GERALDTON'S DIGITAL FUTURE: AN ANALYSIS OF TWO COMMUNITY SURVEYS

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City of Greater Geraldton
a vibrant future

A vision by and for the community
of Greater Geraldton City Region
2029 and Beyond

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Executive Summary

Two community surveys, *Living in a Digital Geraldton* and *Connected Youth,* were distributed in July and August 2012. They form part of a multipronged effort by the City of Greater Geraldton to ensure residents have influence over the Digital Strategy the City of Greater Geraldton is developing.

The evidence collected from a random selection of electors and Years 10, 11 and 12 high school students describe how residents use and value the Internet, the barriers preventing their greater engagement with the technology and their expectations of new services.

Key findings

The 1200 residents (301 adults and 899 high school students) who completed the surveys use the Internet for many activities from emailing and social media to online shopping, watching videos and staying up-to-date with music. They are creating and posting their work, contributing to blogs and making use of the convenience of the Internet to work from home. On average adults named nine activities that they or other members of the household did on the Internet in the past four weeks.

Both groups value the Internet for keeping in touch with friends and family and for giving them unrestricted access to information. Entertainment and personal finance activities are not valued as highly.

The people of Geraldton are frustrated by slow and unreliable Internet connections, which stop them from making full use of new technologies. Most people are optimistic the NBN rollout will enable them to have faster connections but many, especially those in rural areas, remain skeptical.

Internet security is another barrier to greater online engagement. Many adults are not confident their personal information is secure and less likely to use the Internet for managing their personal finances and downloading entertainment. High school students observe bullying on social media sites and dislike negative behavior, 'creepy people', and inappropriate content.

People learn about the Internet on their own. However, those who learn from friends, relatives and workmates use the Internet more extensively.

In several industries, only 40% to 50% of workers use the Internet daily and about one-quarter do not use it at all. Compared with people in other industries, retail, hospitality and community service workers are the least engaged with the Internet.

Students' active use of the Internet is associated with learning from friends, while staying safe on the Internet is associated with learning from adults.

Residents, especially younger people, say they would use online services offered by the City. People were particularly interested to learn about and join local special interest groups online.

Conclusions

If Geraldton is to become a leader of the new digital technology, its strategy must address the needs and aspirations community members and provide everyone with the infrastructure and skills to enable them to participate fully. With this goal in mind, we offer the following conclusions based on the survey results.

Fast, reliable Internet connections

1. The priority is to ensure households throughout the wider Geraldton region have access to faster, more reliable Internet connections.

Increasing and deepening use through peer learning

Peers can help make people better users of what the Internet has to offer.

2. Encouraging peer learning is the best way to help people become more innovative, confident and safe users. Virtual and physical hubs that bring like-minded people together to learn from and challenge each other is a strategy that builds on what Geraldton's young and older digital innovators are doing right now.
3. For adults, the workplace is an effective place to learn about how to use the Internet effectively. Getting more workplaces to adopt online technologies will also help workers to become more confident home Internet users.
4. Facilitating young people to learn about the Internet from peers will improve cybersafety and encourage active uses of the Internet that help them to pursue interests and enhance knowledge and skills.

Offering City of Greater Geraldton services online

5. In introducing online services, the City of Greater Geraldton should focus on applications that help people connect and learn information as well as offering online facilities for conducting routine business, such as the paying of fines and licenses.
6. All online services should be accessible off-line for those people who cannot or do not want to connect to the Internet.
7. The City of Greater Geraldton should use every opportunity to educate people about Internet safety and to adopt best practices.

Developing Geraldton economically and socially

New information technologies will be the foundation of the future economy and Geraldton is in a unique position to position itself as a leader. Some industries are already digital

innovators. However, others are lagging behind. In addition to improving access to better Internet connections, the City of Greater Geraldton and partners should encourage industry-specific peer learning, particularly to retail, hospitality, health, education, community and personal services sectors.

8. The Internet offers many opportunities for the retail and hospitality sector to promote itself within Geraldton and to potential visitors. To take advantage, this sector needs extra support from peers who have been successful.

9. Until Internet connections are faster and more reliable, Geraldton schools will not be able to make use of new learning methods. However, there may be ways to prepare schools for the opportunities that will be available soon. Their students may be the best source of inspiration.

10. Elderly people have the lowest rates of Internet use. This is not just because they did not grow up with the new technology. The capacity to use the Internet will deteriorate with age just like many other functions. The elderly should be able to benefit from the Internet not as direct users, but as recipients of services that make use of the new technology. This is one of many challenges for the social and community services sector, which needs more infrastructure and a more digitally engaged workforce. Demonstration sites and peer learning may be effective strategies to increase smaller social and community service organisations online engagement.

