobs, and government assistance to people without jobs

Survey responses indicated that two-thirds of the respondents prefer to get information *from* the City via the TV news. Not as many selected notices in the mail (39%), the newspaper (31%), or the radio or Seattle Channel (both 22%) (44% have seen the Seattle Channel on cable). Only 8% selected email notification and none selected getting text messages on the cell phone.

In mutual interviewing, many focus group participants noted that they liked the idea of receiving information from the City via email, though a few were opposed because not everyone has email access. When asked what might help people become more comfortable receiving information from the city in this way, participants suggested "little events" that teach people that don't know how to use a computer, or teaching "little by little every day," emphasizing the importance of offering beginner level classes widely dispersed around the city.

Latino immigrants focus groups

Summary: The two Latino focus groups, both with residents with limited English skills, were very different. One group had little education and few activities outside the home. This group had few computer skills and very little access to computers. However, they did have cell phones. The other group contained many people who work or attend school. These participants had better access to technology and more technology skills. Both wanted opportunities to improve their circumstances. Overall, low English proficiency combined with limited education is a powerful barrier to functioning easily in Seattle culture or online where so much local content is in English. Participants expressed an interest in learning English. If the immigrants are undocumented, they believe that they would not have access to community college classes where they could improve their English skills and learn how to use technology.

Latino participants want better technology access and called for more access to more Spanish computers at more places where they are comfortable (such as the Family Center) for more hours. Without computer skills or English proficiency, they feel they are being left behind. Many who want access were unaware of technology centers and wanted to know how to find them; others who were aware of technology centers felt that it is takes too long to get to a computer there, calling for rules similar to those used at the public library, which participants said were too restrictive for people looking for work. Participants also asked for free or low cost bilingual training in computer and Internet basics and a way to practice what they have learned. Additionally, they need some insight into how computers might be helpful for them, with expressed interest in job announcements, job training information, and support in starting or promoting a small business; information about their children's homework and school; and information about immigration reform and access to benefits. Further, they need access to Spanish content.

Some participants voiced concerns about too much computer access so that computers may create isolation and threaten family welfare by distracting family members from the family; others were concerned that without home computer access, children might have a more difficult time succeeding in school and it's more difficult for parents to monitor their children's school progress. At the same time, participants were concerned that with their low level of English proficiency, they would be unable to monitor their children's computer access successfully, and therefore be unable to protect their children from the well-publicized dangers of the Internet. Participants are also concerned about the viruses and hackers that threaten the safety of their computers and their personal information.

Participants prefer to make contact with the government via electronic means, if they have access to it. If not, they prefer telephone or writing a letter. On the City's website, they would like to see information about ESL classes, computer classes, employment opportunities, support groups or activities for parents and teens, health information and alerts, support for

opening a small business in Seattle, and community events and information, as well as local news, immigration news, traffic, and weather.

In addition to the City's website, participants also indicated that the TV news and the radio are both good ways to get information from the City.

Comments from participants and note-takers suggest that a mentoring program might work for this community where community members become teachers as they gain access and learn to use computers. This could also help fill a gap in the community suggested by the survey and by note-takers that Latinos do not belong to in person or electronic community groups, largely because of language and technology barriers, but want community involvement.

Two focus groups were conducted with Latino residents. One was on April 4, 2009 at the North Seattle Family Center in Lake City with four note-takers and 10 participants, recruited from Family Center program participants, and the other was on April 6, 2009 at the Family Works Resource Center in Wallingford with four note-takers and 24 participants, recruited from Family Works' client list and the associated food bank. Ten participants in the North Seattle group completed a brief written survey, as did 27 participants in the Family Works group. After some initial confusion in one group, participants engaged in the planned focus group activities – a dynamic method that relies on mutual interviewing among the community members – with apparent ease and interest. One note-taker made the observation that participants were comfortable talking with one another.

All but three of the participants in both groups indicated that they speak Spanish at home. The three who indicated English at home were at **Family Works** and two of these indicated also speaking Spanish at home. Overall, the age groups were well distributed, with 17% between 18 and 25, 37% in each of the next two age groups, and 9% between 51 and 64. The **North Seattle** participants were more similar in age with all the participants between 26 and 50 years old, compared with two-thirds of the **Family Works** group while another quarter of the **Family Works** group was younger than 26 and three participants were between 51 and 64.

Overall, nearly three in ten (28%) of the Latino participants reported less than a high school education, and another 46% indicated that high school completion was their educational achievement. The remaining quarter were distributed between some college (9%), four-year degree (11%), and post graduate (9%). Half of the **North Seattle** group had less than a high school education, and all but one of the others indicated a high school as their education level. The **Family Works** group reported somewhat more education, with half reporting having completed a high school education and only 20% indicating less than high school. About 30% of the **Family Works** group reported at least some college, with about 20% indicating at least a four-year college degree. About four in ten of the Latino participants were employed, and about one-quarter were homemakers. Half of the **Family Works** group was employed, 20% were

students, 15% homemakers, and 10% unemployed. One person was retired. Most in the **North Seattle** group were homemakers (63%), one was employed and two were unemployed. Household incomes ranged from less than \$20,000 per year (39%) to between \$50,000 and \$75,000, reported by one person. About one-quarter (26%) reported a household income between \$20,000 and \$30,000, and 30% reported income between \$30,000 and \$40,000. Few of the **North Seattle** participants supplied income information and the three that did indicated a yearly household income of less than \$30,000. Sixty percent of the **Family Works** group also had an income of less than \$30,000, and another 35% indicated an income between \$30,000 and \$40,000.

Summarizing, the two focus groups reached different demographics – the participants in the **North Seattle** participants had less education and the daily responsibilities for most were focused in the home, while the **Family Works** participants were somewhat more diverse in age, more educated on average, though some members of the groups also had limited education, with daily responsibilities for most focused outside the home in jobs or at school.

Technology Access and Use

Overall, two thirds of the participants in both groups have cable TV, three-fourths have cell phones, and nearly as many (72%) have a landline at home. Overall, 22% have a cell phone but no landline. About three-fourths (77%) are computer users and 71% are Internet users. Sixtynine percent report having a computer at home and 58% report having home Internet access. Most (69%) use email – with 30% checking it daily and another 41% checking it a few times a week. About half of the email users (34% overall) use email attachments. Overall 14% said they have Internet access on a mobile device.

Survey results show that the two groups have different profiles. The **North Seattle** group access less technology than the **Family Works** group, including cable TV (59% vs. 89%), cell phone only (26% vs. 11%), computers at home (33% vs. 81%), and home Internet access (22% vs. 70%). None of the **North Seattle** participants and 19% of the **Family Works** participants have a mobile device. *Mutual interviewing* results yield the same conclusion about computer access, with a less extreme division (63% vs. 93%). **North Seattle** note-takers explained that 50% to 60% of their families have computers at home, but they are old.

More of the **Family Works** participants are computer users (92% vs. 33%) and Internet users (88% vs. 22%). Again, *mutual interviewing* yields the same conclusion with a less extreme division. About 90% of **Family Works** interviewees were recorded as having used computers for at least a year, compared with 55% of **North Seattle** interviewees. This figure may be too high for the **North Seattle** group as three-fourths of the same participants from **North Seattle** said they would *like* to use a computer and the Internet, agreeing that they are missing out and having trouble getting needed information, staying in touch and getting things done by not having access. It may be that participants have computer access, but no Internet access and no clear understanding of the difference.

Survey results indicate that many more of the **Family Works** participants use email (85% vs. 22%), and email attachments (46% vs. 0%). Almost half of the **Family Works** participants check email at least daily and most of the others check it a few times a week. Two said they never check it. None of the **North Seattle** participants check email daily. Four said they check it a few times a week, and four said they check it less than weekly or never.

Survey: Overall, of the 27 participants who indicated their type of Internet access, 30% noted dialup, 30% DSL, 15% cable, and 19% WiFi. Eleven percent indicated that they have premium or business access. Only two of the **North Seattle** participants indicated the type of Internet access – both dialup. The other **North Seattle** participants did not have any Internet access at home. **Family Works** participants were distributed across the types of access: dialup access (24%), DSL (32%), cable (16%), WiFi (20%), and Business/Premium (12%).

Survey participants were varied in what they would be willing to pay for fast (or faster) Internet service. Most commonly (40%), participants checked \$10-\$20 per month, 22% selected an

amount less than \$10 per month, and another 26% checked \$20-\$30. Three checked \$30-\$40 and one indicated more than \$40. Two people in **North Seattle** indicated they would pay nothing, two selected \$5 to \$10 per month, three selected \$10 to \$20, and two selected \$20-\$30. **Family Works** participant responses were slightly higher so that none indicated that they would pay nothing, one selected less than \$5 per month, three selected \$5-\$10 per month, 11 (42%) selected \$10-\$20, seven (27%) selected \$20-\$30, and four selected more than \$30.

Survey: Respondents were asked to identify their skill level with computers and the Internet, from "None or not very skilled" to "Expert." Most commonly (40%) respondents selected "None or not very skilled." Fourteen percent selected "Know what I need to know," and 20% each selected "Can figure out new programs as I need them" and "Skilled (sometimes help others)." Two people selected "Expert."

Paraphrased Comments

Family Works: When I open web pages and I don't know where to go next

North Seattle: They need education – they don't know. Attack from the root with education: how computers work, how to take advantage of them and at the same time, how to protect the family.

North Seattle participants rated themselves as significantly less skilled. Eight (89%) of the **North Seattle** participants selected "None or not very skilled" as their skill level with computers and one said she is skilled enough to sometimes help others. The **Family Works** participants are more diverse. About 20% selected "I know what I need to know," and about a quarter each selected "none or not very skilled," "I can figure out new programs as I need them," or that they are "Skilled (sometimes help others)." Two people in this group identified themselves as "Expert."

Mutual interviewing: Half of the participants who said they do not have a computer at home also said that they want one. These were at **North Seattle.** The three **Family Works** participants without a computer at home said that they do not want one. About one fourth of the participants with a home computer said it is good enough for their needs – half of the six **North Seattle** participants with a home computer and 82% of the **Family Works** participants with a

home computer. About half said that they use computers in another location and 58% of these say it is enough for their needs; about three-fourths of the **Family Works** participants, and none of the **North Seattle** participants. Nearly four in ten (37%) of the participants indicated that they have problems using computers and the Internet. At **North Seattle** this figure was seven of the eight respondents, and 22% of the **Family Works** participants. Not quite half (47%) of the respondents said they are able to use a computer as much as they want. More of the **Family Works** participants agreed with this than the **North Seattle** participants (56% vs. 33%).

Survey: Nearly all (95%) of the participants are satisfied with the reliability of their Internet access, and fewer, but still most, are satisfied with the speed (76%) and the customer service (72%). The fewest (61%) were satisfied with the cost. However, when asked what one thing would most improve their Internet service, the most common response was *speed* (50%), with price coming in a close second (46%). Most of those answering these questions were from **Family Works**. Only one of the two Internet users at **North Seattle** responded to these items.

Survey: Overall, the most common use for computers was searching the Internet (68%). Participants also use computers to find health information (44%) and use social networking sites (38%). Between 20% and 30% indicated that they use computers to get information about their community and to shop online (both 29%); find information about local businesses (26%); and attend an online class or webinar (21%). Overall 18% said they do not use computers. The most common use of computers in the **North Seattle** group was no use (56%). One third each checked finding health information and getting information about the community. Two said they search the Internet and one each selected taking an online class and social networking. The **Family Works** group provided a different profile. The most frequently selected activity was searching the Internet (84%); followed by finding information about health issues (48%); and social networking (48%). Other uses were shopping online (40%); finding information about a local business (36%), getting information about the community (28%), and attending an online class (24%). None in either group have sold goods or services online or contributed to a blog or wiki.

In mutual interviewing, participants in both groups mentioned that computers are good for getting information, including keeping current on news ("getting the ultimate in happenings around the world"); finding jobs; education, including training and helping children with homework; and communication with family and friends, including those in Mexico. In addition, Family Works participants mentioned using computers for shopping; listening to music; and getting and sharing photos. What they like best about this technology is being in touch with family and friends; staying informed; having access to communication and information/learning new things; homework; managing finances, including banking and bill paying; access to addresses (mapping programs), and playing games. At North Seattle, even though usually not computer users themselves, participants mentioned that computers are also good for looking for benefits; getting information about special events, health, weather, and maps and directions. One person reported finding a new job on the Internet.

Survey: Most of the computer users in these groups use a computer at home (83%). Half noted the library, and about a quarter each indicated work (23%), school (27%), and 10% each indicated a friend or relative's, and a community technology center. Four **North Seattle** survey respondents identified two places that they use computer: home (50%), and the library (50%). Many more (88%) of the **Family Works** group indicated that they use a computer at home, followed by the library (50%), school (27%), and work (23%). Twelve percent each selected a friend's or relative's, a community technology center, or some other location.

In mutual interviewing, participants in both groups were aware of public access computers at the public library. Awareness of community technology centers was mixed. Libraries and the Family Center were the only locations identified by the **North Seattle** participants to access computers. Family Works participants identified home, the library, school, work, and a community center as locations where people use computers. Family Works participants singled out the libraries as a great resource with good Internet access which should be maintained. However, participants in both groups had concerns about library access. Some observed that although the service is good at the library, the computers are slow and can be reserved for only an hour, which is not long enough for people looking for a job. Others noted that libraries do not have enough computers to meet the demand, don't permit the use of social networking sites, and that the computers are getting old. Participants also note that libraries tend to close at 6 when people are getting off work, and suggested a better schedule.

Paraphrased Comments

Family Works: We need training. And get down the prices for Internet and software.

Access to the Internet need to be more equal – available for everybody. It's a tool, but people get isolated. Everybody has a computer. We complain about computers but we also have it. Some families don't, though.

North Seattle: Families may have a computer, but they don't know how to use it – they need courses on basics – most don't know how to start a computer. They need an instructor who knows, reads, and writes in Spanish.

Some families have computers, but not Internet due to high cost. Free Internet or at least in a very low cost would be great.

Some participants were aware of the community technology centers, but noted that the service is slow at those locations, suggesting that the technology centers implement the same relatively restrictive system of use as the library. Others remarked that public access computers at technology canters need more software, and that bilingual, "user-friendly" training is needed, suggesting computer access through the Family Center, along with a way to learn. Most **North Seattle** participants were not aware of community technology centers, even through the Family Center, and wanted to know how to access them.

Generally, about half the participants said that the computers they use away from home are good and/or fast, and about half had concerns, either with the computers (too slow or too few) or with the limited time. Most of the **Family Works** participants (78%) said that the available public access is enough for their needs, and one added that he/she would like to learn more about it. Four remarked that they need something better, including more computers available (expressed as wanting more time on the computers, more computers – especially at community

centers, or a complaint about the slow service at the community centers) and more up-to-date programs.

