Digital Inclusion in Austin

Results from a Citywide Survey

The University of Texas at Austin, Technology and Information Policy Institute, 2015

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1 Executive Summary

The City of Austin and its institutional and social services communities have a long history of dedication to the goals of digital inclusion. In the 21st century, the City faces new challenges associated with rapid growth, income inequality, and population migrations that alter neighborhoods and cultural communities. At the same time, computers and the Internet and the services they offer - and a host of access devices such as smartphones and tablets - also change the way people work, play, learn and engage in citizenship. As Internet access and digital fluency become more essential to make intelligent education, health, social and work choices, being able to available oneself of digitally-based resources is becoming mandatory. Indeed, the economic base of the region has embraced technology, and a local workforce and citizenry that possesses digital capabilities is often taken for granted.

This environment puts digital inclusion efforts high on the list of social and government concerns. The results of a 2014 survey on digital inclusion dynamics are profiled in this report. It underscores that Austin is a city in which people are habituated to digital technologies and who use the Internet and its services widely. Our basic broadband use statistics show that the local population exceeds national averages in terms of home broadband and Internet use. About 92% of the households surveyed have a home Internet connection, and about the same percentage report actually using the Internet. This is higher than comparable national statistics that suggest about 70% of the U.S. households have some type of broadband service at home.

However, digital exclusion still exists. Over 50,000 Austinites do not use the Internet, which may translate into lost opportunities for education, social and health services, and local participation.

This report explores some of the access, use, and attitudes that provide some insight into the dynamics of digital capabilities. Its findings should lead to improving efforts at expanding digital fluency and insuring that everyone has equitable access and abilities to make use of the expanding resources of the Internet.

Access and Devices: Austinites use many devices to access the Internet; rates exceed national averages

1. About 92% of Austin households have a home Internet connection, and about the same percentage report actually using the Internet. This is higher than comparable national statistics reporting that 70% of the U.S. households have some type of broadband service at home.

2. The Austin population's use of electronic, mobile devices exceeds national averages. The rates of having cell phones and home-based Internet subscription in Austin are very high, exceeding national averages. Of the 95.6% with cell phones, 83% have a smartphone which can be used to access the Internet.

3. The majority of respondents also have laptops, and over half have tablets. About 37% have their game consoles connected to the Internet.

4. Among Internet users, the personal computer is most often used to access the Internet, closely followed by using a smartphone to connect. Tablets are used less frequently.

5. While the overall rates of using cellphones to access the Internet are somewhat lower among Hispanics and African Americans, they are still high (89.7% and 87% respectively). Among those who have no home broadband connection, a higher percentage of the African American population uses the cellphone frequently to access the Internet.

Race, Ethnicity and the Internet: Minority groups are less "connected"

1. When we examine aspects of the Internet by race and ethnicity, we find that the African American population is less "connected:" 80% of that group has a home Internet connection, compared to the Hispanic population at 91.9% and the White, non-Hispanic population at 94.5%. They also are the least likely to report using the Internet (81%), compared to the Hispanic population's figure of 88% and the non-Hispanic White population's figure of 96%.

2. Among lower income groups, having a home broadband subscription and using the Internet is far less common among African Americans than among other groups.

3. Although in general most of the Internet users report feeling capable of executing basic Internet tasks, the African American and Hispanic populations report themselves somewhat less capable of doing things such as uploading content, blocking spam, and bookmarking a website.

Non-users: expense, privacy and lack of interest are reasons for not using the Internet; non-users are older, less well educated, and female.

1. People who do not have home-based Internet access share the same opinions about Internet services that are reflected in national statistics: 61% agree or strongly agree that access is too expensive (down from a previous Austin survey); 55% agree or strongly agree that they have safety and privacy concerns about using the Internet; and 41% are simply not interested in using the Internet.

2. Non-users are far less aware of city locations of free public Wi-Fi than is the case for people who already have Internet connections at home; nevertheless, they believe it is *less important* for the City and its partners to provide various Internet-related services including library access, training, and bus access.

3. Non-users tend to be older, less well educated, and more female. There are more White non-Hispanic and Hispanic non-users compared to other racial/ethnic groups (reflecting overall population numbers). Compared to available national statistics, the Austin non-users are more likely to be Hispanic than African American. They also are more likely to not have completed high school. A significant number of non-users are in the 45-54 age group.

4. Forty percent of the people who say they do not use the Internet actually do have a home Internet connection, suggesting that someone else in the household actually uses that connection.

5. The majority of non-users are concentrated in South Austin.

6. About 36% of the "unconnected" say that they would be interested in free training sessions.

7. Among people who do not have home-based Internet access, 76% say that they do not know enough to go online themselves or that they would need some help. About 23% say they simply do not want to start using the Internet.

Places of Access: Home and work are important sites; city-sponsored locations especially important for minority populations

1. Work represents the most significant place for Internet use, followed closely by home. Work – like school – is a place where people learn skills that they cannot necessarily learn at home. Schools, coffee shops or similar places, and a family or friend's home are less significant, although they do show up as access sites for older people. Work is a more significant site for access for non-Hispanic Whites and for Asians than for African Americans, and a more important site of access for men than for women.

2. City-provided sites, such as the library, community centers, and public Wi-Fi places, figure less prominently as common access sites, but they still retain importance for African Americans, the older population and the disabled. Community Centers and libraries are more heavily used by African Americans, possibly as an alternative place to learn skills, as our qualitative observations of the DeWitty Job Training and Employment Center tend to show. Public Wi-Fi appears to be more important for them as well, compared to other racial/ethnic groups. People at lower income levels do not report exceptionally frequent use of public access points.

3. There is broad awareness of the many publicly-sponsored access sites in Austin, and broad support for computer and Internet access in libraries and for training programs.

4. When asked about upgrade plans regarding ultra-high speed broadband services, respondents indicated some price sensitivity: 44% indicated their upgrade would depend on the price of the service. However, a full 26.6% said they would upgrade when new services are available. Only 13% indicated little interest in upgrading, i.e., that they would keep their current service.

Online Activities and Information Sources: phones are increasingly important for email; personal contacts are important for job and health information sources

1. Indicative of the onset of a smart phone era, people use phones more than PCs for some online activities, including email and games.

2. For information about places like Austin or their neighborhood, new online sources like websites and social media are used, but not as much as traditional sources yet. People in Austin still tend to get their information about the city and other places of interest from friends, family, and television. However, online sites are more frequently used than radio and newspapers. Facebook is widely used for some kinds of information.

3. For job information:
    - Most people turn to personal contacts, followed by current employers or colleagues, with online job sites as a distant second and third.
    - More than a quarter of workers aged 18-24 got information about their current job through social networking sites, which is significantly higher than that among older age groups.
    - African Americans and Hispanics relied less on personal contacts for job information than other ethnic groups.
    - Females rely on digital channels for job information more than males do; however males are more likely to be contacted by headhunters and / or recruiters. There is no significant gender gap in relying on personal contacts through other sources like personal contacts, job agencies, or current employers.

4. For health information, most people turn to close friends, health professionals and relatives.

5. For educational information, most people turn to family members, mobile apps and education professionals.

2 Introduction and Background on the Project

The 2014 Austin Digital Assessment Project was supported by the Telecommunications & Regulatory Affairs Office of the City of Austin, the Telecommunications and Information Policy Institute at the University of Texas, and faculty and graduate students from the Department of Radio, Television, and Film and the University of Texas. This study on Internet and technology use surveyed a core sample of 12,000 randomly selected addresses and an additional oversample of 3,000 households in geographic areas with lower median incomes located throughout Austin. The goal of the survey was to examine Internet access and use characteristics across the City. Many of the items replicate those used in national surveys, allowing comparisons between Austin and the U.S.

The sample of 15,000 randomly selected addresses was ordered from the US Data Corporation. Potential respondents had opportunities to complete the questionnaire either online or on a hard copy questionnaire that was mailed to them with a postage-paid return envelope. The questionnaire was available in both English and Spanish.

A mailed survey was returned by 80% of the African American respondents and by 82% of the Hispanic respondents, while non-Hispanic White and Asian respondents used the mail version less often (63% and 47%, respectively). In other words, having a mailed survey appears to be important to reaching minority populations.

The survey was self-administered, and received Institutional Research Board approval at the University of Texas at Austin. A total of **1338** paper surveys and **570** online surveys were received totaling **1908 returned surveys**. Both the offices of the Telecommunications and Regulatory Authority and the University's Telecommunications and Information Policy Institute initiated public relations efforts to encourage people to complete the questionnaire. These endeavors including posting flyers at community centers and churches around the city and especially in the East side of town, developing a radio spot, and releasing press notices about the survey that were published in local papers.

The American Association for Public Opinion Research (AAPOR) has standardized definitions for calculating response rates based conservative measures of eligibility within a sample. According to methods for mail and internet surveys as defined by the AAPOR Standard Definitions Report (2011), the 2014 Austin Digital Assessment Project had a response rate of **12.9%**. This response rate is acceptable for self-administered, mail-based surveys.

Details on weighting procedures, respondent demographics, and analyses can be found in the first Appendix of this report, Respondent Demographics. The appendices contain more detail on the questionnaire and sampling.

3 Using the Internet: Devices, Places, Activities

3.1 Devices

The great majority of this sample, 92%, has a home Internet connection, and most people in a household with home broadband do use the Internet.[1] The City's home broadband and Internet use rates are above the national average (roughly 70% for home broadband as of 2013, and 87% for using the Internet through some device as of 2014, according to the Pew Research Center[2]). The average length of time people have been using the Internet is reported as 20 years: Austin has an experienced population of computer and Internet users.

Among the remaining small percentage that does not have a home Internet connection, about one third (34.6%) actually *does* use the Internet at some other place.

Members of the sample own several Internet-capable electronic devices. As the table below illustrates, even more people have cell phones than a home-based Internet subscription, and of the 95.6% with cell phones, 83% have a smartphone. This is significant because smartphones can be used to access the Internet, among other things.

Table 1 Device Ownership

Device	Usage (%)
TV	96.4
Cell Phone	95.6
Home Internet	92
Laptop	83.4
Tablet	59.8
Cable TV	57.2
Desktop	56.8
Game Console	51.6
Landline Phone	39
Satellite TV	9.3

The majority of respondents also have a laptop, and over half have tablets. The Austin population's use of electronic, mobile devices exceeds national averages.

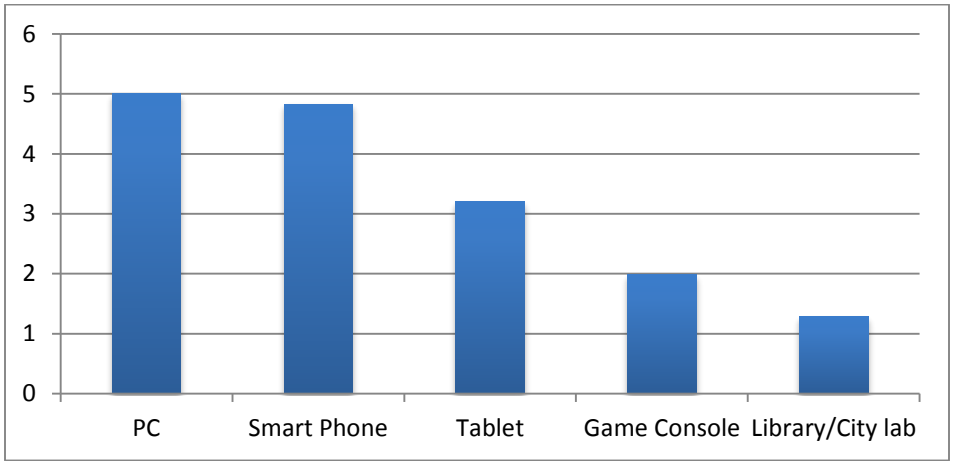
Several of these devices are used to access the Internet. For example, 37.3% have their game consoles (owned by 52% the sample) connected to the Internet. Figure 1 illustrates how

[1] A very small percentage (3.5%) of people said they themselves do not use the Internet even though their home has a connection.

[2] See http://www.pewinternet.org/data-trend/internet-use/latest-stats/ and http://www.pewinternet.org/three-technology-revolutions/.

frequently, on average, respondents reported using particular devices to access the Internet. On a 1-6 scale of frequency of use, where 1 is "never" and 6 is "multiple times a day," a personal computer is most often used to access the Internet, but it is followed closely by a smartphone.

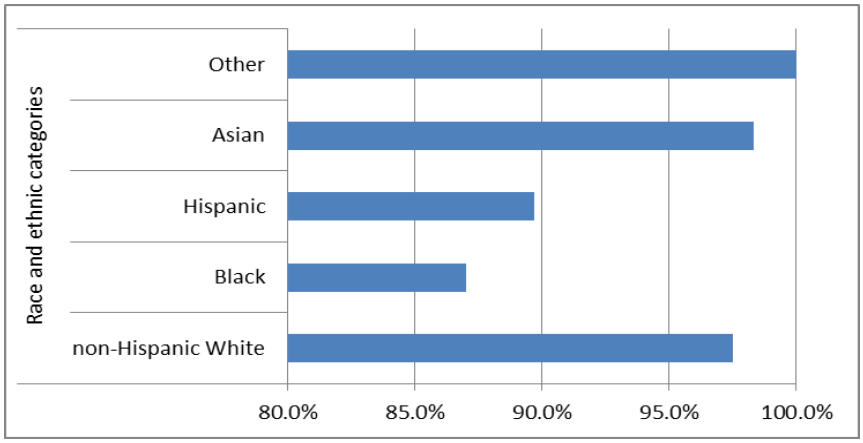
Figure 1 Devices Used for Access: Average Frequency of Use*



*Respondents were asked to report how often they used various devices to go online, ranking frequency of use on a scale of 1 to 6, with 1=Never and 6=Multiple times/day.

Some people have suggested that lower income or minority groups may use smartphones to access the Internet in lieu of maintaining a home broadband subscription. We find some evidence to support this. First, everyone appears to use cellphones to access the Internet, at least *somewhat frequently*. While the overall rates of using cellphones to access the Internet are lower among Hispanics and African Americans, they are still high (89.7% and 87% respectively).

Figure 2 Percent Using Cellphone to Access the Internet by Race/Ethnicity



However, among those *who have no home broadband* connection, a higher percentage of the African American population uses the cellphone *frequently* to access the Internet. That said, however, among those the small group of people without a home broadband connection, 70% of them report being rather light users of the cellphone to access the Internet in any case.[3]

Table 2 Among those with no home broadband, frequently using a cellphone to access the Internet, by race/ethnicity * (N=140)

Race/Ethnicity*	Cellphone Access
Non-Hispanic Whites	31%
Afr American	45%
Hispanic	21%
Other	33%

*"Frequently" defined as using cellphone for Internet access "daily" or "multiple times per day."
**No Asians reported not having home broadband.

Respondents without home broadband who reported less than $10,000 in annual income were the most likely among different income groups to report frequent use of cell phones to access the Internet, along with their opposites – people in the highest income category. (The pool of respondents is smaller than in Table 2 because fewer people reported their income.)

Table 3 Among those with no home broadband, using a cellphone frequently to access the Internet, by income* (N=122)

Income	Cellphone Access
>$10,000	44%
$10,000-$29,999	14%
$30,000-$49,999	38%
$50,000-$74,999	33%
$75,0000+	50%

*Using cellphone for Internet access "daily" or "multiple times per day"

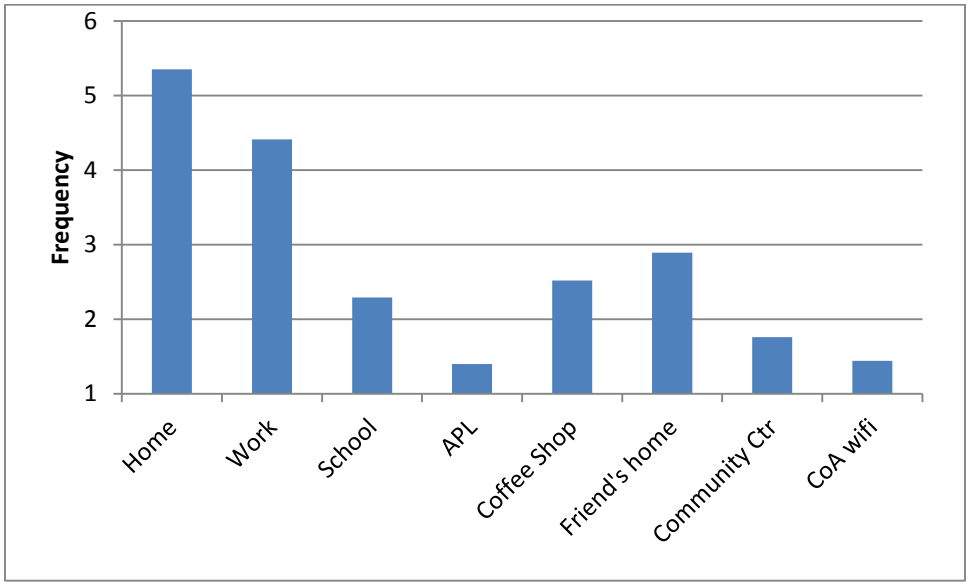
3.2 Places

The *place* of Internet usage also may indicate a great deal about use patterns and expertise, as well as the social opportunities that might enhance learning skills and sharing expertise. Work closely followed home as primary places to use the Internet. Schools, coffee shops or

[3] "Light" is defined as those reporting using the cellphone to access the Internet with a frequency of less than monthly.

similar places, and a family or friend's home were used occasionally (the scale term was "less often" than monthly). All represent places where one can ask questions of other people or observe other users, and learn more about the Internet in the process. In this, the role of work (and home, where family members may be available to help) cannot be underestimated. Some of the City-provided sites (the library, community centers, public Wi-Fi places) figure less prominently as common access sites. Our analyses suggest that different types of people (or users) utilize different access sites.

Figure 3 Sites for Access – Mean Frequency of Use*



- Respondents were asked to report how often they go online at particular sites, ranking frequency of use on a scale of 1 to 6, with 1=Never and 6=Multiple times/day.

Figure 4 provides snapshots of how different groups of individuals access the Internet. (The higher the number, the more often people use that site; the range is from "never" to "multiple times per day.") It seems clear that work is a more significant site for access for non-Hispanic Whites and for Asians than for African Americans, and the reverse is true for Community Centers, which are somewhat more heavily used by African Americans. Public Wi-Fi appears to be more important for them as well, compared to other racial/ethnic groups. Community Centers and public places of access such as coffee shops also are more important access points for the disabled.

The largest difference between men and women in terms of access occur in the work environment (Figure 5) which is a more prominent access site for men than for women. People at lower income levels (Figure 6) do not report exceptionally frequent use of public access points, but the disabled population appears to benefit from them. The reported use of *public* access sites is most significant for the disabled and for African Americans. Using the

Internet at a friend or family member's house also appears to be common even if it is not a daily occurrence.

Figure 4 Mean use of access sites by Race/Ethnicity

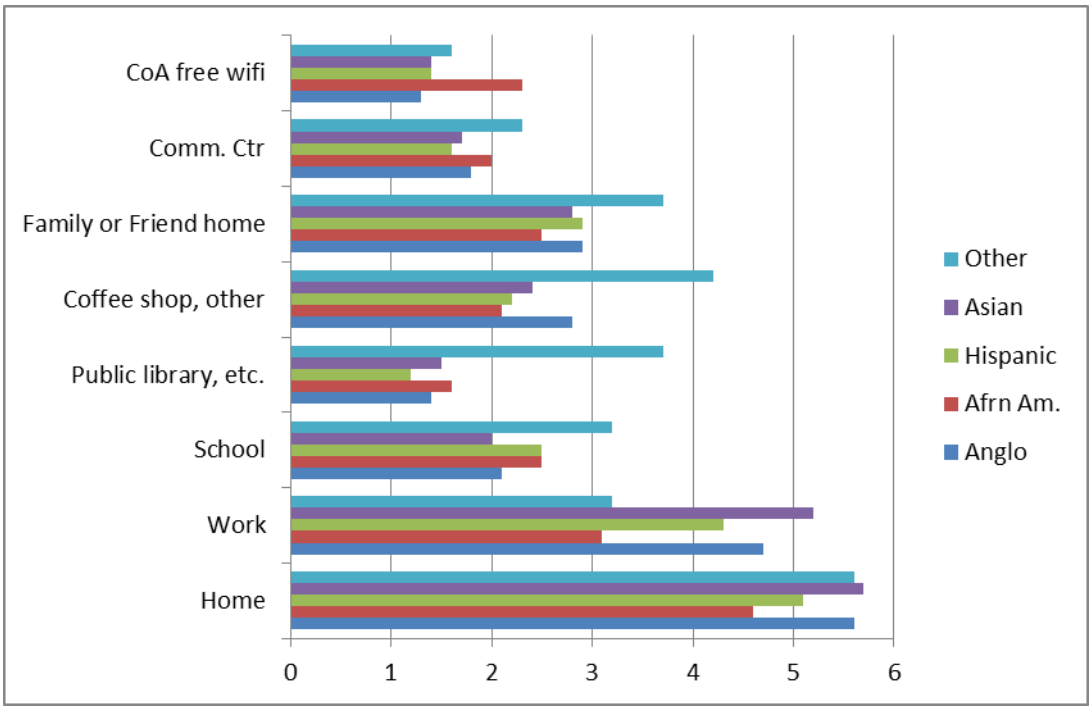


Figure 5 Mean use of access sites by Sex

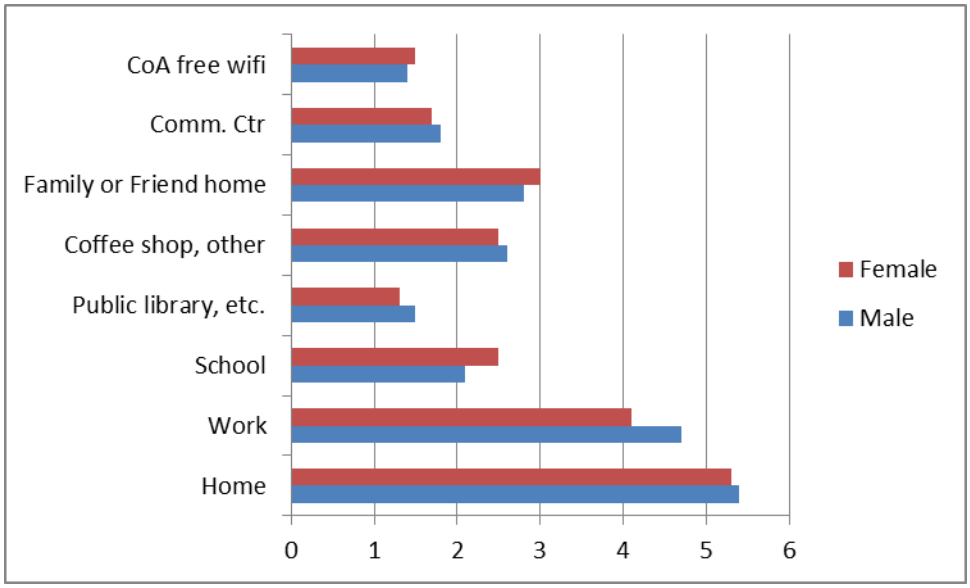
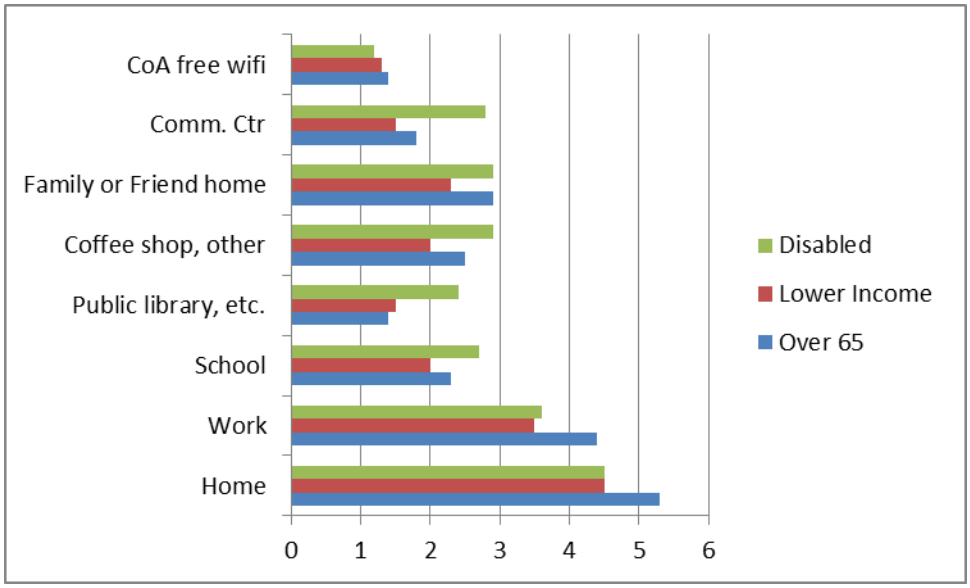


Figure 6 Mean use of access sites by Disability, Older, Lower Income*



*Lower income is defined here as below $30,000

Geographically, Austin's survey respondents who use the Internet are more densely clustered in certain parts of the city, particularly west of I-35. Figure 7 shows the Internet users by region of the City in which they live, and the subsequent maps illustrate where people live who use City-sponsored Community Centers and public Wi-Fi offerings. Zip codes with more users of the Internet are most likely to be west of MoPac as well as in one area in the central-eastern portion of the City (darker colors in the map).