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Introduction

The City of Greater Geraldton is involved in several projects to create a dynamic digital future. The rollout of the National Broadband Network will provide the infrastructure for businesses and households to access superfast Internet and to deliver services through northern Western Australia and to the world. An international team from the IBM Foundation studied local capacity, aspirations and potential for making best use of the NBN and other opportunities.

As part of the planning process to enable Geraldton to become a Smarter City, the 2029 & Beyond team from the City of Greater Geraldton commissioned two community surveys to measure residents' current use of the Internet, barriers to greater participation and expectation for expanded services. Any expansion of Internet based services must be informed by what people are already experiencing.

Social Dimensions mailed surveys to 999 randomly selected electors of Greater Geraldton; 301 people returned completed surveys. The four high schools in Geraldton distributed another survey to Year 10, 11 and 12 students; 899 students participated. Details on the response rate and representativeness of the samples are in Appendix 1.

Although the questionnaires for adults and students were different, they covered the same topics. This report integrates the findings, presenting first how adults and young people use the Internet and what they value most about it. Next, the report examines what should be addressed if the community is to participate fully in a digital future. We look at the current concerns and barriers to greater use, consider what enables people to make full use of what the Internet has to offer and review peoples' expectations of the National Broadband Network and the types of digital services they would like. Lastly, we investigate the digital divide. We show who are missing out and how they can be engaged in a digital future.

Geraldton's use of the Internet

Internet use is very high in Geraldton – although exactly how high is uncertain . Appendix 1 details why the surveys may have over-estimated the proportion of youth and adults who use the Internet, and compares the findings to other sources. We conclude that between 80

and 90 per cent of Geraldton households have at least one member who accesses the Internet.

The Internet is not just about email anymore. People use it for many purposes. Out of 15 possible uses of the Internet, adult respondents indicated they or someone in their household undertook an average of nine activities in the past four months. Table 1 gives a breakdown of Geraldton households' use of the Internet. Communicating directly with people they know, finding information and managing personal finances were the most common uses.

Table 1: How the Greater Geraldton adult community uses the Internet (N=301)

Extent of use / type of use	Percentage
Used by more than 75% of respondents	
Communicating directly with other people through email, chat, messaging or audio or video conferencing	94%
Using the Internet to find information important to you (researching)	91%
Banking online	85%
Paying bills online	79%
Shopping online	74%
Used by more than 50% of respondents	
Making and maintaining connections with people with the same interests through social media such as Facebook and LinkedIn	72%
Downloading or streaming music	57%
Sharing music, video or photographs you have made with others	56%
Playing games on the Internet alone or with other people	55%
Used by less than 50% of respondents	
Downloading or streaming video clips	49%
Working from home	42%
Working with other people, for example planning an event or a project together	40%
Downloading or streaming movies	35%
Putting information or comments on a website such as a blog or discussion forum	30%
Using as part of a vocational or university course (online or face-to-face)	23%
Selling online	22%
Taking an online course	16%
Participating in a virtual world such as Second Life	7%

Note: Based on reported use by all household members in the last four weeks. Includes households that do not use the Internet.

Geraldton high school students are even more enthusiastic users of the Internet. Only 2 of 899 students reported that they did not use the Internet and 79% said they connected at least once a day. Most students (82%) had a mobile phone that could connect to the Internet. When asked what methods they used to stay in touch with their friends when they were not together, 85% of high school students said they texted, 67% used social media and 61% phoned from a mobile. In contrast, to stay in touch with parents or other adults who looked after them, 75% said they texted, 74% phoned from a mobile and only 16% used social media.

Facebook was by far the most popular social media site; two-thirds of students (66%) reported they used it. Students could write in as many sites as they wanted. Tumbler and Twitter were named by 6% each and instagram by 3%. Twelve per cent mentioned one or more other communication tools such as SKYPE, YouTube and a number of messaging services. Girls and older students were more likely to report using social media sites, but the differences were small.

A summary of how the different age groups in Geraldton use the Internet is in Table 2.

Table 2: Summary of Internet use by age group and life stage.