Goals and ambitions about computer use

Overall, Latino community members want to more access to computers and the Internet than they currently have. Participants noted that while publicly available computer meet some of the need of the Latino community, those without any computer skills and without English proficiency are being left behind. Participants suggest two steps for helping Hispanic families get online: 1) increasing access to computers and the Internet preferably by making home access affordable, and if not them by increasing the availability of public access computers at libraries, Family Centers, community centers – wherever people are. This would require increasing the number of computers available, the amount of time available per use, as well as the hours of operation to beyond business hours; and 2) providing free or low cost basic and advanced bilingual computer and Internet training on a flexible schedule and in multiple locations, with the opportunity for learners to practice new skills.

Paraphrased Comments

Family Works: We face two generations: the old generation would like to get rid of the computers because they got isolated and with limitations in the work force. In these days, just one person can do what many people used to do before. For the new generation, it's a great took to get I touch with family, friends, photos, entertainment, information, jobs, etc.

North Seattle: There is a problem when kids are using computers in English but parents don't speak English – how can they tell if their kids are getting into trouble?

I would like to learn about community events and children school programs; I do not use it — I do not know how

Mutual interviewing: Participants with more computer experience gave two-sided answers to these questions, reflecting two different perspectives. From the perspective of older participants, computers have created problems in their lives, by reducing job opportunities and creating isolation in their communities. From the perspective of younger participants, computers and the Internet are convenient tools that bring many benefits including convenience, connection, information, and education.

About half of the participants said they want more computing opportunity, or to use computers and the Internet for more things than they currently do. The groups were quite different in their level of computer experience, yet some participants in both groups focused on wanting to use computers, including public access computers, to start or promote a small business. More of the **North Seattle** participants (67%) mentioned wanting to do more with computers. These participants noted that Latino residents could use computers to find better jobs; look for housing; spend time with children both having fun and helping with homework; look for family support and schools for the children; get special event information; get health information; contact family in Mexico through email; get driving directions; have access to the community and city services and information; and track weather. Most of the **North Seattle** participants said they wanted to learn "everything."

Eight **Family Works** participants (44%) indicated that they wanted to do more with computers. Three of these mentioned specific goals, including designing web pages, learning how to promote their services, and starting a small business. One mentioned needing more time in his/her life to be able to use computers.

The three greatest barriers to computer and Internet access identified by **Family Works** participants were cost, lack of knowledge, and lack of time.

Concerns about Access

Mutual interviewing: Overall, participants in both groups were concerned about Latino residents without access to computers. Though some suggested that for some residents this could be because of not liking technology or not having the time to explore it, both groups believed that individuals without access to computers are missing out on important information and opportunities, and suggested ways of increasing interest in and access to computing skills and resources for Latinos. The Family Works groups was more experienced with computers than the North Seattle groups and were accurate in identifying the benefits of computers that would be of interest to those not currently connected, such as the opportunity to find work, find resources for Latino Seattleites, help children with schoolwork, or access education themselves. Barriers to home computer and Internet access identified by both groups related to the cost of both computers and Internet access. Barriers to public computer access included not enough computers, and especially not enough Spanish language computers, and hours that are not friendly to working parents.

Family Works participants speculated that people who do not have computer or Internet access may be intimidated by technology, unable to afford the expense of becoming connected, lack the motivation to do so, or simply lack the knowledge about the benefits of technology or how to use it. Some participants remarked that some people simply don't like technology or don't have the time.

Family Works participants suggested an awareness campaign to let Latino residents know about the benefits of a computer or the Internet once they learn how to use it. These participants also suggested helping Latino residents who are not yet connected become comfortable using computers and the Internet by placing more computers in general, and more Spanish computers in particular at more locations around the city, and keeping these locations open for longer hours.

At **North Seattle**, note-takers summarized that without access to computer and the Internet, Latino residents will be slow to learn about changes in immigration laws and the resources that would become available with the passage of those laws. Participants are sometimes afraid to call a government telephone number with these questions, and sometimes are unable to because of the English proficiency required. Participants believe that they cannot enroll at a community college because that requires a social security number which they may not have because of immigration status. Note-takers added that without computer and Internet access, these parents

don't know what's going on in school with their children. One note-taker pointed out that with limited English, parents cannot monitor their children's computer use, which can discourage enthusiasm for having a computer at home. However, without home computer access, the children will have computer access only at school, which will make it more difficult for them to succeed in school. They summarized that participants simply have very little information about computers and have concerns about safety, with worries about viruses and predators. Note-takers suggested a program with a waiver for low income families so that families could have computer access and training to use it.

Family Works participants suggested that others might want to begin to use computers and the Internet to get information to look for work, to shop, or to help with their children's homework. Participants especially encouraged access for all because of the value to education, citing the Chilean President who just gave away 30,000 laptop computers to the children with the highest educational achievement in Chilean villages.

In addition to providing more public access Spanish computers, participants encouraged finding ways to lower the cost of computers, support free and open-source software and make the Internet available to all or at least affordable for more people.

North Seattle participants thought that being able to access information in Spanish, especially information about Seattle resources for Spanish speakers, would encourage Latino families to get online. One note-taker explained that being able to find certain services in Spanish language is important because people want control over their own lives in important interactions and therefore don't feel comfortable using an interpreter in visits to the doctor or the immigration lawyer, for example. Participants also want the opportunity to find a better job or job training – online or in the community; more access to education for themselves; more ability to track children's homework; to find family support for families and children; to find health care available to the Latino community; to shop online – and to find coupons; to pay bills online; to find directions via mapping programs. One special concern of this community is to be able to look for family when the family breaks apart because of immigration and deportation. Participants want to be able to find family before they are deported. Participants would like to be able to find a Latino newspaper online and would like a Spanish version of Seattle.gov, similar to the Florida state website.

Participants described many barriers that face Latino families wanting to get computer and Internet access, including:

- No money to buy a computer
- If they have a computer, they don't have Internet access because it is too expensive
- Difficult to find a public access Spanish computer with Spanish software
- Most participants are not proficient in English and do not know how to use computers, and most computer classes require a fairly high level of English proficiency

- Participants believe they must be able to furnish a social security number, which they
 may not have, to be able to enroll in classes at a community college
- Parents may be too busy taking care of families to be able to attend a class

Family Works participants also voiced concerns about the misuse of computers. They noted the isolation that can result from using computers, and concerns about addiction to computers – which results in too much focus put on the computer and creates friction in the family. They also remarked that computerization has resulted in job loss because of the greater efficiencies available with computers. **Family Works** participants voiced a concern about access to pornography for both children and adults.

Training

The need for affordable, accessible, bilingual computer and Internet training was stressed in both groups. Somewhat more than half of the participants from both groups who answered the question during *mutual interviewing* said they had already taken a computer class. **Family Works** participants who have not taken a class identified lack of time, cost, lack of motivation, and health issues as reasons that they have not taken a class. **Family Works** participants who *have* taken classes said they took them in their hometowns; at schools; at Literacy Source; or at a Community Center. Topics included using the Internet; specific software applications; and email. Topics of interest include those three, and how to fix a computer; how to set up programs, creating a website, and "everything." Participants noted that computers and software is expensive and that more training is needed for specific programs. Three **North Seattle** participants said they have taken a basic computer class at North Seattle Family Center, one mentioned a college class in graphic arts and video editing, and another mentioned a basic computer class held at the Seattle Center. All but one in each group said that the classes had been useful, and all of the **North Seattle** participants, and 82% of the **Family Works** participants said that they would be interested in taking a class in the future.

Those who have not taken a class mentioned being held back by not knowing where to find free or low cost classes, the language barrier, a lack of time, and having no place to practice.

Participants in both groups asked for free or low cost "how-to" computer classes, offered on a flexible schedule in many locations throughout the community and conducted in Spanish or Spanish and English. Suggested locations included: public libraries; colleges; Family Centers; community centers; job sites; or wherever classes can be free or very low cost. Participants also mentioned the need for better public transportation so that people who need the classes can get to them.

Basic, "how-to" computer training would include navigation on the Internet and better use of the computer; basics of email; basics of digital photos; and just learning about programs. Advanced classes would provide more in depth training. Some participants asked for a personal tutor or an instructor to be available at all times. One note-taker added that learners

need to be able to work on computers at home so they can practice what they've learned, commenting that there is a big problem in learning, practicing, and remembering.

Family Works participants most often mentioned computer and Internet classes as something that would improve their use of computers and the Internet, followed by a faster Internet connection. Others mentioned the need for a better computer, better time management, and open source software.

North Seattle participants asked for more information about bilingual community computer workshops announced through the Family Center and/or the public library, and in fliers or on calendars. Some of these participants suggested performing community service in exchange for this training.

Evaluator Note:

Latino residents willing to perform community service in exchange for computer training may be willing to raise awareness with community members about the benefits of computer and Internet access, and perhaps demonstrate or provide one-on-one tutorials for basic computer skills to others in the community (Borrowing from "Each one teach one").

Communicating with Government

Survey: Participants most commonly prefer to make contact with the government on the web or by email (48%), or by telephone (24%). Fewer preferred to write a letter (17%) or visit in person (14%). The patterns were different for the two groups. North Seattle participants were more likely to opt to write a letter (40%), with only 20% selecting each of the other options. At Family Works, about half prefer web or email contact, a quarter prefer the telephone, and the rest are evenly divided between writing a

Paraphrased Comments

Family Works: I hope this information really helps to create a useful proposal to the City!

letter and visiting in person. When asked how they prefer to give their opinions to the City on issues they care about, 30%-40% of both groups opted for a telephone survey, about a third of both groups selected calling into a meeting, about 20% of each groups selected participating in an online discussion. Slightly more of the **North Seattle** participants opted to attend a city-wide meeting (22% vs. 16%) or a community level meeting (33% vs. 20%). More of the **Family Works** group selected and email or online survey (40% vs. 11%). No one selected a short text-message survey, nor did anyone select "none."

Survey: Overall, about one third of the participants have visited Seattle.gov or seen the Seattle Channel. More of the **Family Works** group has visited Seattle.gov (42% vs. 13%) and more of the **North Seattle** group has seen the Seattle Channel (50% vs. 31%). Two people remarked that the Seattle Channel has is really good or has good information. In *mutual interviewing*, most participants said they don't know much about the City's website and cable channel. However, participants were able to name some of what they wanted to see on Seattle.gov, including:

- ESL classes
- Community events and information; Family, Social, Cultural
- Access to support groups
- Free family events
- Employment opportunities locally and in surrounding areas
- Weather
- Traffic
- Local news
- Sports
- Nutrition

The list developed by **North Seattle** participants includes:

- Seattle news
- Alerts
- Updated immigration news
- Information on how to open a small business in Seattle
- Community services
- Teen services and activities, and support for teen parents
- Updated health information, including health services
- Community and city events
- Computer classes
- Housing
- Job information, a directory of jobs website, a list of agencies and positions available for a bilingual speaker
- The magazine *Colors*
- Weather

Residents from these groups want to know more about immigration, especially about changes in laws that would affect immigrants, and about their communities. Participants were especially interested in having resources and more information in general available to the Hispanic community in Spanish. **Family Works** participants were also interested in how the City uses our tax dollars.

North Seattle participants also mentioned wanting to know about kindergarten and how to be involved in their children's school, as well as education opportunities for themselves, including English classes and bilingual computer classes; community events for the well-being of the community; programs to help families and parenting tips; childcare in the area; and how to get involved with the community. Note-takers summarized that the participants they heard from need information in Spanish to gain access to education, services, and activities for themselves and their families. This was

Paraphrased Comments

North Seattle: I like the idea either way because I would get information about everything that is happening in the community.

It will keep me updated on what's happening around us.

seen as key to being able to participate more fully in the community. They come to the Family Center to get information about Mexico and the family still there or recently deported. Translated comments from mutual interviewing bear out the note-takers' impressions that participants want access to community involvement that currently eludes them, largely because of language and technology barriers.

Survey: Survey respondents in both groups were well distributed in how they want to get information from the city. None selected text messages. Between 30% and 40% each selected the TV news, the radio, and the City's website. Between 20% and 25% selected the newspaper, email notices, and notices in the postal mail. Among the **North Seattle** respondents, nearly half (44%) each selected the TV news, the Seattle Channel, and the City's website, a surprise considering the lack of computer access in this group. About one third each selected the radio, the newspaper, and postal letters. Two each selected hearing from other community members and recorded telephone or cell phone messages. None of the **North Seattle** participants selected email notices. In *mutual interviewing*, participants added that email is great for those that have email; otherwise, postal mail is preferred. They also thought that fliers and calendars for bilingual computer classes would be effective for getting the word out.

A third of the **Family Works** group also selected radio, TV news and email notices. About a quarter selected the City's website and about 20% checked the newspaper, postal letters, and other community members. About 10% opted for the Seattle Channel or receiving recorded telephone messages on their home phone or cell phone. In *mutual interviewing*, most **Family Works** focus group participants noted that they liked the idea of receiving information from the City via the website or email, although they also mentioned postal mail and posting information at schools and at work sites.

African American focus group

Summary: Participants in the African American focus group were more technologically connected than the African American survey respondents, with all using computers for at least a year and most using email at least daily. All but one participant reported having home computer and Internet access, mostly high-speed (with few satisfied with its cost). Despite this access, most assessed their computer skills modestly. The most common use for computers was searching the Internet, especially for health and community information. Participants listed many other uses.

Participants voiced concerns about having too much computer access, about computer viruses and hackers, and about the inequity of computer access in the community. They noted that people who are not currently connected may be afraid of computers or simply unaware of their benefits and without access to affordable training on how and why to use them. Participants expressed concern that people who are not connected are "losing ground in the information technology world."

Participants want to learn more, regardless of their current level of expertise, and they want that opportunity for others, especially more vulnerable members of the community, such as seniors and limited English speakers.

Participants called for more time on more public access computers, at hours that are friendlier for working people, along with affordable and patient training, a 24 hour help desk with support available in different languages and if possible a way for learners to acquire a personal computer so they can practice at home. Participants also commented that public access locations may be too crowded and may not be comfortable for people doing their banking, bill paying, or researching sensitive health information.

Participants want to make contact with the government on the web or by email (two-thirds), by telephone (half) or in person (half). They want to give their opinions via an online survey or in an in person focus group. Participants are interested in finding employment information, neighborhood information and events from all departments, all in one place. They also want crime and safety information and more contracts for small businesses, and budget transparency. Participants stressed the importance of getting the honest news, even if it is not comfortable.

Most participants want information via the TV news or postal mail. About half opted for email notices and about one third prefer the radio or newspaper. About a quarter selected the City's website or the Seattle Channel.

A focus group with African American residents was conducted on April 8, 2009 at the Garfield Teen Life Center with 24 participants and four note-takers. Seventeen participants completed a

brief written survey. Participants engaged in the planned focus group activities – a dynamic method that relies on mutual interviewing among the community members – with apparent ease and interest. Participants were well educated (all survey respondents have at least some college and 60% have at least a four-year college degree), and most were employed (64%). The others were unemployed (14%), retired (14%) or students (7%). Participants were diverse in both age and income. About half were between the ages of 51 and 64, about a third between 18 and 50, and the others 65 or older. Of the people indicating household income, two indicated income of less than \$30,000; five indicate between \$30,000 and \$40,000; four between \$40,000 and \$75,000; and two over \$100,000.