When we examine where people live who report using library or city facilities for access, the maps illustrate almost the opposite pattern: people who use library facilities for Internet access are also from the parts of Austin that seem to show fewer Internet users overall when we visually compare the maps in the two figures. Actual library locations are also plotted (Figure 8). That map illustrates that some of the sections of the city with respondents who report making use of public Internet access do not have local libraries; in other words, people have to make an effort to seek out libraries that are not nearby in order to access the Internet.

Figure 7 Internet User Percentages by Zip Code

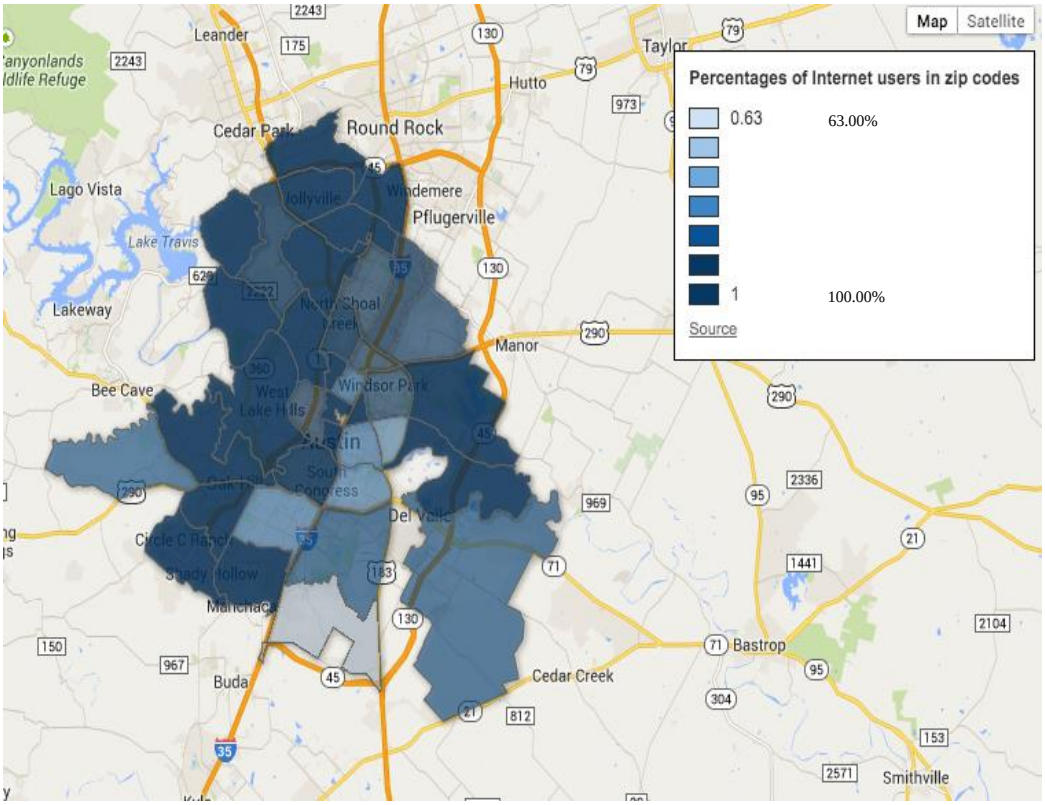
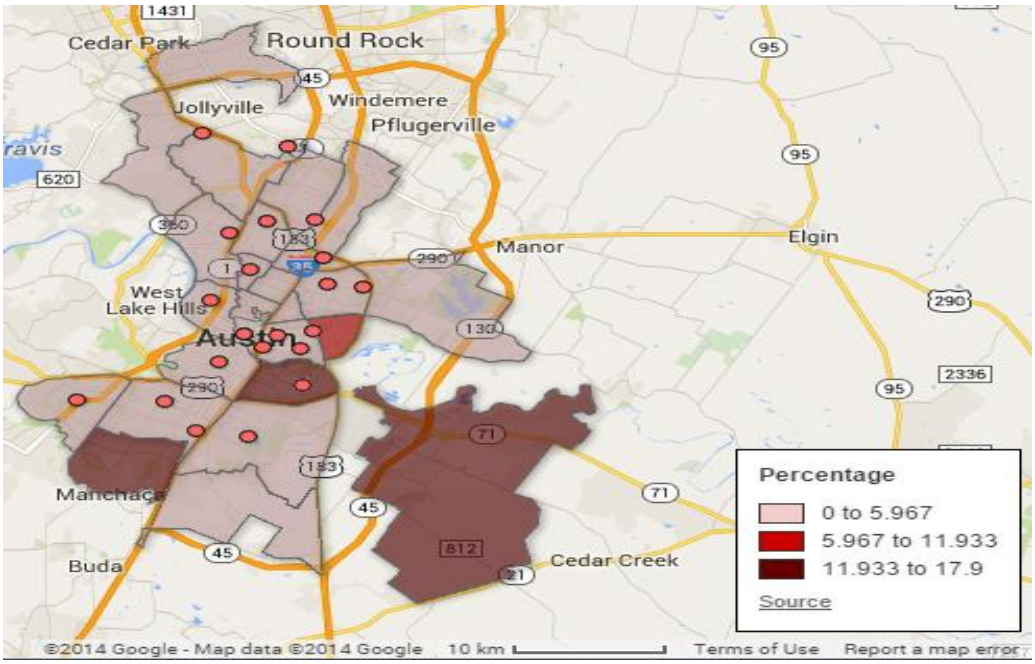


Figure 8 Library Internet User Percentage Responses by Zip Code*



*Approximate library locations also represented.

Figure 9 Public Wi-Fi User Percentages by Zip Code

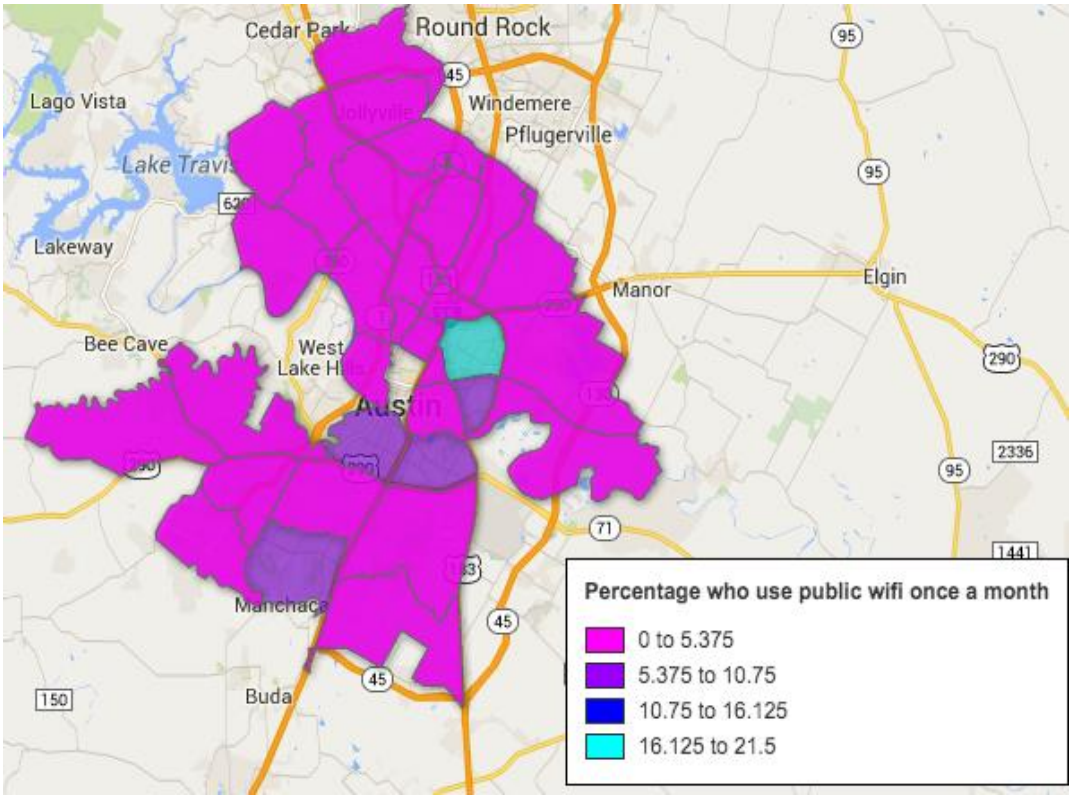


Figure 9 maps the population percentages of city regions where people most often use public Wi-Fi, illustrating heavier use in the south central and some east central portions of the city as well as the area around in the far south part of the city just west of I-35.

3.3 Activities

Understanding *how* people use the Internet, i.e., what they actually *do* with their connections, provides some insight into what we might call digital fluency or digital capability. Table 4 shows what people do with different devices or forms of access at least daily ("daily" or "multiple times per day"). This shows that certain kinds of online activity, such as email, are actually now more common on smart phones than on PCs. Many of these findings reflect similar national trends. For example, with respect to mobile phone uses, a 2014 Census Bureau survey reports

- 32% of the population downloads mobile apps
- 42% browse the web (Austin's "access" rate is 75%),
- 43% check email (Austin's rate is 67%), and
- 30% check social networks (Austin's rate is 50.5%).[4]

[4] See http://www.ntia.doc.gov/press-release/2014/digital-nation-report-shows-rapid-adoption-mobile-internet-use for a summary. The Census data were gathered in 2012.

The Austin results for these and most activities show much higher rates compared to national data. The PC still remains popular for reading online, but use of mobile devices has taken off.

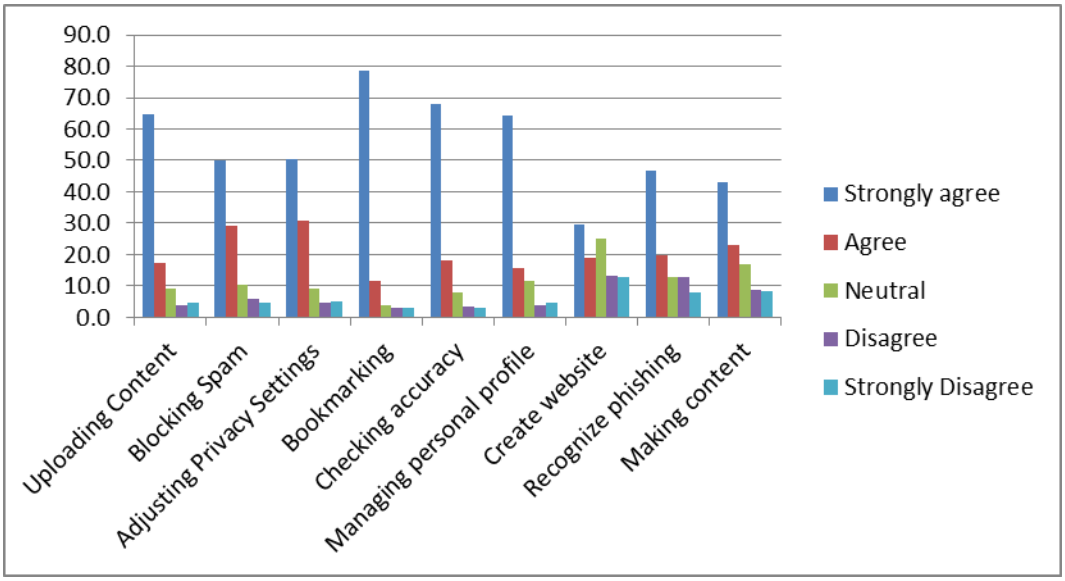
Table 4 Online Activity by Device

Devices	Internet access (%)	Email (%)	Games (%)	Social Network (%)	Banking (%)	Listen to Music (%)	Read Online (%)
PC	78.1	66.8	13.4	46.4	13.2	47.7	29.3
Smart phone	75.1	67.1	19.9	50.5	18.1	43.5	22.3
Tablet	34.9	25.9	10.8	20.0	4.5	12.2	18.5
Game console	11.7	0.2	6.8	0.5	6.1	1.3	6.1
Library / PCC	1.0	1.0	0.7	0.1	0.1	0.7	0.5

Note: The table shows what people do with different devices or forms of access at least daily ("daily" or "multiple times per day").

Whether using a computer, tablet or a smartphone, when it comes to digital capabilities - not the same as digital skills, which imply an assessment of efficiency and ability - most of Austin's Internet-using population reports being able to engage in several common tasks. When asked if they *feel capable* of doing the common actions listed in Figure 10, the respondents rated themselves as proficient on most: high percentages of people "strongly agree" or "agree" that they feel capable of performing these actions. Creating a website, making content and recognizing phishing registered the *lowest* capability self-ratings.

Figure 10 Agree or Strongly agree they feel capable (%)



These activities, taken together, might be considered indicators of digital fluency: familiarity and overall capability with typical Internet tasks. We combined these into a "Fluency" scale and investigated how different demographic factors might be related to Digital Fluency, with higher ratings associated with greater fluency.

The mean ratings on Digital Fluency in the following figures (Figure 11 through Figure 15) indicate strong associations with educational level, age, race and ethnicity, and income and even smartphone use. People with higher incomes and educational levels and who are younger rate themselves are more fluent when it comes to these aggregated capabilities. Ratings differ across ethnic and racial groups as well, with the African American population rating itself as relatively less fluent with digital tasks. That using a smartphone is accompanied by greater general digital fluency signals this technology's role within the digital arena, whether we consider it a gateway to acquiring more digital skills, or a reflection of peoples' pre-existing familiarity with how to execute these tasks.

Figure 11 Digital Fluency by Education

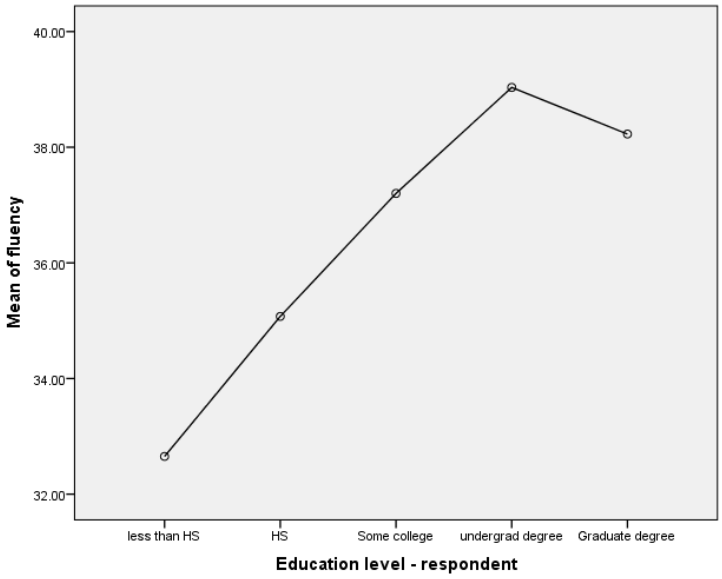


Figure 12 Digital Fluency by Age

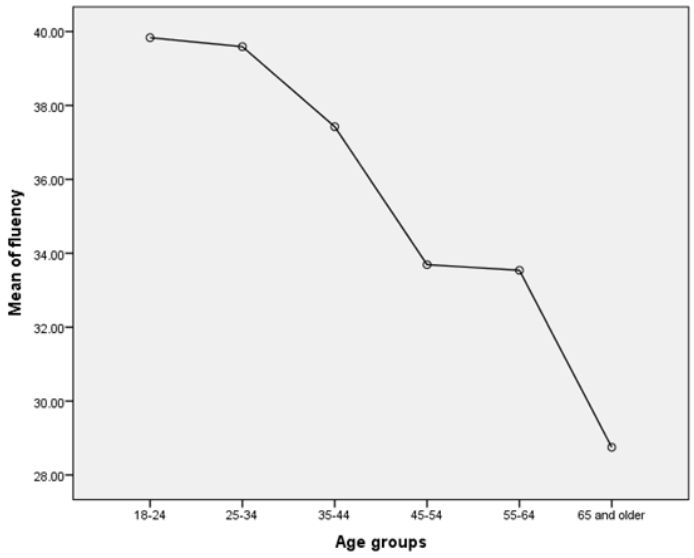


Figure 13 Digital Fluency by Income

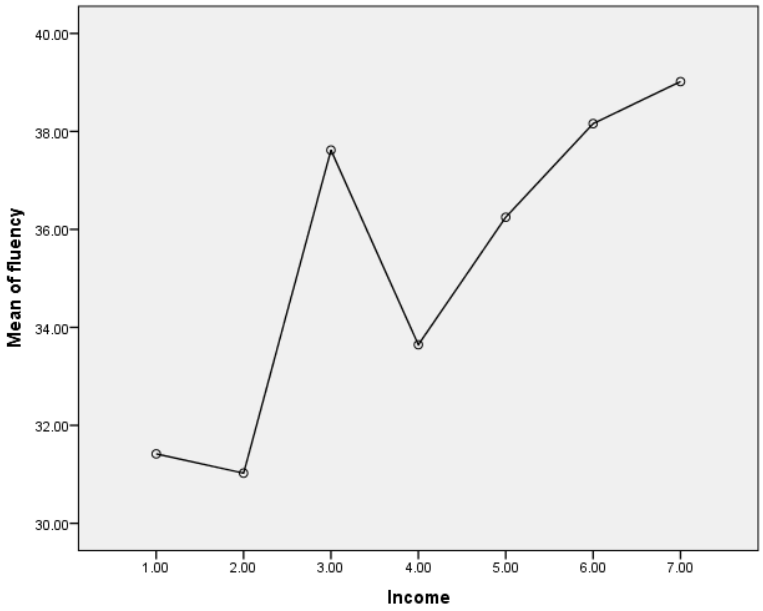


Figure 14 Digital Fluency by Smartphone Use

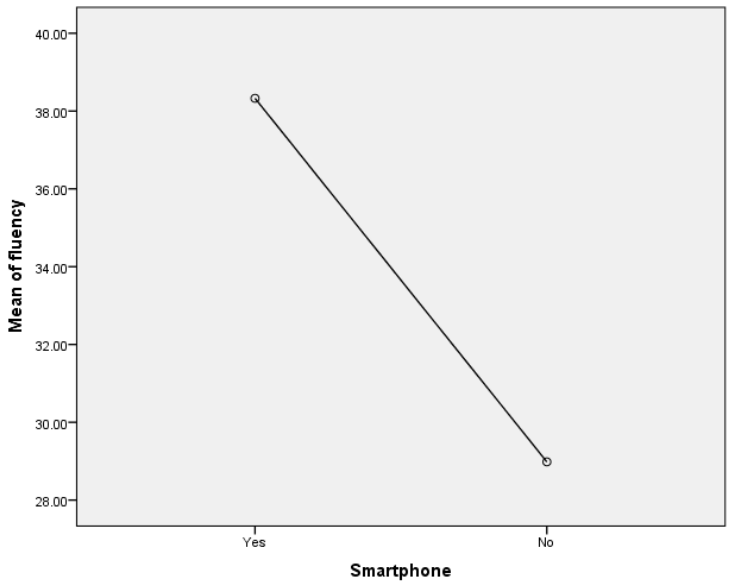
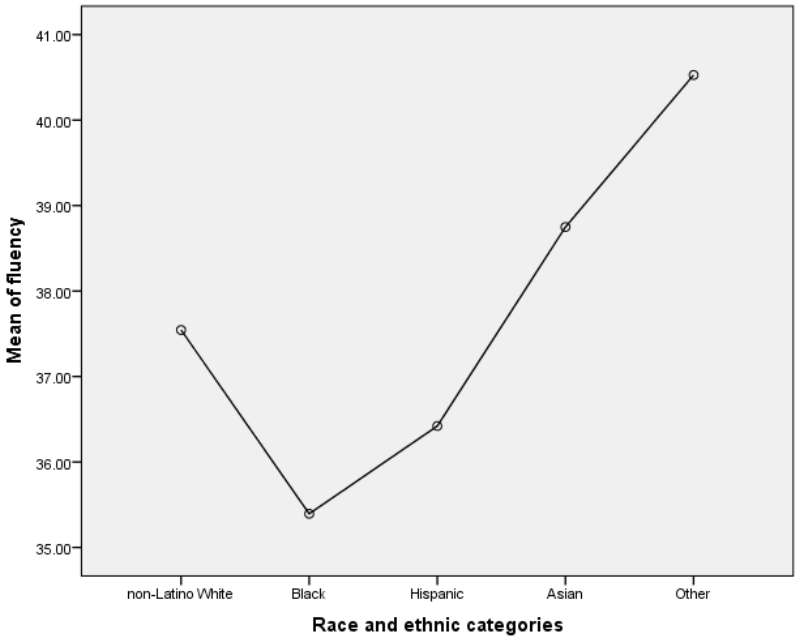


Figure 15 Digital Fluency by Race & Ethnicity



All in all, the Austin population's self-reported capabilities suggest strong competencies in the digital world, but these findings are mitigated by recognizing that such capabilities are not distributed equally throughout the citizenry.

3.4 Intentions to upgrade

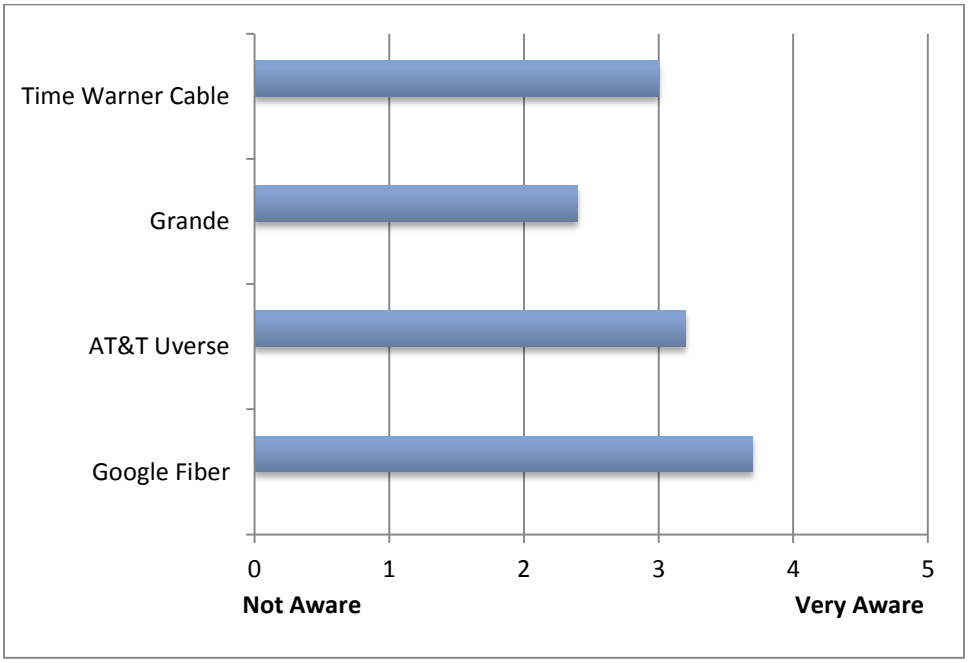
With Austin's high percentage of Internet users, interest in the recent and future network upgrades is logical. Ever since Google Fiber announced its imminent availability in Austin, competitors have increased their local advertising and promised to improve their network speeds. When asked about upgrade plans, respondents indicated some price sensitivity: 44% indicated their upgrade would depend on the price of the service. However, a full 26.6% said they would upgrade when new services are available. Only 13% indicated little interest in upgrading, i.e., that they would keep their current service (see Table 5).