Life stage	Internet use	Activities (reported by 75% or more of respondents)
Students aged 15-17 years	Universal use (898 out of 899 students reported they used the Internet and 79% are on every day). Most students (82%) have mobiles that connect to the Internet and 97% also connect at home with a laptop, desktop or tablet.	The five most common Internet activities reported by boys are listening to music, watching video clips, gaming, social media and schoolwork. Girls' top five activities are listening to music, social media, school work, instant messaging and online chatting, followed closely by watching video clips and shopping.
Young adults: 18-24 year olds	All respondents in this age group use the Internet. 80% have a smart phone in their household.	At least 70% use the Internet to communicate one-on-one with people they know, bank online, social media, find information, shop and pay bills online and download or stream music.
Young families: 25-39	97% of respondents connect to the Internet. 80% have a smart phone in their household.	These people use the Internet in the same way as those in the younger group *except* they are less likely to listen to music. If there are children aged 12 to 17 in the house, then use of the Internet for games is also common.
Older families: 40-59	99% of respondents connect to the Internet. Only 61% report their household has a smart phone.	People in this age group use the Internet for communicating with people directly and through social media, finding out information and managing personal finances. Children in the house increase the likelihood of using the Internet for playing games.
Active seniors: 60-74	85% of respondents connect to the Internet. Smart phone ownership declines to 21%.	The only common uses of the Internet are to communicate directly with people (through email, messaging or SKYPE) and to find out information.
Older residents: 75 and over	44% of respondents connect to the Internet. No respondent in this age group has a smart phone.	Among those who use the Internet, the most common activities are direct communication and finding out new information.

Regardless of how they used or accessed the Internet, people of all ages valued two aspects above all: connectivity and learning.

Figure 1 displays high school students' most common words to describe what they liked best about the Internet. Teenagers loved the connectivity that social media, gaming and special interest sites provide (although these have their drawbacks, as we discuss below). They also valued the freedom the Internet gave to access information about anything.

Figure 1: Word cloud of what students like best about the Internet (font size in proportion to word frequency)

Adults placed a similarly high value on connectivity and learning new information. Using a scale of 1 to 9, where 1 equaled no importance and 9 indicated great importance, respondents were asked to rate the importance of different broad reasons for using the Internet. The highest mean score was for 'connecting with people' (Figure 2). This was closely followed by 'learning'. 'Doing business' and 'entertainment' were also valued positively, but on average

Figure 2: Mean value placed on types of Internet uses, by age

had a lower importance score than connecting with people and learning. Older people tended to consider all uses of the Internet of lower importance than younger people. The only exception were seniors aged 60-75 years old who placed a very high value in staying in touch with people through the Internet.

Growing Geraldton's digital future

The adult and youth surveys describe a community that has embraced the Internet. People from 15 to over 60 years old are confidently using technology to stay in touch with the people they care about, to research topics that interest them and to manage their personal finances. People up to the age of 40 are regularly connecting through their smart phones and other age groups have desktop, laptop or tablets at home.

However, this level of engagement may not be enough for Geraldton's digital future. The surveys investigated what the community perceived as barriers to greater use of the Internet. What services did they think would be available and what opportunities did they want? Finally, we learned from the Internet pioneers, the people who were already using Internet use in ways that will become more common in the future.

Barriers

Youth and adults identified the same two broad barriers to Internet use. Both groups complained about Internet speed and connectivity available through much of Greater Geraldton and both groups expressed concern about safety on the Internet.

Speed and connectivity

Geraldton residents are united in their frustration with Internet speeds and, in many locations, no access to a residential broadband connection. Many people are relying on inadequate mobile technologies.

When asked what would enable them to use the Internet more, adults' most common response was faster and more reliable Internet access (125 responses or 42% of the total sample). Thirty adults said they needed a broadband connection to their house. Several people took the opportunity to complain about their current services, as illustrated by the quote below by a frustrated business woman and mother of two.

> We have crap internet services in our area. We actually use our mobile phones to tether internet in our home. It's the best we can get. We have been in our home for 12 years and always strugggled to have any kind of internet service we can use with any speed. It's always crap. At night its worse to the point we can't do business. We have two businesses and it's hard to work from home. Usually we can only get fair speed in the mornings. Over the years the internet speed here has actually got much worse, kind of like everyone is jamming what is available so it slows it all down.
>
> We actually cancelled out home internet plan recently again. We have tried a few times to get it working but it's not worth the $50 per month to Telstra. We are stuck with Telstra here, no other providers work.
>
> We are very skeptical about the NBN. I don't know if it's going to make any difference to us as a family and business operators. We heard the NBN was going to ensure that all rural people got super fast internet. At the moment I think we have been forgotten. We haven't heard much, or how it will help us at all except for those fancy ads on telly saying how great it's been for people who had poor internet before (they sure could come to our house) eg: we can't use Skype, we can't download movies or music, can't download program updates here. It's difficult to surf the net for business or pleasure with any speed. At night it jams and doesn't work at all. To do business we go into town to use fast internet at our town office. Pretty sad! I would love to see what the NBN has to offer us??? That will be the question!