Technology Access and Use

Survey results show that nearly all (94%) have a cell phone and cable. Most (88%) have a computer at home and almost as many (82%) have home Internet access. Forty-one percent have a mobile device.

Survey: Nearly all (94%) are computer and Internet users and they indicated a range of skill level, with most saying "I know what I need to know" (40%) or "I can figure out new programs as I need them" (33%). Few claimed to be more skilled – three (20%) indicated "Skilled (sometimes help others)" and one indicated "Expert." All said they use email, with most (88%) indicating daily use. Most (82%) use email attachments. Most (87%) report having high-speed access at home, specifically DSL (33%), cable (40%). One person indicated WiFi and another person reported having premium or business class access. Two use dialup access. Survey participants were varied in what they would be willing to pay for fast (or faster) service, with two people saying they would pay nothing, five selecting \$5 to \$10 per month, and another four selecting \$10 to \$20. Five people (about one third) selected amounts of \$20 or more.

Mutual interviewing revealed that all focus group participants have used computers for more than a year and all have a home computer except for one person who has enough access at work.

Survey: Most people are satisfied with most aspects of their Internet access (speed: 86%; reliability: 85%; and customer service: 73%) except for the price (31% said they are satisfied). Accordingly, when asked what one thing would most improve their Internet service, five people (36%) selected price. Another two people selected price as one of two areas for improvement. Speed was the second most frequently selected (four people – 29%), and two people selected customer service.

Survey: The most common uses of computers in this group was searching the Internet (88%); finding information about health issues (88%); getting information about the community (81%); finding information about local businesses (75%); or shopping online (75%). Some indicated that they use social networking sites (44%) or that they have taken an online class or webinar (38%). Few (13%) have sold goods or services online. None indicated that they contribute to a blog or wiki.

In mutual interviewing, participants mentioned using computers for banking; research; education – including saving money by printing out textbooks available online; pictures/video/webcam; drawing; games; shopping; watching TV; downloading music; job searching; maps/directions; travel reservations; forms (job, unemployment, school); dating; running and maintaining a business; graphic designing (websites); up-to-date news including local events; and storing and organizing information. Best uses include the quick access to any information, with health information, sports highlights, and staying informed mentioned specifically; the convenience including 24/7 bill paying; doing school work or education in general; communication; work; and entertainment.

Survey: The most common location for using a computer in this group was at home (88%). Work is also a common location for using a computer (63%), followed by the public library (38%), school (31%) or a friend's or relatives (25%). Two (13%) indicated a café or restaurant, and one indicated a community center or technology center (6%). Nearly as many (21%) use a friend's or relative's computer.

In mutual interviewing, participants noted that it is economical to have a computer at home, though participants mentioned using computers at the unemployment office; at church; at school; at the libraries; or in their car or on an airplane. Participants noted that the library is great if WiFi and space are both available, but some felt that the library is too crowded, lacks privacy and the hours of operation are business hours, when patrons might be at work. Participants suggested making more computers available at public access locations, give more time on them, and more hours of access. While most felt that at home access was preferable, one thought that having a laptop would give too much access.

Goals and ambitions for computer use

Mutual interviewing: Most of the uses for computers and the Internet listed in response to this question are also on the list of how computers are currently used. Participants said they want to learn how to use specific applications; how to fill out applications; how to communicate via webcam and chatting; about twitter; how to scan and send pictures; how to use a flash drive; how to improve genealogy research; how to shop online; how to make travel arrangements; how to make home movies; troubleshooting – and how the inside of a computer works; how to add equipment; and the difference between uploading and downloading. One person remarked that people need the option of researching health issues. This may reflect the broad range of computer experience, and a desire by focus group participants to learn more, regardless of their current level of expertise.

All participants who answered the question during mutual interviewing said they had taken a computer class, listing a variety of sources including the Parks Department, the Mayor's office, the City of Seattle, and King County Library. They also mentioned various schools, and several mentioned taking classes at work. Topics included specific software applications; computer repair and troubleshooting; basics of online research and information literacy; computer

networking; social networking; email; file management; and better use of software and equipment. All said that the classes had been useful, and most of these said that they would be interested in taking another class. One specifically asked for training in areas to enhance knowledge, business, and marketability and several others said they want to learn "everything." Some were more specific, mentioning graphics or how to research.

Participants also identified a need for upgraded equipment; lower cost for services; more time; and free or low cost training to be able to use computers as they'd like.

Concerns about Access

Mutual interviewing: Overall, participants noted inequity in computer access in the community, speculating that those who do not use computers may be intimidated by them, with no or limited knowledge about computers, and no feasible way to gain access and knowledge because of the expense of home access and insufficient public access. In addition to lack of access, participants mentioned that people not currently connected also have a lack of understanding about the benefits of computers, and no access to affordable training on why and how to use them. Participants are concerned that people who are not connected are "losing ground in the information technology world." Participant comments suggest that the fears of people who do not have access are similar to

Paraphrased Comments

All senior centers need computers.

Yes, they are left behind.
Computers are the future. With no or little experience, seniors don't have access or the means to get a computer, and even if they do get one, they don't have any training.

If you never use it, you don't know the benefits.

If you don't use it, your knowledge is limited.

computer users', but magnified by a lack of knowledge and context of experience. Some mentioned that new learners might have a fear of making mistakes, and others mentioned a fear of well-publicized Internet dangers, such as identity theft or other misuse of personal or financial information; viruses; risks to children; and the threat of being scammed.

Participants mentioned a concern that seniors do not have needed access to computers and that at public access sites, they have to "battle" younger users for access. Although the participants believe that residents who do not have access to computers and the Internet, and who do not know how to use it are disadvantaged, they also noted that seniors without computer access don't always feel they are missing anything because of simply not being aware of the information and convenience that is available through the Internet.

Participants noted that "there is too much demand and too little supply" for publicly available computers and suggested **increasing the availability of public access computers** at libraries, churches, community-based organizations, senior centers, the employment office, community centers – wherever people are – by **increasing the number of computers available**, **the amount of time available per**

Paraphrased Comments

Computers at work and at home – we use them to help our kids with homework. Just about everything we do is on computer. All things seem to be going that way, with less and less contact with people.

People who don't use computers and the Internet are in a hostage situation as more and more of what we need is online. Are we not alienating people who don't have access? Signed, a resident dinosaur.

use, as well as **the hours of operation** to beyond business hours.

Participants also suggested helping residents who are not yet connected to find used, cheaper computers, with one person specifically mentioning Interconnections, the local nonprofit organization that accepts volunteers to help refurbish computers to be shipped to developing countries as a way of earning a computer system for themselves along with some knowledge of computer functioning and repair. Worldstart.com was also mentioned as a training source for people who already have computers but want to learn new applications. Other support needed to get residents computerized included: knowing where to find **free hands-on computer training**, at more locations around the city and at more times (not just business hours), with patient instructors – perhaps youth volunteers teaching seniors, more user-friendly and non technical instruction books, tutorials on computer usage, a 24 hour help desk with support available in different languages.

Participants also remarked that having a home computer and Internet access does not necessarily solve access problems. They note that home Internet access and home computers themselves seem too expensive – expensive enough to prevent some from having home access – and even with access at home, about half said they do not have as much access as they want, with some mentioning that they compete with family members for time on the computer.

Some participants are seeking to upgrade to a newer computer, noting that their current computer still has floppy drives and they do not have Internet access, or to a laptop for the convenience of being able to use it anywhere, or simply adding a computer because even with their home computer, they do not have enough access because others in the home also want access. Another person, however, cautioned that laptop access could be *too much* access, leading to too much computing with a specific concern voiced about the addictive aspect of computer use.

Even in this relatively well-connected group, one person commented that s/he is "lost" on computers, has only a dial up Internet connection because high speed access is unaffordable, and that s/he would like questions answered without it costing money. Another asked, "How do you get information about software, tools, and so on? How do you use them and what all is needed? I need more information and more access."

People also asked for more information on computing safe from viruses and other predation, safe online shopping practices, protection from online scams, and safeguarding personal information, both for themselves and for people who are new to computing. One person asserted that s/he does not do any personal business on the Internet because of safety concerns.

Communicating with Government

Survey: Two thirds of the survey respondents prefer to make contact with the government on the web or by email, and about half (53%) prefer the telephone. Nearly as many (47%) prefer to visit in person, and 20% prefer to write a letter. Correspondingly, when asked how they prefer

to give their opinions to the City on things they care about, half the respondents selected email or participating in an online survey and as many selected participating in an in person focus group. One third selected attending a citywide meeting, and a quarter each selected attending a community meeting and participating in a telephone survey. Two wanted to call into a meeting and only one wanted to participate in a short text-message survey. None indicated interest in a discussion on the Internet. No one checked "none."

Survey: Most (81%) of the survey respondents have visited Seattle.gov and seen the Seattle Channel (73%), and most of these (73%) on cable. In *mutual interviewing*, people named some of what they wanted to see on Seattle.gov, including:

- Employment information more user friendly; application and application status
- Neighborhood events; ways to meet your neighbors; networking
- More contracts for small groups/businesses; and contact information for people issuing contracts
- Police information and what's going on; crime and statistics
- Service information; community organizations
- More City events from all departments in one place, updated regularly and posted before the event
- Good road map with geographic markers
- Assistance for seniors and people with disabilities
- Tax information
- Internal departmental information whom to contact with problems
- Future projects or events not yet finalized that allow younger voters to get involved in government and politics

Information that could lead to employment and information about local neighborhoods and how to meet neighbors were both frequently mentioned as topics that participants wanted to see on the City's website. Participants added that they want honesty on the City's

Paraphrased Comments

We want honesty – even if it's not pretty, tell us the truth! Give us information in real time, exactly what's going on – crime, buses...

Access to live people for problems

I would like to know what's going on in the community – if I was new

website. And they want information on programs or services that target specific groups – by gender, age, or other group. Participants asked for real time information so that they are up-to-date in the moment with neighborhood events, such as crime, and services, such as buses. They also want to know what's happening in outside communities.

Residents want to know more about what's going on around the City, with many comments relating to crime and safety, including crime statistics, sex offender movement, and block watch information. They want to know more about free services and events, and how and where to get involved in the community. They also asked for more information about how public money is spent, and they want to be able to get information about schools and school decisions, and zoning issues.

Some individual ideas provided by participants in mutual interviewing include some way to personalize the City's website, a citywide Google page, for example "igoogle" which would result in information about local events, and other topics of interest. Another suggested that the website could be a location letting visitors know where to find affordable software, free classes, free WiFi, and other discounts. Participants were reticent about receiving text messages from the City, saying they would like a text message *if it's important*. For some, traffic alerts met the "important" criterion.

Survey: Most survey respondents want to get information from the city via the TV news (82%) or notices in the mail (82%). About half (55%) prefer to get email notices and about one third each prefer the radio or the newspaper. About a quarter prefer watching the Seattle Channel or checking the City's website. Only two were interested in receiving recorded messages or text messages on their phone or cell phone, and only one wanted to count on hearing it from other community members. In *mutual interviewing*, most focus group participants noted that they liked the idea of receiving information from the City via email.

African immigrants focus group

Summary: Most of the participants in two of the African Immigrant events had limited or no English proficiency. Participants seemed relatively well connected with small technology, such as cell phones and mobile devices, but since many were illiterate in Somali and therefore did not complete the brief survey, it is difficult to be sure. Surprisingly few had landlines. The group attending the Africa Celebration was more educated and better established, with proficient English and technology access. The participants in the other groups had low English proficiency and less access to computer technology and wanted more. Nearly all indicated that they feel they are missing out by not having more technology access and the knowledge to use it.

Participants find technology both unaffordable and inaccessible because of lack of training in their language or not knowing where to find it, lack of money, and lack of content material in the native language. Respondents who do have a computer at home are most likely to have a dial up linernet connection.

Participants in one group discussed concerns about MySpace and other Internet sites, which they fear will leave their child vulnerable to predators or negative content. However, as non English-speaking parents, they are blocked from monitoring thei children's computer use, unsure whether their child is doing homework as they claim, or visiting forbidden (and possibly misunderstood) websites without their parent's approval.

Despite the relatively low level of computer access, participants most commonly indicated that they prefer to make contact with the government on the web or via email. It may be that when this option is available - that is, when the participant has the skills and the access to the technology, this may be the preferred method; otherwise, the telephone is preferred.

Participants want to be involved with community affairs - no one indicated that they do not want to give their opinions in any form. Participants most often selected an email or online survey, but again, this may be dependent on knowledge of and access to the needed technology. Participants want to get information from the City via TV news, the City's website, notices in the mail, the Seattle Channel or the newspaper.

Participants would like to find job information, support for a family business, and information about homework/ summer and after school activities on the City's website. Participants were particularly interested in learning information about their community – other community members, events, and information, as well as access to global news. They'd like to find links to languages other than English, access to education, including learning English and learning about computers – with one person asking for "Pictures that talk and interpret and explain it." This may be a reflection of the limited literacy among these participants, pointing to the need for a universally designed website that is accessible even with limited ability to read.

We participated in three events to learn about the perspective of African immigrants on technology. On April 4, 2009, the North Seattle Family Center in Lake City hosted an African Celebration, providing a booth for the Department of Information Technology. Brief surveys were collected from 11 attendees at this event.

On April 9, the Atlantic Street Center hosted an Internet Safety workshop with the Horn of Africa Services and the Digital Connectors group from the Seattle Metro YMCA for parents already interacting with the Internet, at least through their children. We were invited to attend the workshop and integrate information gathering with the Internet Safety presentation. A modified focus group was conducted, and a few brief surveys were completed.

With the help and support of the Seattle Housing Authority, The Horn of Africa Women's Alliance, and Neighborhood House, the third event gathered members of Seattle's Somali

community from all around the city for a focus group held at the Elizabeth House in the High Point area in West Seattle on April 10, 2009. Due to outstanding recruiting efforts by community leaders, this group had a tremendous response with more than 60 participants, well beyond the expected 10 to 12. With the impromptu facilitation support provided by the same community leaders, three somewhat different groups were conducted with this large group of participants. Few of the women were able to complete the brief survey because illiteracy in the Somali language; however, they engaged enthusiastically in mutual



interviewing and note-takers worked diligently to capture the conversations. The men did some mutual interviewing, but with more Somali literacy, some opted to respond to the interview questions independently in Somali. These comments were translated by Hassan Ward of the Horn of Africa Services. The survey and focus group findings for African immigrants from all sources will be combined in this report.

