WIRED FOR WELL-BEING:
CITIZENS’ RESPONSE TO E-GOVERNMENT

A report presented to the
E-government Unit of the State Services Commission

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9 June 2004
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EXECUTIVE SUMMARY

For a study on Citizens’ Responses to E-government commissioned by the E-government Unit, State Services Commission, a series of focus group interviews was held throughout the New Zealand’s North Island. The purpose of the twelve group interviews (and a companion questionnaire completed by 65 people) was to obtain the views of citizens from different socioeconomic groups and from different sectors about what government information they sought, which government services they used, their use of government on the Internet in comparison to other channels they use to gather government information, and about their experiences in dealing with government, especially through the Internet. Those experiences related to how they located the information they needed, what barriers they encountered in their use of government on the Internet, if they thought government on the Internet advanced democratic processes, and their levels of trust and confidence in government information and services on the Internet. As an additional means of data collection, some focus group participants completed observed walk-throughs of information-gathering tasks to demonstrate how they approached and engaged in problem solving related to seeking government information.

The findings showed that participants came from a wide range of socioeconomic backgrounds and from many different sectors in society. The extent and nature of their contact with government, whether on the Internet, in person, or by phone, was dependent on how they traditionally gathered government information, the nature of their work, and personal circumstances. Of the 65 participants polled, 72.3 percent had used government on the Internet, though in some cases they were unaware that the sites used were government. The role(s) they played in society (taxpayer, parent, business person, independent contractor to government, Maori, advocate for an ethnic group, advocate or activist on social, environmental or political issues) was the primary determinant of their use of government on the Internet.

Some of the other major findings are:

1. Most frequent contact was on the following topics: City Council issues; immigration/passport /citizenship issues; education, taxation, employment opportunities and conditions; legislation (Statutes, Regulations, and Bills); and Regional Council issues.

2. Participants relied on the telephone as well as face-to-face contact to complement their use of web sites. Which mode they selected first depended on their personal experience, circumstances, and preferences, and their selection patterns are unlikely to change much in the near future. They like direct contact with people and might use the Internet to locate the names and/or phone numbers of departmental or agency contacts.

3. Most participants were unaware of the concept of e-government, and made little use of services available from government on the Internet. They associate government web sites with the provision of basic information.

4. Most participants search for information on government web sites by using Google or guessing the URL of the agency they want. Typically, they have not
heard about or use the government portal. Even those who have used the portal
did so irregularly. The portal has not made a lasting impression on them.

5. The barriers they encountered while using government web sites fell into the
following five categories: physical (i.e., technical and infrastructure), skills-
based, attitudinal, content-based and web page design and architecture. In
addition, lack of knowledge that the information is there, and where to seek it,
inhibits use. A major reason for limited use and non-use relates to a lack of a
perceived need for government information.

6. Most participants have a much higher level of trust in government on the
Internet than they do in the Internet in general. Distrust was most likely to
appear within the focus groups of Maori, Pacific peoples, students, and
working professionals.

Based on the study findings and suggestions of the participants, the report focuses on
the following set of recommendations:

i. Standardising and improving web site design, and linking information between
sites;
ii. Providing more information on sites on content, and annotating headings and
links;
iii. Ensuring web sites include contact information and that the information
provided has a corresponding date (currentness of information is an important
aspect of trust);
iv. Promoting a policy of multi-channel communication between citizens and
government;
v. Closer monitoring of compliance with the New Zealand Government Web
Guidelines (http://www.e-government.govt.nz/docs/web-guidelines-2-
1/index.html);
vi. Ensuring that government web sites meet disability guidelines and that people
with impairments do not have to enter a web site through a mirror site or other
backdoor channel;

vii. Developing online assistance, and training in the use of government online;
viii. Inviting more contact through e-mail and guaranteeing prompt response from
agencies;
ix. Improving online forms so that the public can complete and return them online;
x. Promoting the concept of e-government and publicising its benefits more
(relating those promotion efforts to the public’s information needs and
information-gathering preferences);
xi. Rethinking and vastly improving the government portal;
xii. Providing free access for those with their own computer and those without (e.g.
the equivalent of an 0800 phone line but for use of government on the Internet);
xiii. Using incentives to encourage small business owners to engage in e-compliance;
xiv. Rewarding department and agency web sites for their adherence to ‘best
practices’ and assuring that these practices emphasize ‘performance metrics’
related to their public’s satisfaction and the concept of service quality in e-
government.
1. INTRODUCTION