Table 5 Intentions to upgrade

Intentions	%
Will upgrade when available	27
Will upgrade but not immediately	8
Depends on price	44
No, will keep current service	13
DK	8
Total	100.0

There is, however, awareness that ultra-high-speed services are coming, as Figure 16 indicates. Respondents were asked to rank their awareness of different services on a scale of 1 to 5, with 1 meaning "not aware" and 5 meaning "very aware."

Figure 16 Awareness of Ultra-high-speed services*



*1=Not aware, 5=very aware

As well, there is a great deal of optimism regarding high-speed Internet services. Most people thought it would improve many services "a lot:"

- 60% felt it would improve home entertainment
- 53% felt it would improve the chance to start businesses
- 57% thought it would help innovation
- 67% thought it would help working from home
- 59% agreed it would improve online learning, and
- 48% thought it would improve Internet pricing.

These statistics hint at how Austinites are thinking about their futures, and how network connectivity can figure into their plans and aspirations.

The next sections in this report examine Internet nonusers, followed by a more detailed look at how minority populations use the Internet.

4 Profile of the Nonuser

The relatively few people in the sample (8%, or 153) who do not use the Internet tend to be older, less well educated, and somewhat more female. There are higher percentages of Hispanics (53.6%) and White non-Hispanics (26%) than other racial/ethnic groups who are not using the Internet. The 8% represents about 52,805 people within Austin's adult population (estimated by the 2012 American Community Survey to be 660,065).

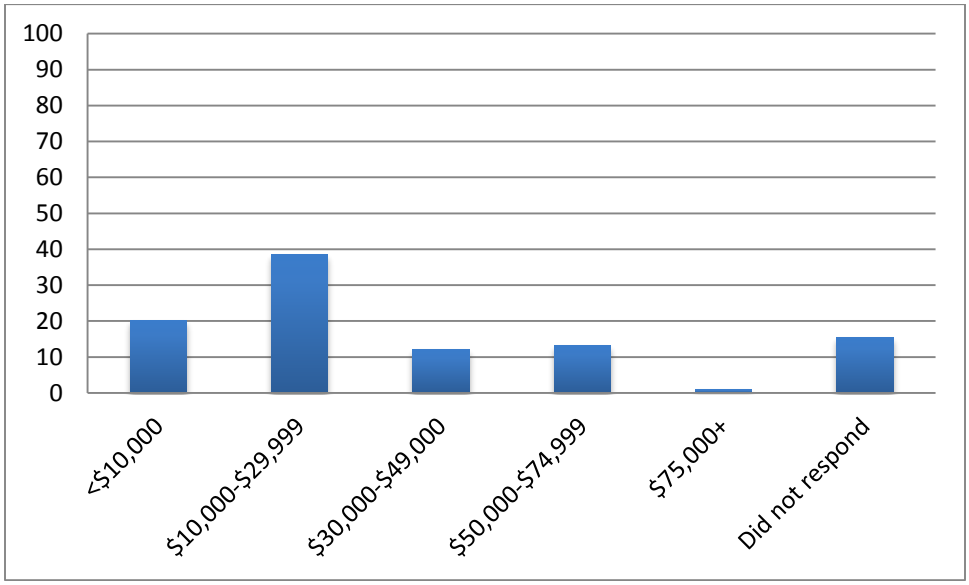
Table 6 Nonuser Status by Race/Ethnicity, Gender, Education and Age, Austin

Demographic	Austin Weighted Sample (N=153)
Race and Ethnicity (adults)	
Non-Hispanic White	26.1%
African American	18.3%
Hispanic	53.6%
Asian	1.3%
Other	0.7%
Gender	
Male	46.4%
Female	53.6%
Educational Attainment	
Less than high school	70.4%
High school	13.8%
Some college	10.5%
BA	4.6%
Postgraduate	0.7%
Age 18 plus	
18-24	0%
25-34	1.3%
35-44	15.1%
45-54	34.2%
55-64	15.1%
65+	34.2%

Compared to available national statistics, the Austin nonusers are less likely to be African American and more likely to be Hispanic. They also are more likely to not have completed high school, although one surprising finding is the number of people in the 45-54 age group (equivalent to the number of seniors) who do not use the Internet. However, the nonuser

population overall is fairly small. As noted earlier, Austin's rate of Internet use at 93% is still higher than the 87% average Internet use reported by the Pew Research Center in 2014.5

Figure 17 % Nonuser Status by Income (n=130)

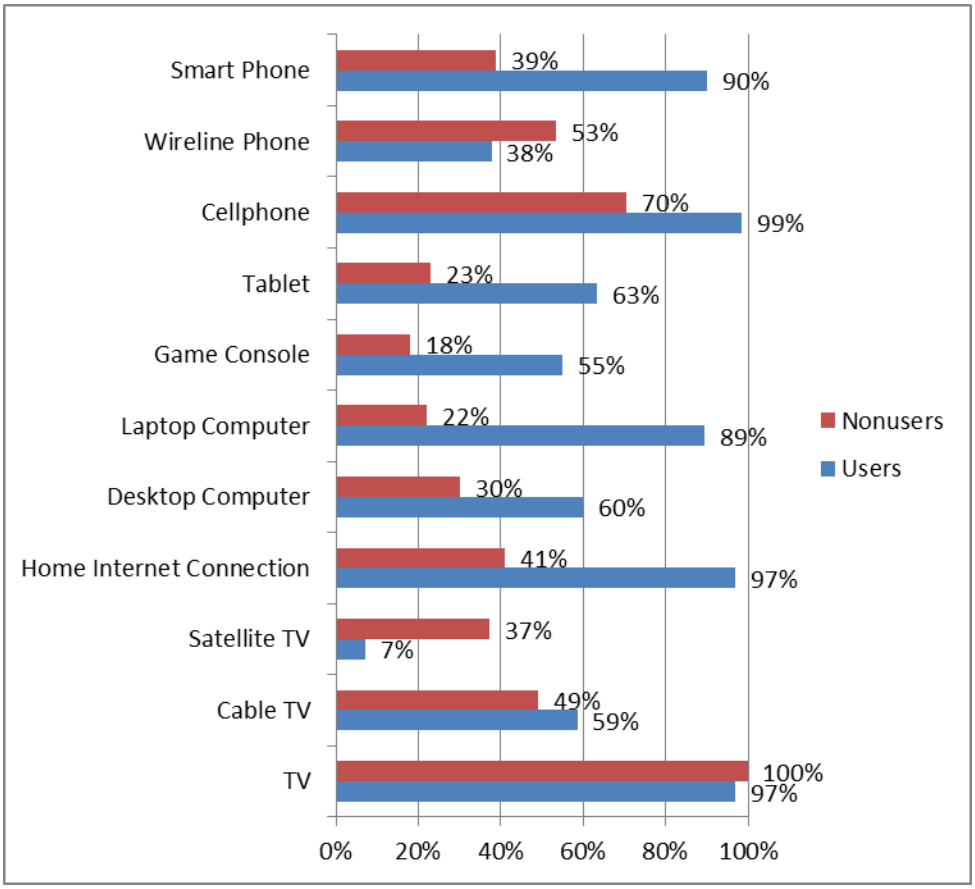


In terms of income, respondents most likely to be nonusers report between $10,000 and $29,999 a year. This percentage is significantly above those of the other income categories—20% of nonuser respondents reported incomes below $10,000, and only 1% of nonusers reported income of $75,000 and above. Over 15% of respondents in the nonuser category declined to provide income information.

These results demonstrate that nonusers do use some digital technology, but in lower numbers compared to users. Compared to people using the Internet, nonusers are far less likely to use tablet, or laptop or desktop computers. When it comes to cellphones, 70% of nonusers do use a cellphone, but even *more* Internet users report having cellphone. It also is striking that 41% of the people who say they do not use the Internet actually *do* have a home Internet connection, suggesting that someone else in the household actually uses that connection.

[5] Pew Research Center (2014), How the Internet has woven itself into American life. http://www.pewinternet.org/2014/02/27/part-1-how-the-internet-has-woven-itself-into-american-life/.

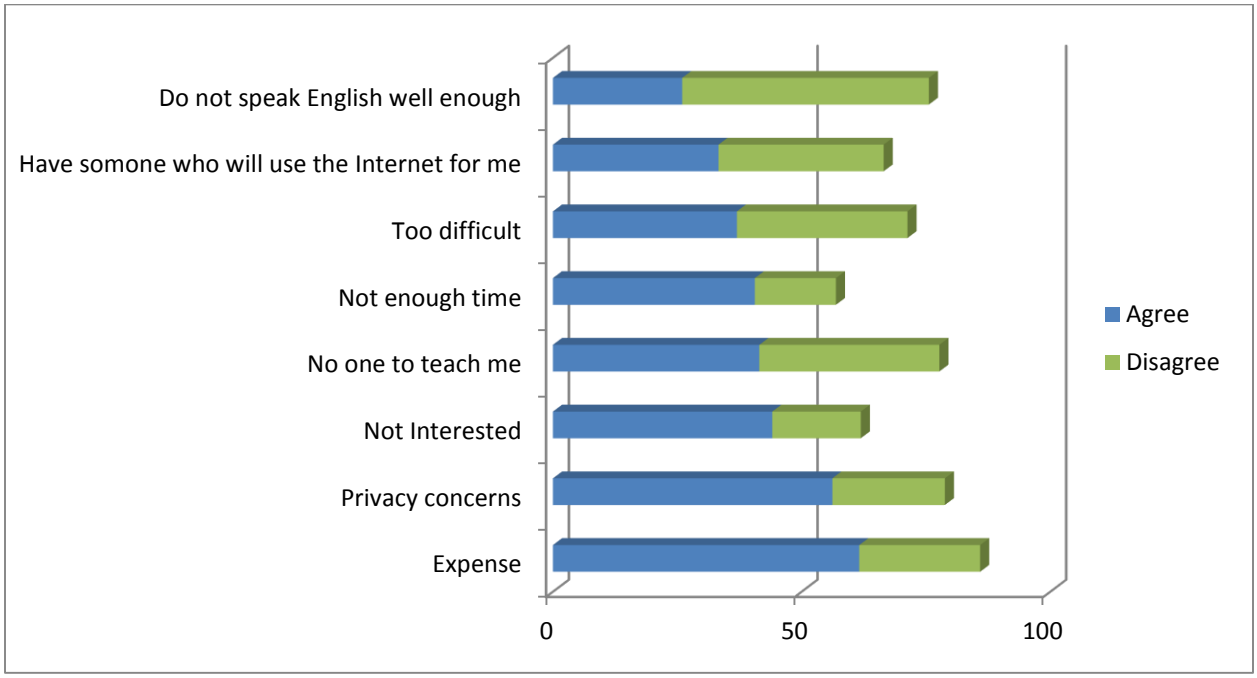
Figure 18 Users' and Nonusers' home media (%)



When asked why they do not use the Internet, respondents agreed or disagreed with the factors as illustrated in Figure 19. The results parallel many national findings with respect to the importance of cost. However, typically most people say they are simply *not interested* in using the Internet, and while 40% of this sample agrees with that notion – the third most often cited reason for not using the Internet - expense and privacy concerns are even more important in our sample. Language difficulties are the least cited factor.

When we asked nonusers "If you wanted to start using the Internet, do you feel that you know enough about computers and technology to be able to do that on your own, or would you need someone to help you?" 42% said they would need someone to help them. (People had to choose just one response from our response options.)

Figure 19 Reasons for not using the Internet (%)



One third said they could do it on their own, and another 24% simply reiterated that they were not interested in using the Internet. In other words, there may be some room to work with professed nonusers by providing some help, or by encouraging them regarding how useful it might be for them to actually use online resources.

Table 7 Help with technology (%)

Knowledge Level	Percent
I know enough to go online on my own	33.5
I would need someone to help me	42.1
I would not want to start using the Internet	24.4
Total	100

When asked if they would be interested in participating in free training through a local organization, 36% of the nonusers indicated they would be interested. Among these nonusers who desired to get training, the following indicates their interests:

Table 8 Training interests among nonusers

Training Interest	Percentage
Social media	23%
Email	59%
Job Searching	31%
Software	46%
Learning to edit/create my own work	88%

Age is a major factor in predicting nonusers' interest in free computer training. The vast majority of those expressing interest in free computer training are over 45 years old (which is, after all, two thirds of the group of non-users); only 5% of those interested in free training are under age 45. Race and ethnicity are less significant factors, but respondents identifying as Hispanic are by far the largest single race and ethnic category expressing interest; over 68% of respondents expressing interest in training are Hispanic. In terms of income, over 64% of nonusers interested in computer training make less than $30,000 a year. Gender is not a significant factor, with only a slightly higher percentage of females than males reporting interest.

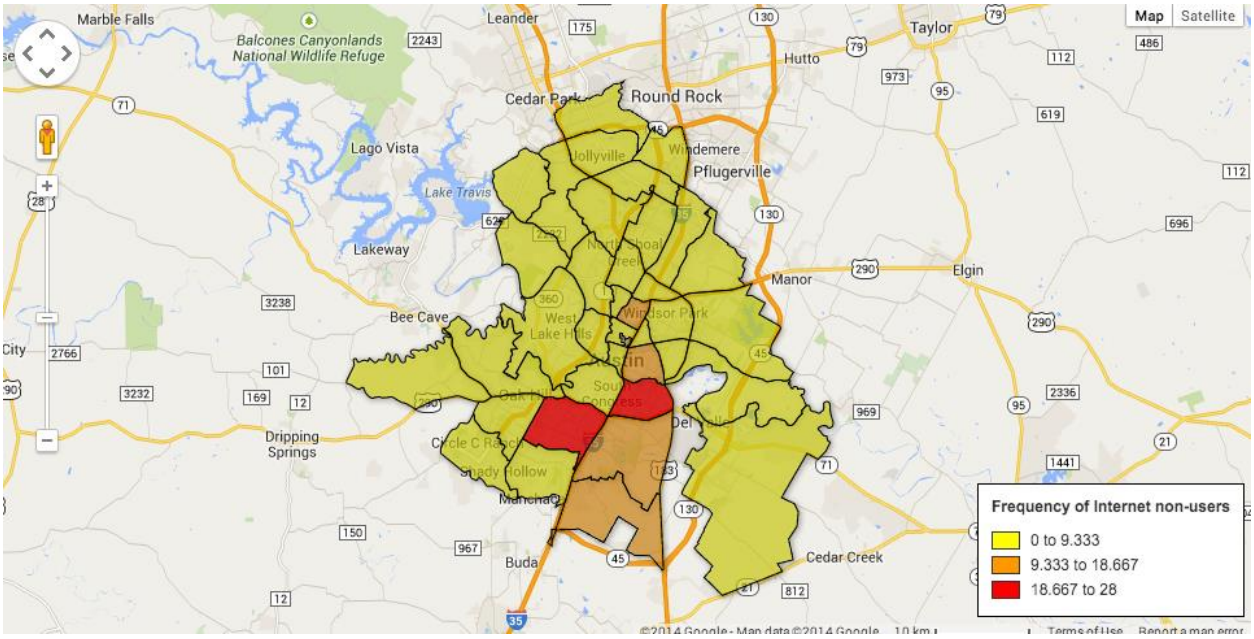
When asked "if you could subscribe to a home broadband service at a price you considered acceptable, would you do so?" fully 63% of the nonusers responded "Yes." This underscores the role of prices in depressing the use of the Internet and home Internet subscriptions. The price points people indicated are indicated below. It is not too surprising that a very low price is preferred, but a significant number also chose a price range of $46-60, suggesting a high value for the service.

Table 9 Monthly price preferences for home broadband (nonusers, in %)

Prices	Percentage of Nonusers
$10-$15	36.6%
$16-$25	4.5%
$26-$35	12.2%
$36-$45	8.8%
$46-$60	30.7%
$61-$75	7.3%

Finally, when we examined the zip code distribution of the small number of nonusers, we found some areas of the City that appear to house more people in that category – most notably on the South side of Austin. This information may be helpful in terms of targeting services in the future (see Figure 20).

Figure 20 Nonuser locations (zip codes)



5 African American and Hispanic Populations and the Internet

Throughout this report we are offering snapshots of how different populations groups use the Internet. Many of our results characterize these groups by sex, age, income and racial/ethnic status. This section specifically highlights the African American and Hispanic populations in Austin.

As noted earlier, these population groups illustrate lower home broadband subscription rates, and *numerically* the nonusers of the Internet are predominantly Hispanic, in line with their comparatively greater presence in Austin. However, when we look at the dynamics of Internet use and acquiring digital abilities within these two minority populations, some findings stand out.

Several results suggest less overall digital familiarity within these populations, compared to the Asian and non-Hispanic White population. Having an appropriate device as well as knowing how to use it for purposes such as completing forms or emailing or accessing the Internet both figure into the investigation. For example, in terms of how people completed the survey, markedly fewer African American and Hispanic respondents used the online site: 20% and 19% respectively, compared to 37% and 53% of the non-Hispanic White and Asian populations using the online site. Might device ownership and digital "fluency" explain this result?

When we look at the population groups' ownership of various devices (Figure 21), the African American and Hispanic populations demonstrate lower rates of home Internet connections and lower possession of laptop computers, tablets, and smartphones. Indeed, the rates for the African American population using versatile tools such as laptop computers, tablets, and desktop computers are markedly lower than for other groups. Their 80% rate of both having a home broadband subscription and using the Internet is lower than that of the Hispanic population. While the percentages of all groups having a cellphone are roughly equivalent, the African American population has much lower rates of smartphone access – and smartphones are typically more capable in terms of Internet access compared to cellphones (or feature phones). Device ownership patterns show important differences.

On the other hand, the use of game consoles is the highest among the African American population group, and it appears this is one way that population accesses the Internet. The data also show comparable ownership of cellphones, a gateway technology to the more expensive smartphones.

Do people have the interest, skills or abilities to use their devices to access the Internet? Here the data also show that the African American population uses desktops, tablets, and smartphones less often than do others. Where "1" means "never" and "4" means "daily or multiple times per day," this population's use of those devices is lower than that of other

groups. However, as noted earlier, using game consoles for Internet access and going to the library for access are both higher for African Americans (Figure 22).

Figure 21 Devices & Services by Population Group

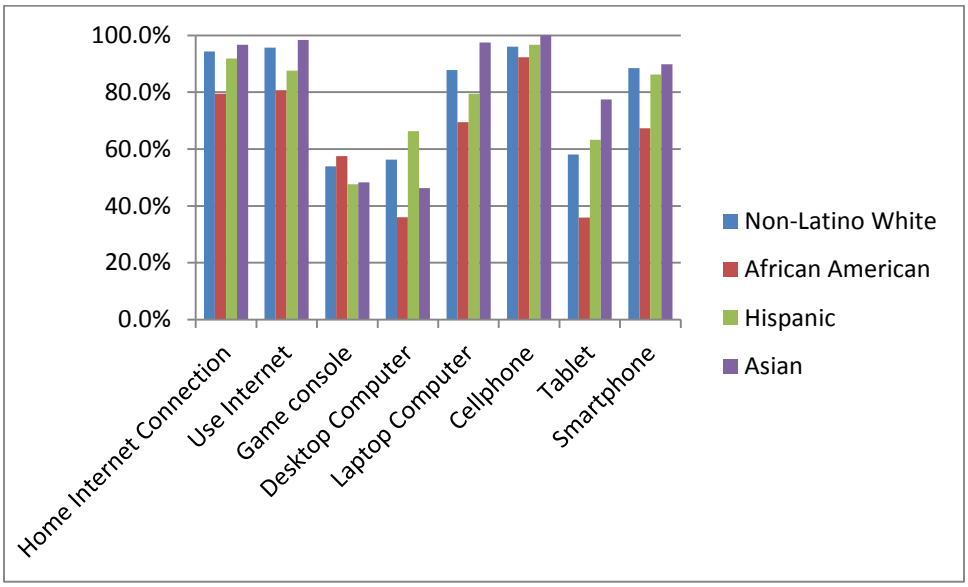
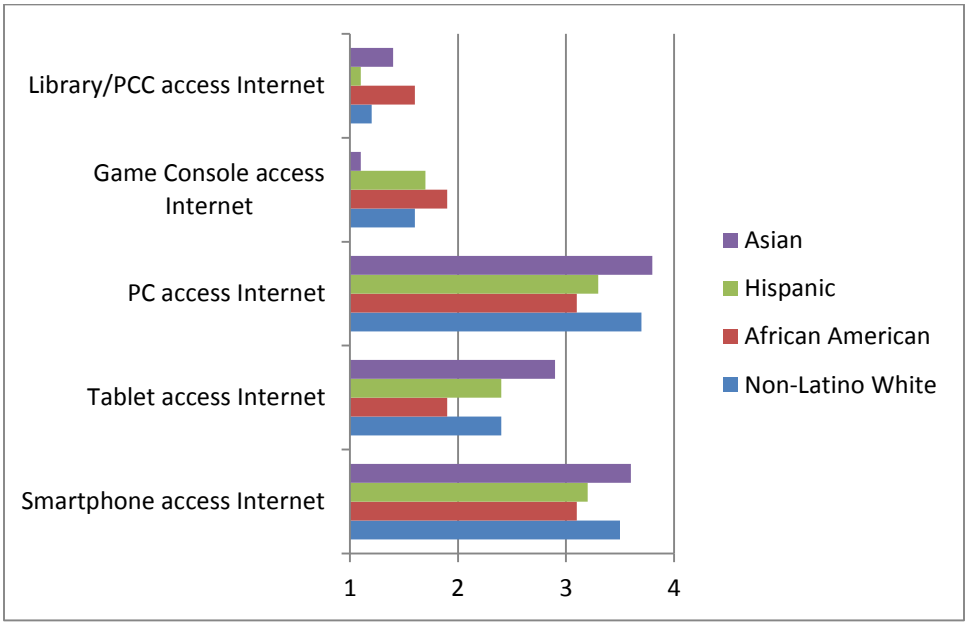


Figure 22 Means of Accessing the Internet by Population Group



If we look at a few common activities that use digital devices such as sending email, playing music or engaging social networking sites, similar patterns emerge. For example, Figure 23 and Figure 24 show that the library or Public Computing Center are more popular places for emailing and listening to music among African Americans than is the case for other subgroups (although overall use rates are still fairly low). Using devices such as tablet, PCs and smartphones is comparatively less popular for them to do email compared to the rates for

other groups; the Hispanic population uses these devices more for email than do African Americans, but here too the comparisons with Asians and non-Hispanic Whites are telling. Listening to music using a smartphone is a common practice for everyone, with rates for African Americans again being somewhat higher.