Nearly all of the survey participants indicated that they speak some language other than English at home, although six indicated that they also speak English. Five of these six were African Celebration attendees. Somali was indicated most often. Participants ranged in age from 18 to older than 65. About one third were in the youngest age group, 18 to 25, 40% were between 36 and 50, and 12% were older than 50. Just over half (56%) were employed and 22% indicated that they were unemployed. A quarter are students, often in addition to being employed. Two individuals indicated that they are disabled. Annual household income ranged from less than \$20,000 (29%) to more than \$100,000 (13%). Only attendees of the African Celebration reported incomes above \$50,000. This group also has achieved more education, with about 80% reporting at least some college and half reporting at least a four-year degree. About one-third are in the process of obtaining more education.

Summarizing, the African Celebration attendees seem to be more established, with more (and increasing) education, higher incomes, more employment (70%), and more use of English. Responses from the three sources will be reported separately when they differ.

Technology Access and Use

Survey results show high levels of cell phone access (91%) and lower levels of access to other technologies. About three-fourths of the survey respondents have cable TV, and about two-thirds have a computer at home (but 70% use a computer), and only about half also have Internet access at home (though 63% use the Internet). A surprisingly low percentage have landlines (58%), which may partially account for the low rate of home Internet access, and a surprisingly high percentage have Internet access on a mobile device (19%). Overall, about 40% indicated having only a cell phone.

The most common uses of computers in these groups are to search the Internet (64%), find health or community information (both 36%). About six in ten use email – daily for about 60%. Not as many (43%) use email attachments. Among the computer users, 78% use a computer at home, 30% each at work or the library, and about 20% each at school, a computer or technology center, or at a friend's or relative's. Sixty-three percent have high speed access, including cable Internet (38%), DSL (8%), WiFi (13%) and premium/business class (4%). About 30% have dialup access.

Different rates of technology adoption were seen in the three groups, with the more educated, more employed, more English proficient, higher income The African Celebration attendees consistently reported having more access. Specifically, respondents in this group are more likely to have a computer (90% vs. 52%) and the Internet (100% vs. 43%) at home, and are less likely to say that they don't use a computer (0% vs. 32%). They less likely to have a dialup connection

(20% vs. 36%) and are more likely to search the Internet (91% vs. 50%), shop online (55% vs. 14%), and get information about the community (64% vs. 23%). They are also more likely to use computers at work (50% vs. 18%) and nearly all check their email daily (91% vs. 40%). One third of the other two groups say they never check it compared

to none of the African Celebration participants.



Further, the participants who attended the High Point focus group have the least access to technology, with less cable access (50% vs. 86%), less Internet access at home (33% vs. 57%), and less land line access (42% vs. 67%). They are less likely to find information online about local businesses (9% vs. 36%), health information (9% vs. 45%), or about their community (0% vs. 55%). They are less likely to have computer access at work (0% vs. 47%), at the library (10% vs. 41%), or at a community center or technology center (0% vs. 29%). Among those with Internet



access, the High Point group members are most likely to have dialup access (63% vs. 13%) and least likely to have cable Internet (13% vs. 50%).

Mutual interviewing in the High Point group confirmed that about 60% of the participants have used computer for at least a year, with about half reporting that they have a computer at home and about 40% saying they use one at a different

location. Most (86%) of

Paraphrased Comments

those without a computer at home say they want one. One-thirds of those with one at home say it is not enough for their needs, and about 60% of those who use computers at a different location say those are not enough for their needs. Participants identified the library and community centers as places to access computers, but added that it's difficult because of not being able to use it individually. One person said they access computers via their phone. One person offered the estimate that half the people use computers at home and at the library. Several responded to this question by asserting that they need a computer. When asked what's stopping them from having a computer, one participant wrote, "I don't have a lot of things." Others

I don't know how to use it but I want to learn how to use the computer one day.

We like to use the computers so we can learn more informations

I will learn everything going on in the world It will help educate me and help me with school work

It is good because it eases learning when you're at home. You can follow up with news, you can apply for work, and you can use it to take classes.

Computers are great and helpful. I use them for homework, email, chat, messenger. I get good information. I personally think it is important for

grades because I have a computer, to research children or and adults to be able to use computers

Nearly all (93%) of those who do not use computers, want to and think they are missing out without access,

Half of the computer users in this group say they have

problems using computers. One person clarified this by

saying if it's written in his language, he does not have a

identified lack of education or not enough money.

I would love to use it since it fulfills a need (Translator: he/she is yearning to have one)

with about 60% agreeing that they have trouble getting the information they need, staying in touch with friends and family, and just getting things done. Two participants did not feel that they had trouble functioning without computers because they get word of mouth news from friends and neighbors.

Mutual interviewing: Participants identified a number of valuable uses for computers, including finding information or learning, including access to ESL education; keeping up with the news; helping children with homework or being able to check on grades; looking or applying for

problem with it.

work, or acquiring needed job skills; communicating with friends and family, including those overseas; family life skills and finding family resources; paying bills online; conducting business

from home; getting directions; shopping online; entertainment, or simply surfing the Internet. When asked to identify the best things about using a computer, the men responded that it would permit them to find a job, make a living, use it as a tool to study, keep up with news, find a used car, or watch sports.

Paraphrased Comments

I'd be on the same level with the world (Translator: meaning he/she will be on par with others)

Paraphrased Comments

Survey participants were varied in what they would be willing to pay for fast (or faster) Internet service. Responses ranged from nothing (about a quarter of respondents) to \$40-\$50 (one respondent), with about half of the responses falling between \$5 and \$20 per month. None of the African Celebration participants said they would pay nothing, compared with 38% of those in the other groups.

Half of the survey participants in each group were satisfied with the reliability of their Internet connection. Groups differed on their satisfaction with other aspects of Internet service. The African Celebration attendees, most of whom reported high speed access, were satisfied with speed (80%) and customer service (75%), but not cost (43%). The Internet safety group was also more likely to have high speed access. Half of this group was satisfied with the speed of their connection, but not with the cost (29%) or customer service (20%), perhaps related to low level English skills. Most of these respondents in these two groups identified a lower price as the one thing that would most improve their Internet service. High Point respondents were

Some concerns is that I don't know what my children are learning on the computer. I have a problem with the computer. I don't know how to keep my children out of the bad things in the computer and because I don't know how to use one. I don't know how to use a computer at all.

Children and adults are using computers at home. It's going good and sometimes it's bad at home. MySpace is the only one thing I hate about the computer.

Yes and no. People do and don't have access to the computer. No because money, some people are cutting off the Internet because of the cable, speed, etc. Problem it creates with Facebook, MySpace, strangers.

Parents don't understand how to use computers. My son says he's working on homework and I don't know how to find out what he's doing. It's a language problem.

When people get too involved with the Internet, they don't do anything else – don't go out and play.

most likely to have dialup access, so although more satisfied with the cost (71%), fewer were satisfied with the speed (40%).

The Internet safety group identified a number of concerns related to using computers. Parents were concerned that their children are looking for – or being confronted with – negative or inappropriate content online. But the parents feel that with their own low skill level with computers – and in some cases, their low English skill levels– they cannot adequately monitor their children's use and keep them safe. Parents voiced a considerable amount of concern about MySpace and other social networking programs, afraid that these sites, and for some, access to email, pose a risk to their children that as parents, they are not equipped to manage. Other concerns included the cost of computers or Internet access, a slow connection, and the complexity of using the Seattle School's homework information website, The Source. Participants also voiced concerns about other aspects of Internet safety, such as identity theft, and viruses. Some were also concerned about their children spending too much time on the computer and not spending time outside playing.

Suggestions for addressing these challenges included access to computer classes for the parents, which would help them keep track of what their kids are doing, limiting the children's usage on the computer, and learning to lock out specific sites that provoke concern among the parents.

Goals and ambitions about computer use

Mutual interviewing: Participants identified a number of ways they'd like to expand their computer use, starting with learning to use computers or maintaining skills they have. Participants also indicated wanting to keep up with the news, and staying in contact with friends and family, including those in Africa. Several mentioned using the computer to get a job or developing job skills by learning how to use a computer. Some mentioned using it to keep track of their children's school work or to help with children's homework. Some mentioned a need to learn English. Participants asked for both ESL classes in the community, and for computer classes.

Paraphrased Comments

I know how to enter the net but don't know how to get information

Computers are for the younger generation for immigrant parent are very difficult to do so.

What would enable to do that is get help from the government and open classes that can also teach older people

I would like to chat with my people in Africa

I don't have a lot access to information, all information are in English

Concerns about Access

Mutual interviewing: The two most frequently mentioned barriers were: not knowing how to use computers; and the cost of computers and Internet access. Participants mentioned that either of these could prevent access. Some focused on not knowing how to use a computer even if one has the means to buy one, while others mentioned not having the means to buy a computer, even knowing how to use one.

Participants reported that many people don't know where to find accessible computer classes and suggested offering classes in the community. Some specified a women's only class, with a female instructor, perhaps with one-on-one assistance. Some suggested combining ESL with computer training and others noted the importance of having the training in the language of the learners. Others suggested providing donated computers or making low cost computer available, and other identified a need for free Internet access. One participant asked for more content to be translated into Somali.

One participant suggested going to the community college for training and a few suggested the public library, but most said they did not know where they would go for help.

Paraphrased Comments

First help learn English. After that learn computer skills and that will make our life easy

I think they are missing something because there is a lot of things that you need from the computer but you can't even find out

Some people can't afford to buy one or maybe they just don't want to own one.

Yes, left behind on information, education

We don't know how to use it, that's why

They are missing communication especially us as Somali. We use to computer to hear the news from Somalia

What would help? To get more help from someone that knows more than you

Participants want to learn to use computers and the Internet for both specific and general purposes; and some community members are willing to teach others. Remaining barriers include access to computers and the Internet, knowledge of English or the availability of Somali content, and lack of literacy.

Communicating with Government

Survey: Taking the three groups together, participants most often indicate that they prefer to make contact with the government on the web or via email (58%). This preference was much greater among the African Celebration attendees (82%) and much less preferred among the participants in the Internet safety workshop (30%). Next most frequently nominated was in person contact (35% overall), but this option was selected by none of the High Point participants. The High Point participants were more likely to select the telephone (60%), preferred by about half as many of the other groups. Writing a letter was selected by only 10% of the African Celebration attendees, and by about half of the groups.

Survey: Overall, about half of the survey respondents selected giving information and feedback to the city via email or an online survey, and about 30% overall (including none of the High

Point group) opted for attending a community meeting. Between 10% and 20% in each group were willing to call into a meeting or attend a city-wide meeting. None of the participants selected "none."

Participants indicated the most interest in getting information from the TV news (68% overall), by notices in the mail (36%), from the city's website (32%), from the Seattle Channel (28%), or from the newspaper (24%). The High Point group provided a different profile. These participants selected the TV news (80%), the City's website (60%), and 20% each selected email, the Seattle Channel, and recorded telephone or cell phone messages. None of the High Point group selected the radio, the newspaper, notices in the mail, or text messages. The other two groups selected the radio (25%), newspaper (30%), notices in the mail (45%). Few participants overall wanted to receive text messages from the city (12% overall), all in the African Celebration group (27% of this group).

Just under half of the survey participants have seen the Seattle Channel, mostly on Cable. Many fewer (30%) have visited Seattle.gov. Few respondents gave answers to the question of what they already know about the Seattle Channel or Seattle.gov. Three people noted that they are informed about the city and its government from these sources, or that they watch Seattle-based news. Others mentioned various new sources, such as CNN, Fox, and MSNBC. Participants were able to identify many things they'd like to see on the City's website, including:

- Job announcements
- Links to languages other than English
- Information to help with homework
- A way to learn more about computers
- Summer and after school activities for children
- Support for family business
- Monthly community meetings
- Resources
- Sports
- Obituaries of fellow community members
- "Pictures that talk and interpret and explain it"
- "I would help an individual who doesn't have competence with regard to the Internet."

When asked what they want to know more about, participants most often said something about their community – learning about others in their community, exploring the how well the community is, and community level events and information. Some participants asked for more content in the Somali language, including the Somali channel and Somali news journals, and others asked for ways to learn English, especially pronunciation. Participants asked for access to education, in general, and computer training in particular. Participants also expressed interest in global news and sports.

Participants were fairly evenly divided in response to the question about how they'd like to receive information. Three asked for a phone call; four asked for email. Two specified "no text." Some participants noted explicitly that they would like more human contact and others mentioned getting information through the community center or from community visitors.

Korean immigrants focus group

Summary: The Kawabe Memorial House provides low income retirement housing for Korean and Japanese seniors. Only two of the focus group participants had any English proficiency, and one of these commented that the lack of English skills among the other participants was disabling for them. Correspondingly, participants expressed interest in getting news and information through any medium, as long as it is in Korean.

Although these participants were selected because of attending a computer class in the building, fewer than half identified themselves as computer users in the brief survey and only three indicated any computer skills. Two mentioned having computer in their rooms, but these are English language computers and their owners cannot use them because of the language barrier. Additionally, although the Kawabe House has a computer lab, only two of the computers are Korean computers, not enough for the needs of the Korean residents. Further, participants note that Korean residents in the building next door have no access to Korean computers at all. As in other groups, one participant in this group also made the point that it is difficult to learn to use computers without being able to practice the lesson at home.

Participants were clear that they want to become computer users, feeling that they are missing out or beingleft behind without access; and they were clear about what they would like to use a computer for, including getting quick information and news in Korean; staying in touch with relatives overseas (while saving money on expensive telephone calls); keeping their minds active and healthy; learning about the world; and even to learn English. Barriers include not having adequate access to Korean computers, limited hours of access to the computer lab in the building, an insufficient skills to use computers. Participants also voiced concerns about computer viruses.

These participants prefer to make contact with the government and get information from the government through the postal mail. Some expressed interest in talking with someone from the City in person. Others mentioned the TV news as a good source for City information. In conveying opinions to the City, four selected an inperson focus groups and one wants to write to the Mayor in Korean.

A focus group with 11 Korean residents of the Kawabe Memorial house, and two bilingual Korean note-takers was conducted on April 11, 2009 at the Kawabe House. Twelve participants and note-takers also completed a brief written survey. All the participants were selected because of their participation in a computer class offered at the Kawabe House. Most did not understand English. With only two translators, we created two groups and used a modified method of mutual interviewing, followed by two concurrent and separately conducted traditional focus groups. In the introduction, participants indicated that they would be eager to receive text messages from the City, as long as they are in Korean.

Seven women and five men completed a survey. Three-quarters of the participants were 65 or older, and the other three were between 51 and 64. Six indicated that they were retired; two were homemakers, and two were unemployed. Educational achievement was varied, with one person indicating less than a high school education and another seven (58%) reporting high school completion. Two had some college or a two-year degree, and two others had completed a four-year degree. None reported income.

Technology Access and Use

Survey results show that about one-third of the respondents have a cell phone. Most (82%) have cable TV, only two say they have a computer at home. In discussion, participants explained that these two in-room computers are not used because they are not in Korean. None have home Internet access either via computer or via a mobile device.