1.1 BACKGROUND

The use of government information and services on the Internet in New Zealand rose from 40 percent in 2002 to 45 percent the following year. Correspondingly, the number of these who used the Internet increased from 71 percent to 75 percent in the same time period (see Government Online, 2003). Given the continuing increase in the number of users (and presumably the increased number of uses) of the Internet and government on the Internet, the E-government Unit, States Services Commission, wanted to learn more about what New Zealanders expect of the government information and services provided over the Internet as well as through more traditional channels. Equally important issues are

- How do New Zealanders interact with government in their daily lives, either as individuals and citizens, or in relation to their roles in the workplace?

- What government information and services have they used, either online or through more traditional channels, and how do they view those experiences?

- How do they locate the government information and services they use?

- Has access to the Internet changed the way in which they seek government information and services?

- What barriers, if any, does the public encounter in seeking government information and services both online and through traditional channels?

- How might barriers be overcome?

- Do they consider the government portal (http://www.govt.nz) as a way to overcome obstacles to the receipt of government information and services?

- How much trust and confidence does the public place in the information and services that the government provides on the Internet?

- What factors affect their levels of trust and confidence?

- Do they distinguish between trust in the Internet as a secure means of accessing information and services in general and trust in government web sites for the information and services provided?

- Do demographic characteristics (e.g. personal, educational, cultural, and geographic) influence responses to the previous questions?

The answers to these questions neither suggest nor imply that the government perceives the provision of information and services as the exclusive role of the
Internet. Instead, the answers show how people interact with government and their preferred methods of that interaction, as well as suggest strategies for meeting the information needs and information-gathering strategies of the public through assorted channels, be they traditional or the Internet. In essence, as the percentage of the public using government on the Internet increases, has the public really become more dependent on the Internet for access to government information and services? Has increased Internet access resulted in a decrease in the use of other channels for gaining access to government information?

1.2 PREVIOUS STUDIES

Several studies (e.g. a report prepared by the Institute for Economic Research (2001) on e-government preparedness in the small coastal township of Levin, and a report on a series of focus group interviews with selected groups of citizens in and beyond the Wellington region (Cullen, 2004)), have highlighted some of the motivators and barriers lying behind the use of government information on the Internet. Motivators that Cullen identified for using the Internet varied greatly among the groups interviewed, but they centred on convenience, rapid access to a wide range of up-to-date information, the ability to participate in policy debates, the ability to schedule appointments, the avoidance of difficulties in speaking and listening to English, anonymity, and the ability to contact government in a less personal and intrusive way. Each group encountered some barriers in its use of government on the Internet. Those related to the ‘digital divide’—the gap between those who have access to information technologies such as the Internet, and those who do not—include:

- Physical access to information and communications technologies (ICT), ranging from competition for the one residential telephone line to poor connections in rural areas, to lack of time and money;
- The level of ICT skills and support, as well as the need to keep up-to-date with computer hardware and software;
- Attitudes related to concerns about the safety of the communication over the Internet, the lack of privacy for community access services, and a preference for human communication, either face-to-face or by telephone; and
- The relevance of content and contacts, as the public may find neither appropriate content nor personal contacts on government web sites that are helpful in resolving their information needs.

Both of the reports (Cullen, 2004; Institute for Economic Research, 2001) highlight some key issues, in particular:

- The need for alternative channels of communication to cater to those who, for whatever reasons, lack access to government on the Internet, or who prefer a more interactive and personal form of communication;
- A lack of awareness of the government portal and the need for greater promotion of it if the portal is to fulfil the vision of serving as a ‘one-stop shop’ for e-government;
• The need for government departments and agencies to promote the information and services that they make available on the Internet and that are accessible through the portal;

• A widespread need for an education programme to enable the public to be more effective and efficient in searching for, and gaining access to, government information and services through the Internet; and

• The need to build a culture of open communication between government and citizens, and a climate of trust to facilitate online transactions and other services.