High school students were similarly emotive about their need for speed; 26% volunteered that a slow connection was one of the things they disliked about using the Internet.

Internet safety

Students and adults shared concern about the safety of the Internet.

Thirty per cent of adults reported they would use the Internet more if they had greater confidence their personal information was secure. Men and women were equally likely to be concerned and older people were more likely to be concerned. The people who identified security as a barrier used the Internet less for managing their finances and some forms of entertainment (such as downloading music). For example, 68% of the people who were concerned said they paid bills online, compared to 84% of those who did not identify security as a barrier.

High school students -- who conduct their social lives online -- have more immediate concerns about Internet safety. Three-quarters of students (75%) say that they have

observed someone be nasty or cruel online (72% of Year 10 students, 86% of Year 11 students and 82% of Year 12 students). When asked what they disliked most about the Internet, 29% wrote about bullying, 'creepy people,' 'pedophiles' or 'scammers'. Some students expanded that the 'faceless' nature of the Internet allowed people to spread rumours anonymously. Others complained about inappropriate content such as offensive and annoying advertisements and pop-ups.

Costs of Internet plans

The cost of connecting to the Internet is a barrier for some Geraldton residents.

Half (50%) of adults who pay for an Internet plan reported that they could easily afford it, even though some remarked they found it expensive. Only eight respondents said paying for their connection was always difficult. The remainder said that they could usually afford it but sometimes it was difficult. But regardless of ability to pay for a plan, people have the same number of devices and perform the same number of activities online. The Internet has become one of life's necessities.

Few students mentioned cost as a factor in using the Internet. When asked what they disliked about the Internet, fifteen out of 899 students mentioned that some sites cost money to view or that they disliked running up to maximum allowable downloads.

Expectations and demand for new services

Waiting for the NBN

Geraldton residents are looking to the National Broadband Network for access to faster and more reliable Internet. Adults were asked what other outcomes they expected from the NBN roll-out. Their responses to the seven specific outcomes listed indicated a general level of optimism, but also a high degree of uncertainty (Table 3). Most people thought the NBN will mean better access for rural areas , but a number of respondents who lived out of town doubted they would benefit. More than half of respondents think that the NBN will bring new opportunities for business , entertainment and social services but 20% to over 30% reported they didn't know or did not give an answer.

Similarly, when asked about the impact it would make to their own family, 28% reported they did not know enough about the NBN to say. Sixty per cent said it would make a big difference (18%) or some difference (42%).

When asked about the NBN, most youth focused on the potential for greater download speeds. They expected the NBN would be the end of slow connections and drop-outs. They

would be able to watch more videos and finish their schoolwork quicker. One Year 12 girl exclaimed 'I will never leave my room ever'.

Table 3: Adults' expectations of what will happen due to the National Broadband rollout.

	Agree	Disagree	Don't know	No answer
Local businesses will suffer from greater competition	20%	36%	38%	7%
Rural parts of Geraldton will get better Internet access	79%	4%	15%	2%
Children and youth will have better educational opportunities	72%	7%	17%	4%
People living in Geraldton will find it easier to work for businesses based elsewhere, such as the Pilbara, Perth, Sydney or overseas	69%	7%	20%	5%
Local businesses will be able to grow	64%	7%	25%	4%
There will be more entertainment options	58%	8%	29%	5%
Access to health services will improve because services will be delivered over the Internet	53%	13%	29%	5%

City services

The City of Greater Geraldton, along with other government agencies and private enterprise, is considering what services to offer online. CGG already has a few online services but recognises the need to make more available. The survey of adults collected information on what online services residents use now and which ones they would like to use.

It is already possible to book tickets for the local theatre and search for books at the city library online. Use of these services was reported by 26% and 28% respectively. Men and women were equally likely to have booked tickets or searched for a book online (p=0.018). Age was not associated with using either of these services; about 30% of people of every age had booked a ticket or searched for a library book. Greater experience on the Internet did make a difference. People who used the Internet for more activities were more likely to report using the CGG online services.[1]

If CGG made more services available, would they be used? To investigate this, the survey asked about four services. Most respondents (66%) said they would use a service to learn about and join a special interest group; 62% to pay parking fees, 71% to search for information about land and 46% to apply for a job at the City. Preparedness to use online

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[1] Even after adjusting for age and sex in a binary logistic regression, the number of other reported Internet activities was a strong and statistically significant predictor of booking a ticket and searching for a book online.

services was strongly associated with age. Table 4 shows that for every service, younger people were more likely to give their support than people older than themselves. But relevance of the service was equally important. People age 40 to 59 expected they would search for land information on land because they own property, but less likely to expect to apply for a CGG job.