In *mutual interviewing*, eight participants indicated that they have used a computer for at least a year, consistent with their selection as members of a computer class. However, in the survey, only four participants indicated being computer users, assessing their skills as "none or not very skilled" (7) or "Know what I need to know" (3). Three survey respondents indicated that they use email (without

Paraphrased Comments

One person using computer can get all information from world – Japan, Russia, Korea. Sit in front of computer and look into the world.

When a person uses the computer, it helps with dementia, keeps an active mind.

attachments), checking it daily (1) or less than weekly (7). Only one said she or he uses the Internet. Two people said they have dialup Internet access, and two said some other access (not DSL, cable, or WiFi).

Eight people responded to the *survey* question asking how they use computers. Three of these checked the box indicating that they do not use computers. Four said they search the Internet, and one each indicated shopping online, finding information about local businesses, about health, or about the community. In *mutual interviewing*, participants said that computers are good for almost everything in daily life, including getting quick information; getting news, including reading the Korean newspaper online; staying in touch with relatives overseas (and saving money on expensive telephone calls); organizing medication information for the residents and for emergency personnel; and for entertainment and remaining mentally healthy. Some mentioned ordering from Safeway online, saying that only one person in their building does that and the others do not know how. One person mentioned using a computer to learn English. When asked what they like best about computers and the Internet, participants mentioned email, the Internet, news, and "lots of information in a speedy way."

Survey: Few respondents answered the questions relating to satisfaction with their Internet provider, presumably since most don't use the Internet. However, among those who answered, three of five were not satisfied with the speed of their Internet access, the three who answered were satisfied with its reliability, and two of the three who answered were not satisfied with the cost.

In discussion, participants explained that Kawabe House provides the space for a computer lab belonging to a Japanese group, on the condition that the Korean residents can also use it. Two of the computers in the lab are Korean, too few, according to these participants. One person

commented, "We use the Korean computers in the lab, and then forget what they learn when we go back to our rooms." In the *survey*, three people indicated that they use computers at home, one indicated the library and two each checked a technology center, and some other location.

Goals and ambitions for computer use

In mutual interviewing and in discussion, participants were clear that they want to become computer users with most feeling that they are missing out by not having the skills or the access to get online. Most participants agreed that they want easy access to a Korean computer, including in their own rooms, so they can learn and then practice and eventually have access to all the information that the Internet offers; a few thought they were too old or that they do not need computer access.

Participants who thought of themselves as non users look forward to being able to email with family; get the news; and have some fun in a way that is also good for their health.

The barriers that these participants identify are not having adequate access to a Korean computer – the hours of access to the lab in the building are limited – or the skills to use it. Some voiced concern about computer viruses.

Paraphrased Comments

I'm not that good at computers – I'm basic.

With Korean language, I will learn better; need a Korean computer.

I want to know many things about computer.

Fun and good for my health and hobby.

I will be behind in the modern high tech world.

I am at an age that I don't need computer.

If I have a computer, I'll become more knowledgeable. At night I will sit on the chair and look out at all the world. And I'll be able to see events in Korea – want to see developed country. Will improve vocabulary, will help not to become Alzheimers.

Most of the participants (83%) indicated that they have taken a computer class and that it was useful and that they want to take another.

Concerns about Access

In discussion, these participants indicated that even though they have very limited access to computers and the Internet, the elderly Koreans living in the building next door have no access at all.

Participants explained that an English-speaking volunteer currently teaches the computer class and they thought they would learn better if their teacher could speak Korean and teach them on an accessible (Korean) computer. Participants would especially value in person instruction so they can ask questions. One suggested making 10 Korean computers available, either in individual rooms, or in a public room with more access than currently available. One asked for personal tutoring.

One participant remarked that the language barrier that these participants face is substantial, explaining that they are not able to navigate in the English-speaking world except to go to church and

to the market. This person indicated that they are even unable to call 911 because of the language barrier.

It may be that once these seniors achieve online access they may next encounter a language

Communicating with Government

barrier in the content they wish to access.

Survey: None of the eight people indicating how they prefer to make contact with the government selected "on the web or email." Four selecting writing a letter, three opted to talk to someone in person, and two selected the telephone. When asked how they prefer to give their opinions to the City on things they care about, most selected "other." Four selected an in-person focus group and two each selected a telephone survey and "none." In *discussion*, one person mentioned wanting to be able to email the Mayor in Korean.

Survey: None of the respondents have visited Seattle.gov and about one-third have seen the Seattle Channel, all of them on cable. In *discussion*, participants asked that City information be provided in Korean so that they could get help with a problem or read about good news.

Survey: Participants were consistent in how they want to get information from the city, with most (83%) indicating notices in the mail. Four selected getting city information from the TV news, two selected the Seattle Channel, and one each selected radio, newspaper and the City's website.

Discussion indicated that the most significant concern for these residents is the ability to use the Korean language, regardless of the mode of communication.

Paraphrased Comments

If you would please, I want to have personal tutoring

I need Korean instructor for computer class

People are really disabled by their language.

Four groups doing email class right now. Very helpful. We repeat the class to learn it better.

Chinese immigrants focus group

Summary: Participants in this focus group of Chinese speakers were diverse in age: some were parents of young children and nearly half were seniors. Note-takers summarized two significant barriers for technology access: 1) lack of English skills leads to a need for Chinese language computers and content translated into Chinese; and 2) the cost of home Internet access is prohibitively high relative to participants' income.

This group reported some technology access, with just over half reporting having a cell phone and cable TV, and nearly all having a computer and (mostly high-speed) Internet access at home (despite concerns about the expense). Most use email, though for most, not with attachments, and fewer than half check their email daily. Participants assessed their computer skill levels as low with the majority saying they have problems using computers, including: lack of access to Chinese computers; slow and expensive Internet access; insufficient computer skills without access to classes; risks to personal information; and after overcoming these barriers, participants remarked that the lack of translated materials on public or commercial websites prevent non English speakers from accessing the information. Most commonly, participants use computers to access the Internet, searching for health and community information, local and international news, and other information.

Only the community center provide Chinese computers, but participants noted that no one at the community center can teach them how to use it, the hours are too limited, and the number of computers is not enough to meet the needs of people wanting to use them. Those without enough access feel they are missing out and life is harder without being able to use a computer.

Participants want access to computers and the Internet, Chinese or bilingual classes to help them learn how to use the technology, and an opportunity to practice what they've learned. Some mentioned wanting to get news and other information online and others want to use it for personal purposes, such as sharing photos and paying bills online. Others were interested in improving work skills and some want to use the Internet to advance their education. Participants suggested that other community members would be interested in getting online if they knew they could communicate with the world more easily, get news first hand, and learn.

Most participants (two-thirds) want to make contact with the government on the web or by email, and many (42%) prefer visiting in person. About half want to give their opinions at a community meeting, and not quite as many want an email or online survey.

Participants would like the City's website to be in multiple languages and provide government news and information, and information related to education, health, ESL opportunities, and Chinese computer classes. They want local news, employment opportunities, public safety, health insurance options, and benefits information. Most participants (79%) look at the newspaper or TV news for information from the City, but more than half also selected email notices and just under half selected the City's website, notices in postal mail or the Seattle Channel.

A focus group with 13 Chinese residents and four bilingual Chinese note-takers was conducted on April 13, 2009 at the International District Community Center during the day. Fourteen participants and note-takers completed a brief written survey. Using a show of hands, most of the participants indicated that they are computer users and about three-fourths have a computer at home. Only about half have cell phones and few use text messaging.

In a debrief following the focus groups, the note-takers indicated that the translations of the written material seemed to have been done by machine, making the questions difficult for the participants to understand. Summarizing what they had heard, they indicated that the language barrier also creates a challenge in using computers so that participants specifically mentioned the need for Chinese computers. Another concern related to the cost of Internet access.

All participants indicated speaking Chinese at home. Nearly half (43%) of the participants were 65 or older, probably reflecting the midday timing of the focus group, though all the age groups were represented: one participant was between 18 and 25, two between 26 and 35, three between 36 and 50, and 2 between 51 and 64. Only one of the participants was employed; five (36%) were retired; four (29%) were homemakers, two were students, and one each was disabled and unemployed. Educational achievement was varied, with 29% indicating less than

a high school education and another three (21%) reporting high school completion. Five (36%) had some college or a two-year degree, and two had completed a four-year degree. Income for most was low, with three-fourths reporting an annual household income of less than \$20,000, and two others reporting \$20,000 to \$30,000. One reported an income between \$50,000 and \$75,000.



Technology Access and Use

Survey results show that 57% of the respondents have a cell phone and 43% do not also have a landline. Just over half (57%) have cable TV, nearly all (93%) have a computer at home, and almost as many (86%) have home Internet access. Only two participants reported having Internet access on a mobile device.

Most of the participants indicated that they are computer users (92%), with 85% saying they use email – 69% also use attachments. Less than half (39%) of the email users say they check their email daily. Another 31% check it a few times a week. The others check it weekly or less often. *Mutual interviewing* yielded similar results, with 85% saying they have used computers for at least a year and the same percentage saying they have a computer at home.

Of the 10 who described their Internet access, eight indicated high-speed access. However, seven selected "Cable," and four of these also selected "DSL." Some participants may have been confused by the written question – perhaps due to not having a clear understanding of the technology – when asked about their skill level with computers, all the respondents selected either the lowest skill level "None or not very skilled" (55%) or the second step, "I know what I need to know" (45%) – or due to problems in the translation. None reported having premium access and two use dialup access. Survey participants were varied in what they would be willing to pay for fast (or faster) Internet service, with two saying they would pay nothing and another two selected less than \$5 per month, one selected \$10 to \$20, four selected \$20 to \$30, and three selected more than \$30 per month.

Just over half (57%) of the *survey respondents* said they use it to search the Internet, and nearly as many said they use it to find health information (50%), to get community information (50%), find information about local businesses (43%) and to shop online (43%). Not as many use social networking sites (21%) or sell goods or services (7%). In *mutual interviewing* eleven participants mentioned using the computer to find local and international news, and health news. Four said they use computer for entertainment, such as watching movies online and email. Some like to use computers to get directions, look up words, send photos, or make video calls. Some mentioned that they best like to visit Chinese websites.

Survey: Respondents were mixed in their satisfaction with several aspects of their Internet service with 60% indicating satisfaction with the speed of their connections, 64% with its reliability, and 75% were satisfied with the customer service. However, only one quarter were satisfied with the cost of their Internet service. When asked what one thing would most improve their Internet service, seven people (60%) selected price; three (30%) selected speed, and two selected reliability. None selected customer service. Mutual Interviewing confirmed that participants are dissatisfied with the slow speed and high cost of Internet access.

Survey: The most common location for using a computer in this group was at home (92%). In mutual interviewing, most (83%) said they use computers in some other location as well, and for one-third of these, these computers do not meet their needs. About one-third (31%) selected school and about one-quarter (23%) selected the library. Fewer (15%) selected a friend's or relative's, or a community center, and only one each selected work or a café or restaurant. In mutual interviewing, some mentioned that the library does not have Chinese computers, which presents a barrier to these residents. Three of the participants reported that they do not have a computer at home to use, so they use the computers at the community center. However, the hours for the computer center are limited, no one is available to teach them how to use it, and there are not enough computers to meet the needs of those wanting to use it. In addition, these participants reported that the speed of the Internet access is too slow. Those with home Internet access find it too expensive, agreeing that they could pay between \$35 and \$40 per month. However, some expect to pay less than that and they expect higher speed.

Goals and ambitions for computer use

Mutual interviewing: Participants want to become more proficient with computer and the Internet in general, and they want to learn to get news and other information online, and on a more personal level, they would like the opportunity to learn to use email and send and receive pictures, and pay bills online. Several mentioned wanting to improve their work skills, their education, and wanting to advance their personal interests. One person, just beginning to use

computers, mentioned a goal of learning to chat with her friend and discover more about the world.

Most of the participants (60%) indicated that they have taken a computer class and two-thirds of these reported that it was useful. Most of the participants have taken computer classes at the Chinese Information and Service Center (CISC), and/or the library. They reported that they learned basic skills about the computer and using the Internet.

All participants reported an interest in taking classes in the future, though a few said that in the past they have been too busy with young children at home, and some mentioned not having a computer or much opportunity to practice.

Paraphrased Comments

Gmail, research, learning ESL system. I'm studying computer classes in library and community center.

I would like to improve my education in order to search where I want to get more information which I'm interested in the field

Participants believe that other community members would also appreciate the opportunity to learn to use computers to be able to access education, the news and other information that is personally interesting to them. Participants added that to achieve this, it would be necessary to have access to low cost Internet service, and low cost classes.

Participants noted that to be able to do these things, they need a way to learn, access to a Chinese computer, and a fast, stable Internet connection.

Concerns about Access

Mutual interviewing: The barriers identified by participants include the lack of home computer access, coupled with the expense relative to the low income of the community members without access, lack of familiarity with computers or the Internet, coupled with a lack of training to become familiar, especially for seniors that live alone, and not knowing English, the language of most public access computers and most available computer training.

Participants thought other community members might want to begin to use a computer if they knew they could use it to communicate with the world more easily, and specifically to talk to friends and get the news first hand. Some emphasized that computers are attractive to use

Paraphrased Comments

Older people don't know about computer, and there are nobody to teach them because they live alone

Computers are expensive (people don't speak English receive low salary so that computers are expensive for them)

because it is easy to get information, fast. Others thought community members would be interested because of the opportunities to learn with computers. Some suggested more training

in specific applications and simply letting people know about the interesting information and resources available online.

Speaking about their own access, the three without home computers say they want one, and two with a home computer say the one they have is not good enough. Three say they feel like they are missing out and life is harder without being able to use a computer, so they would like to learn. One person said he or she did not want to become a computer user. Participants who are not currently computer users said that it's hard to learn how to use computers if nobody is

available to teach them, and that they don't understand English, so their options for learning are limited. Note-takers added that because many seniors now live alone without their children available to help them, the community must step in.

Paraphrased Comments
I wish I can get free Internet
access in order to make
lower my home expense...
and we will use often the
Internet

Nearly two-thirds (62%) of the computer users said they have problems using computers and the Internet, pointing to the lack of translation in Chinese, slow and expensive Internet access, and the lack of anyone who

can teach. Some mentioned their concern about the lack of protection of personal information and one simply said that he or she cannot understand how a computer works.

The main barrier to computer and Internet use identified by these participants was language. Participants noted that websites, local and government, are not available in Chinese. They added that translator software provides limited word-by-word translation which makes the meaning difficult to discern after translation. Thus, even those with access to the Internet now are still unable to benefit from it because of the language barriers. Thus, participants described two tiers of barriers: at the first tier, lack of exposure, lack of training, the high cost of Internet access and home computers contribute to an initial lack of access that prevents some community members from getting online at all; at the second tier, content in English only prevents non English-speaking community members who have overcome the barriers in the first tier from accessing content.

Participants suggested making free or low cost multi-language classes available through community centers, with careful attention to scheduling so that the classes would not conflict with the work schedules of community members, and perhaps offering different classes for different age groups; creating more places with multi-language public access computers, that are open longer hours; providing multi-language options for software and websites, especially government websites; and making computers cheaper. Some suggested relying on young people to provide training.