Figure 23 Email site by Subgroup

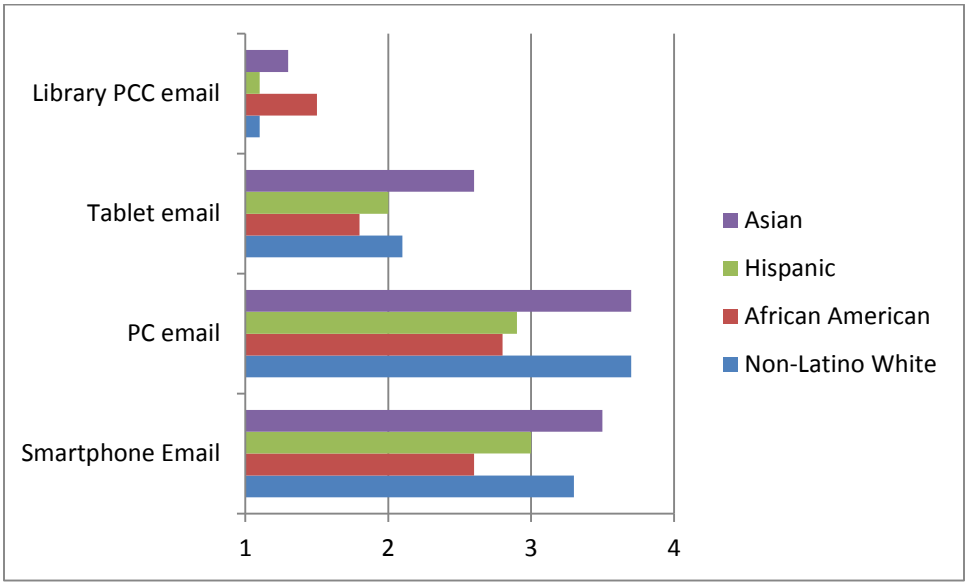


Figure 24 Music Source by Subgroup

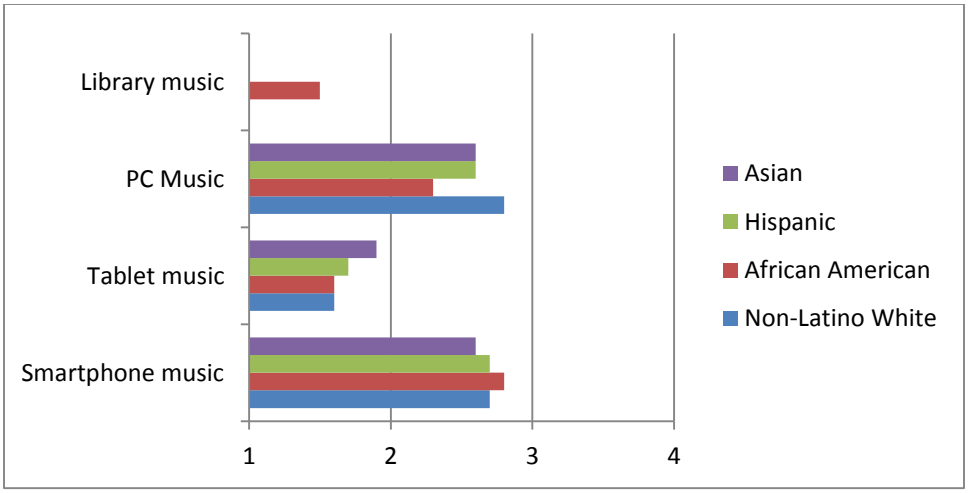
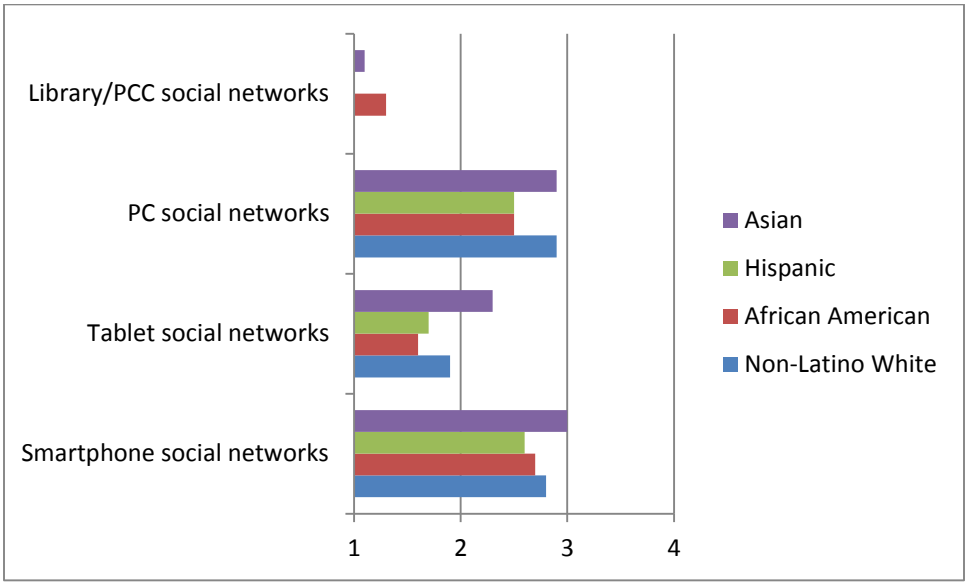


Figure 25 Social Networking Source by Subgroup

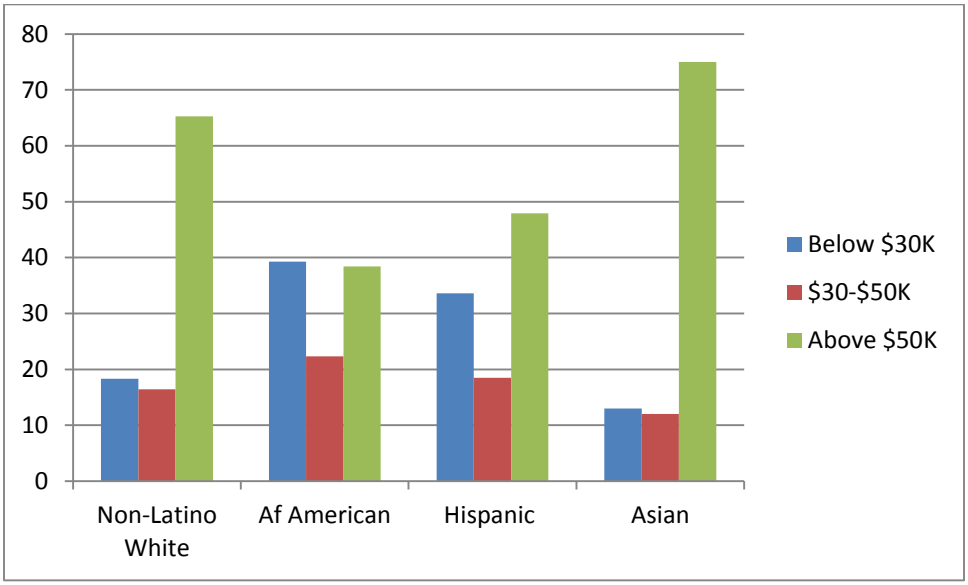


Our final comparison looking at devices and common digital activities across populations examines social networking, another very common activity - and one many smartphones are designed to optimize. Here, it is clear that the Asian and White non-Hispanic populations are accessing social networks via PCs and tablets more frequently than are other groups. The figures for using smartphones for these purposes, however, are more similar. Once again, the African American population uses library or PCC facilities for this purpose too – at a fairly low rate, but more often than is the case for other groups.

Thus, in terms of technologies such as laptop or desktop PCs or tablets, minority populations demonstrate lower ownership levels and consequently less use for various purposes. Game console ownership and use for Internet access, however, are higher among the African American population. As noted above, library or PCC facilities are more important for various functions for African Americans than for other groups. Phone-based technologies facilitate entertainment such as listening to music or social networking across all groups.

If device ownership and ease of use for information purposes (e.g., email) illustrate different patterns, what might be behind them? Do some groups not own PCs because they are expensive? Because they are more complicated to use? Income is one possible answer. While more complex analyses will quantify the role of income, it is the case that the African American and Hispanic populations reported lower levels of income compared to the other groups (Figure 26). This clearly can affect device ownership and costly items such as Internet subscriptions.

Figure 26 Race/Ethnicity by Income



If we look at people making under $30,000 in annual income and how that might be associated with using the Internet or having a home broadband subscription, the data are striking:

Table 10 Among $30K* or less income, % reporting...

	Non-Latino White	Af American	Hispanic	Asian
Use Internet	83	44	80	85
Home BB	77	41	85	69

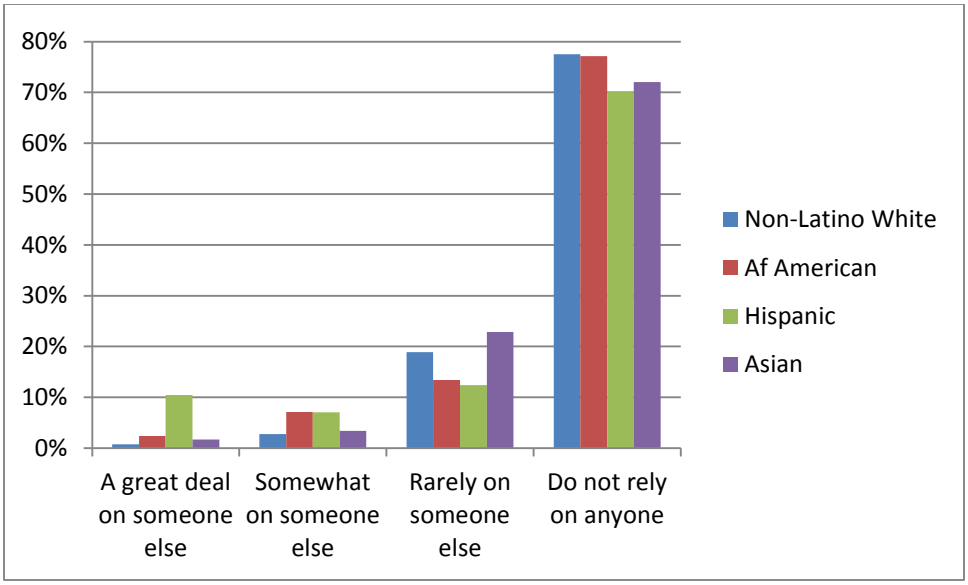
*N of <$30K =401

The African American population at this income level is *the least likely* to invest in a home broadband subscription, and also far less likely to use the Internet. If the utility of the Internet is not apparent, there would be no reason to spend the money on a home subscription. This finding suggests that the Internet is far less valued for that subgroup compared to all of the other population groups.

Moreover, we know that nearly everyone working fulltime reports using the Internet, but among people *not* working fulltime, there are racial/ethnic differences: while 93% and 92% of the Asian and Non-Latino White populations respectively report using the Internet and not working full time, those figures are lower for African Americans (73%) and Hispanics (81%).

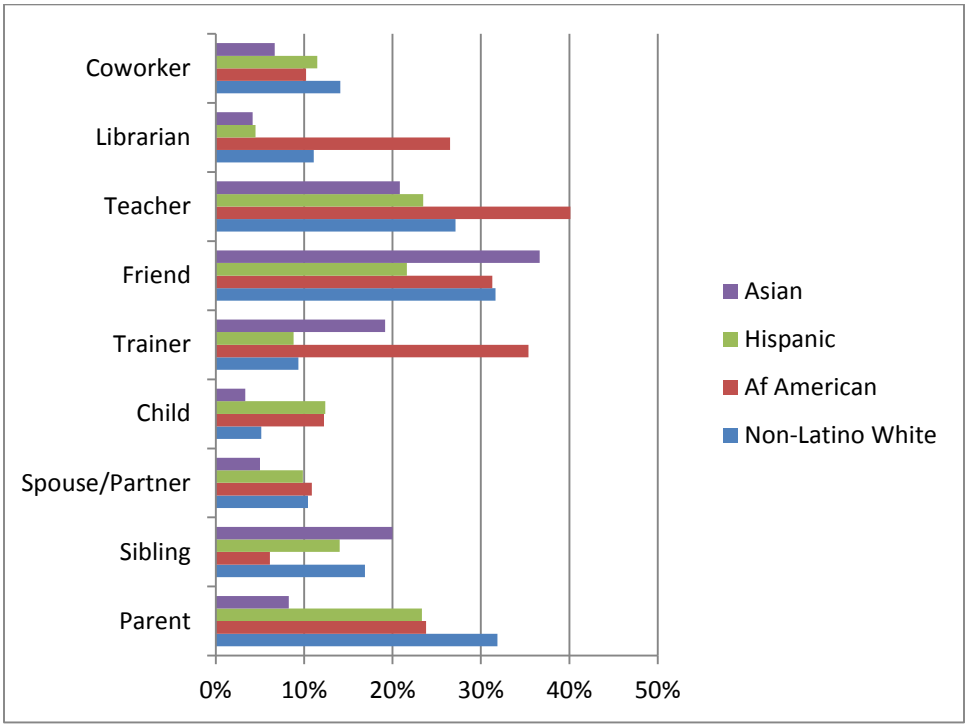
Beyond income, there also are some differences in how people learn to use the Internet and acquire digital fluency. When it comes to seeking assistance, a higher percentage of the Hispanic population reports relying "on someone else a great deal" for Internet help (11%); it is tied with the African American population in reporting "relying somewhat on someone else" (7%). Nevertheless, most people do not rely on anyone for Internet help (70% and above) (Figure 27).

Figure 27 For help with the Internet, I rely...



What strategies do these results suggest for helping people to use the Internet? The questionnaire listed a variety of family members as well as institutionally-based instructors (librarians, teachers, trainers) and asked people to indicate who taught them to use the Internet. As Figure 28 suggests, the African American subgroup significantly more often reported relying on institutionally based people – teachers, librarians, trainers – for learning to use the Internet, compared to other groups. It, along with the Hispanic population, also more often reported relying on a son or daughter to teach them in contrast to the low percentages reported by other groups. The important role of parents is also apparent, particularly for non-Hispanic Whites. Informal help from friends also is evident.

Figure 28 Who taught you to use the Internet?



There is evidence across the survey results that the library is not a preferred or frequently used source of information or training for the Hispanic population. This may hint at some need to think about how the library system can reach that population. However, the African American population seems to use libraries and other public institutions at far greater rates. Underscoring this finding, the next section, which examines information sources for jobs, likewise illustrates that the African American population more heavily relies on a job center or agency for information about jobs, whereas the non-Hispanic White and Asian populations rely more heavily on personal contacts.

6 Information Sources

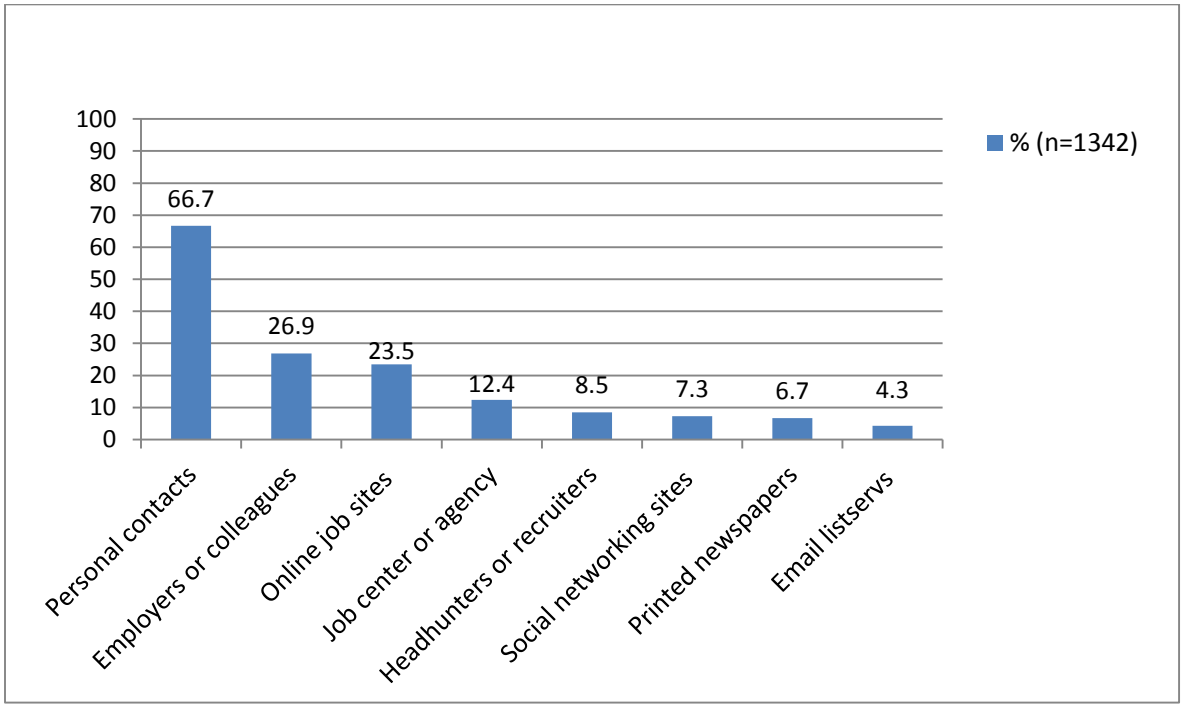
People in Austin still tend to get their information about places of interest from traditional sources, such as friends and family, and television. Online sites tended to be next, followed by radio, then newspapers. Facebook was the next source, overall, showing that it has become an importance source of information, followed by mobile apps and Twitter. New online sources of information are used, but not as much as traditional sources yet. For neighborhood information, within Austin, primary information sources are friends and family, television, newspapers, online sites, radio and Facebook. For Austin information, overall, primary information sources are similar except that newspapers fell to fifth place, behind radio, just ahead of Facebook.

Table 11 Sources for Information about Places

Info sources	Neighborhood Info (%)	Austin Info (%)	Texas Info (%)	USA Info (%)	Other Countries Info (%)	Immigrant Country Info (%)
Friends & Family	57.5	64.9	60.9	52.9	41.5	15.6
TV (offline)	35.1	61.8	61.0	62.2	58.1	13.4
Newspapers (offline)	31.0	39.5	33.7	36.1	33.2	3.5
Online Site	28.4	56.5	54.3	56.7	50.8	9.5
Radio (offline)	25.9	50.4	41.8	41.8	38.8	7.9
Facebook	22.1	38.8	32.1	34.2	30.9	7.7
Mobile App	11	23.7	18.3	20.5	19.7	2.0
Twitter	3.9	13.0	9.7	13.5	12.2	1.1

The more prevalent source of job information is personal contacts, followed by current employers or colleagues, with online job sites as a distant second and third. Two-thirds of respondents get information about their current job from personal contacts, 26.9% from current employers or colleagues, while 23.5% from online job sites such as Monster, LinkedIn, and Craigslist. In comparison, only a small proportion of the respondents get job information from email listservs (4.3%), print media (6.7%), or social networking sites (7.3%). In addition, 8.5% of the respondents get information about their current job from headhunters or recruiters and 12.4% from job centers or job agencies.

Figure 29 Current Job Information Sources



Across all age groups, the most frequently used source of current job information is personal contacts. The youngest cohort, respondents aged 18-24, are particularly reliant on this information source and are also the most likely group to rely on online tools such as job websites like LinkedIn and Monster. The youngest group is also by far the most likely to use social networking sites including Twitter and Facebook and are more likely than other age groups to report using employers and colleagues as information resources. No respondent in the youngest category reported use of job agencies or print media. The next age category of 25-34 year olds are just slightly less likely than their juniors to use job websites, but much less likely to rely on social networking platforms for current job information; whereas just over a quarter of the youngest respondents use social networking sites, under 5% of those 25-34 years old do. This 25-34 year old group is also the most likely age category to get job information from headhunters and recruiters and from email listservs.

Respondents aged 35-44 are significantly more likely than other age groups to report using job centers and agencies, and are the least likely to use personal contacts in seeking job information. Whereas about a third of respondents in the two youngest age categories report using job websites, this proportion drops precipitously among those 35 and older. Those who are 55 to 64 report the highest reliance on print media, followed by respondents aged 65 and older. Members of this oldest group are the most likely to use personal contacts as job information sources.

Table 12 Current Job Information Sources by Age

Current job information sources	18-24	25-34	35-44	45-54	55-64	65+	n
From personal contacts	70.2[1]	68.0	57.9	67.7	71.8	80.5	1342
From current employers or colleagues	30.2	26.7	27.1	26.3	25.4	20.0	1342
From online job sites such as Monster, LinkedIn, and Craigslist	34.7	33.3	17.8	10.5	11.9	7.3	1344
From a job center or agency	0.0	13.6	18.1	12.6	14.1	9.8	1343
Contacted by headhunters or recruiters	4.5	13.1	9.0	6.3	2.8	7.3	1343
From social networking sites such as Facebook, Twitter, Pinterest, and Meetup	25.1	4.9	5.0	2.6	2.8	0.0	1342
From printed newspapers, magazines, or journals	0.0	4.2	7.5	11.6	14.1	12.5	1342
From email listservs	4.0	6.0	1.9	4.2	4.9	2.4	1343

Table 13 Current Job Information Sources by Ethnicity

Current job information sources	Non-Hispanic White	African American	Hispanic	Asian	Other	n
From personal contacts	73.1[1]	43.2	59.3	65.7	82.9	1342
From current employers or colleagues	31.8	24.7	21.8	21.8	8.6	1342
From online job sites such as Monster, LinkedIn, and Craigslist	22.2	30.9	25.4	21.6	14.3	1343
From a job center or agency	9.3	28.4	13.6	18.8	2.9	1342
Contacted by headhunters or recruiters	9.3	2.5	8.9	6.9	8.6	1342
From social networking sites such as Facebook, Twitter, Pinterest, and Meetup	5.8	6.2	11.0	2.0	11.4	1342
From printed newspapers, magazines, or journals	5.5	16.0	7.4	6.9	2.9	1343
From email listservs	5.1	2.5	2.6	5.9	2.9	1341

[1]Percentage (%) within ethnicity category

Personal contacts are the most popular information resource for current job information across ethnic groups, and respondents in the categories of non-Hispanic White and Other are the most likely to use personal contacts for this purpose. Those identifying as non-Hispanic White are also the most likely to rely on current employers and colleagues, with nearly 32% reporting use of this information channel. Non-Hispanic White respondents are much less likely than Asian, African American, and Hispanic respondents to utilize job centers and agencies. Over 30% of African Americans report using job websites, followed by just over a quarter of Hispanics. African Americans are also significantly more likely to rely on print media such as magazines and newspapers, and job centers. Respondents identifying as Hispanic or Other are most likely to employ social media as a source of job information, and Asians are the least likely, with only 2% using social media tools for seeking job information. Asians are the most likely to report using email listservs for this purpose but across all of the ethnic groups, listservs were infrequently reported as a resource for job information.