Twelve per cent (or 36 respondents) suggested other services the City should offer online. The most common suggestion was pet registration, mentioned by eight respondents. Other suggestions included streaming council meetings, posting reports on surf conditions and recharging Aquarena cards.

Table 4: Percentage of respondents agreeing that they would use the service if available online.

Age	Pay parking fines	Search for land information	Apply for a job	Find special interest groups	Numbers of respondents in each age group
18-24	87%	87%	79%	84%	39
24-39	77%	76%	56%	73%	98
40-59	58%	78%	44%	70%	119
60-74	39%	42%	7%	46%	34
75 and over	11%	11%	0%	11%	9
All respondents	65%	73%	47%	68%	299
Number of respondents answering the question	290	294	291	294	

Note: Two respondents did not report their age.

Notably, people were most receptive to using a service that local government does not currently offer. Geraldton residents are accustomed to using the Internet to find new information and connect with people and are receptive to an online CGG service that would help them find and meet people who share their interests. This is a powerful example of how moving online is not just about putting current services on a new technology. Local government can use the Internet to support the community in entirely new ways.

School resources

Geraldton high schools differ in how they use the Internet, although all are constrained by infrastructure. At the request of Geraldton Senior College we asked high school students if they wanted their class schedules, assignments and resources online and available outside of the school. As Table 5 shows, the degree of support depended on how familiar the students were with this service. Geraldton Senior College students, where this service is not available, were the least likely to support it.

Table 5: Students views on whether class material should be available online.

Should class material be online and available outside of school?	Geraldton Senior	Geraldton Grammar	Strathalbyn	Nagle	All students
Yes for all classes	37%	46%	38%	63%	47%
Yes for some classes	9%	12%	17%	11%	10%
No I don't like this	27%	25%	24%	9%	21%
Not sure / don't know	27%	17%	21%	17%	22%
Total	100%	100%	100%	100%	100%
N	430	76	63	308	877

Most students connect to the Internet at school on school computers (87%) or laptops (74%) but the use of the Internet for teaching could be greater. We asked students what they did at school on the Internet in the last two weeks. The most common use was to look up information related to their classes (81%). Half the students (49%) uploaded assignments at school. Nine per cent of students said that they worked on a project over the Internet with young people from other schools and five per cent said someone other than their teacher taught them over the Internet.

Fostering digital pioneers

If Geraldton is to be a leader in the digital century, residents of all ages should have the opportunity to become creative, productive users of the Internet. To understand how this might be achieved, we used the surveys to explore who was an innovator and how they became one.

How adults learn to be digital innovators

People learn new uses for the Internet by extending what they already know to new applications. For example, if someone understands how to search for car parts he or she can search for recipes. If someone knows how to pay a telephone bill online, paying local government rates online is easy. Peer learning is important for the internet because peers have similar interests and a similar set of skills; peers help each other to expand how they use the Internet to do things that are important or interesting.

The work setting affects Internet use. Adults who used the Internet at work (especially those who used it every day) performed more activities on the Internet than people who did not use the Internet at work or who were not employed (Table 6). Using the Internet at the workplace enabled adults to incorporate more Internet activities into their daily life.

Table 6: Mean number of Internet activities in the past four weeks by use of the Internet at work.

Do you connect to the Internet as part of your paid work or business?	Mean	N
Yes, every day	11.0	126
Yes, but not every day	10.0	61
No, I do not use the Internet as part of my paid work or bus	8.0	71
Not applicable, I do not have paid work or operate a business	7.0	31
Total	9.6	289

Note: Differences were statistically significant, ANOVA, F=20.3, p<0.001.

To understand what influenced adults to adopt new ways of using the Internet, we took a closer look at the people who reported that in the past four weeks they (or someone in their household) contributed to blogs or discussion forums (30%), took an online course (16%) or worked from home (41%). Using a binary logistic equation, we estimated the influence of age, sex, exposure to the Internet at work and concern about the safety of personal information on adopting these practices. We found using the Internet every day at work and not being concerned about safety had a positive and statistically significant effect on performing those new Internet activities. The probability of doing any of those activities was the same for men and women and for people of all ages. We conclude that age is not a barrier to innovative use of the Internet, as long as people use the Internet at work and are unconcerned about Internet security.

Our next question was whether Internet use differed by industry. The City of Greater Geraldton expects that adopting new technology will drive economic development. We analysed the survey to determine which sectors of the economy were leading innovation in Internet use. We focused on people working in four sectors: trades and technical jobs; professional services; retail or hospitality; and community services such as health, education and personal care.