While some of the above-mentioned issues are specific to groups that, in the past, have been considered to be disadvantaged in terms of the digital divide (e.g. rural groups, those from lower socioeconomic groups, those with either poor English-speaking skills or low education, beneficiaries, and Maori), the two studies indicate that response to e-government is more individualistic. That response is a complex mixture of external circumstances, opportunity, and personal and cognitive preferences. Thus, use of government on the Internet involves issues such as the digital divide, socioeconomic characteristics, and cultural and personal issues.

The success of e-government—whether government to government, government to citizen, or government to business—depends on a better understanding of the types of barriers that inhibit or prevent use, as well as the public’s information-gathering preferences and past experiences in gathering information and dealing with particular government departments and agencies. Cullen (2004) and the Institute for Economic Research (2001) have identified a number of barriers related to the public’s use of e-government. These barriers might be related to service, technology, agency, content, or level of education. Because other barriers might exist, there is need to develop a taxonomy of different barriers.

The technique of telephone interviewing limited the scope and depth of the survey for Government Online (2003) because there was insufficient time to probe motivators and barriers to gathering government information. Regional perspectives and the highly selective coverage of groups limited the insights gained from the Institute for Economic Research (2001) and Cullen (2004), both of which were qualitative studies. Clearly, there is a need for additional probing of the public information-gathering behaviour related to the use of government information and services, particular those available over the Internet.

1.3 PURPOSE OF STUDY

This study, which builds on the previous reports, includes the perspectives of more individuals, and from different parts of New Zealand’s North Island, but still predominately the Wellington area. The study expands the knowledge base of citizen and business needs for government information and services through the Internet, and it contrasts Internet use with the use of other channels for gathering government information and for using government services. With this expanded base of knowledge about the questions presented in the Background section above, the E-government Unit, States Services Commission, can develop national strategies for
understanding better the public’s use and non-use of government on the Internet, and can share those insights with government departments and agencies to make government web sites more responsive to the public’s needs, expectations, and patterns of information-gathering.

1.4 STUDY PROCEDURES

For data collection, the study used focus group interviews but before the interview started each participant was asked to complete a general questionnaire. That questionnaire, which addressed the questions listed in section 1.1, delved into participants’ use of computers, the Internet, and government information and services, as well as perceptions about the availability of government on the Internet; the instrument also gathered background demographic information. Members of the E-government Unit reviewed the questionnaire and suggested new wording, where appropriate, and at the request of the research team, conducted two separate pretests of the instrument. Based on the responses they received from their staff, the instrument was further revised (see Appendix A for the final instrument used).

Because one purpose of the study was to identify questions that the E-government Unit might ask later in a national survey, the wording of the questions asked was reviewed after completion of the first two focus group interviews (those relating exclusively to the issue of trust). Those interviews did not produce any changes to the questionnaire. Subsequent interviews only produced five suggested changes: all of which were to add further categories to question 6 (on government agencies contacted). Two participants wanted ‘disabilities’ added as a topic for which they might seek government information, one person favoured the inclusion of ‘defence’, another recommended ‘conservation’, and two wanted ‘science’ and ‘food safety’ added.

The investigation was conducted in three stages. First, in March 2004, two focus group interviews explored, in some depth, the issues of security and trust (see Appendix B for the questions asked). These interviews were conducted first because the E-government Unit needed the information quickly for a survey it was preparing. These focus groups contained people who were much more broadly defined demographically than the subsequent interviews, and the interviews were conducted in Wellington. The purpose was to gather a diverse set of perspectives; nonetheless, subsequent focus group interviews continued to probe the issues of security and trust.