Table 14 Current Job Information Sources by Gender

Current job information sources	Male	Female	n
From personal contacts	66.0[1]	67.5	1342
From current employers or colleagues	24.8	29.4	1342
From online job sites such as Monster, LinkedIn, and Craigslist	20.8	26.7	1343
From a job center or agency	12.7	12.1	1343
Contacted by headhunters or recruiters	11.8	4.7	1341
From social networking sites such as Facebook, Twitter, Pinterest, and Meetup	3.9	11.3	1343
From printed newspapers, magazines, or journals	7.9	5.3	1342
From email listservs	3.5	5.2	1342

[1]Percentage (%) within gender category

Table 15 Current Job Information Sources by Education

Current job information sources	Less than high school	High school	Some college	Under-graduate degree	Graduate degree	n
From personal contacts	73.1[1]	43.2	59.3	65.7	82.9	1342
From current employers or colleagues	11.6	23.8	21.5	30.5	36.4	1341
From online job sites such as Monster, LinkedIn, and Craigslist	26.3	18.0	24.5	25.0	22.1	1343
From a job center or agency	10.4	7.6	13.1	13.9	13.0	1343
Contacted by headhunters or recruiters	0.0	1.2	8.1	13.0	9.5	1341
From social networking sites such as Facebook, Twitter, Pinterest, and Meetup	0.0	1.7	14.4	6.2	4.7	1341
From printed newspapers, magazines, or journals	3.1	7.6	7.0	6.6	7.5	1344
From email listservs	0.0	1.7	2.4	3.2	12.3	1341

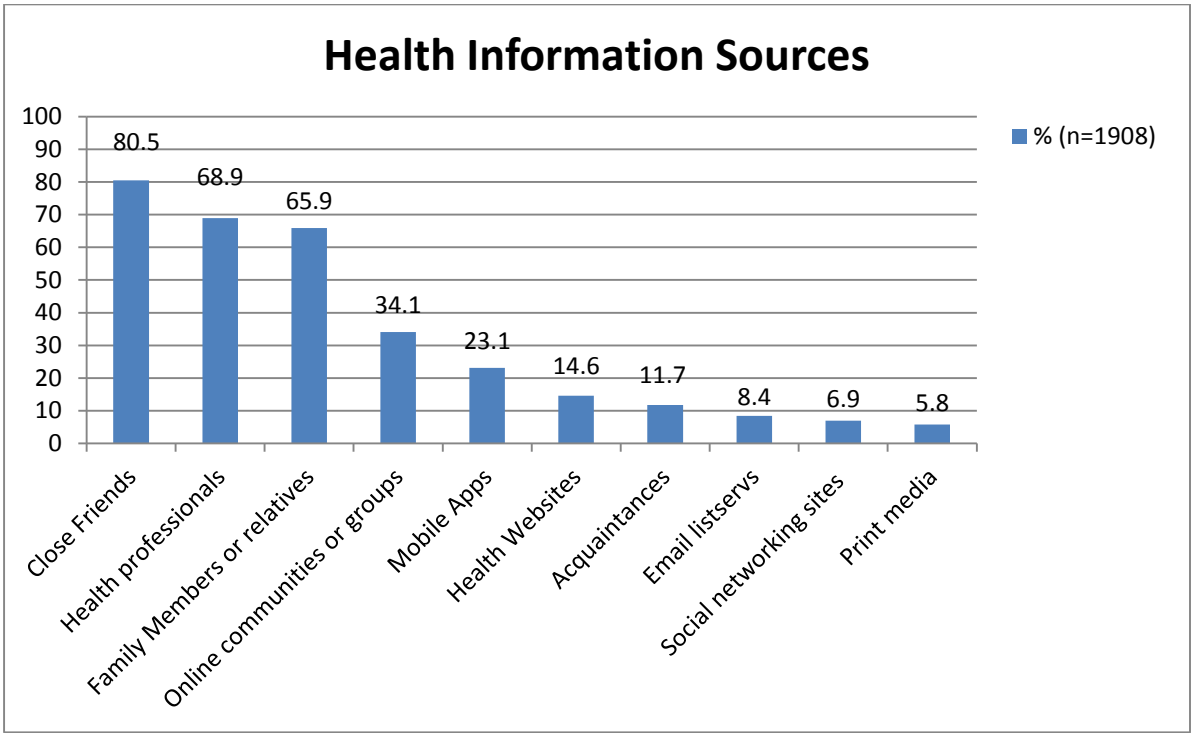
[1]Percentage (%) within gender category

Both men and women are most reliant on personal contacts for job information, followed by sources like current employers or colleagues, online job sites, and then job centers or agencies. Yet, female respondents use digital channels to get information about their current jobs significantly more than do male respondents, both in terms of going to online job sites and seeking information on social networking platforms. However, male respondents (11.8%) are more likely to be contacted by headhunters or recruiters than are female respondents (4.7%). There is no significant gender gap in terms of getting job information from personal contacts, current employers or colleagues, job centers or agencies, print media, as well as email listservs.

Across all education groups, the most frequently used job information source is personal contacts. Interestingly, people who have lowest levels of education and who have the highest levels of education are significantly more reliant on personal contacts. Significantly lower percentages of respondents with high school and undergraduate college education get information this way, and those with high school education were the least likely to report using personal contacts. People reporting at least some college are much more likely to be contacted by headhunters or recruiters than those who have high school or less education. Respondents who have completed college are more likely to get job information through current employees or colleagues. Respondents with some college education—but without undergraduate degrees--are more likely to get current job information through social networking sites such as Facebook, Twitter, Pinterest, and Meetup than people with other levels of education. Those with a graduate degree are the most likely to get job information through email listservs. There are no significant educational gaps in terms of getting job information through job centers or agencies as well as print media such as newspapers, magazines or journals.

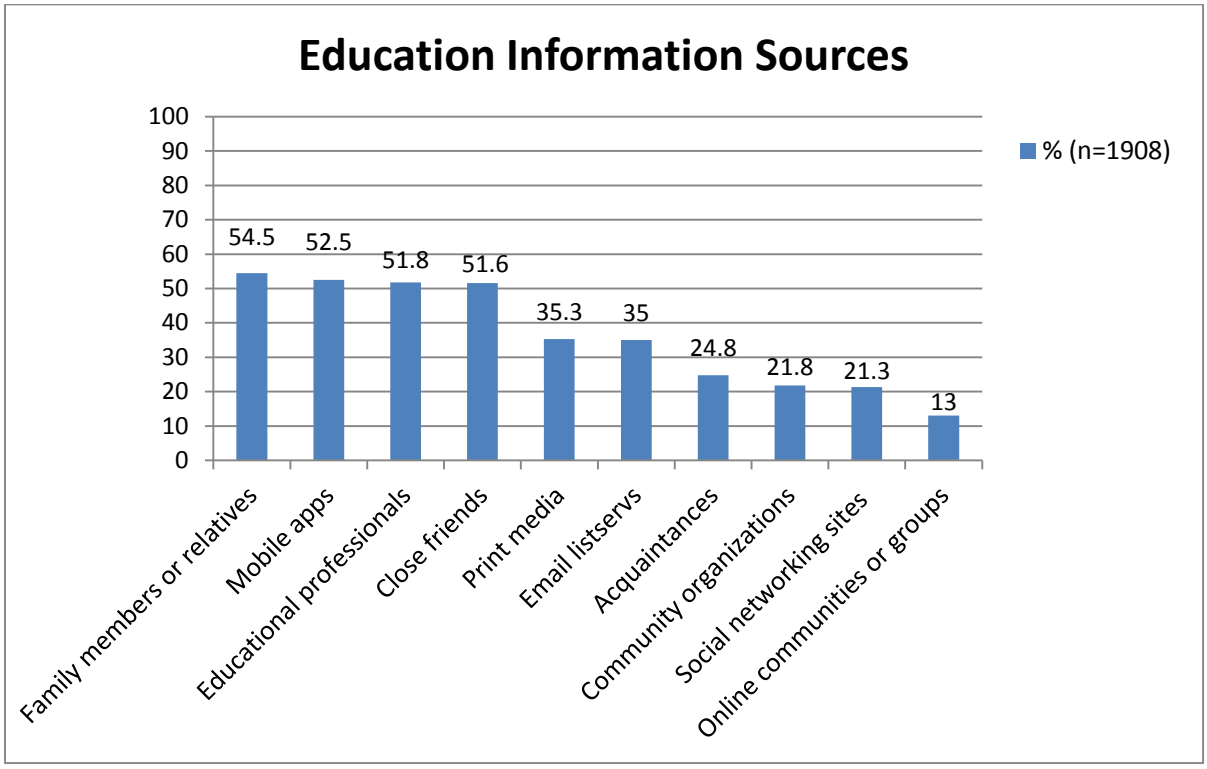
The most prevalent source of health information source is close friends, followed by doctors, nurses or public health professionals and family members or relatives. For example, 80.5% of respondents get health information from personal contacts, 68.9% from doctors, nurses or public health professionals, while 65.9% get this information from family members or relatives. By contrast, only a small proportion of respondents get health information from print media (5.8%), social networking sites (6.9%), and email listservs (8.4%). In addition, 11.7% of respondents get health information from acquaintances, 14.6% from health websites, 23.1% from mobile apps, and 34.1% from online communities or groups.

Figure 30 Health Information Sources



Family members or relatives (54.5%), teachers or other educational professionals (52.5%), and close friends (51.6%) are primary sources for education information. It is noteworthy that another main source people use to get education information is mobile apps (52.5%). By contrast, much smaller percentages of people rely on acquaintances (24.8%), community organizations (21.8%), social networking sites (21.3%), and online communities or groups (13%) to get educational information. Furthermore, 35.3% of respondents use printed newspapers, magazines, or journals and 35% use email listservs to get educational information.

Figure 31 Education Information Sources



7 City Services

Using Technology to Access Online City Services

Respondents frequently use digital technology to pay bills and access city services. In terms of technology, PCs are the most popular choice of technology, with 17% of respondents employing PCs on at least a weekly basis. Nearly 75% report using a PC at least once for paying utility bills or for getting city information. Smart phones are the next most popular mode of access, with nearly 11% of respondents using them at least weekly to access city information or pay utility bills. Just over 41% of respondents have used a smart phone at least once to access these services. Tablets, which rank as the third most frequently reported technology, are considerably less common, with just 16.8% of people surveyed using them at least monthly for bills or for finding city information.

Computers in city libraries or labs and game consoles are rarely used for these purposes. Only about 3% of respondents (out of N=1521) report ever using a computer at a city library or lab.

Figure 32 Device Frequency of Use for Paying Utility Bills or Accessing City Information

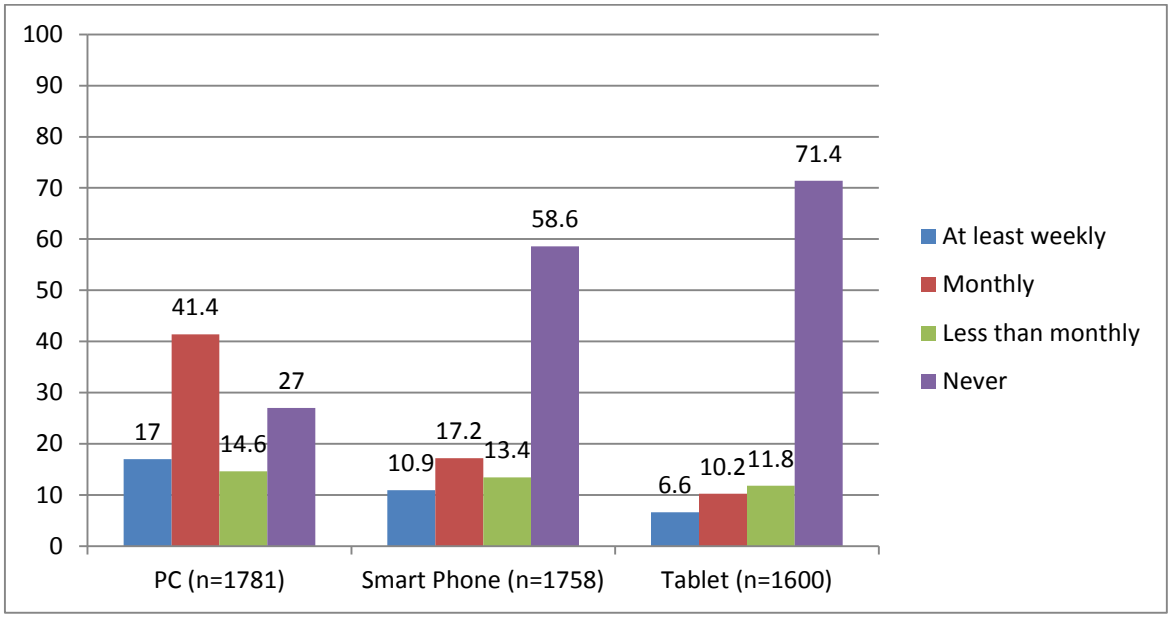


Table 16 Accessing City Information and Paying Utility Bills at Least Monthly

Race/Ethnicity	PC	Smart Phone	Tablet
Non-Latino White	68.1	26	15.6
African American	40.5	18	9.1
Hispanic	43.9	31.1	14.3
Asian	88.7	44.4	30.5
Other	36.6	7.7	60

Table 17 Accessing City Information and Paying Utility Bills at Least Monthly %

Income	PC	Smart Phone	Tablet
<$19,999	46.1	27.2	15.3
$20,000-$39,000	57.5	47.8	8
$40,000-$74,999	62.8	30.7	14.8
$75,000 +	70.3	28	21.5

Table 18 Accessing City Information and Paying Utility Bills at Least Monthly %

Education	PC	Smart Phone	Tablet
<High School	44.3	45.1	14.9
High School	30.2	17.5	15.8
Some College	55.3	25	10
Undergrad Degree	70	29.1	19.5
Graduate Degree	77.6	31.6	24.5

Those using PCs to access online city information and bill services are likely to be of non-Hispanic White or Asian backgrounds, with a high income and education level. Asian and Hispanic users are more likely than other ethnic groups to use smart phones for this purpose. Respondents without high school diplomas are also more likely to employ smart phones in this manner. Tablet users are generally fewer, and tend to hold college degrees and have high incomes.

Awareness and Perception of City Services

The City of Austin offers a variety of free services to support residents' access to computers and online technologies. These include computer and Internet access at Austin Public Library branches, public Wi-Fi service in downtown Austin, computer training in public libraries and city-affiliated venues, and Wi-Fi access on Capital MetroRapid buses. Awareness of these services varies widely by race and ethnicity, income, and education. Overall, respondents are most familiar with the computer and Internet access services offered at Austin Public Library branches, with nearly 95% reporting awareness. The great majority of respondents were aware of other public services, although these programs were not quite as well-known as the

Library's computer and Internet access facilities. Respondents were least likely to know about Wi-Fi access on city busses, with nearly 14% of respondents reporting they are unaware of this service.

Table 19 Respondents' Awareness of City Services

Service	% Aware
Computer and Internet Access at Public Libraries	94.9
Free Public Wi-Fi Downtown	86.7
Public Computer Training	88.1
Wi-Fi on Capital MetroRapid	86.1

While it is encouraging that many Austin residents are aware of the services offered by the City –at least 80% of every population group reports being aware of these services - awareness varies considerably by race and ethnicity, income, and education level, and this may indicate the need for greater outreach among certain populations. African American residents were among the respondents least likely to report awareness of City of Austin digital inclusion efforts, particularly the downtown area Wi-Fi service and computer training programs. Additionally, over 10% of African American respondents are not familiar with the free computer and Internet access offered at Austin Public Library branches. Generally, the Library programs were the most widely recognized across the categories of Race and Ethnicity, Education, and Income.

Disparities in knowledge among different education levels were among the most dramatic. Whereas nearly most people with at least a high school education knew about free public computer training, nearly 30% of respondents without a high school diploma reported being unaware of these programs. Those at the lowest end of the education spectrum were also least likely to be aware of Wi-Fi service on Capital MetroRapid buses and in Austin's downtown.

Respondents annually earning from $20,000-$39,999 demonstrate the lowest awareness among the different income groups. Those reporting the lowest incomes, below $19,999, were significantly more aware of City services including CapMetro Wi-Fi and public computer training than those in the tier above them. Respondents reporting incomes over $40,000 consistently showed greater familiarity with public programs than those survey participants in lower income categories.

Figure 33 Percentage Reporting Awareness of City Services, by Race/Ethnicity

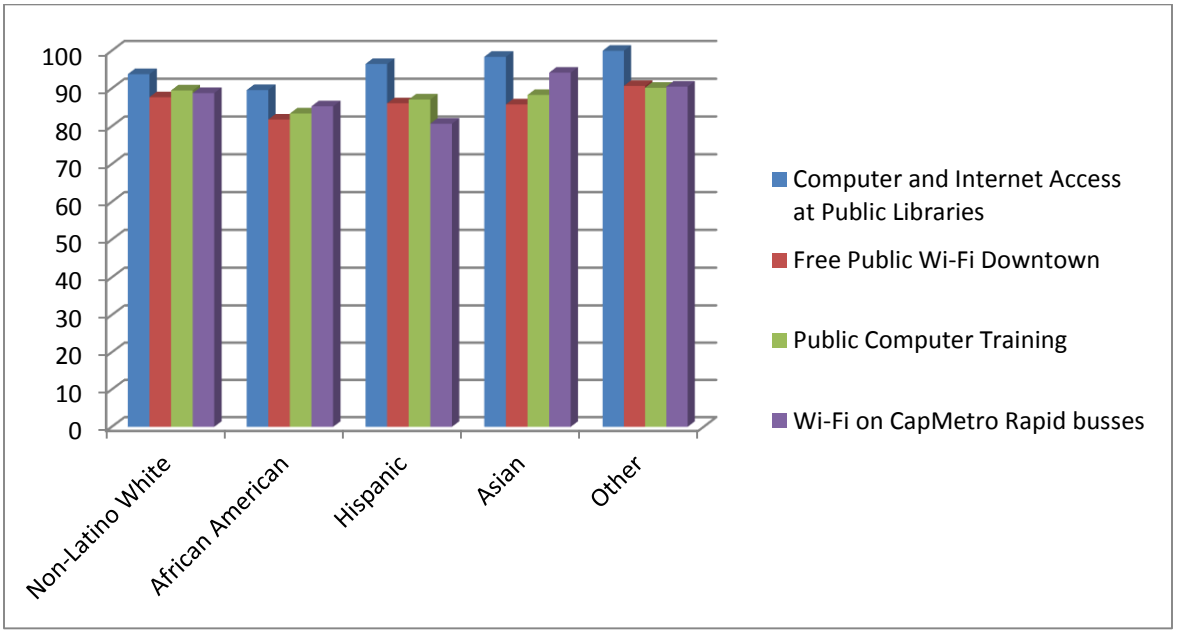


Figure 34 Percentage Reporting Awareness of City Services, by Education

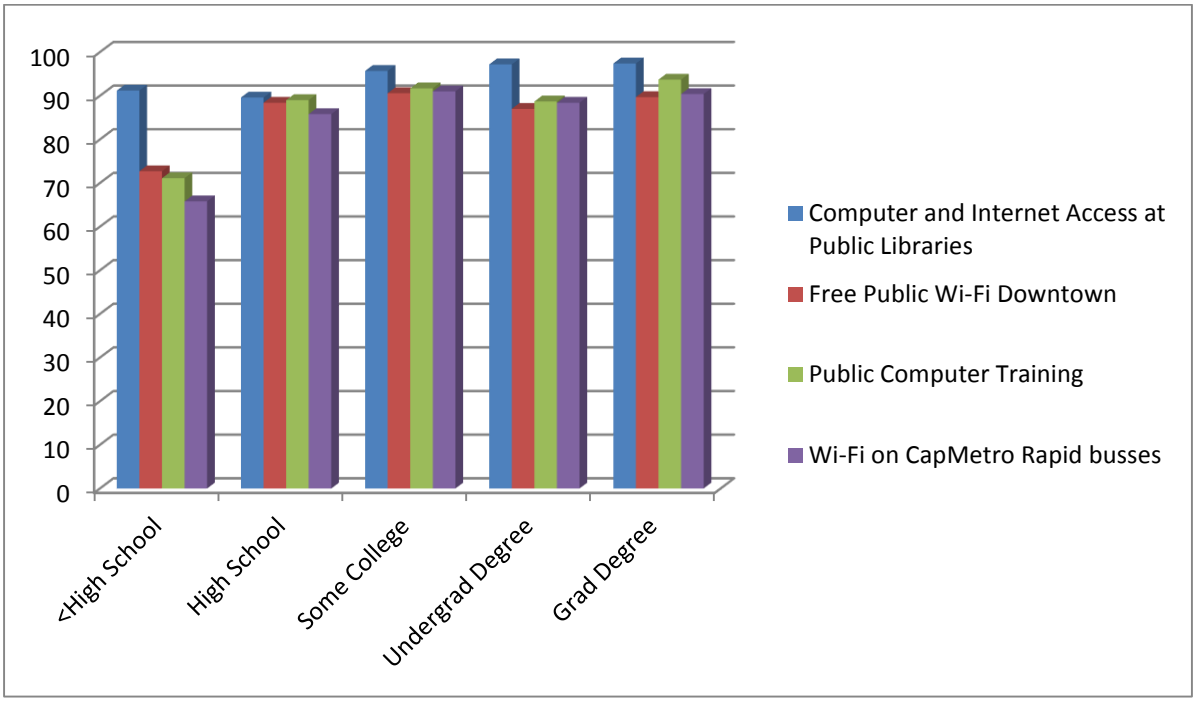
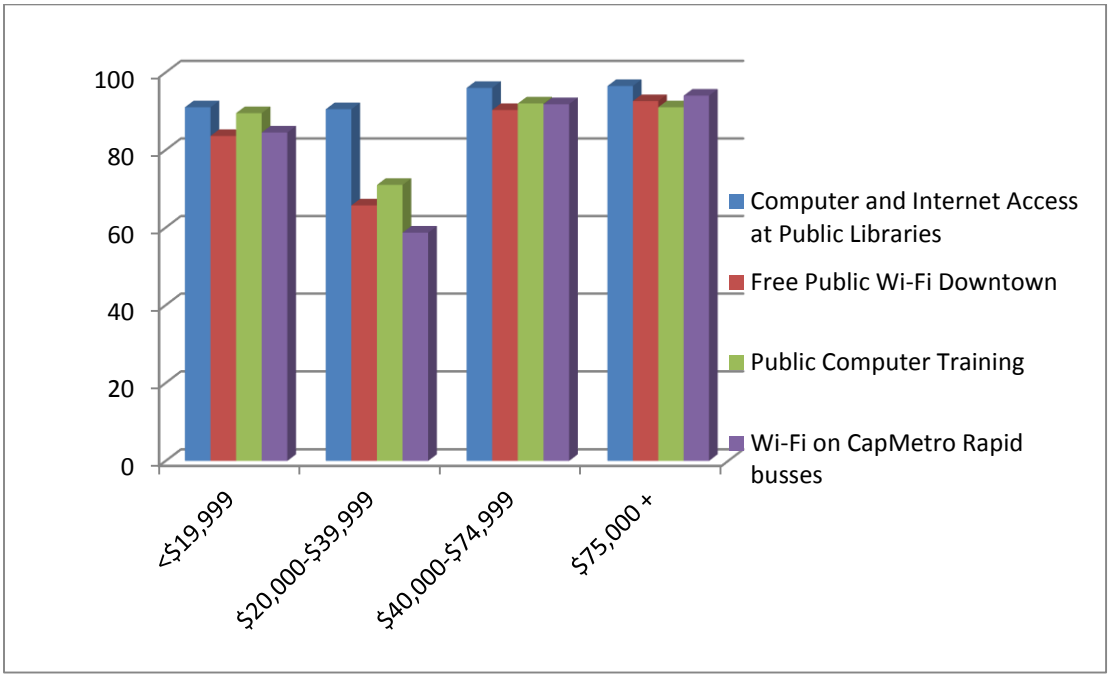


Figure 35 Percentage Awareness of City Services, by Income



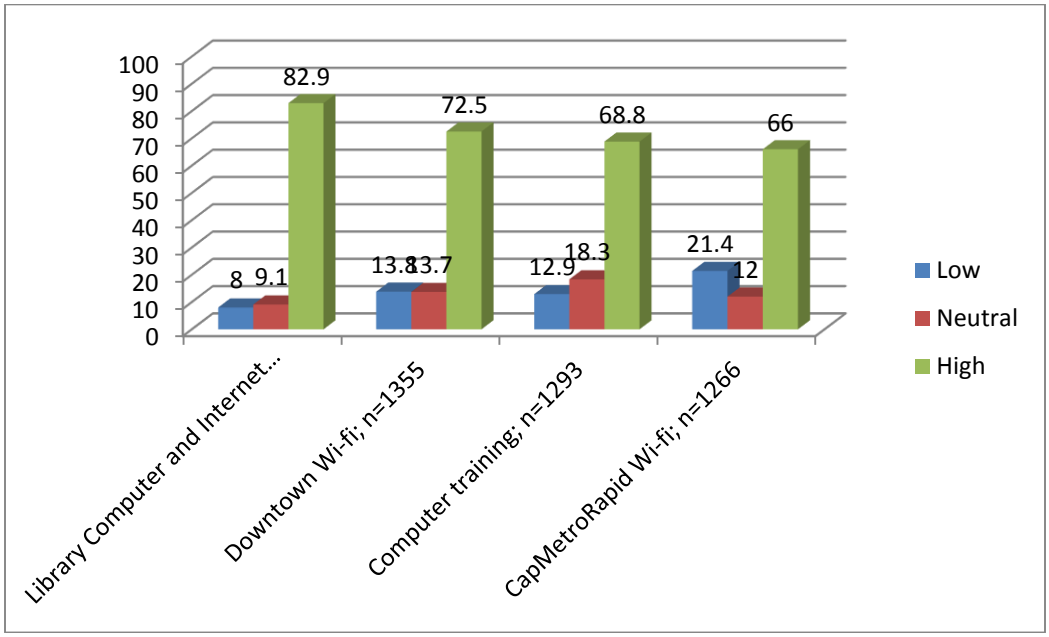
As expected, non-Internet users are also significantly less likely to be aware of these City services. Nearly a third of non-user respondents are unaware of Wi-Fi on the MetroRapid buses, while over 20% are not familiar with free computer training programs or the free downtown Wi-Fi network. Austin Public Library services are the most likely of the programs to be familiar to non-users, with just 16.4% reporting they are unaware of them.