Table 7 shows that in three of the sectors only 40% to 50% of people working used the Internet everyday and 25% to 30% did not use the Internet at all. The new technologies have not yet penetrated the entire Geraldton workforce.

The proportion of people working from home is another indicator of how much different sectors use the Internet. Overall, 42% of respondents said they worked from home online (Table 1). We estimated the probability of working from home in a binary logistic regression, holding age constant. People working in professional services were 4.4 times more likely to

work online from home. People in technical fields or traders were twice as likely (odds ratio of 2.3). People in retail and hospitality and in community services were not more likely to work from home than people employed in other fields or not working. Although working from home may not always be desirable, this finding demonstrates that sectors are not equally engaged with the Internet. Increasing the use of the internet by people in retail and hospitality and in health and other community services may require targeted strategies.

Table 7: Use of the Internet at work among people in selected industries.

Do you connect to the Internet as part of your paid work or business?	Technical & trades	Professional services	Retail and hospitality	Community services
Yes, every day	41%	80%	42%	53%
Yes, but not every day	33%	12%	29%	17%
No, I do not use the Internet as part of my paid work or bus	25%	8%	29%	27%
Not applicable, I do not have paid work or operate a business	1%	0%	0%	3%
Totals	100%	100%	100%	100%
N	79	25	31	70

How students learn to be digital innovators

The survey for high school students had a specific question about how they 'learned what to do on the Internet'. Students could select from eight options. Almost all youth said they taught themselves (88%). Three-quarters of the students reported they learned from friends (74%) and a smaller proportion said they learned from teachers (31%), parents (29%) or other adults (13%).

Like adults, students benefited from learning about the Internet from friends. The survey asked students about their other interests. Among the suggested categories were music, dance, sport, reading and science, nature or animals. They could also write in other interests. Two out of three students responded to the next question, which asked them how they used the Internet to pursue their interests. We coded these answers into two categories: 'passive' for users who described watching and listening and 'active' for users who described finding out something new or using the information to improve their skills. Of those who gave an answer, 39% gave one that indicated active use. Girls were more likely to give an 'active' response, perhaps reflecting their tendency to give longer answers.

The responses were analysed statistically to determine how students learned to be an 'active' user of the Internet. After statistically adjusting for gender, students who said they learned new things on the Internet from their friends were more likely to be active users. Students who reported they learned about the Internet from teachers, parents or other

adults were less likely to use the Internet actively. Peers, rather than adults, help young people get the most out of the Internet.

Peer learning has its limitations. Cyberbullying is a major concern for students, their parents and teachers. Only 12% of students who said they had observed someone be nasty or cruel online asked for advice about what to do. The most common action reported was to ignore it (72%). We investigated whether learning about the Internet from adults or friends had the greater impact on seeking advice about cyberbullying. In a binary logistic regression, controlling for gender and year at school, students who learned from adults were significantly more likely to report asking for advice. Students who learned from friends were also more likely to say they ask for advice but the difference was not statistically significant. In this instance, adults are a more positive influence on Internet behavior. Learning from peers does not make students more likely to seek advice.

Geraldton's digital divide

As described in this report, there is not much evidence of socio-economic differences in the ability to access the Internet. Adults did not mention cost as a significant barrier, although it is possible that people who could not afford Internet access were less likely to respond to the survey.

Location remains a significant determinant of who does and does not have access to the Internet. Rural areas are most affected but many respondents complained about not getting broadband in Geraldton suburbs. Respondents found ways to get online, usually by using slower, less reliable or more costly methods.

The elderly and other home-bound people are another group not fully participating in the Internet. The decline in Internet use by age is inevitable. Training programs cannot reverse this process. When the current Internet savvy generations age, they too will spend less time on the Internet. Loss of cognition and making new priorities are a part of the ageing process. One elderly respondent wrote on the survey form that she had been an Internet user, but her computer had broken down and the cost of the connection no longer seemed good value.

In the future, the elderly will be consumer of online services. Businesses and community services delivered through the Internet will help older people stay in their homes and communities longer. These services may not rely on older people being active users, but they will be major consumer of Internet services.

Conclusions

The Internet is about relationships and information. People in Geraldton use the Internet to connect with friends and family, gain new information, manage their personal finances and be entertained. They learn how to do these activities from friends, relatives, schoolmates and workmates .

The most important digital divide is no longer about access to the Internet; it is about the quality of Internet engagement. Families, schools and businesses need infrastructure and services that will enable them to perform activities that require more data at faster speeds.

