

**Residential Survey Results
for
The City of Seattle**

Draft Report

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The City of Seattle contracted with CCG Consulting LLC (“CCG”) to conduct survey of a statistically valid sample of residents of the City. The purpose of the survey was to ask residents questions about their telephone usage, cable TV and Internet usage and to determine the level of interest in a fiber network in the City. A full copy of the survey and the results are attached to this report.

The first step in developing the survey was to determine how many residents must be surveyed for the results to be considered statistically valid. In our line of work we routinely help clients to determine sample sizes. At CCG we use tools to determine sample size. For several years we have consulted two web sites, (www.surveysystem.com/sscalc.htm#terminology) and (<http://calculators.stat.ucla.edu/>) that have online sample size calculators. The first site is from the web site for Creative Research Systems, a firm specializing in market research. The second site is from the Statistics Department at UCLA. Prior to using these sites, I used to perform these calculations manually and I have tested both of these sites to make sure they produce the same results as my manual calculations. The sample sizes provided by these websites has always been the same or nearly the same (sometimes varied by 1 because of rounding) as the results I obtain by manual calculation.

In creating the sample size one must determine the level of confidence that is wanted from the results. We selected a sample size that would produce results with a 95% confidence level. In layman’s terms this means that the results obtained would be roughly within 5% of the results we would expect to obtain if we were able to talk to every resident in the City. This confidence level is the same one used for almost all business surveys (along with political and newspaper surveys). A vastly larger number of surveys would be required to get a tighter confidence level, so economics normally dictate the 95% precision.

There are approximately 271,000 households in the City by current estimates. To obtain the desired results we need 384 valid samples.

We use a systematic sampling approach for calling. We start with white page listings for the City and then call every twenty-fifth resident. If there is no answer we proceed on to the twenty-fifth household after the one missed. This type of methodology isn’t strictly random, but this is the approach that almost all telephone surveyors use and it is a valid sampling technique. Since our callers don’t know anybody in the City, we believe this method achieves the same results as using a pure random calling pattern.

The questions for the survey were designed in a collaborative effort between CCG and the City.

Following are the highlights of the results of the survey:

Telephone Usage

The first set of questions asked was about telephone usage. We wanted to know how people used their landline and cell phones today.

The answer to the first question surprised us. 99% of households surveyed still report that they have landline phone service. There is a general perception that households are dropping basic telephones in favor of cell phone service, but that apparently has not yet surfaced in any material way in the City. 56% of households have cellular service which is lower than the national average.

90% of households report that the landline phone is still the primary telephone. 10% declared the cell phone as the primary phone.

We asked about how people make long distance calls. 63% of households use their home phone that is prescribed to a long distance carrier. 7% more use their home phones and a calling card. 20% use their cell phones to make long distance calls. 7% reported using both the home phone and the cell phone. Only 3% of customers don't make any long distance calls.

There are several providers of local phone service in the City. 80% of residents identified Qwest as the phone provider. Comcast has made significant inroads into the market for a recent entrant and has already captured 13% of households. 6% of households use other local companies such as Vonage, North Star, WTI, Sprint and IDT.

We then asked how much people spend on their telephone landline bill and on the total telephone bill including cell phone. 96% spend less than \$100 per month for their home telephone service including cellular (72% less than \$50). However, only 83% spend less than \$100 when including their cellular bill (45% less than \$50).

We must note that our experience has shown that the amount that people report they spend on bills is often different than what they really spend.

CATV Service

We also asked who people use for CATV service. 60% use Comcast, 3% use Millenium, 6% use Direct TV and 8% use Dish Network. 23% report no cable TV usage. These numbers are very close to the national average in total, but lower than average in terms of the percentage of people using satellite providers.

We asked how many TVs people have in their households. One person in the sample had no TV. 27% have one TV, 37% have two TVs, 19% have three TVs, and 17% have four or more TVs.