Communicating with Government

Survey: Two thirds of the survey respondents prefer to make contact with the government on the web or by email, and 42% prefer to go in person. One-quarter prefer to write a letter, and the fewest (17%) selected using the telephone. When asked how they prefer to give their opinions to the City on things they care about, half opted for attending a community meeting, and 43%

selected email or participating in an online survey. Thirty percent said they'd prefer to participate in a telephone survey, and 21% selected an in person focus group or a short text survey. One each selected attending a city-wide meeting, participating in a discussion on the Internet, or nothing at all.

Survey: Three-fourths say they have visited Seattle.gov and about as many have seen the Seattle Channel, with about 70% specifying that they saw it on cable. In *mutual interviewing*, participants mentioned that they find local and international news, government news, immigration information, and information about the economy on the City's website and cable station. They also mentioned that it shows them how to take a bus and how to make weather repairs. However, participants commented that not much of the content is available in Chinese. Participants named some of what they wanted to see on a multi-language Seattle.gov website, including:

- Government news and information
- Society workshop
- Education information
- Health information
- ESL opportunities
- New policies
- Updated information
- Society workshop
- Computer classes available in Chinese

Participants want the Seattle Channel and Seattle.gov to include local news; City policies; employment opportunities; wealth fairs; traffic; more information about people, and public safety; and health insurance options and welfare benefits for low income people. They would especially like this information in Chinese.

Survey: Participants were varied in how they want to get information from the city, with most (79%) indicating the newspaper or the TV news. More than half (57%) asked for email notices; and 43% each selected the City's website, notices in the mail, or watching the Seattle Channel. Fewer selected the radio (21%) or text messages (7%) or recorded telephone or cell phone messages (7%).

Mutual interviewing revealed again that the main concern of these participants is getting information in Chinese, whether by email, text messaging, or any other medium.

Graduate students focus group

Summary: About three-fourths of these students are cell phone only users. All have a computer at home and nearly all have high-speed Internet access as well. All check email daily. Nearly all said that their current computer is enough for their needs and a few mentioned wanting a newer computer with a faster connection, better speed and reliability, more memory, and something lighter and better for multimedia. Most are satisfied with the speed and reliability of their Internet service; fewer are satisfied with the cost or the customer service. Some suggested considering Internet access a basic utility. Despite the satisfaction with speed and the relative dissatisfaction with cost, students still said they'd pay between \$5 and \$50 per month for significantly faster service.

Nearly all use computers to search the Internet, shop online or use social networking sites. Almost as many use the Internet go get information about their community, local businesses, and fewer, about health information. Cell phone only users were more likely to attend an online class. Participants most commonly mentioned using computers to get quick and convenient access to information, for work, entertainment, or daily living. One interviewer asked her partners to imagine and comment on their life without computers. Interviewees used worrds like, "disaster," "constricted," "insane," and "cry" to describe their imagined lives. Participants agreed that nonusers are missing out on important benefits of access and are being left behind in access to the most up-to-date information on jobs, education and health; information in general; entertainment and pop culture; communication; news and information; and convenience.

When these participants were asked where they do most of their computing, their answers turned to the portability of their personal computer, rather than to public access computers. Participants identified a number of disadvantages about public access computers: they cannot keep up-to-date; the environments are noisy, distracting, and unclean; the time limits are too restrictive, especially considering their slow Internet speed; lack of privacy for financial or health information; too few computers, so the waits are too long; and you can't work in your pj's.

Participants consider themselves to be proficient users, with as much access as they want (with some identifying "computer fatigue" or too much use). Many still have computer learning goals but are not sure how helpful classes would be for them. Several said they would teach themselves new skills, for find a younger person who already has the skills and ask for help.

For others, participants suggested providing more public access computers, including some that can be privately owned, making WiF more freely available, promoting the benefits of computer and Internet access, and providing instructors capable of teaching different populations. Lack of skills or knowledge, sometimes associated with concerns about viruses, spam, or accidental exposure to pornography was the most frequently identified barrier presumed to affect unconnected community members, followed by lack of access and personal issues. Participants suggested more useable technology, addressing the safety concerns of nonusers, and providing a training program in locations that the target community already uses, with the capacity for a

person to be able to respond quickly to the questions of learners. Additionally, participants suggested supplying staffing at public access locations so that new users can have their questions answered promptly.

Most participants (79%) want to make contact with the government on the web or via email. Cell phone only users were consistent in this view (90% vs. 44% of those with a land line). These participants want to give their opinion via an email or online survey (87% overall, and 93% of cell phone only users).

Participants developed an extensive list of what they'd like to see on the City's website, including a calendar of events, customizable by neighborhood, incluiding enteratinment and community involvement opportunities that would bring people together. Other topics included a wide range of local neighborhood information and events, information about transportation, voting, city business and business with the city, a forum for citizen feedback, bills and policies, jobs, and upcoming issues that are *relevant to me*. Several asked for contact information, including emergency numbers and ways to contact City staff members and local politicians.

About half of the participants opted to get information from the City via opt in and tailored, short, infrequent, and important email. About as many selected the newspaper and the City's website. Some participants emphatically rejected ideas that others preferred, indicating the diversity of personal preference and the importance of retaining a variety of communication options.

Participants offered several ideas to help people become comfortable receiving electronic information from the city, with the ability to contact a person for help with the technology as a central piece of several suggestions. Participants also suggested videos of upcoming events or other universal design strategies to make the information accessible for people with limited English literacy.

A focus group was conducted with 44 UW graduate students and two co-facilitators enrolled in the spring 2009 UW program evaluation class, Public Affairs 526 on April 15, 2009 at the University of Washington. Thirty-nine students, 26 women and 13 men, completed a brief written survey. Participants engaged in the planned focus group activities – a dynamic method that relies on mutual interviewing among the community members – with apparent ease and interest. A well educated group, all had completed a four-year degree, and all were engaging in post graduate work. Most of the participants (76%) were Caucasian, with two African American, one African, one Korean, two Chinese, and two Latino students, and one of some other ethnicity. Most (90%) of the participants speak English at home and the others speak Spanish (1), Chinese (1), Korean (1) and some other language (1). About one-third (31%) of the participants were between 18 and 25 years old, about twice as many (62%) were between 26 and 35, and the remaining three were between 36 and 50. Most of the participants (64%) identified themselves as "students," and the other 36% identified themselves as "employed."

About half (49%) of the participants reported an annual household income below \$20,000, and the others ranged fairly evenly over the other categories up to \$100,000 or more (11%).

Technology Access and Use

Survey results show that all of the respondents have a cell phone and 77% do not also have a

landline. Analysis comparing the demographics, access, practices, and preferences of cell phone only participants as compared with other participants revealed few differences. Demographically, women in this group are more likely to be cell phone only users (88% vs. 54%). Other differences will be presented below. Just over half (56%) have cable TV; all have a computer at home and almost as many (97%) have home Internet access. More than one-third (36%) reported having Internet access on a mobile device.

All but one participant indicated that they are computer users (97%), and all report that they use the Internet, and email, with attachments. All participants check email daily. *Mutual interviewing* yielded similar results, with all saying they have used

Written Comments

I feel like it is ridiculous that we, citizens of Seattle, all pay such high rates for individual internet access when it (wi-fi) could be broadcast as a public good

Could it [WiFi] be considered a public utility?

computers for at least a year and the same percentage saying they have a computer at home. Nearly all (88%) said the computer access they have is enough for their needs, with some adding that they need a new computer with a faster connection, better speed and reliability, more memory, a laptop with lighter weight or something better for multi-media.

None of the respondents indicated dialup access. More than half (56%) selected cable; more than one-third (36%) selected WiFi; and 13% indicated DSL. One reported having premium access and four indicated some other Internet access. Most are satisfied with all aspects of their Internet service, including speed and reliability (88% are satisfied with both), cost (76%), and customer service (73%). Despite this overall satisfaction with speed, 26% speed as the single factor that would most improve their Internet access. More than twice as many selected (64%) selected price as the one factor most in need of improvement. Somewhat inconsistently, even though participants are satisfied overall with the speed of their access, and relatively dissatisfied with the cost of their access, many (82%) indicated a willingness to pay between \$5 and \$50 for faster service. Well over half (63%) selected options between \$10 and \$30 per month. Many participants mentioned using their computers wherever they could find wireless access and called for more widely available free WiFi access.

Nearly all (95%) of the *survey respondents* said they use their access to search the Internet, to shop online, or to use social networking sites. Nearly as many (90%) said they use the computer to get information about their community or about local businesses. Two-thirds use the Internet to find health information. Fewer (28%) have contributed to a blog or wiki, or have attended an online class or webinar (26%). More cell phone only user have attended a webinar or online class (33% vs. 0%). Fifteen percent have use the Internet to sell goods or services online. In *mutual interviewing* participants described how computers were part of many aspects of their daily lives. The participants summarized the rest of the group as using computers for:

- Access to information / staying informed
- Distributing information
- Communication/ social networking
- Entertainment (photos, games, music, movies)
- Shopping
- Doing work/ work-related programs
- Staying organized (documenting information)
- Health information
- Daily needs (bills, banking)
- Organizing and improving efficiency
- Everything
- Communication
- Learning and education
- Employment searches
- Social networking
- Spell check

Review of notes from *mutual interviewing* reveals that the most commonly mentioned use is the quick and convenient access to information, for work, entertainment, school, or personal interest. The next most common use related to keeping in touch with family and friends or staying connected to the community. Interestingly, some cautioned about the risks of too much computer use – some of those comments appear in paraphrase at right.

Interview Notes

"Life without a computer..."

Useful for her studies; information; entertainment; fun on Internet – facebook, community with friends; easier to communicate for her with computer – access to family, friends at home country; work and study; look for an internship; send your resume cover letter... Life without computer?... A disaster, Internet makes life easier, [otherwise] messy/harder life

All questions about history, politics, anything can be looked up on Internet – e.g. schedule for entertainment, recipe; anything on Internet, much less educated without computers...no computer in your life – TV and phone only course of communication and news – feel constricted from lack of ease in getting information

I'd be insane without a computer – no way – no world for you without the Internet She'd cry without computers because her work is based on computer – less effective work without computer

If have a question about events, or going out (to dinner), can quickly access info; linking people; accessing community info; increases ability to be socially connected Access to news and news sources; email, social networking sites, convenience; everything!; good way to keep track of things; purchasing goods; banking; communicating; staying informed/news

Access to anything, anytime to answer questions, very useful for job searching

Without Internet, disconnected from world

Some also mentioned "computer fatigue," a condition some experience after spending too much time meeting computer-related demands that results in a reluctance to use the computer more.

A general remark made by many interviewees is that computers just make their lives easier, following with examples of school, work, personal interests, entertainment, or daily living. One interviewer supplemented the provided questions by asking the interviewee to imagine his or her life without computers. Notes from these interviews are included in the text box on the previous page.

Respondents used words like "disaster," "constricted," "insane," and "cry" to describe their imagined lives without the support of computers and the Internet.

Survey: The most common location for using a computer in this group was at home (87%), although two-thirds also selected school, and more than half (56%) indicated their work locations. About one-third (31%) have used a computer at the library and about as many (33%) have used a computer at a café or restaurant. One person each said they've used a community center or technology center, and one person selected another location. In *mutual interviewing*, participants named a wide variety of places that they use computers, with many saying

"anywhere." Most participants were referring to the use of their own portable laptop computers in multiple environments, relying on WiFi Internet access. Respondents were positive about using computer labs on the UW campus, and less positive about public access computers available to the general community through libraries or community centers.

Overall, participants agreed that these computers are less convenient and less desirable to use for several reasons, including:

- Public access computers are usually not up to date because they can't keep up with the increasing demands of software and content providers
- Public use environments are noisy and distracting
- Time limits on public access computers are too restrictive, especially with the slow Internet access at many public access locations
- You can't work in your PJ's
- Public settings lack the privacy many prefer to access their financial information and to look up certain health information
- Public access locations have too few computers so the waits to use a computer are long
- Public access environments are not clean

Interview Notes

It's not good for social interaction, [we have] less face-to-face communication; daily go out to meet people, [there is] less chatting in person.
We're losing it; [we have a] loss of writing.

Interview Notes

It's always pushing – there's always a gap because providers are always pushing up the need for speed and power. You can't go to the library because they can't keep up.

Public library – long line, you have to wait for people; slow access to Internet; computer in public library

Libraries are for low income

[Public access] computer runs slower – takes a long time → computer rage and frustration

Difficult, confusing, setup, not as easy to use as personal setup is

Participants suggested several ideas for improving public access computer use, including the use of headphones, making more computers available with faster Internet connections, and better compatibility between the software available on these computer and other computers.

Goals and ambitions for computer use

Mutual interviewing: Participants consider themselves to be proficient users overall, with 36% rating themselves as skilled to "...figure out new programs as I need them," and 54% rating themselves as "Skilled (sometimes help others)." Three people rated themselves as "Expert" and one indicated "I know what I need to know."

Nearly all of the participants use a computer as much as they want (only one answer "no" to this question) and most (83%) have taken a computer class, identified as useful by 90% of the respondents. Participants mentioned learning to use computers at all stages of school, K through 12, at work, at a community college, and at the computer center at the UW. Topics include Apple basics, shortcuts, and compatibility; keyboarding and specific software applications, including the Office Suite, statistical software, Adobe Photoshop, web design, email, and how to make animation. About two-thirds said they would be interested in taking another class, depending on the relevance of the content. Several of these participant noted that after achieving a certain level of proficiency, they can learn as well or better by using online tutorials or other resources, or getting help from friends.

When asked what they'd like to do with computers that they can't do now, few participants articulated unmet needs. Some skills mentioned include using iMovie, using Skype to make video calls; using database programs and

Interview Notes

People need public access computers to be easy and straightforward in order to use – quit trying to be flashy

Recycling of computers is getting better.
Wireless connectivity is sporadic and
unorganized; virus protection should be tax
deductible - support a standard, city-wide
program that would be cheaper to buy

[They need to] understand the utility of computers, what they can do for them; overcome technology fear... utilization → increased independence; free up time; stay informed and socially connected; social capital and increased opportunity; increases ability to navigate in the world. Need competent instructors who can teach different populations

accessing hard to find data; using HTML language; advanced Excel skills; using media production software; developing particular job skills; managing emails, using Photoshop; web design; and learning how to do hardware maintenance. Other comments related more to access than to skill, including faster Internet access to facilitate using the computer to watch TV and for other purposes, access to digital library resources, and more capacity on the computer to take advantage of Internet content. Two noted that they'd like broader access to information with some way of easily knowing what information is available.

Participants were asked what they thought others might need. One person observed that residents use computers to communicate with people in state government that it would otherwise be difficult to make contact with. Others were more general in their comments, identifying the need for more access to computers, including computers that can be privately

owned, more freely available WiFi to permit Internet access for all, communication of the utility of computers to populations where they are currently under-utilized, and instructors who are capable to teaching different populations.