From March through May 2004, ten focus group interviews were conducted in the Auckland, Hamilton, Taranaki, and Wellington areas with individuals representing the following groups:

1. Disabled citizens, recruited from two local branches of the Disabled Persons Association;

2. Maori, from rural and urban areas around Hawera;

3. Pacific peoples, from the Pacific Island Advisory Committee of the Manukau City Council;
4. New immigrants, attending English as a Second Language classes, in Karori;

5. People in the business community (Auckland), recruited through Newmarket Rotary Club;

6. People in the business community (Wellington), recruited through Wellington Rotary Club;

7. Residents of rural communities, recruited from a rural women’s network outside Morrinsville;

8. Senior citizens, attending a senior social group at Miramar Community Centre;

9. Students attending Victoria University; and

10. Working professionals, all members of an amateur choir in Wellington.

As with all focus group interviews, participants completed a consent form and the questionnaire prior to the beginning of the focus group interview. Each interview lasted from one hour to 90 minutes. (Appendix C reprints the questions asked in these interviews).

For consistency and reliability, the same investigator led the discussion in each focus group interview. The other investigator monitored the responses, taking careful notes and occasionally asking a follow-up question to clarify a response for the written record. The focus group interviews were taped, and a written transcript produced.

For a further dimension to data collection, participants in the early focus group interviews were invited to take part in a walk through—an observational technique to examine how they would go about answering a set of pre-determined questions. During April and May, these observations were conducted at Victoria University in the office of one of the investigators. Participants sat at the computer but had access to a nearby telephone book. They were asked to verbalise and demonstrate their method of searching for the answers to five pre-selected questions (see Appendix D for the instructions, and tasks set).

It also merits mention that many participants, especially the Pacific peoples, Maori, and disabled carefully reviewed their answers to the questionnaire before turning in the form. A typical comment was, “I feel I am representing all Maori, so I am taking great care in completing the survey.”

A limitation of the study was that it was not possible in the time frame during which the study had to be completed to conduct additional focus group interviews across New Zealand and involve more people from each of the ten demographic groups. The Maori interviewed inserted a caution. They stressed that, because “literacy is an issue for our people,” future surveys should be cognisant of this fact and should involve Maori as the research team (or part of it).
2. FOCUS GROUPS

2.1 FOCUS GROUP PARTICIPANTS

Altogether, 65 individuals\(^1\) participated in the ten focus group interviews and the two additional ones that concentrated on the issue of “security and trust.” Table 1 provides background information on them, and Table 2 indicates their level of experience with computers and Internet use. (The information for both of these tables was taken from questionnaire responses.) During the focus group interviews, a number of those interviewed mentioned that they tended to confine their use of the Internet to work. Home use might centre on doing e-mail and engaging in fun activities (e.g. playing games or helping children with projects). Some others disagreed and were more likely to search the Internet at home, including government web sites. Whichever approach they used depended, in part, on (1) whether there was a single line for Internet access at home, and (2) the speed of modem access. In those instances in which participants found it too time-consuming to search at home, they were likely to contact government by phone.

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\(^1\) Nine women comprised the new immigrants focus group, thereby raising the number of participants to 74. However, we have separated them from Tables 1 and 2 and the total number because we did not ask them to complete the questionnaire and we abbreviated the questions asked in the focus group interviews. We also provided extensive prompting. This different treatment was due to their limited English reading, writing, and oral communication skills.
Table 1. Background Information*, **