If Geraldton is to become a leader of the new digital technology, its strategy must address the needs and aspirations community members and provide everyone with the infrastructure and skills to enable them to participate fully. With this goal in mind, we offer the following conclusions based on the survey results.

Fast, reliable Internet connections

1. The priority is to ensure households throughout the wider Geraldton region have access to faster, more reliable Internet connections.

Increasing and deepening use through peer learning

Peers can help make people better users of what the Internet has to offer.

2. Encouraging peer learning is the best way to help people become more innovative, confident and safe users. Virtual and physical hubs that bring like-minded people together to learn from and challenge each other is a strategy that builds on what Geraldton's young and older digital innovators are doing right now.
3. For adults, the workplace is an effective place to learn about how to use the Internet effectively. Getting more workplaces to adopt online technologies will also help workers to become more confident home Internet users.
4. Facilitating young people to learn about the Internet from peers will improve cybersafety and encourage active uses of the Internet that help them to pursue interests and enhance knowledge and skills.

Offering City of Greater Geraldton services online

5. In introducing online services, the City of Greater Geraldton should focus on applications that help people connect and learn information as well as offering online facilities for conducting routine business, such as the paying of fines and licenses.
6. All online services should be accessible off-line for those people who cannot or do not want to connect to the Internet.

7. The City of Greater Geraldton should use every opportunity to educate people about Internet safety and to adopt best practices.

Developing Geraldton economically and socially

New information technologies will be the foundation of the future economy and Geraldton is in a unique position to position itself as a leader. Some industries are already digital innovators. However, others are lagging behind. In addition to improving access to better Internet connections, the City of Greater Geraldton and partners should encourage industry-specific peer learning, particularly to retail, hospitality, health, education, community and personal services sectors.

8. The Internet offers many opportunities for the retail and hospitality sector to promote itself within Geraldton and to potential visitors. To take advantage, this sector needs extra support from peers who have been successful.
9. Until Internet connections are faster and more reliable, Geraldton schools will not be able to make use of new learning methods. However, there may be ways to prepare schools for the opportunities that will be available soon. Their students may be the best source of inspiration.
10. Elderly people have the lowest rates of Internet use. This is not just because they did not grow up with the new technology. The capacity to use the Internet will deteriorate with age just like many other functions. The elderly should be able to benefit from the Internet not as direct users, but as recipients of services that make use of the new technology. This is one of many challenges for the social and community services sector, which needs more infrastructure and a more digitally engaged workforce. Demonstration sites and peer learning may be effective strategies to increase smaller social and community service organisations online engagement.

Appendix 1: Description of the samples

Community survey

The community survey, also called the adult survey in this report, was sent to a random sample of electors from the Greater Geraldton region. Electors are people over 18 years old registered to vote in the Greater Geraldton wards. Registering to vote is compulsory in Australia.
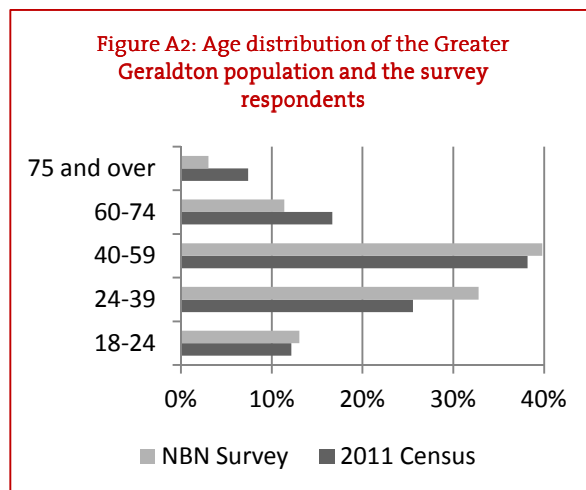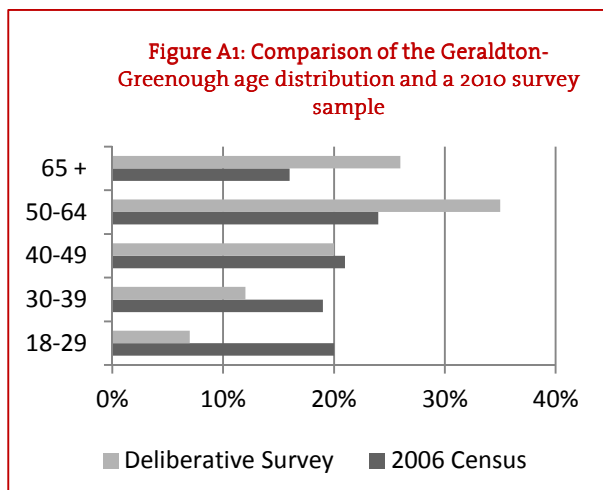
The sample was drawn by the Australian Electoral Commission for the purpose of this research. Although 4,000 names were made available, Social Dimensions sent surveys to fewer electors but made a greater effort to improve the response rate. In mid July 2012, questionnaires, a cover letter, an entry form for a draw for an iPad and a stamped return envelope were sent to 799 randomly selected electors. Ten days later a reminder postcard was sent to those electors who had not responded and in another two weeks the full package of a questionnaire and other material was resent. To secure a larger sample, an additional mailing to 200 newly selected electors was sent at the same time as the second reminder.