Concerns about Access

Mutual interviewing: Participants attempted to answer this question for themselves, as well as for others who have less access. For themselves, participants mentioned "computer fatigue," from too much computer user at work or at school, and high cost of Internet access, asking for

more widely available free WiFi access, and the ongoing need for upgrading computing capacity to keep up with the growing demands of computer software and Internet content.

Participants summarized the responses they received when they asked why people don't use computers or the Internet with this list:

- Lack of access
- Affordability
- Intimidated/don't know how
- Uninterested
- Don't need
- Learning disabilities
- Fear, overwhelming, unfamiliar
- Fatigue, costs
- Limited/controlled access
- Lifestyle choice

Review of the interview notes shows that lack of skills or knowledge and lack of access were the most frequently identified barriers. **Lack of skill or knowledge** was frequently attributed to intimidation/ fear/ discomfort in general or a

Interview Notes

Lack of understanding – intimidated (esp. elderly); Access; Cost-prohibitive to own; Unaware of capability

Lack of knowledge of technology and function of internet; Fear, ignorance

Slow connections cause frustration;
Filtering on public access computers
discourage use; Too much work time
discourage personal use
Don't enjoy sitting inside; Extroverts;
Job doesn't call for it; Grad. student
can't afford one, can't fix it, so doesn't
use it

Access for kids because it's excessively monitored, not even fun; Fatigue, lifestyle choice; Fear, intimidation, overwhelming, ignorance; No time to do the research to get to trusted sources

specific fear of accidental exposure to pornography, exposure to viruses or spam. Others remarked that people who don't understand the usefulness of computers might not be interested in learning to use them. Participant thought that these barriers might apply particularly to seniors and other people who were not born into a technologically connected world. Lack of access was discussed as the expense of owning and maintaining a personal computer, the limitations of public access computers where participants find that access is difficult and limited in terms of time, filtering of Internet content, and the Internet connections are frustratingly slow. Participants identified **personal issues**, such as a lifestyle decision made by those who do not want access—or more access; the belief by some that they do not need access. Others suggested that for some, the amount of learning needed to become a competent computer or Internet user, or the overwhelming amount of information facing the new user,

perhaps with insufficient information literacy skills, may be discouraging. Two people mentioned that children's access is so heavily monitored and filtered that it isn't even fun anymore. This is an interesting comment in light of the apparently lower levels of technology use among the youngest survey respondents.

When asked what might motivate people not currently online to get online, participants' suggestions included communicating the value of access to those not yet online, providing training and support to help them learn to use the technology, and providing free or low cost, easy access to enough computers and the Internet so once new users clear the motivation and skill hurdles, they have the access to use the new skills. Most frequently, participants suggested letting non users know the type and extent of information available on the internet. Others emphasized the value of the Internet for communication, especially internationally, and social networking; for developing job skills; and for pursuing personal interests. Three participants noted that increasingly, non users are being forced to become Internet users as fewer resources are available in print.

A few participants suggested letting non users know how computers will make their lives easier and allow them to perform daily tasks more efficiently.

Other participants responded to the question by trying to identify barriers on the "supply side" of the relationship. One individual noted a need for better usability in technology; another suggested addressing the safety concerns of non users; and another urged that any training program incorporate a capacity for a person to respond quickly to the questions of learners. This participant may have also intended this

suggestion to apply also to customer service units so that when any users, but new users in particular, approach the support staff with a question via any means, but especially via the Internet, that the support staff make a concerted effort to respond promptly.

When asked what would help or make it easier for people to use computers and the Internet, group members produced this list:

- Classes with better publicity
- Public computers (good ones), perhaps at local businesses, not just libraries, with better publicity

Interview Notes

Access to information; Access to communication; Participatory culture; On-line socializing

Make it more affordable; More locations of computer and wi-fi

Give more info; Make life easier

News, local information; To connect w/other people (esp. internationally); Different software programs make hobbies or tasks more fun or easier; Less expensive would be better incentive to use

If people could easily have their questions answered; If they could learn things that interested them; If definitive answers could be provided

People are increasingly forced to do it; Easy access to classes; Information, especially w/diminishing print news

- City-wide free WiFi
- Affordability
- Communicating value
- friends

Review of the interview notes shows that nearly all participants called for simple, appropriate, comfortable, accessible free or low cost computer and Internet training for people without computer skills. Similarly, they suggested providing staffing at the library and other public access destinations so that new users can get answers to questions as they begin to use computers. Additionally, participants called for easy access to computers, specifically suggesting putting computers in churches, cafes and other convenient locations where people gather anyway, and different ways of making personal computers affordable to more people, mentioning computer recycling programs and subsidization for people with low incomes. Access includes both computers and Internet.

Four participants called for more user friendly technology so that the learning curve is not so steep. Two individuals mentioned the need for attention to language.

When asked where *they* would go to learn how to use computers or the Internet, most participants said "school," not a surprising response for a group of students. However, nearly as many said they'd turn to friends, neighbors, family members or "a young person." Several also mentioned a community center or the library. Several indicated that once they achieve a certain level of proficiency, they learn well using Internet resources or tutorials.

Interview Notes

Major barriers for older, discomfort with keyboard and mouse; Teaching relationship with moving the object and what's on screen; Cheap free access

More, easier access; free wifi; staff in libraries who can actually assist people with computer questions. Increase access in South end

Classes in trusted places in community where people are already active

Access and skill; Classes; Language compatibility; Friendlier; Demographic (logs, etc.) focus; Connection to life, purpose

Classes for specific age groups – older people might be intimidated to take a class with younger more experienced

Make hardware and internet access more affordable; More locations of computers; Citywide wi-fi; Increase availability of education classes

Classes – inviting non-intimidating easy access; Free wifi for city; Computer recycling where people can donate old computers

Expanding sites where computers are accessible, i.e. only 1 hour and limited HS at library and slow; Increase quality and quantity

Most participants were unfamiliar with the computer centers around the city. A few ventured some opinions, including that they should advertise themselves more, that they need more flexibility in their time limits, easier printing, more computers so the wait is not as long, and more up-to-date computers, and staff available to help with computer-related questions. One participant called for public access computers in more informal spaces, such as cafes. One person noted that there are too many barriers to using the technology centers.

Participants agreed that non users are missing out on important benefits of access and are being left behind. The interviewers produced this list of responses:

- Missing most up-to-date info on jobs, education, medical information
- A larger array of information
- Some things are internet only
- Entertainment
- Job postings and job viability
- Communication
- Pop culture
- News/information
- Can be a time saver

Review of interviewer notes shows that the most commonly mentioned benefit of computers that that those without access are missing is access to quick, important and most up-to-date information. Also frequently mentioned was access to jobs and job application procedures; easy

Interview Notes

Don't use because: Access - not provided through work, haven't bought; Yes being left out; Lots of info online; Communication easy (email etc); Left out of conversation.

Proficiency – don't know how – need training; High cost of computers, internet, software, hardware; Yes, left behind; Seattle vs. tech city; Important info online: jobs, education, government updated

Old people don't know how to use; Afford; Kids log from parents/family; Even if can afford, don't know how to adapt to their needs; Yes, being left behind; Language – news from home country – less global perspective; Use older forms of communication; Miss out on the entertainment

communication options such as email; job skills; international news, which might be especially important for immigrants; social networking; and popular culture.

Communicating with Government

Survey: The great majority of the survey respondents (79%) prefer to make contact with the government on the web or by email. This is even stronger among cell phone only users (90% vs. 44% of those with a land line as well). Twenty-eight percent prefer the telephone, 13% selected going in person (more of those with a land line – 44% vs. 3% of cell phone only users), and none selected writing a letter. When asked how they prefer to give their opinions to the City on things they care about, a strong preference (87%) emerged for an email or online survey, especially among cell phone only users (93% of this group vs. 67% of those with a land line). One person wrote in, "If given an online survey, I suggest real time tabulation of results for the public." Only one person indicated a telephone survey. Thirty-eight percent indicated an interest in attending a community meeting, 26% an in-person focus group, and 21% a discussion on the Internet.

Survey: Nearly all (90%) say they have visited Seattle.gov and fewer than half (44%) have seen the Seattle Channel (two-thirds of these have seen it on cable). In mutual interviewing, participants provided a great deal of feedback about the Seattle.gov website. Participants had less to say about the Seattle Channel and in discussion after this group's presentation, several participants were concerned that they had not been given the opportunity to give the feedback that they would be unlikely to watch the Seattle Channel regardless of the content. The interviewers responsible for this question produced this summary of information participants would like to see on the City's website:

- Community events
- Restaurants
- Research statistics
- Utility rates
- Citizen feedback
- Neighborhood crime statistics
- Updates issues relevant to me
- Announcement of town hall meetings
- Job listing
- Zoning info
- Public works planning/happening in my neighborhood
- Info community centers
- City council bills issues
- Transportation (routes, traffic)
- Emergency numbers
- Voting information
- Trash and recycling times and service information
- Know about your community
 - Social events
 - o Personal enrichment
 - Networking
 - Volunteering
 - o Community info
 - Significant buildings and development
 - Search by interest area, then find out where (neighborhood)

Interview Notes

Easy access to dept contact info; quick links to most requested info (even outside of city)

Show only events in the neighborhoods I'm interested in; Alerts about solid waste changes, recycling; Traffic interruptions; Weather forecast/current/historical data

Maybe have an option like "my seattle" so I could customize?

Jobs: office of Film/Music – updates; Sustainability issues; Calendar specific to her community for events; Council update feed

Single source for all bills

Community /neighborhood event;
Neighborhood issues – concerns – link to all neighborhood assoc; Clear access to local politicians (school board, etc.); Upcoming issues – key concerns of lawmakers; Local govt should be farther ahead in providing access – increased access is necessary for a healthy democracy

Most customizable interface as possible Like iGoogle where you can make page outer to what I want.; Visual RSS feed.; Social networking, kinda of like a city government profile w/your info and others

Notice on upcoming community events especially anything requiring vote.; Also, easily accessible volunteer opps (on-call volunteer opps.)Not good enough update and info on volunteering currently

City of Seattle 2009 Information Technology Residential Survey Final Report

- By neighborhood information
- Council agenda items
- Neighborhood/community events

Review of interviewer notes shows that the most common suggestion was a calendar of events, customizable for the neighborhood levels and including entertainment, and community involvement opportunities and bringing people together. Many of the specific suggestions can be found in the text boxes at right. This group was also very interested n hearing about upcoming issues and agenda planning for the City Council, as well as city policy, laws, procedures, and decisions. (This group of Public Affairs students may have more interest in community policy making than other groups.) Additionally participants expressed strong interest in being able to get information relevant to them, about their own neighborhood, perhaps in a customizable format. Several also wanted information about transportation, including bus schedules; bicycle information; traffic issues; and access to traffic cameras.

Several participants mentioned wanting access to contact information to enable them to talk to a City staff member or a local politician. They also wanted emergency numbers easily accessible. Some wanted to see updates on city business including the progress of construction projects. Several were interested in information that would help with looking for a job, including a customizable job search page. Other suggestions includes news alerts and emergency information, such as how the City is responding to a weather emergency; a feedback blog where residents can explain how issues affect life in their community, and a regularly updated neighborhood blog; weather; attractions/ restaurants/ arts/ and culture - the information a visitor might want to see; data and information, including reports on city sponsored programs; social networking; volunteer opportunities; links to the most requested information, and links to each neighborhood association; information about people in the community, including candidates, and the agendas of local politicians; crime and safety; a listing of resources and community-based organizations within the City. Single individuals suggested posting coupons online; providing

Interview Notes

Bus routes; Weather; Maybe town hall meetings; Proposed legislation; City sponsored events

Updates for the issues most relevant to me (bicycle issues, things happening in my neighborhood, arts and culture);
Upcoming town hall meetings or events

New development plans, policy changes, new activities; Would use for info about moving or visiting a city – jobs, sights, etc.; Services available to residents (utilities, etc.); Transportation info

Calendar of community events (free, farmers markets); Current proposals/initiatives; When city council seeks public input

Map with gradients (hills) with bike lanes outlined

I don't watch TV. Website —
neighborhood blogs Key is that is
regularly updated. Sites that don't update
don't get traffic.; Using internet to
simplify the municipal government
process so people can get educated about
issues previous to vote

Calendar specific to her community for events, when the meeting is ahead of time; Clean up party events; Security issues

History of community, buildings &development; Heritage; People & activities, bringing people together

Blog on how issues of city are affecting community life

information about Seattle's history; zoning and development information; a central place to pay bills; sustainability issues; and comparisons to other jurisdictions.

When participants were asked what they already know about the Seattle Channel and Seattle.gov, no clear responses emerged. Several people mentioned job postings, and others mentioned it as a way to find out about City departments, including contact information, and to find contact information for council members. Some mentioned that the website is a good source to get updates on the Mayor's initiatives; to find out about neighborhood plans; to get information about adopting pets; and to find municipal codes. Two thought it provided information about gas prices. Some mentioned that the website is unattractive, looks dated, and is difficult to navigate.

Some noted the Seattle Channel carries public interest stories and city council meetings that the respondent described as "boring." Another simply described the Seattle Channel as boring.

Survey: Participants were varied in how they want to get information from the city. Just over half (54%) indicated email, with several qualifying comments. Several emphasized that it had to be an "opt in," system and tailored to their particular interest and above all, not convert to spam. Some specified that email would be acceptable of infrequent, short, and important - another suggested receiving weekly updates. One person specified "no email." About half each said the newspapers, and the City's website. About a quarter each said the TV news (28%), the radio (23%), and from other community members (26%). Twenty-one percent asked for written notices in the mail, and about as many (18%) asked for text messages on the cell phone (however many others emphatically rejected this idea), although one was open to real time text information for the bus that would tell the rider when to expect the bus. Very few (5% each) opted for recorded telephone messages or turning to the Seattle Channel. Several recommended providing an RSS feed option. Interviewers gave this summary:

- Email
- Only specific (very)
- Tailored
- Or not at all
- Self-subscription
- Text no don't want to be bothered (emergency alerts okay)

Interview Notes

I would go to the website more if I found it more useful, user friendly, and pretty.

The internet – on websites, would like to find rather than receive info but would possibly sign up for very specific list-serv or alerts. Would need to choose more specifically.

Social networking sites; Local newspaper website (events calendar); Would seek specific info and then choose whether or not to receive email /mail about it.