<table>
<thead>
<tr>
<th>Category</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>36</td>
<td>55.4</td>
</tr>
<tr>
<td>Male</td>
<td>28</td>
<td>43.1</td>
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<td>1.5</td>
</tr>
<tr>
<td><strong>Ethnic Group</strong></td>
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<td></td>
</tr>
<tr>
<td>NZ European</td>
<td>46</td>
<td>70.8</td>
</tr>
<tr>
<td>Maori</td>
<td>8</td>
<td>12.3</td>
</tr>
<tr>
<td>Pacific peoples (Samoan, Tahitian, Tongan)</td>
<td>8</td>
<td>12.3</td>
</tr>
<tr>
<td>Asian (Chinese, Taiwanese) or Indian</td>
<td>3</td>
<td>4.6</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-19</td>
<td>2</td>
<td>3.1</td>
</tr>
<tr>
<td>20-24</td>
<td>6</td>
<td>9.2</td>
</tr>
<tr>
<td>25-29</td>
<td>4</td>
<td>6.2</td>
</tr>
<tr>
<td>30-34</td>
<td>6</td>
<td>9.2</td>
</tr>
<tr>
<td>35-39</td>
<td>7</td>
<td>10.8</td>
</tr>
<tr>
<td>40-44</td>
<td>5</td>
<td>7.7</td>
</tr>
<tr>
<td>45-49</td>
<td>7</td>
<td>10.8</td>
</tr>
<tr>
<td>50-54</td>
<td>6</td>
<td>9.2</td>
</tr>
<tr>
<td>55-59</td>
<td>5</td>
<td>7.7</td>
</tr>
<tr>
<td>60-64</td>
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<tr>
<td>65-69</td>
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<td>10.8</td>
</tr>
<tr>
<td>70-74</td>
<td>2</td>
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</tr>
<tr>
<td>75-79</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>80 or over</td>
<td>2</td>
<td>3.1</td>
</tr>
<tr>
<td><strong>Highest Level of Formal Educational Qualification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Certificate</td>
<td>6</td>
<td>9.7</td>
</tr>
<tr>
<td>6th Form Certificate/UE/Bursary</td>
<td>14</td>
<td>22.6</td>
</tr>
<tr>
<td>Trade/Vocational Certificate or Diploma</td>
<td>11</td>
<td>17.7</td>
</tr>
<tr>
<td>Business Diploma</td>
<td>2</td>
<td>3.2</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>15</td>
<td>24.2</td>
</tr>
<tr>
<td>Postgraduate Degree</td>
<td>10</td>
<td>16.1</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>6.5</td>
</tr>
<tr>
<td><strong>Household Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$0-$9,999</td>
<td>3</td>
<td>4.6</td>
</tr>
<tr>
<td>$10,000-$19,999</td>
<td>5</td>
<td>7.7</td>
</tr>
<tr>
<td>$20,000-$29,999</td>
<td>5</td>
<td>7.7</td>
</tr>
<tr>
<td>$30,000-$39,999</td>
<td>6</td>
<td>9.2</td>
</tr>
<tr>
<td>$40,000-$49,999</td>
<td>4</td>
<td>6.2</td>
</tr>
<tr>
<td>$50,000-$59,999</td>
<td>6</td>
<td>9.2</td>
</tr>
<tr>
<td>$60,000-$69,999</td>
<td>6</td>
<td>9.2</td>
</tr>
<tr>
<td>$70,000-$79,999</td>
<td>3</td>
<td>4.6</td>
</tr>
<tr>
<td>$80,000 or over</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>Did not answer</td>
<td>26</td>
<td>40</td>
</tr>
</tbody>
</table>

*Some participants did not answer all of the questions. In case of the new immigrants, we viewed the questionnaire as too complex for them to complete. The nine women came from Hong Kong, Japan, China, Romania, Indonesia, Sri Lanka, and Korea.

**Percentages subject to rounding.
Twenty-nine respondents were employed, whereas fourteen received a benefit, pension, and six a student loan or allowance. Another four were homemakers who shared their partner’s income, and one was retired (self-funded); eleven respondents did not state a source of income. (See Table 2)

Table 2. Occupation of respondents

<table>
<thead>
<tr>
<th>Employment category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking/finance</td>
<td>3</td>
</tr>
<tr>
<td>Business/consulting</td>
<td>3</td>
</tr>
<tr>
<td>Council employee</td>
<td>1</td>
</tr>
<tr>
<td>Farmer</td>
<td>6</td>
</tr>
<tr>
<td>Legal annotator</td>
<td>1</td>
</tr>
<tr>
<td>Lab technician</td>
<td>1</td>
</tr>
<tr>
<td>Librarian</td>
<td>1</td>
</tr>
<tr>
<td>Manager/administrator</td>
<td>2</td>
</tr>
<tr>
<td>Musician</td>
<td>1</td>
</tr>
<tr>
<td>Retail worker</td>
<td>1</td>
</tr>
<tr>
<td>Retired self-funded</td>
<td>1</td>
</tr>
<tr>
<td>Public servant</td>
<td>2</td>
</tr>
<tr>
<td>Scientist</td>
<td>1</td>
</tr>
<tr>
<td>Self-employed</td>
<td>4</td>
</tr>
<tr>
<td>Student</td>
<td>6</td>
</tr>
<tr>
<td>Teacher</td>
<td>2</td>
</tr>
<tr>
<td>Supported by partner</td>
<td>4</td>
</tr>
<tr>
<td>Benefit/pension</td>
<td>14</td>
</tr>
<tr>
<td>Not specified</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
</tr>
</tbody>
</table>