We asked how much households spend on cable TV. 9% of homes spend under \$25 per month. 24% spend between \$25 and \$50 per month. 28% spend between \$50 and \$75 per month. 13% spend over \$75 per month. Another 3% didn't know what they spend including those who buy cable as part of a bundle.

We asked the 23% of households who have no cable service what they would be willing to spend for a 40 channel package. 24% said less than \$10 per month, 36% said between \$10 and \$15 per month. 14% said between \$15 and \$20 per month, and 4% said more than \$20 per month. This response shows that price is key for these customers and they are unwilling or unable to spend much on cable TV.

Internet Service

Next we asked where people get Internet service. 43% said from cable modem (Comcast or Millenium), and 12% said from DSL (Qwest). Another 3% said they have 'broadband' without specifying which service. Another 1% of customers get wireless broadband. That equals 59% broadband penetration in the City, which is higher than the national average for broadband penetration (a little over 50%). 18% oh households report using dial-up. Adding dial-up to broadband shows a total Internet usage in the City of 77%. Only 23% of households report no Internet usage.

We asked what households spend on Internet usage. 16% report under \$20 per month. 29% report between \$20 and \$40 per month. 20% report spending between \$40 and \$60 per month. 1% report paying more than \$80 per month. 3% didn't know what they spend, many of whom use a bundle of services.

We asked about bundling of services. 48% of households report getting at least two of the three triple play services on one bill today (telephone, cable TV and Internet).

We asked those households without Internet what they would be willing to pay for service 'that is significantly faster than Comcast or Qwest). 40% said less than \$20 per month. 4% said between \$20 and \$30 per month. The rest didn't know or would not be interested in Internet access at any price. The response to this question points out that monthly cost may not be the only factor in the digital divide. 16% of households in the City today already have Internet access for less than \$20 per month, so price does not seem to be the barrier. Many of these households are not interested in Internet access at any price.

Seattle as a Network Provider

We asked households if they would like to see more telecommunications competition in Seattle and 70% said yes.

We asked how likely households would be to support the City of Seattle if it joined private partners and developed a new fiber network that could provide cable TV, Internet, telephone and other services. 59% of households said likely or very likely. 16% of households said unlikely or very unlikely. 25% of households were unsure.

We then asked if people would support a City network if that meant getting lower prices. 73% of households said likely or very likely. 11% of households said unlikely or very unlikely. 16% of households were unsure. As we have seen across the country, price is one of the major factors for residential households in choosing a telecommunications provider.

We then asked if people would support a City network if it meant getting faster Internet service. 67% of households said likely or very likely. 16% of households said unlikely or very unlikely. 17% of households were unsure. This response shows a significant interest in faster Internet speeds, but not as much interest as in lower prices. This may reflect the fact that 23% of households have no Internet today.

Next we asked if people would support a City network if it required public financing. 60% of households said likely or very likely. 16% of households said unlikely or very unlikely. 24% of households were unsure. Interestingly, this question did not get a larger negative response, but a number of people were unsure if they would support this compared to earlier questions.

Finally, we asked the key question, which is how many households would subscribe to services if provided on a City fiber network. The responses are as follows:

	<u>Yes</u>	<u>No</u>	<u>Maybe</u>
Basic CATV	66%	23%	11%
Digital CATV	54%	33%	13%
Local Phone Service	69%	14%	17%
Telephone Features	68%	16%	16%
Long Distance	63%	21%	16%
High Speed Internet	61%	24%	14%

CCG has performed a large number of surveys nationwide for both municipalities and for commercial firms. These results are very positive and are higher than the results seen in many other surveys. We have to suspect the high positive response is a result of a combination of some underlying dissatisfaction with the current providers or else a very positive feeling about the City.

These positive responses are far higher than any demand take rates predicted in any of the financial models used to look at the potential for profitability for a City network.

Some of these responses are extraordinary. For example, 61% of households said they would buy high-speed Internet access from the City, which is higher than the total broadband penetration of all providers in the City today. When one considers the yes and maybe votes together, the opportunity for success of a City network is outstanding.