Public Service Priorities

For survey participants who are aware of the City's free computer and Internet services, the Austin Public Library's programs rank the highest in importance, followed at a distance by the free downtown Wi-Fi service, computer training, and Capital MetroRapid bus Wi-Fi (Figure 36).

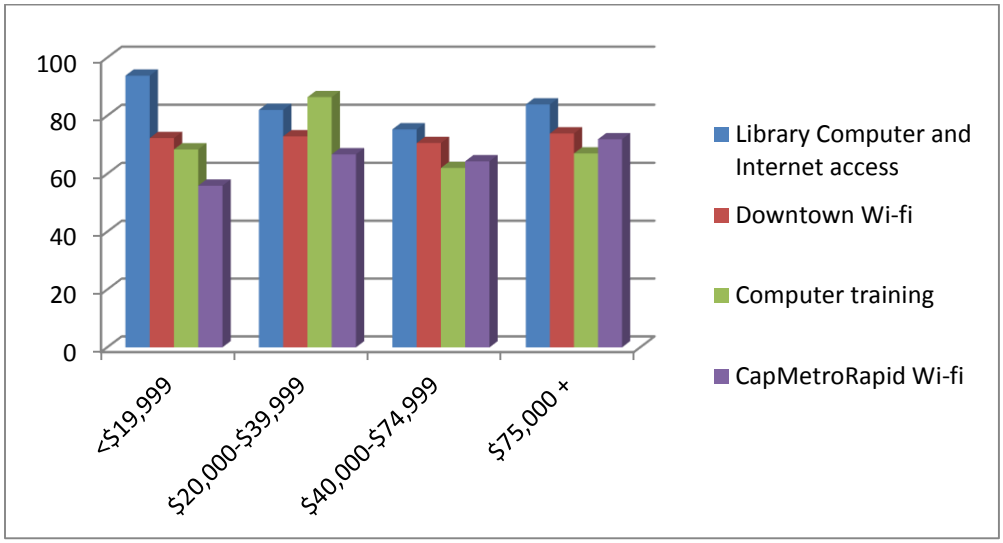
Income is associated with the value of these services. Respondents in the lowest income category, African Americans, and those with at least 16 years of Internet experience are most likely to identify Austin Public Library services as high priority. These same groups all tend to show the least interest in Capital Metro bus Wi-Fi service. Respondents identifying as Hispanic and those without high school diplomas show the greatest interest in this service. Hispanics, respondents without high school diplomas, and those reporting annual incomes of $20,000-$39,999 were among the most likely to prioritize computer training (Figure 37 through Figure 39).

Figure 36 Public service importance ratings (in %)*



*Among those aware of services

Figure 37 Agree Services Ranked are Important, by Income



Generally, survey participants with less education were more likely to show support for Wi-Fi service downtown and on city buses, as well as computer training, while those with at least undergraduate degrees demonstrated less interest in these programs. That said, over 60% of the sample rated all of the services as important (Figure 39).

Figure 38 Agree Services are Important, by Race/Ethnicity (%)

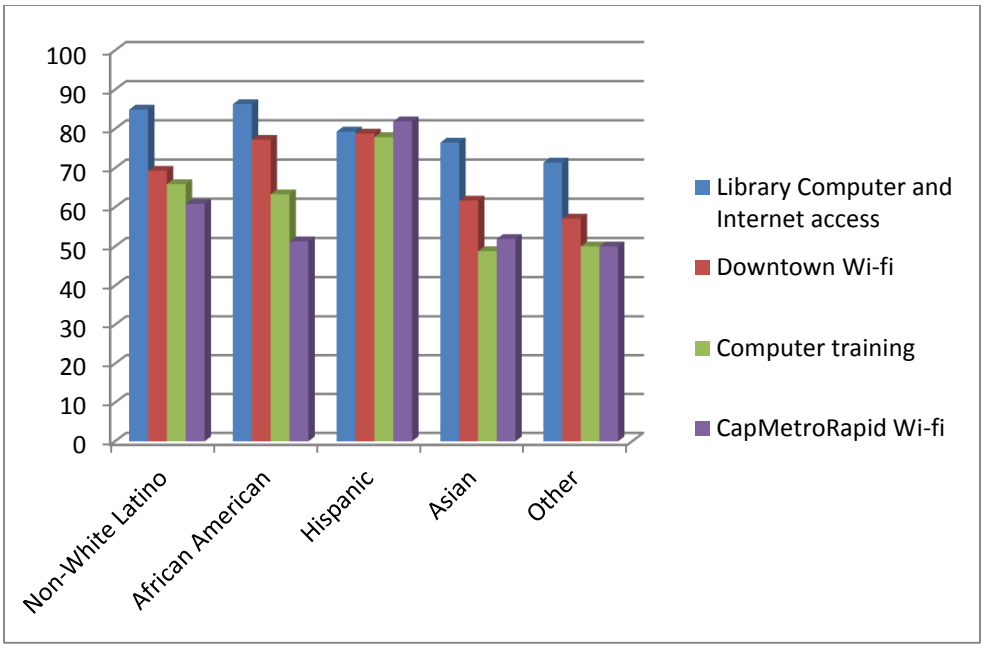
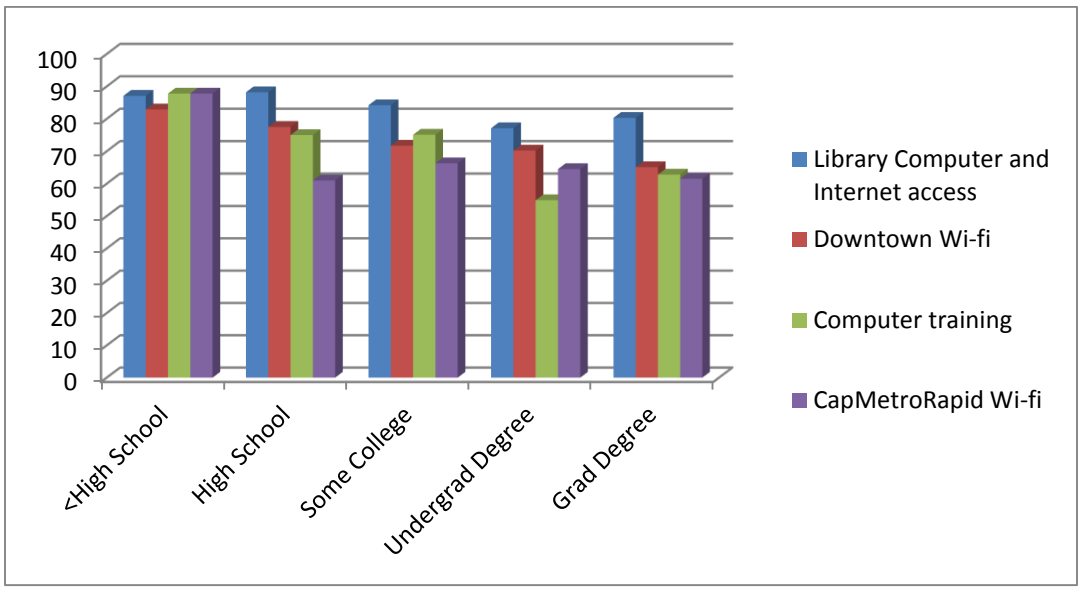


Figure 39 Agree Services are Important, by Education (%)



8 Qualitative Observations

Bases of qualitative information

The qualitative portion of this report is based on complementary sources of information gathered over time from 1999 to 2014. They include observations by University of Texas undergraduate and graduate students made at six libraries and public access or training centers of what kinds of people, in terms of age groups, ethnicity, and gender, were using public access. Where possible the students also observed what kinds of things people were working on and what kinds of help they asked from the librarians, staff or other users. The second is based on in-depth qualitative interviews that examined peoples' life history with media and technology interviews with 35 people in 2014, plus other interviews conducted since 1999—with major waves in 1999-2000, 2004-06, 2009, 2012 and 2014. In some interviews, we put emphasis on interviewing three generations of the same families to better observe trajectories within families over time. In 2014, to get a better sense of low income, first generation immigrant Latino families, we concentrated about a third of our interviewing in Dove Springs, about half of that with people associated with River City Youth Foundation. The rest of the interviews were with a variety of people in Central and East Austin.

Public access still necessary

The 2014 City of Austin/UT Digital Competencies survey shows that most have home access (93%), but a significant minority among the African American and Latino minorities, older people, the poor and the least educated, does not. We note that many people use public facilities because they lack either a home computer or a home-based connection to the Internet. For example, a number of parents interviewed in Dove Springs in 2014 noted that their kids used computers and Internet at multiple locations: at home if they had them (only a minority of those interviewed had computers and home, not all of those connected to the Internet), at school (but effective access at school was limited), at libraries, and at River City Youth Foundation (RCYF) and other community centers.

Austin Public Library for access to computers and Wi-Fi

Observations from libraries concentrated in East Austin show that many people come to the Austin Public Library (APL) to use public access computers and, increasingly, many also come to use free public Wi-Fi on their own devices. Both kids and adults frequently use Wi-Fi at the Austin Public Library on their own computers and devices. For example, when we asked one adult professional immigrant from Mexico in 2014, "Have you ever been to a library in Austin? What did you use there?" He said, "Yes, but it was mainly because I didn't have Internet at the time and I needed to do research for work. Therefore, I would go to the library primarily for the Wi-Fi."

Schools are also crucial for both access and skills learning. In-depth interviews conducted by students over the years, from 1999 to 2014, show that many lower income and minority youth first got access to a computer in school, usually in a keyboarding or similar class in the second to fifth grade. In 2014, the teenage son of one of an adult interviewed at River City Youth Foundation still commented that, "I didn't know what a computer was up until about 5th grade."

Internet continues to be too expensive for some

For many of the poorest people in Austin, having home Internet is still too expensive. For example when an interviewer asked a first generation immigrant from rural Mexico in 2014, "Do you have Internet?" They replied, "Now, no. We had it for a while but we got rid of it because it was so expensive."

Access devices like cell phones and tablets seem to broaden who uses Internet

The survey and in-depth interviewees both show that older adults, less educated adults, and those with little computer experience may find both smartphones and tablets easier points of access to the Internet than a laptop or a PC. For example, one second generation immigrant, in his late teens, said of his parents, "No, my mom doesn't know how to use a computer. We bought her an iPad for Christmas and she's barely learning how to use it. My dad, he has an iPod but just for music. He doesn't have apps or nothing like that. My mom, neither of them know how to use a computer."

River City Youth Foundation (RCYF) has started giving graduates of its adult computer course a tablet. One of the UT interviewers asked an adult participant, a first generation immigrant mother in Dove Springs," So [RCYF] gave y'all a tablet right? What do you use the tablet for?" She said, "Well to communicate with them and also to help out my kid, when he needs to write about something we look it up there, if he wants to know about a planet we search about it and find the one that is more credible and more understandable, that's how it's helped…"

Computers frequently first acquired for kids school work

A variety of studies since the late 1990s have noted that lower income, lower education, African American and Latino families often thought of computers primarily as something that was good for their kids, and usually bought them for that reason. This still seems to be largely true for these groups. A UT student originally from Guanajuato noted, "We did have TV and radio most of my life but we didn't have a computer until I was in middle school so all of my homework that I had to do I would have to go to the public library or stay after school so that I could type up my work because I knew I didn't have any of that stuff at home. Eventually we did get a computer but that was mainly just to type things. It wasn't until a year after we got that computer that we added the Internet which made things a lot

more simple because, just doing homework at home was easier than staying at school for so many hours or having to get there super early."

A number of programs through schools and non-profits have tried to get computers into homes, particularly those of families with school age children. For example, some kids in Dove Springs first got computers through a middle school 'computers for kids' program. A University of Texas student from that neighborhood noted that, "… in middle school there was this program where we got the big computers, and we would stay after school and we would learn how to use them, and take care of them, and then we would get to take it home… we would have to go to meetings, and our grades had to be good… It was when I was in 8th grade. It was like 2006."

Many lower income and minority kids do have game systems

Some also first get Internet access devices, computers, smart phones and, recently, tablets, to play games. This is more common for boys but includes girls as well. Girls are more likely to say they were drawn into the Internet to use Facebook, but some boys also say that.

Observation of several Wired for Youth centers at East Austin public libraries showed that a number of children and youth, particularly boys, used the centers to play games, but a number of youth also did homework, used social networks, sought information, watched videos, etc. The relative openness of the Wired for Youth centers to let kids do a variety of activities, and the availability of youth librarians to help kids with homework searches, etc. have definitely helped bring youth into the library and into computer and Internet use. In contrast, the first UT observation study of East Austin libraries in 1999 showed that minority boys were very under-represented in their use of public access at the libraries. That changed dramatically by 2009 and 2014. Minority youth are now strongly motivated to use the Internet and flock to libraries to do that. In fact, boys have been using public access more than girls since 2009, perhaps motivated by the popularity of playing computer games, watching videos, doing searches and the increasing requirement by schools to type papers and use searches.

Technology empowering in various ways

Access to technology is empowering in a variety of ways. A graduate of the River City Youth Foundation program and the mother of a son in their youth program said she is not only able to use her tablet that was given to her by River City Youth Foundation but she finds it empowering. Having a son with Downs syndrome, she says she is able to use her tablet to research the function of the new prescribed medicine they give to her son; "it has helped because since he runs, he likes to watch kid songs and videos and it's the way he stays calm."

Public access is necessary but not sufficient

We have found in in-depth interviews with a variety of people that most of them, except perhaps those under 30, have needed help from someone to learn how to use computers or the Internet. Many children in the middle class learn from parents at home. They tend to have an advantage that lasts, visible in both survey results and qualitative interviews. Many others learned at school. The 2014 survey showed that teachers taught over a quarter of those in the survey. Others learned from colleagues or friends at school or work. Qualitative interviews bear this out.

Technology access is increasingly required for a variety of tasks that everyone has to perform, no matter their level of Internet access or skill: access to government services, signing up for health care, filling out forms for university admission, and so forth. However, just having access to a computer and the Internet, as at most libraries, is not necessarily enough.

Many disadvantaged people also need extensive coaching or classes to learn how to do those necessary tasks online. For example, UT students' observations at libraries and at the DeWitty Center, as well as DeWitty's own internal research, tends to show that many people, particularly working class African American men, go there to learn to do very basic, but required tasks and forms, for unemployment insurance, to apply for jobs, to create resumes, and beyond.

DeWitty has staff available and trained to help and coach people individually, but most libraries and other public access centers, such as those in the Housing Authority of the City of Austin (HACA), do not. One Austin Public Library location, the Willie Mae Kirk Branch, has a part time staff person to help people with individual tasks and learning; her experience, as related at a briefing for the City of Austin Telecommunications and Regulatory Affairs digital inclusion advisory committee in 2014, shows that there is considerable demand for this kind of service. University of Texas students' observation of the kinds of computer and Internet help patrons seek at East side Austin Public Library branches tends to confirm that people need more individual help than the existing librarian staffing pattern is able to supply.

Older generations particularly need help with skills, overcoming fear of technology

A number of older teenagers and college students interviewed in the qualitative interviews said they had helped parents, grandparents or other older relatives learn how to use computers, tablets, even smart phones, to use the Internet, since it was hard for them to learn on their own. A University of Texas student from Mexico noted in 2014, "I taught both my parents how to text. It's a lot more convenient. I try to call them or text them at least once a day."

In an interview, one middle-aged immigrant from rural Mexico was asked, "And why don't you want a Facebook?" She said, "I don't know how to use it. They [her children] try to

teach me, but I can't… I can look at it just fine but I can't type well." Observations at several libraries as well as DeWitty and River City Youth Foundation (RCYF) confirmed that many disadvantaged would-be users lack typing or even literacy skills, as well as confidence to try to develop skills.

River City Youth Foundation has also begun to concentrate more on teaching adults in the last three years, including a number of confidence building measures, including learning how to do the same skills, such as sending email, on computers, tablets and smart phones. This also raises a question of multiplatform literacy, helping people learn how to use the technologies they already own; similar to some school programs that let students bring their own devices and learn how to use them for school work.

We find that confidence, skills and multiplatform literacy are important to teach the maximum number of disadvantaged users. In an earlier round of observation at both libraries and public access centers in 2009, University of Texas students observed a program for seniors at Conley-Guerrero Senior Center, which had very specific programs for building both confidence and capacity to use technology. One example in 2009 was a computer class segment called "Mouse Aerobics," focused on just getting seniors comfortable with moving the mouse and use it to do things onscreen.

Losing fears of computers

One need is to help older, less educated and more disadvantaged users lose their fear of computers. One first generation immigrant Mom in Dove Springs was asked by an interviewer, "How did you learn (to use computers)?" She said, "Here (River City Youth Foundation), here was where I lost the fear." But the same interviewee noted that she preferred to use a tablet or phone for Internet now because they are easier to use.

Lower income parents want to use tech to help their kids in school

One of the problems highlighted to us in an interview with one of the directors of River City is the lack of contextual knowledge for many immigrant parents. They do not know what the work and education demands on their children will be. So River City Youth Foundation has started working more contextual information into their digital inclusion classes, focusing for example on what parents need to know and then teaching them tools that can help. For example, the first email assignment in the parents' class is to email their child's teacher. One of the first Web assignments is to learn how to use AISD Parent Connect. An upcoming program planned by Housing Authority of the City of Austin will also incorporate this idea, teaching parents about AISD Parent Connect. We think it shows the need to contextualize digital inclusion instruction, connecting it to solving problems people have with work, health information, and parent information.

One woman in Dove Springs commented about the River City Youth Foundation parent education and technology class she took: "[I am] very excited because, can you imagine…

for me it's a blessing having come across Tech Comunidad and their teachers because they're always making sure that we learn. And I'd say, you normally pay for computer classes and here it's all free and plus we're going to get a tablet at the end, so yeah I'd say it's such a blessing." After having a laptop only three months, she is delighted to be able follow her son's grades in school more closely. (The River City Youth Foundation parents' class taught her to use AISD Parent Connect.)

Getting tech to keep in touch with families in US and across borders

Among poorer residents, including recent immigrants, there is an increasing use of Internet devices, starting with computers, but increasingly focusing on smart phones and tablets, for communication with family and others. For older adults, using Skype is one of the main attractions of computers and tablets, since it is a lot like talking on the phone. The same is true for first generation immigrants to communicate with family back "home." Many like Skype, particularly, since they can see each other, as well as talk. A Mexican student at University of Texas noted, "So my grandma likes to talk on the phone. With my dad, it's phone and emails… And so with my mom, I communicate via Skype. With my sister, I use Skype and Facebook. I also use Whatsapp to communicate with all of them but not my grandmother. She wants to learn how to text but she can't."

Trends in Austin's disadvantaged population's use of digital media

In addition to the above, we note that there are several large social trends that are relevant:

First, there is a long-term process in the formation across generations of the educational or cultural capital needed for empowering digital media use. What do grandparents and parents try to pass along? Where does education for their children fit in their priorities?

Second, what are overall family trajectories toward computer and Internet use at home, which is very helpful for letting younger children learn computer and Internet skills early in life. As noted above, many disadvantaged children only learn computer skills at school, so their skills and knowledge already lag those who learned at home.

Relatedly, do both parents and youth have access to the kinds of schools and work where they learn how to use computers and the Internet for empowering, educational or work uses, as opposed to simply learning how to consume entertainment through digital media? Do they become digital media creators or consumers?

Finally, we have evidence from the 2010 and 2014 surveys, as well as from qualitative interviews that the oldest generation and parent generation are sometimes now learning technology from their children, or grandchildren, although our quantitative results did not signal children as more important sources than libraries or schools or parents. Can training be stimulated or helped along by programs through schools or non-profits?

9 Conclusions

Austin is a community that is very aware of and in love with technology. Home broadband subscriptions and Internet use, at 92% each, exceed national averages, and there is keen interest in the upgrades currently promised by many local service providers including Time Warner, Google Fiber and AT&T U-Verse. People use a variety of digital devices for various purposes, and the Austin population provides evidence of growing use of, or even dependence on, the smart phone for many purposes. Mobile devices are widely used, and have supplanted or are supplementing conventional computers in many regards. The local population's use of some digital technologies exceeds national averages. With a growing technology workforce, prominent universities recognized for their degrees in engineering and sciences, a videogame developer industry and the internationally known SXSW Interactive Festival that showcases all things digital, Austin is takes its place at the front ranks of cities with digital technology users.

Does this mean the digital divide is gone? We titled this study "digital inclusion" because while simple access may have receded as an issue, both the cost of access to a high quality or high speed network and the interest and expertise levels in using digital resources vary across the population. Disparities in income, education and minority status still are associated with peoples' status as "digital competents." Older people also comprise some of the least connected. In a world where information services - indeed all services – are migrating toward digital platforms in some fashion, this is worrisome. Our study suggests the 8% of people (52,805 adult Austinites) who are not using the Internet are predominantly Hispanic or non-Hispanic White, have not completed high school, and are somewhat older; they also report that price, privacy concerns, followed by disinterest, are the main factors in their not using the Internet. Even among Internet users, however, we see different levels of digital fluency; enhancing skills and capabilities remains an important issue.

As more people migrate to various devices that are cheaper, mobile, and easier to use, some critics believe that digital inequality issues disappear. This study finds wide use of mobile technologies such as smartphones, and hints that some populations may be substituting spectrum-based smartphone access to the Internet for home broadband subscriptions to a fixed line source of bandwidth. However, inasmuch as reading and creating content on a mobile phone platform remains more difficult than in a PC-based environment, this substitution may be problematic. As well, we still see issues of cost and digital fluency mixed in with the many positive signs of digital inclusion.

Many city-sponsored and non-profit services have long track records in remediating the disparities associated with using computers and the Internet. We observe anecdotally that for a certain population, children can be a gateway toward using technology, both in terms of (1) parents being sufficiently interested in their children's education that they acquire the skills to interact with their schools, and (2) becoming more technologically savvy with help from their children. It is encouraging that City-sponsored programs such as computer access and help in libraries appear to be widely appreciated among the citizens, and that other city-sponsored access locations are indeed used by segments of the population, particularly African Americans and the disabled.

There does seem to be some evidence, however, that older people in particular are not aware of or engaged in programs designed to train people. The services exist, and 42% of our sample indicated they would need training to use the Internet, but there may be a disconnect between the nonuser population and the services: is it an issue of motivating or engaging people? Is it an issue of matching services to the locations of the users, to their time constraints, or to their interest levels? Are the environments where training services exist perceived as friendly or welcoming to would-be clients? Several possible explanations are available.