No – intrusive – I don't want to use my cell for updates – prefer RSS

Probably no because it would depend on nature and frequency of updates. Would like info I choose but don't want a bunch of spam

No text messaging!; Too many emails and then interest stops; Weekly update instead daily

Good idea to get tailored email information

- Channel community info, services available
- Most want to go to website rather than to receive
- Blog citizens about how city issues affecting community
- No texts (unless infrequent and important)
- Email only if relevant (RSS feeds)
- Clarify points of contacts in w/in the city

When asked what could help people become more comfortable receiving information through an electronic medium, participants emphasized the importance of giving learners a way to contact a person for help with the technology, and then getting a quick response to their questions. This could be done by the telephone or through instant messaging – the key points were promptness and access to a real person who could help. Others remarked that the first step would be to help people who currently don't have access become comfortable with email and the Internet, returning to the suggestions of free and low cost computer and Internet access, an easy "non flashy" website, perhaps customizable, with the needed high quality information. One person suggested putting videos of upcoming events online, a suggestion that might benefit residents with limited English literacy.

Vietnamese immigrants focus group

Summary: This group was divided with some who had very limited English language skills and who seemed confused by the questions and the topics of computers, and others who were more comfortable speaking English than Vietnamese and were more technologically aware and connected. All participants have a cell phone and about one third do not also have a land line. Almost two-thirds have home computer and (mostly high-speed) Internet access. Most (81%) say they use email (but only about one-third use attachments and half check it daily), three-fourths say they use the Internet and only about half say they are computer users. These figures suggest that some participants do not recognize the hierarchical relationship between access to computers, the Internet, and email. Most participants gave themselves modest skill ratings.

Participants use computers to search the Internet, get health and community information, find out about local businesses, and shop online. They also mentioned using it to apply for jobs and look for ESL opportunities. Some use the Internet to keep in touch with friend and family overseas and use the Internet to make international calls less expensively, identifying the best thing as the fast, easy access to whatever information they need, allowing them to use the internet to learn, read the news, stay in touch and get directions. Some suggested developing a social networking site for Vietnamese people to draw community members to the Internet.

Participants are satisfied with the speed and reliability of their Internet service, but not as satisfied with the cost or the customer service. However, participants commented that they have dropped their Internet access because of it's too expensive and too slow.

This groups did not express the desire to gain access to computer or the Internet seen in other groups, but some participants seemed confused about the notion of computers and why they might be beneficial. This could indicate a greater lack of awareness in some segments of this community. Further study into the technology needs of this community might be warranted.

Some participants identified a number of specific computer-related goals and barriers that stop them from achieving those goals, such as not enough time or knowledge, inadequate hardware or slow and expensive Internet access. Participants suggested ways to make computers more accessible, such as providing public access computers, free, in person training in how to use them in more languages, and making computers simpler to use, possibly providing voice recognition software to reduce literacy demands. One person mentioned fears about security and identity theft.

Participants called for a calendar of events and activities on the City's website, and Vietnamese-specific information, perhaps through a link; Participants would like to see real time crime and safety information on the City's website, resources for low income families, ways to volunteer, information about the rights of people with disabilities, and information about computer classes

Participants asked to get information from the City via infrequent, opt-in email messages, keeping other options available for those without email access.

A focus group with residents of Vietnamese descent was conducted on April 16, 2009 at the Denise Louie Education Center with 13 participants and four note-takers. Sixteen participants and note-takers completed a brief written survey. Most of the participants spoke Vietnamese primarily, but some spoke English at home and were not comfortable speaking Vietnamese. Note-takers were bilingual. The English speakers formed two groups; the Vietnamese speakers formed the other two. Since this method relies on mutual interviewing among the community members, the language barrier interfered with certain groups interviewing one another. The problem was resolved with the bilingual note-takers serving as translators in "group" interviews when the Vietnamese-speaking and English-speaking groups interviewed one another, resulting in a series of small focus groups, rather than multiple mutual interviews. Although this solution was satisfactory, other solutions that might have resulted in an easier experience with more input from all community members include: 1) ensuring that participants all speak a common language; 2) conducting two parallel sessions, divided by language; or 3) mixing the tables so that both languages are represented at each table permitting participant to

seek out compatible language partners in each interview partner selection process. Then the note-takers could facilitate each group's bilingual discussion after all the interviews were completed. Despite this challenge, participants engaged in the focus group activities and provided rich information.



Participants were diverse in age, educational achievement, and income. They ranged in age from 26 to one participant who was older than 65 years. About half (54%) were between 26 and 35, about one-fourth (23%) were between 36 and 50, and the others were older than 50. Educational achievement ranged from one person with less than a high school education, five (39%) who completed high school, 31% with some college or a two-year degree, and almost one-fourth with a four-year degree or more. More than half (58%) are employed, and one each was retired, a homemaker, a student, a working student, disabled, and unemployed. Of the people indicating annual household income, two indicated income of less than \$20,000; three were between \$30,000 and \$40,000, three more between \$40,000 and \$50,000; two between \$50,000 and \$75,000; and one over \$100,000.

Technology Access and Use

Survey results show that all participants have a cell phone and 38% do not also have a landline. Just over half (56%) have cable TV and a few more (63%) have a computer and Internet at home. Only one person reported having Internet access on a mobile device.

Only half the participants indicated being computer users, though 75% indicated using the Internet – and 81% indicated that they use email (although only one-third say they use email attachments). About half of the email users say they check their email daily and another quarter check it a few times a week. The others check it weekly or less often. All but one of those with home Internet access reported having high-speed access, specifically DSL (25%), cable (42%), and



WiFi (17%). None had premium or business class access and only one used dialup access. Survey participants were varied in what they would be willing to pay for fast (or faster) service, with four (29%) saying they would pay nothing and another 3 (21%) selecting less than \$5 per month. Two selected \$5 to \$10 per month; one selected \$10 to \$20, and two each selected \$20 to \$30, and \$30 to \$40.

Survey: When asked about their skill level with computers, nearly all the respondents selected either the lowest skill level "None or not very skilled" (38%) or the second step, "I know what I need to know" (50%). Two people ventured higher self-assessments with one selecting "I can figure out new programs as I need them" and another selecting "Skilled (sometimes help others)." No one selected the "Expert" option.

Twenty percent of the *survey respondents* indicated that they don't use a computer, and 60% said they use it to search the Internet. About one third said they use it to find out about local businesses, to find health information, to get community information, to shop online, and to use social networking sites. Two people (13%) use it sell goods or services. In *mutual interviewing* participants summarized by saying that they are good for everyday use, adding that they use them to shop online, download programs, apply for jobs and look for ESL opportunities. Others mentioned that they use a computer to email friends and relatives, and some use the Internet to call Vietnam. Participants mentioned reading newspapers online and using computers for entertainment, such as playing games, listening to music, and watching movies.

In mutual interviewing, participants noted that what they best like about computers and the Internet is the fast, easy access to whatever information they need, and that they can use the Internet to learn, to read the news, to stay in touch, and to get directions.

Survey: Most people are satisfied with the speed (85%) and the reliability (80%) of their Internet access, and they are less satisfied with the cost (63%) and especially the customer service (43%)²¹. When asked what one thing would most improve their Internet service, seven people (54%) selected price and surprisingly, six (46%) selected speed. None selected customer service.

Vietnamese Immigrants Focus Group

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²¹ This figure may be deceptively low – only about half the respondents answered this question. It may be that those who felt dissatisfied with the customer service were more likely to respond.

Mutual Interviewing: Some reported that they had dropped their Internet subscription because it was too expensive and too slow.

None of the non users indicated that they felt like they were missing out; however, some seemed somewhat confused about the notion of computers. With the apparently low but somewhat confusing survey responses regarding technology access, and the apparent lack of desire for more connectivity, further study into the technology awareness and technology needs of this community might be warranted.

Survey: The most common location for using a computer in this group was at home (81%). Other locations were not selected by many. Three each selected work, the library, and a friend's or relative's. One indicated school. In *mutual interviewing*, some mentioned that library's connection is much better than at home, and that the community center also has a faster connection. However, participants suggested that better parking access at the library and the community center would help make those computers easier to use. Others remarked that public access computing environments as too loud to concentrate well. They noted that the library works "OK," but that computers at work and at home are better. Participants expressed concern about Internet safety, worried about "hackers stealing my credit card information."

Goals and ambitions for computer use

Mutual interviewing: Participants said they want to learn to do web design, and they want to learn to Google better, and generally, better research techniques. One person said she or he would surf more, but there is not enough time, and another would like everything to be on one website. Another wants to learn to email, shop online, watch movies and learn to solve computer-related problems. Participants want more free services and resources, and support for genealogical research. Some mentioned wanting GPS tracking of sex predators and other information related to enhancing public safety.

Some participants indicated that they do not have enough time to pursue their computer-related goals, and some also noted they do not have enough knowledge. One commented on not having an adequate computer and having slow access – another mentioned the cost of access. One person mentioned concerns about security and identity theft.

Paraphrased Comments

I'd like to learn a few different software programs. I wish the Internet was faster and not so expensive.

More free classes offered in the community to help folks broaden their computer knowledge and make their lives easier – Software programs to help you start your own business and be successful.

Concerns about Access

Mutual interviewing: Participants suggested that some community members don't use computers because they don't know how to use them, they do not have a computer at home, and computers are too expensive. Some thought that others might be discouraged from learning because of security issues (such as hackers and viruses), or because they are just old fashioned. Participants also noted barriers due to language, intimidation, and age, saying that some community members might be too old to enter the technology age. Participants suggested having more languages available in the computers at public access locations.

Paraphrased Comments

People are afraid of hackers, scams - you hear about scams, like the person who ordered a phone but received a rock and couldn't return it. People don't want to participate because of that risk.-

Participants noted that people without access may lack up to date information and news, having to depend on children and others to keep them informed. Participants suggested that community members without home access who want access to computers and the Internet might rely on the library, community centers, schools, and family and friends.

Participants suggested that others might want to use computers if they knew they could keep in touch with family and friends, get information quickly and easily, including information about benefits, save time with daily tasks, like making appointments, getting directions, and paying

bills. One person made an off-hand comment that although computers do save time, they are also time consuming. Others thought that a social networking site for Vietnamese people might draw community members to the Internet, as would the opportunity to learn via the Internet.

In addition to more training, described below in more detail, participants also asked for faster connections and lower cost for Internet access. One participant focused on specific types of content, such as music and news. The library was the most frequently suggested place that participants said they would go to learn to use computers. The community center, school, a friend's or relative's were also mentioned. In discussion, participants remarked that there are problems with using library computers and that the community technology center is good – the connections are faster and it's free. Additionally, a volunteer is available to help solve problems.

In discussion, participants repeated the concerns about the threat of hackers and scams, risks that might discourage community members from participating. Participant comments transcribed from interview sheets

Paraphrased Comments

Website is simple, not too much word and link

Education on more privacy protection specially for people who don't know how to use them

They are a lot around, but getting an account to use might be daunting

I didn't know there were computer centers available

suggest a lack of understanding of computers and the Internet among some of the participants, as well as a lack of awareness of access opportunities.

Training

Most of the participants (79%) indicated that they have taken a computer class and most of these reported that it was useful. Most (71%) were interested in taking classes in the future. Classes had been taken in high school; at community colleges; at the community center; from the City of Seattle; and from work. Topics included keyboarding; the basics of the Internet; including accessing news online; emailing; online entertainment; Microsoft's Office Suite; Adobe Photoshop; how to create a website ("without the intimidation of learning"); and other software programs.

Participants mentioned that they want to become more skilled in programs, for work, for personal interest and for surviving. They prefer classes with an in-person teacher, but need the classes to be free or low cost.

Participants suggested that more free classes, taught in Vietnamese, could be offered in the community to help community members learn



basic computer skills, such as Internet browsing, as well as more advanced skills including working with Microsoft Office and applications to help interested individuals start their own business. Some believed that individuals who do not currently have access, especially the elderly, might be intimidated and afraid of new things. Classes taught in different languages and giving attention to protection from the risks of the Internet were suggested as possible ways to help these individuals gain access.

Participants also suggested printing basic information about computers and computer access in a pamphlet that could be freely distributed. One participant asked for someone to come and teach her/him how to use the computer, and also suggested providing voice recognition software for those unfamiliar with a keyboard or who may have limited literacy. Others suggested that community members might get help from their children, friends or relatives, or at the library. Others suggested making more computers publically available, and finding a way to make home computer and Internet access more affordable. One person suggested the need for more simplicity ("less buttons") in computer use, and the possibility of video instruction.

Communicating with Government

Survey: Two thirds of the survey respondents prefer to make contact with the government on the web or by email, and one-quarter prefer the telephone. A few prefer to write a letter (17%) and one prefers to visit in person. Correspondingly, when asked how they prefer to give their opinions to the City on things they care about, 62% selected email or participating in an online survey, followed by 15% who prefer a discussion on the Internet. One each mentioned wanting to attend a

Paraphrased Comments

Knowing what's going on would help in picking an event to attend

Your own personal community, free events, singles events, events for older lonely folks

city-wide meeting, wanting to participate in a short text survey, or attending a community meeting.

Survey: Few (23%) of the survey respondents have visited Seattle.gov or seen the Seattle Channel (38%). In *mutual interviewing*, participants mentioned City Life, an educational resource, and some thought they might be a way to find city jobs or more information about childcare services, but most confirmed that they don't know much about the City's website or TV channel. Participants named some of what they wanted to see on Seattle.gov, including:

- Calendar of community events and activities, especially Vietnamese events
- Local news
- Weather updates
- News (including Vietnamese newspapers)
- Available resources, especially for low income families
- Easy links to government services, social services available for low income families; health care
- Ability to socialize on the City's website
- City budget information
- Continuous updates on schools
- More colors, video, and music

Participants wanted to know more about cultural activities, and multi-cultural activities. Several expressed interest in Vietnamese-specific information, in Vietnamese, such as news about the Vietnamese community, and Vietnamese festivals and events, and other things happening in the community, such as grocery sales or real-time crime reporting to help them know what areas to avoid. Participants also expressed interest in finding resources for low income families, learning about the rights of people with disabilities, and ways of volunteering. Participants also are interested in finding out more about classes, specifically mentioning computer classes, and arts and crafts. One person requested a link that would lead them to all Vietnamese events.

Survey: Participants were varied in how they want to get information from the city. About half asked for email notices that they could opt into; 38% each selected the newspaper or the City's website and 31% selected the TV news. About a quarter selected the radio or notices in the mail. Two selected the Seattle Channel and only one was interested in receiving recorded telephone messages. None wanted text messages on their cell phone, saying it is a bad idea unless the City can find a way to make it free.

In general, participants approve of knowing what's going on, and like being able to communicate with the government. Participants were divided about email, with some afraid of SPAM, and one person suggested limiting email to one per week. Others were concerned that if the City relied on email for giving out information, those without access would not have a way of being informed.

Participants also suggested mailers to let people know about Vietnamese classes being offered, and flyers that could be distributed at Viet Hoa, nail shops, and Sea Deli.

Participants had three different suggestions for helping people become more comfortable communicating with the City by electronic means:

- 1. Custom language ability, including telephone support in multiple languages
- 2. Training, with some suggesting a telephone or other types of tutorials, and others suggesting classes. Participants asked to have the process explained thoroughly, with special attention to the problem of hackers and viruses.
- 3. Improved customer service, with faster responses from the city and more personable telephone responses.