In all, 999 randomly electors were sent questionnaires. The surveys could be returned by mail or completed on line and in two cases conducted over the phone. The 301 completed surveys obtained by the time the survey closed on 29 August represents a 34% response rate. After taking into account surveys returned because the elector no longer lives at that address.

Social Dimensions has considerable experience in conducting surveys and in our experience a 34% response rate is fairly poor considering the investment in sending reminders and promotion of the survey over local radio and newspapers. There are several possible reasons for the poor response rate. First, the topic may not have interested people. Second, there may have been a rapid and recent decline in Geraldton's willingness to participate in mailed surveys. Social Dimensions believes that while the second cause is possible factor. Globally response rates to mailed surveys have fallen and surveys administered by phone or online are more common. However, the first cause was the most relevant for this survey.

Older residents usually have a much higher participation rate in surveys. For example, the survey conducted as part of the 2010 Deliberative Democracy project in Geraldton attracted a response rate of 20% (with no reminders) and resulted in a sample significantly skewed to people over 50 years old (Figure A1).

In some early qualitative work Social Dimensions had learned that older people were not interested in the Internet and were reluctant to be interviewed on the topic, saying they were 'too old'. To compensate for this bias the survey's cover photo showed older men enjoying their smart phones. It was hope that older people will see that the survey was also for them. Nonetheless, the respondents returning the *Living in Digital Geraldton* survey were skewed towards younger people (Figure A2). In fact, the age distribution of respondents is so similar to the 2011 population distribution that the results shown in the report have not been adjusted.

Figure A1: Comparison of the Geraldton-Greenough age distribution and a 2010 survey sample

Figure A2: Age distribution of the Greater Geraldton population and the survey respondents

Although age-bias may not be a serious problem, it is very likely that people who do not use the Internet were less likely to participate. Based on the survey findings, 95% of the sample said that they or someone in their household used the Internet, even if occasionally.

Other evidence suggested that up to 20% of Geraldton residents are not regular Internet users. Social Dimensions conducted a phone survey for the City of Greater Geraldton in early 2012 which found that 78% of individuals over age 18 (weighted for the age distribution of the population) used the Internet at least once a week. The 2011 census found that 77% of Greater Geraldton households connected to the Internet, however, it is not clear how householders relying only on mobile technology (e.g. connecting through their smart phones) answered this question as there was not a specific category.

The real proportion of households that access the Internet, at least occasionally, probably lies between 80 and 90%. The *Living in Digital Geraldton* survey should be viewed as a survey of Internet users, although it offers some insights into those who, for whatever reason, are not users.

Tables A1 shows other characteristics of the *Digital Geraldton* sample.

Table A1: Sample characteristics of the *Digital Geraldton* sample

Sex		Industry	
Male	43.1	Retail or hospitality	10.6
Female	56.9	Technical or trades, including farming and construction	26.2
Age		Transport and logistics	4.0
18-24	13.0	Professional services or management	8.3
24-39	32.8	Health, education or other community or personal services	23.6
40-59	39.8	Clerical or administrative	6.3
60-74	11.4	Not currently employed or in business	16.6
75 and over	3.0		
		Mean household size	3.3

Connected youth survey

The youth survey was not intended to be representative. Instead, it was a convenience sample of students attending when the survey was distributed. Participation was voluntary. The characteristics of those who participated reflect that many Year 11 and 12 students, especially boys, have education programs outside of school grounds and were not available to participate (Table A2). No attempt was made to weight the results by the proportion of students attending each school or enrolled in each year. It is possible that students who do not have access to the Internet choose not to participate.

Table A2: Characteristics of students participating in *Connected Youth*

School	Number of students responding	Year	Boys	Girls
Geraldton Senior	447	10	151	132
Geraldton Grammar	78	11	130	186
Strathalbyn	64	12	103	158
Nagle	310	Total	384	476
Total	899			