The City has unique opportunities to tailor the many training services that do exist to the populations that could benefit from becoming more digitally proficient.

Appendix I Respondent Demographics

Respondent demographics mirror some of the same biases present in many population surveys: the sample was older, more educated, more female and skewed to the non-Hispanic White population. Consequently, a weighting procedure developed by Dr. Strover was used to compensate for the unrepresentativeness of the randomly sampled respondents. Using criterion data supplied by the 2010 Census and the 2012 American Community Survey, SPSS 22's raking procedure generated a weight used in subsequent analyses.[6] The four weighting variables included sex of the respondent, educational level, race and ethnicity, and age group. With the weighting procedures, the survey results are generalizable to the Austin population. The following tables illustrate the results for basic demographic characteristics of the city. We provide comparisons of the unweighted and weighted frequencies.

Table 20 Race and Ethnicity, Age, Education Level and Gender: Weighted and Non-weighted Sample Results and Census Results for Austin (N=1908)

	2010 Census Parameter	Unweighted	Weighted
Race and Ethnicity 18 Plus			
White, non-Hispanic	48.7%	72.6%	48.7%
African American	7.7%	5.0%	7.7%
Hispanic	35.1%	14.8%	35.1%
Asian	6.3%	3.7%	6.3%
Other	2.2%	4.6%	2.2%
Gender			
Male	50.6%	42.0%	50.60%
Female	49.4%	57.0%	49.4%
Educational Attainment 25+			
Less than high school	13.2%	2.3%	13.2%
High school	16.7%	9.3%	16.7%
Some college	24.6%	17.9%	24.6%
BA	29.5%	38.5%	29.5%
Postgraduate	15.9%	31.9%	15.9%
Age[7]			
18-24	18.6%	1.00%	18.6%
25-34	26.6%	13.8%	26.6%
35-44	19.0%	18.7%	19.0%
45-54	15.5%	16.2%	15.6%
55-64	11.2%	22.0%	11.2%
65+	8.9%	28.4%	8.9%

[6] The relevant comparative data are reproduced at http://www.austintexas.gov/page/demographic-data.

[7] Computed on the basis of 2010 Census figures for 18 and older only; total adult population base=614,923

The mean size of the sample households is 2.1 (compared to the 2010 Census reported household size in Austin of 2.37), and roughly one fifth of the sample (21%) lived alone, with another 47% living with one other adult. Two thirds of the households had no children living with them; about 9% lived with one child and another 15% lived with two children.

Table 21 Children in Household (n=1908)

Number of children	Percent of Households
None	70.8
1	9.1
2	15.7
3	3.7
4 or more	.8

As highlighted earlier, the weighted sample racial and ethnicity composition includes 48.7% non-Hispanic Whites, 35% Hispanic, 7.7% African American and 6.3% Asian. Overall, even with the weighting, over 45% of the population has completed a college degree (Bachelor's level or higher). This statistic matches a national Census-based survey (the American Community Survey 2012 figures). Finally, with regard to income, the median income level in the sample is in the $50,000-$74,000 category, compared to the 2010 Census-reported median household income of $50,132. We conclude the sample is a good representation of the Austin population on these dimensions.

In terms of employment, just over half the sample reports working full time, and 13.7% report working part-time. The 2012 American Community Survey Profile Report notes that among people 16 years and older, 73% were in the labor force, either employed or actively searching for employment. In a city with many universities and opportunities to extend one's education, it may not be too surprising that 17.2% report being students. The adult population reporting a disability that affects their use of the Internet is 6.1% (compared to the American Community Survey results for Austin of 8.3% "with a disability.") The median age of the weighted sample is 37.

Table 22 Sample Demographics (Weighted)

	In Percentages (N=1908)
Gender	
Male	50.6
Female	49.4
Ethnicity/Race	
White (non-Hispanic)	48.7
African American	7.7
Hispanic	35.1
Asian	6.3
Other[8]	2.2
Age Categories	
18-24	18.6
25-34	26.6
35-44	19.0
45-54	15.6
55-64	11.2
65+	8.9
Education	
Less than high school	13.2
High School	16.7
Some college	24.6
B.A. or B.S.	29.5
Post-graduate	15.9
Income	
Less than $10,000	5.6
10,000 – 19,000	6.2
20,000 – 29,000	9.3
30,000 - 39,000	7.3
40,000 – 49,000	7.3
50,000 – 74,000	16.5
75,000 or more	32.7
No answer	15.0

[8] Native American, mixed race, among others

Disabled	6.1
Employment*	(N=1908)
Full-time	51.4
Part-Time	13.7
Self-Employed FT	7.2
Student	17.2
Homemaker	3.2
Unemployed	7.1
Retired	10.2
Other	1.6
Work Type	
Professional	27.3
Manager	11.3
Business Owner	9.1
Clerical	10.0
Service	5.6
Skilled	4.9
Semi-Skilled	4.4
Other	15.1
Self Employed or Small Business	14.6
"High Tech"	3.6
"Cultural"	4.5

*Percentages may not add to 100% because of multiple responses and subsamples

The following tables illustrate some of the relationships within the sample regarding education, race and age. It is worth highlighting that younger people in the 18-24 age bracket, typically thought of as technologically sophisticated, have lower educational accomplishments - primarily because education takes time. Non-Hispanic White and Asians have higher levels of education overall.

Table 23 Education by Race

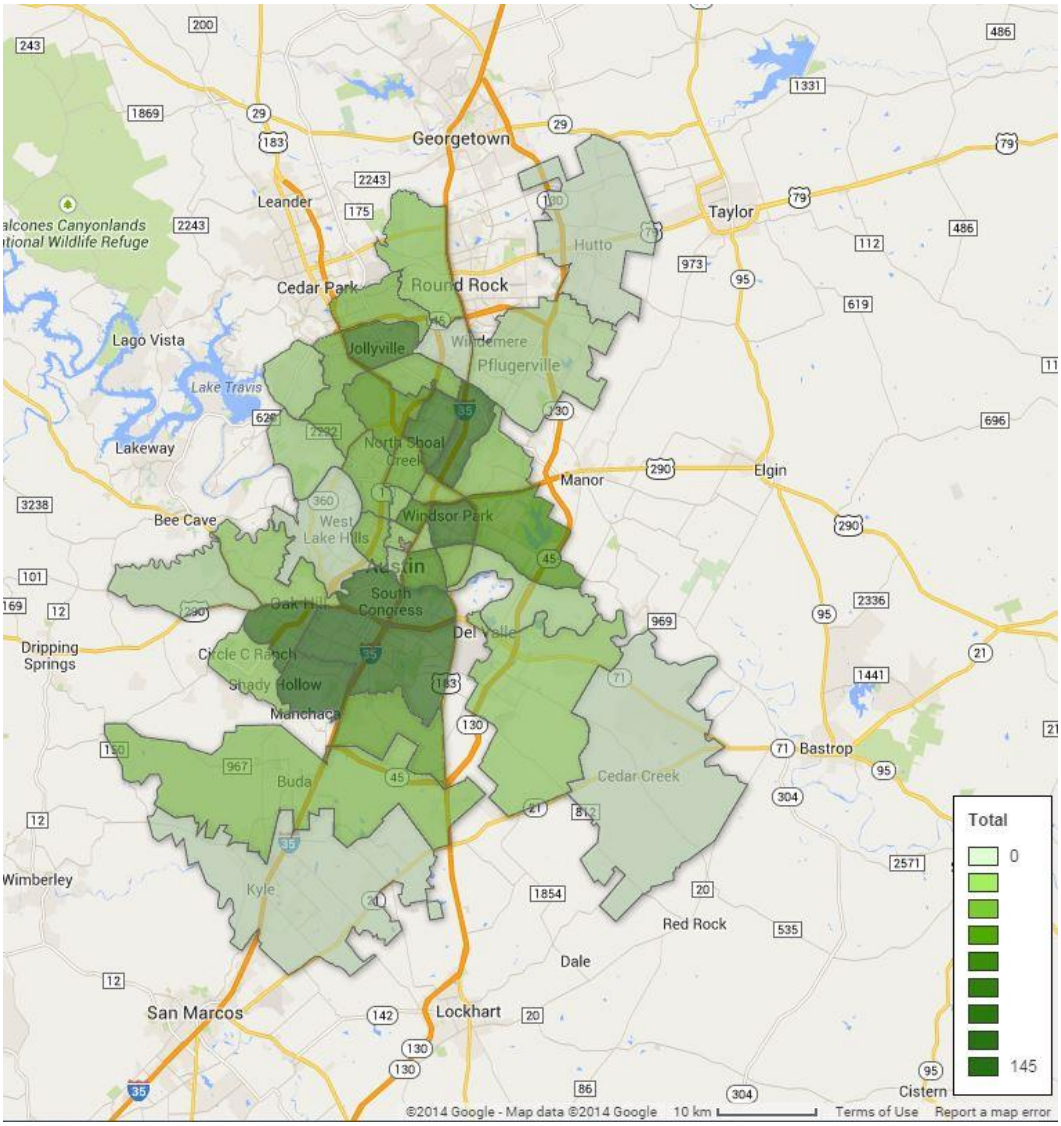
Education level - respondent	Race and ethnic categories					Total
	non-Hispanic White	Af Amer	Hispanic	Asian	Other	
Less than HS	4.1%	17.7%	27.5%		9.5%	13.2%
HS	14.7%	28.6%	16.6%	5.0%	52.4%	16.7%
Some college	25.1%	27.9%	24.8%	17.5%	21.4%	24.6%
Undergrad degree	36.1%	15.0%	23.6%	37.5%	7.1%	29.5%
Graduate degree	20.0%	10.9%	7.5%	40.0%	9.5%	15.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 24 Education by Age

Education	Age Categories						Total
	18-24	25-34	35-44	45-54	55-64	65 and older	
Less than HS		11.8%	10.5%	22.7%	14.5%	32.7%	13.2%
HS	42.3%	6.3%	12.2%	14.0%	13.6%	12.9%	16.7%
Some college	29.9%	21.2%	21.3%	23.1%	35.0%	21.1%	24.7%
Undergrad degree	25.9%	40.5%	32.6%	24.1%	22.4%	15.8%	29.5%
Graduate degree	2.0%	20.2%	23.5%	16.1%	14.5%	17.5%	15.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Finally, the Austin sample draws from zip codes the City of Austin identified as those bounding its geography; the sampled zip codes are reproduced in the Appendix. Figure 40 illustrates the Austin region zip codes and their associated survey response rates. The deeper colors indicate more survey responses, with a minimum response rate of (0) to a maximum response rate (145). Mailed surveys came from a broader area of Austin than was the case for the electronic surveys, which were heavily concentrated west of I-35 and in the southern portion of the City.

Figure 40 Zip Codes by Survey Responses



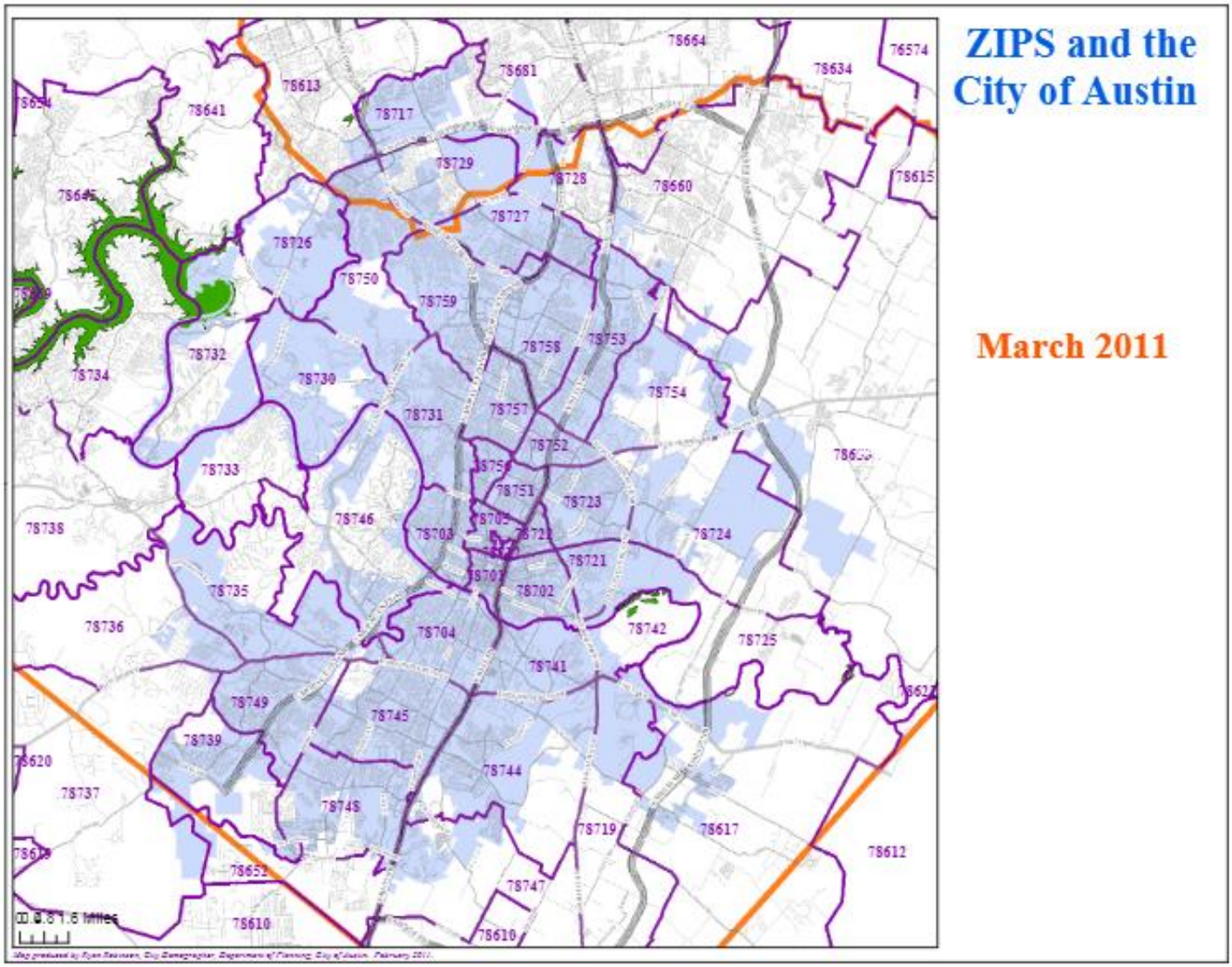
Appendix 2 Sampled Zip Codes

Sampled Zip Codes in Austin (N=15000)

78617*	78736
78701	78739
78702*	78741*
78703	78742*
78704	78744*
78705	78745
78717	78747
78721*	78748
78722	78749
78723*	78750
78724*	78751*
78725	78752*
78726	78753*
78727	78754
78729	78756
78730	78757
78731	78758*
78735	78759

* Denotes zip codes with oversampled addresses

Appendix 3: Austin Zip Code Map



Appendix 4: The Questionnaire and Weighted Percentage Responses

Dear Austin Resident,

You have been selected from a random list of Austin residents to participate in a research survey, entitled the Austin Digital Assessment and conducted by the City of Austin in partnership with the University of Texas at Austin (UT). If you are a current resident of this address and are age 18 or older, we request that you complete the following survey. If there are multiple adults in your home, please have the person with the most recent birthday complete the survey. Completing the survey may take up to 20-30 minutes of your time.

This survey asks about your use of communications technology and your access to it. Even if you believe you don't use communication technology, your response is important to us. Your participation in this study will help both the City and UT to understand the needs of the community and how to include all of Austin in the new digital media environment. Your participation is entirely voluntary and you may decline to answer any question. If you choose to participate, your personal information will not in any way be associated with your responses. All responses you provide will be kept private and used for the purposes of this study only. Risks to participants are considered minimal. There will be no cost or direct benefit to you for participating in this study.

If you have any questions, please call Dr. Sharon Strover at (512) 471-5826. This study has been reviewed and approved by The UT Institutional Review Board (IRB). If you have questions about your rights as a study participant, or are dissatisfied with any aspect of this study, you may contact – anonymously, if you wish – the IRB by phone at (512) 471-8871 or email at orsc@uts.cc.utexas.edu. Thank you in advance for your participation.

To protect your privacy, survey responses will only be identified through an access number rather than identifiable personal information. Please enter the access number found on your postcard at the top of your survey below.

If you prefer to take the survey online, you may do so by visiting the website
http://www.atxdigitalassessment.com

We greatly value your help with this important project, and thank you for participating.

Sincerely,

University of Texas at Austin, Telecommunications and Information Policy Institute and

City of Austin, Office of Telecommunications and Regulatory Affairs

Questionnaire and weighted percentages by response categories

THE AUSTIN DIGITAL ASSESSMENT

PLEASE ENTER YOUR ACCESS NUMBER: _____

Q1. HOUSEHOLD: We would like to begin by asking you some questions about your household.

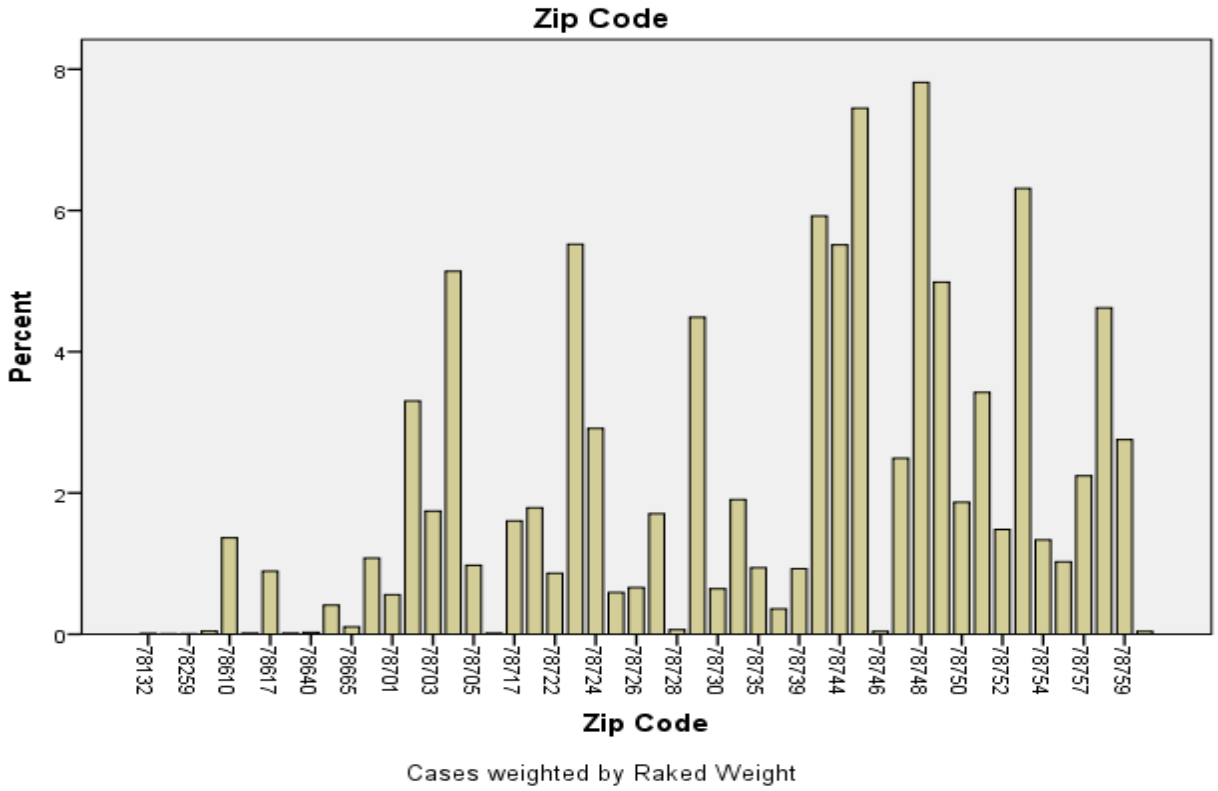
A. Including yourself, how many adults (age 18 or older) live in the place you currently live?
_____

1 Adult = 22.5%
2 Adults = 49.9%
3 Adults = 19.4%
4 Adults = 5.8%
5 Adults = 2.3%
6 Adults = 0.0%
19 Adults = 0.1%

B. How many children (under the age of 18) live with you in the place you currently live?
_____

0 Children = 70.8%
1 Child = 9.1%
2 Children = 15.7%
3 Children = 3.7%
4 Children = 0.4%
5 Children = 0.4%

C. What is your zip code? _____



Q2. HOME MEDIA: The following questions ask about the media that you have access to at the place you currently live. Please check ☑ your answer.

	Yes	No	DK
Do you have a home Internet connection?	92.5%	7.4%	0.1%
Do you have a TV in your current residence?	97.0%	3.0%	0%
Do you subscribe to cable TV (ex. Time Warner, Grande, UVerse)?	57.6%	42.1%	0.2%
Do you subscribe to satellite TV (ex. DIRECTV, DISH)?	9.6%		

	90.0%
	0.5%
Is there a game console in your current residence (ex. PlayStation, Wii, Xbox)?	52.0%
	47.6%
	0.4%
If **YES**, is the game console connected to the Internet?	63.4%
	33.9%
	2.6%
Is there a desktop computer you can use in your current residence?	57.0%
	42.9%
	0.1%
Do you have a laptop or notebook computer?	83.8%
	16.1%
	0.1%
Do you have a home phone line (wired, landline)?	39.2%
	60.6%
	0.2%
Do you have a cell phone?	96.6%
	3.7%
	0%
If YES, Do you have a smart phone (like iPhone, Blackberry, Android phones)?	86.0%
	13.9%
	0.1%
Do you have a tablet (iPad, Kindle Fire, Surface, etc.)	60.1%
	39.8%
	0.1%

Q3. INTERNET: We would now like to ask about your use of the Internet.

A. Do you use the Internet at all on any device at any location? (ex. surf the web, chat, email)?

Yes = 91.9% No = 8.1%

↳ **If YES please move to question H on page 3.**

↳ **If NO please continue answering below**

B. If you wanted to start using the Internet, do you feel that you know enough about computers and technology to be able to do that on your own, or would you need someone to help you? (CHECK ONE)

- ☐ I know enough to go online on my own. 33.5%
- ☐ I would need someone to help me. 42.1%
- ☐ I would not want to start using the Internet. 24.4%

C. Thinking about the reasons why you do NOT use the Internet, please indicate how much you agree or disagree with the following statements. (CHECK ONE for each row)

	S. Agree	**Agree**	**Neutral**	**Disagree**	**S. Disagree**
An Internet connection is too expensive.	43.3%	18.3%	14.1%	21.8%	2.5%
I am concerned about my safety and privacy.	36.5%	19.7%	21.3%	15.3%	7.3%
I do not have enough time.	11.5%	29.1%	43.2%	9.7%	6.6%
I am not interested.	23.8%	20.3%	38.1%	11.0%	6.8%
I don’t need to go online because I have someone					

who will do it for me	13.4%	19.9%	33.5%	17.9%
	15.4%			
I have no one to teach me how to go online	10.2%	31.3%	22.3%	14.7%
	21.5%			
I do not speak English well enough to use the Internet	20.4%	5.6%	24.4%	21.4%
	28.2%			
Using the Internet is too difficult	20.8%	16.1%	28.8%	15.8%
	18.5%			

D. There is currently free public computer training at various locations around Austin. Would you be interested in participating in free training through a local organization?

Yes = 36.1% No = 63.9%

↳ **If no, please skip to question F**

E. If you were to attend free computer training, what would you be interested in learning about? *****

☐ Social Media	1.0%
☐ Email	2.4%
☐ Job Searching and online job applications	1.3%
☐ Software (learning Microsoft Office, for example)	1.9%
☐ Learning to create or edit my own work (writing, photos, videos, website, etc.)	3.6%

***percentages for this question include all survey respondents in the total**

F. If you could subscribe to a home broadband service at a price you considered acceptable, would you do so?

Yes = 62.9% No = 37.1%

G. At what monthly price would you consider a home broadband Internet subscription to be "too expensive to consider"?

☐ $10-15	36.6%
☐ $16-25	4.5%
☐ $26-35	12.2%
☐ $36-45	8.8%
☐ $61-75	30.7%
☐ Over $75	7.3%

↳ **If you do NOT use the Internet, please continue to Section Q5 on page 8.**

H. How many years have you been using the Internet? Mean = 14.88 years.

I. Other than yourself, who taught you to use the Internet? (CHECK ALL THAT APPLY)

☐ My father or mother	26.3%
☐ My brother or sister	15.1%
☐ My spouse or partner	9.8%
☐ My son or daughter	8.0%
☐ Another relative	5.6%
☐ Computer course trainer	11.9%
☐ A friend	27.9%
☐ A Teacher	27.1%
☐ A Librarian	9.3%
☐ A Coworker	12.4%
☐ Just myself, No one else	29.8%
☐ Other:_____	3.8%

J. To what extent do you rely on a family member or friend in order to look things up on the Internet?

Rely a great deal on someone else:	4.2%
Rely somewhat on someone else:	4.6%
Rely rarely on someone else:	16.3%
Don't rely on anyone:	74.9%

K. Do you plan to upgrade to Ultra-high speed Internet service (such as that promised by AT&T, Google, Grande, Time Warner) when it becomes available? This service is as much as 100 times faster than cable broadband.

Will upgrade when available:	26.6%
Will upgrade but not immediately:	8.2%
Depends on price:	44.4%
No, will keep current service:	12.9%
Don't know:	8.0%

L. How aware are you of the following ultra-high speed services (1 = not aware, 5 = very aware)

	Not Aware	**2**	**3**	**4**	**Strongly Aware**
Time Warner Cable	31.7%	11.2%	14.1%	15.7%	27.3%
Grande	48.0%	12.6%	12.4%	7.4%	19.7%
AT&T Uverse	24.0%	8.7%	19.2%	18.6%	29.6%
Google Fiber	17.8%	5.9%	14.2%	17.2%	44.9%

M. Please indicate how much you agree or disagree with the following statements regarding how you feel about your Internet skills. (CHECK ONE for each row)

I feel **capable of**	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
Uploading content (Ex. Videos, photos, music) to a website	64.8%	17.3%	9.1%	4.0%	4.8%
Blocking spam or unwanted content	50.1%	29.2%	10.2%	5.8%	4.7%
Adjusting my privacy settings online	50.3%	30.9%	9.2%	4.6%	5.1%
Bookmarking a website or adding a website to my list of favorites	78.7%	11.6%	4.0%	2.8%	2.9%
Comparing different sites to check the accuracy of information	67.8%	18.2%	7.8%	3.3%	3.0%
Creating and managing my own personal profile on a social network site	64.4%	15.5%	11.5%	3.8%	4.7%
Creating and managing my own personal website	29.5%	19.1%	25.0%	13.3%	13.1%
Recognizing a phishing request	46.9%	19.7%	12.7%	12.8%	7.9%

Making my own content (Ex. Videos, photos, music)	43.1%	23.2%	16.7%	8.7%	8.2%

N. How often do you access the Internet in the following places? (CHECK ONE for each row)

Often	**Multiple times per day**	**Daily**	**Weekly**	**Monthly**	**Less Never**
At home (where you currently live)	79.5%	12.7%	3.2%	0.9%	2.1% 1.6%
At work	67.8%	8.6%	3.8%	0.3%	3.1% 16.5%
At school/university	22.8%	4.9%	1.1%	0.5%	6.3% 64.4%
At an Austin Public Library	1.8%	1.1%	3.0%	3.1%	14.9% 76.1%
Coffee Shop or other private business	6.4%	4.9%	19.7%	14.7%	24.1% 30.2%
At the home of a friend/family member	11.2%	6.9%	18.1%	20.2%	24.8% 18.8%
At a community center or other public place like a city bus	4.0%	2.1%	3.2%	11.5%	20.8% 58.3%
City of Austin Free Public Wi-Fi	1.2%	1.0%	4.1%	3.8%	17.8% 72.1%

Q4. DEVICE USAGE: We would now like to ask about the devices you use to access the Internet. How often do you:

A. **Access the Internet** on the following devices?

(CHECK ONE for each row)

Often	**Multiple times per day**	**Daily**	**Weekly**	**Monthly**	**Less Never**
Smart Phone	75.2%	7.1%	4.1%	0.7%	1.7% 11.1%
Tablet	28.7%	13.0%	16.2%	7.2%	5.4% 29.5%
Personal Computer	67.1%	16.5%	7.9%	1.0%	2.4% 5.2%

Computer at a city library/lab	0.3%	0.9%	1.7%	1.9%	21.6% 73.6%
A Game Console	8.3%	6.9%	11.9%	4.4%	14.1% 54.5%

B. **Read or send email**?

Often	**Multiple times per day**	**Daily**	**Weekly**	**Monthly**	**Less** **Never**
Smart Phone	62.1%	10.8%	4.8%	2.4%	3.7% 16.2%
Tablet	17.6%	13.2%	13.3%	3.3%	12.2% 40.3%
Personal Computer	54.2%	17.2%	11.9%	6.4%	4.2% 6.2%
Computer at a city library/lab	0.4%	0.9%	1.5%	1.0%	13.3% 82.9%
A Game Console	0.3%	0.1%	0.2%	0.3%	5.6% 93.6%

C. **Play online games**?

Often	**Multiple times per day**	**Daily**	**Weekly**	**Monthly**	**Less** **Never**
Smart Phone	10.8%	10.9%	13.6%	4.7%	13.5% 46.6%
Tablet	5.2%	7.5%	12.3%	6.6%	13.5% 54.8%
Personal Computer	7.6%	6.7%	9.4%	6.9%	17.8% 51.6%
Computer at a city library/lab	0.1%	0.8%	0.3%	0.1%	4.4% 94.4%

A Game Console	2.6%	6.2%	9.2%	7.9%	9.7%
	64.4%				

D. **Buy a product online**?

	Multiple times per day	**Daily**	**Weekly**	**Monthly**	**Less Often**
	Never				
Smart Phone	1.2%	0.3%	10.1%	23.0%	30.3%
	35.0%				
Tablet	0.8%	0.3%	8.1%	15.6%	20.0%
	55.3%				
Personal Computer	1.4%	0.9%	20.4%	45.2%	21.2%
	10.8%				
Computer at a city library/lab	0.1%	0.1%	0%	0.1%	2.2%
	97.5%				
A Game Console	0.4%	0.1%	0.1%	3.6%	6.4%
	89.5%				

E. **Use online banking services or pay bills online**?

	Multiple times per day	**Daily**	**Weekly**	**Monthly**	**Less Often**
	Never				
Smart Phone	9.2%	10.7%	16.6%	11.2%	15.4%
	36.9%				
Tablet	1.7%	3.7%	9.0%	7.6%	12.6%
	65.3%				
Personal Computer	3.9%	10.2%	37.0%	25.8%	5.3%
	17.9%				
Computer at a city library/lab	0.2%	0%	0%	0.4%	2.4%
	97.0%				
A Game Console	0.1%	0%	0%	0.2%	1.1%
	98.6%				

F. **Create and post original media (writing, art, music, videos)**?

	Multiple times per day	Daily	Weekly	Monthly	Less Often	Never
Smart Phone	6.1%	4.1%	12.7%	7.2%	16.2%	53.7%
Tablet	1.7%	1.2%	4.2%	6.0%	16.1%	70.9%
Personal Computer	3.1%	4.1%	12.5%	13.7%	23.9%	42.7%
Computer at a city library/lab	0.2%	0%	0.1%	0.2%	3.3%	96.2%
A Game Console	0.2%	0.1%	0%	0.4%	1.3%	98.1%

G. **Listen to music or radio**?

	Multiple times per day	Daily	Weekly	Monthly	Less Often	Never
Smart Phone	27.9%	19.6%	14.8%	5.5%	8.2%	23.9%
Tablet	7.0%	7.5%	10.8%	6.1%	14.4%	54.2%
Personal Computer	17.2%	20.6%	21.8%	8.1%	11.7%	20.6%
Computer at a city library/lab	0.3%	0.6%	0%	0.1%	3.8%	95.2%
A Game Console	0.9%	0.8%	4.9%	2.5%	7.6%	83.3%

H. **Participate in a discussion forum**?

	Multiple times per day	Daily	Weekly	Monthly	Less Often	Never

Smart Phone	9.2%	3.2%	5.8%	4.7%	16.3%
	60.9%				
Tablet	3.9%	3.0%	3.3%	3.2%	13.1%
	73.5%				
Personal Computer	9.5%	5.3%	7.8%	8.8%	18.2%
	50.3%				
Computer at a city library/lab	0%	0.6%	0.1%	0%	2.7%
	96.6%				
A Game Console	0%	0.2%	0.1%	0.1%	1.5%
	98.2%				

I. **Use social networking sites? (Myspace, Facebook, LinkedIn, Twitter)**

	Multiple times per day	**Daily**	**Weekly**	**Monthly**	**Less Often**
	Never				
Smart Phone	41.0%	14.0%	8.8%	3.9%	4.0%
	28.4%				
Tablet	12.5%	11.3%	8.8%	6.0%	9.1%
	52.3%				
Personal Computer	32.4%	17.4%	11.4%	5.8%	9.6%
	23.2%				
Computer at a city library/lab	0.1%	0.1%	0.2%	1.3%	7.1%
	91.2%				
A Game Console	0.4%	0.3%	0%	0.5%	3.1%
	95.8%				

J. **Read e-books, online magazines, or online newspapers**?

	Multiple times per day	**Daily**	**Weekly**	**Monthly**	**Less Often**
	Never				
Smart Phone	13.7%	10.6%	16.6%	9.0%	11.0%
	39.1%				

Tablet	8.8%	13.3%	10.9%	10.8%	7.6%
	48.7%				
Personal Computer	14.5%	17.0%	14.5%	6.1%	11.8%
	36.1%				
Computer at a city library/lab	0.2%	0.4%	0.3%	0.5%	4.3%
	94.3%				
A Game Console	0.1%	0%	0%	0.1%	1.2%
	98.6%				

K. **Comment on TV content while watching TV**?

Often	**Multiple times per day**	**Daily**	**Weekly**	**Monthly**	**Less** **Never**
Smart Phone					
	1.0%	2.5%	5.5%	2.8%	8.6%
	79.7%				
Tablet	0.5%	0.4%	1.2%	2.2%	6.8%
	88.8%				
Personal Computer	0.4%	0.6%	3.5%	2.9%	8.7%
	83.9%				
Computer at a city library/lab	0%	0%	0.2%	0.1%	0.5%
	99.2%				
A Game Console	0.1%	0.6%	0%	0%	0.7%
	98.6%				

L. **Pay utility bills or check city information**?

Often	**Multiple times per day**	**Daily**	**Weekly**	**Monthly**	**Less** **Never**
Smart Phone	3.6%	2.0%	5.3%	17.2%	13.4%
	58.6%				
Tablet	0.9%	1.7%	4.1%	10.2%	11.8%
	71.4%				

Personal Computer	1.4%	3.7%	11.8%	41.4%	14.6%
	27.0%				
Computer at a city library/lab	0.1%	0.1%	0%	0.2%	2.6%
	97.1%				
A Game Console	0.2%	0%	0%	0%	0.9%
	98.9%				

Q5. GENERAL MEDIA: Here we have some more specific questions about your use of media.

A. Which of the following services or devices do you use to regularly use to view films, television and other entertainment?

Often	**Multiple times per day**	**Daily**	**Weekly**	**Monthly**	**Less**
	Never				
Cable or satellite TV	33.7%	30.2%	8.3%	0.6%	5.0%
	22.3%				
A device to stream media such as Roku or Apple TV	6.8%	10.8%	7.5%	2.1%	5.0%
	67.8%				
DVD Player	1.8%	7.7%	23.5%	22.0%	18.8%
	26.2%				
Hulu or Hulu plus	1.4%	2.8%	7.5%	5.2%	17.1%
	66.0%				
Netflix	10.2%	20.4%	24.0%	6.5%	7.1%
	31.7%				
Amazon Prime	3.6%	5.4%	10.6%	6.6%	10.6%
	63.2%				

B. From which sources do you get information about each of the following? (CHECK ALL THAT APPLY)

	Friends & Family	**Mobile App**	**Online Site**	**Email**	**Facebook**	**Twitter**	**TV**
	Newspapers	**Radio**					

Your Neighborhood	57.5%	11.0%	28.4%	15.4%	22.1%	3.9%	35.1%
	31.0%	25.9%					
Austin	64.9%	23.7%	56.5%	14.8%	38.8%	13.0%	61.8%
	39.5%	50.4%					
Texas	60.9%	18.3%	54.3%	8.3%	32.1%	9.7%	61.0%
	33.7%	41.8%					
USA	52.9%	20.5%	56.7%	9.0%	34.2%	13.5%	62.2%
	36.1%	41.8%					
Other countries	41.5%	19.7%	50.8%	7.2%	30.9%	12.2%	58.1%
	33.2%	38.8%					
If applicable, country your family immigrated from	15.6%	2.0%	9.5%	2.1%	7.7%	1.1%	13.4%
	3.5%	7.9%					

C. Most people get information from many different sources. Where do you get **health-related** information? (CHECK ALL THAT APPLY)

☐ Family members or relatives	67.4%
☐ Radio (offline)	43.3%
☐ TV (offline)	5.1%
☐ Close Friends	78.8%
☐ Acquaintances	11.4%
☐ Doctors, nurses, or public health professionals	68.4%
☐ Health websites	18.7%
☐ Printed newspapers, magazines, or journals	8.4%
☐ Email listservs	8.2%
☐ Social networking sites such as Facebook, Twitter, and Pinterest	7.0%
☐ Online communities or groups	32.9%
☐ Mobile apps	23.9%
☐ Other: _____	13.4%

D. Most people get information from many different sources. Where do you get **education or training related** information? (CHECK ALL THAT APPLY)

	Yourself	**If applicable, your school-aged children**
Family Members or relatives	53.6%	11.4%
Close Friends	51.5%	6.8%
Acquaintances	32.6%	5.1%
Teachers or educational professionals	51.0%	15.5%
Community or neighborhood organizations	24.4%	4.8%
Printed newspapers, magazines, or journals	50.0%	5.1%
Email listservs	21.2%	2.5%
Social networking sites such as Facebook, Twitter, and Pinterest	33.3%	3.9%
Online communities or groups	34.9%	4.0%
Mobile apps	21.7%	2.8%
Other: _____	12.0%	1.6%

E. How important do you think it is for the City of Austin and its partners to provide the following services on a scale of 1-5 where 1 is the **least** important and 5 is **very** important. All services listed are currently available.

(CHECK ONE for each row)

	1 (least)	**2**	**3**	**4**	**5 (most)**	**Not aware of this service**
Free computer and Internet access at public libraries	5.3%	2.3%	8.4%	13.4%	65.6%	5.1%

Free public Wi-Fi downtown	6.3%	5.0%	14.6%	18.1%	42.6% 13.3%
Free public computer training (Skillpoint Alliance, public libraries, etc…)	5.9%	5.4%	14.5%	14.9%	47.5% 11.9%
Free public Wi-Fi on Capital Metro Rapid buses	10.3%	8.1%	11.7%	19.8%	36.1% 13.9%

F. To what extent do you think ultra-high speed Internet (such as Google Fiber or AT&T GigaPower, etc.) would improve the following aspects in Austin?

	A Lot	**Some**	**Only a little**	**Not at all**
Home Entertainment	60.0%	27.2%	6.8%	6.0%
Starting Businesses	52.7%	32.1%	9.1%	6.0%
Innovation	56.7%	27.9%	9.5%	5.9%
Working from home	66.5%	21.3%	6.0%	6.3%
Online learning/education	58.7%	26.0%	8.8%	6.5%
Internet pricing options	48.1%	25.3%	14.4%	12.2%

Q8. WORK: Next, we would like to learn about your work and employment.

A. We would like to ask about the jobs held by people you may know. These people include your friends, relatives, and acquaintances (acquaintances are people who know each other by face and name). Is there anyone you know who is…? (CHECK ALL THAT APPLY)

☐ a nurse	67.9%
☐ a farmer	20.0%
☐ a lawyer	57.4%
☐ a middle school teacher	40.8%
☐ a full-time babysitter	18.1%
☐ a janitor	18.1%
☐ a personnel manager	31.4%
☐ a hair dresser	54.5%
☐ a bookkeeper	34.8%
☐ a production manager	26.5%
☐ an operator in a factory	19.0%
☐ a computer programmer	61.8%
☐ a taxi driver	6.3%
☐ a professor	46.7%

- ☐ a policeman 27.6%
- ☐ a Chief Executive Officer (CEO) of a large company 20.5%

B. What is your current employment status? CHECK ALL THAT APPLY

- ☐ Employed full time 51.4%
- ☐ Employed part time 13.7%
- ☐ Self-employed full time 7.2%
- ☐ Self-employed part time 5.2%
- ☐ Student 17.2%
- ☐ Disabled 3.2%
- ☐ Full time homemaker 3.2%
- ☐ Unemployed 7.1%
- ☐ Retired 10.2%
- ☐ Other:_____ 1.6%

If you are <u>not employed at all</u>, move forward to question 9 on page 13, "Personal Information"

C. What kind of work do you do? (CHECK ALL THAT APPLY)*****

- ☐ Professional: lawyer, doctor, nurse, teacher, accountant 27.3%
- ☐ Manager, executive, or official: store manager, business executive 11.3%
- ☐ Business Owner 9.1%
- ☐ Clerical/Office/Sales: secretary, receptionist, sales clerk 10.0%
- ☐ Service work: waiter/waitress, hairstylist, police or fireman, janitor, nurses' aide 5.6%
- ☐ Skilled trades: electrician, plumber, carpenter 4.9%
- ☐ Semi-skilled: assembly line worker, truck driver, bus driver 4.4%
- ☐ Other 15.1%

***Percentages in responses to questions 8C to 8H include "Unemployed" and "Retired" in total**

D. In which year did you start your most current job? Mean: 2007

E. Most people get job information from many different sources. Where did you get information about your **CURRENT job**? (CHECK ALL THAT APPLY)

- ☐ From personal contacts 45.1%
- ☐ From a job/employment center or agency 8.7%
- ☐ From current employers or colleagues 18.6%
- ☐ Contacted by headhunters or recruiters 5.6%
- ☐ From online job sites such as Monster, LinkedIn, and Craigslist 15.5%
- ☐ From in printed newspapers, magazines, or journals 4.8%
- ☐ From email listservs 3.0%
- ☐ From social networking sites such as Facebook, Twitter, Pinterest, and Meetup 4.8%
- ☐ Other 3.4%

F. If you got your **CURRENT job** information from **personal contacts**, was it from (CHECK ALL THAT APPLY)

- ☐ Family members or relatives 13.3%
- ☐ Close friends 22.5%

☐ Acquaintances	15.2%
☐ Headhunters or recruiters	2.3%
☐ Current employers or colleagues	15.4%
☐ Other: _____	2.0%

G. How often, if ever, do you work from home?

☐ Everyday	16.9%
☐ A few times a week	13.4%
☐ A few times a month	12.6%
☐ Less often	17.6%
☐ Never	39.5%

H. When you work from home or other places, do you use telecommunications media to remotely access resources from the office?

Yes = 59.4% No = 40.6%

I. Do you consider yourself to be self-employed or a small business owner?

☐ Yes**. ► If YES, please fill section Q8** ☐ No **► If NO, please continue on to Section Q9, skipping section Q8**

Yes = 18.9% No = 81.1%

Q8A: Small Business Questions

A. Does the business or organization belong to the high-tech sector?

Yes = 20.3% No = 79.7%

B. Does the business or organization belong to a cultural industry sector (ex., film, music, media, publishing etc.)?

Yes = 26.0% No = 74.0%

C. How many years has your CURRENT business been operating? Mean: 9.83 years

D. How many people does your CURRENT business employ? Range 0-100,000

E. Does your business have the following?

	Yes	**No**
A website	59.8%	40.2%
A blog	25.4%	74.6%
Facebook presence	45.4%	54.6%

Twitter presence	31.0%	69.0%
A mobile app	11.0%	89.0%
Presence on other social media platforms	31.6%	68.4%

F. How frequently does your business use **social media** for the following activities?

Often	**Daily or more often**	**A few times a week**	**A few times a month**	**Less** **Never**
Advertising, marketing, and promotion	15.4%	9.7%	14.9%	12.6% 47.5%
Building professional business networks or communities	8.9%	14.1%	19.6%	8.3% 49.0%
Crowdfunding (ex. Raising funds for projects or ideas)	3.0%	3.3%	2.2%	12.8% 78.6%
Crowdsourcing	2.5%	1.9%	12.9%	6.4% 76.5%
Tracking and analyzing social media	5.6%	4.7%	13.4%	11.8% 64.5%
Using social media management tools such as HootSuite	4.1%	2.3%	10.2%	10.2% 73.2%
Recruiting Employees	2.1%	4.3%	2.9%	15.9% 74.8%

Q9. PERSONAL INFORMATION: In this final section, please answer some questions about yourself.

A. Are you male or female?

Male = 50.6% Female = 49.4%

B. Are you, yourself, of Hispanic, Latino, or Spanish origin or descent?

Yes = 37.0% No = 63.0%

C. Which race (or races) do you consider yourself to be? (CHECK ALL THAT APPLY)

☐ White	74.6%
☐ Black or African American	10.2%
☐ Asian or Pacific Islander	6.3%
☐ American Indian, Eskimo, or Alaska Native	3.5%
☐ Other	2.4%

D. Do you have a medical condition or disability that makes it harder for you to use the Internet?

Yes = 6.1% No = 93.9%

E. How fluent do you consider yourself to be in the following languages?

	Completely	**Fairly**	**Somewhat**	**Not Very**	**Not At All**
English	89.0%	6.0%	2.9%	1.6%	0.6%
Spanish	18.8%	8.1%	16.6%	29.8%	26.7%

F. What year were you born? Mean: 41.08

G. About how long have you lived in Austin? Mean: 20.16 years

H. What is your current civil or relationship status? (CHECK ONE)

☐ Married	38.6%
☐ Living with a partner	14.4%
☐ Single	42.3%
☐ Other: _____	4.7%

I. What is/was the highest degree or level of school completed by the following people?

	Less than Graduate / high school prof. degree	High school	Tech / 2 yr college, Some college	4-year undergraduate degree
Yourself	13.2% 15.9%	16.7%	24.6%	29.5%
Your mother	18.7% 14.5%	26.2%	15.8%	24.8%
Your father	23.2% 17.5%	18.3%	17.8%	23.2%

J. Last year, in 2013, what was your total family income?

☐ Less than $10,000	5.6%
☐ $10,000-$19,999	6.3%
☐ $20,000-$29,999	9.4%
☐ $30,000-$39,000	7.4%
☐ $40,000 to $49,000	7.4%
☐ $50,000 to $74,999	16.7%
☐ $75,000 or above	33.2%
☐ Prefer not to answer	14.0%

K. Please indicate the places you and your family members were born. (CHECK ALL THAT APPLY)

	Born in the USA	Born outside the USA	Don't know
Yourself	81.2%	17.9%	0%
Mother	71.3%	27.4%	0.2%
Father	71.5%	26.5%	0.7%
Any of your Grandparents	64.7%	36.4%	2.6%

H. Are you willing to be contacted for a follow-up to further help the City of Austin? If yes, please leave your contact information below. It will be kept strictly confidential.

Yes = 48.7% No = 51.3%

Contact information:

_____

_____

_____

THANK YOU FOR YOUR IMPORTANT FEEDBACK!

Please use the self-addressed, stamped envelope to return your survey.