Overwhelmingly, English is the major language that participants used in their daily lives. They might, however, combine English with another language: Bengali; Chinese; Cook Island Maori; Dutch; Fijian; Japanese; Maori; Romanian; Samoan; Swedish; or Tamil. Two people indicated Maori or Tongan, and some listed sign language.
Table 3. Level of Experience with Computer and Internet Use*

<table>
<thead>
<tr>
<th>Category</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Computer Use</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No experience</td>
<td>4</td>
<td>6.2</td>
</tr>
<tr>
<td>Some experience (e.g. e-mail, basic word</td>
<td>31</td>
<td>47.7</td>
</tr>
<tr>
<td>processing, and office computer)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experienced (e.g. competent with a number</td>
<td>30</td>
<td>46.2</td>
</tr>
<tr>
<td>of computer applications)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Internet Use (including e-mail and web</td>
<td>4</td>
<td>6.2</td>
</tr>
<tr>
<td>sites)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No experience</td>
<td>4</td>
<td>6.2</td>
</tr>
<tr>
<td>Some experience (e.g. e-mail, online</td>
<td>39</td>
<td>60</td>
</tr>
<tr>
<td>purchasing, games, and/or some searching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for information)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experienced (e.g. dedicated surfer)</td>
<td>22</td>
<td>33.9</td>
</tr>
</tbody>
</table>

**Use Internet from**

<table>
<thead>
<tr>
<th>Location</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>58</td>
<td>50</td>
</tr>
<tr>
<td>Work</td>
<td>32</td>
<td>27.6</td>
</tr>
<tr>
<td>School or place of study</td>
<td>10</td>
<td>8.6</td>
</tr>
<tr>
<td>Internet café</td>
<td>6</td>
<td>5.2</td>
</tr>
<tr>
<td>Library</td>
<td>5</td>
<td>4.3</td>
</tr>
<tr>
<td>Other (e.g. hotel/motel)</td>
<td>5</td>
<td>4.3</td>
</tr>
</tbody>
</table>

*Percents subject to rounding.
**Respondents could tick all that apply.

2.1.2 **Encouragement to use the web**

Their responses to the survey question, “What kinds of things encourage you to use the Internet?” encompassed seven broad categories:

1. **Create a record.** The ability to create a paper trail or bookmark relevant homepages, web pages, or information content;

2. **Convenience of online activities.** Ability to engage in online activities (banking, purchasing products, and travel bookings);

3. **Ability to find information** (e.g. on a wide variety of topics, current, and useful for the completion of assignments for school age children);

4. **24/7/365 access.** Anytime/anywhere access to information and communication with others (communication is not limited to friends and colleagues);

5. **Convenience** (and being able to avoid being placed on hold, as when calling an organisation by phone);

6. **Information content.** The ability to find high quality information that reflects different views and perspectives, that is readily accessible, or that is germane to their information need; and
7. **Independent information gathering.** The ability to find information independently and anonymously, and the ease and serendipity of searching.

Participants in the focus group interviews reinforced the above-mentioned advantages, while suggesting some new ones related to general use of the Internet and web. They mentioned:

- **Access to contextual information.** The background and detailed information provided enable them to understand issues better.

- **Home use as an alternative to attending a meeting or visiting a government department or agency.** Participants with an impairment limiting their mobility could gather information from home. If they were unable to attend a meeting, they could obtain information, perhaps related to that meeting, from the Internet.

- **The Internet provides contact information.** That contact information might be more detailed than the telephone book provides. When they contact a government department or agency, they like to know the name of an individual.

- **An opportunity to be reflective.** When they use the web, they are not likely to be in a hurry. In contrast, when dealing with someone on the phone, they or the person at the other end may face time pressures. Clearly, use of the phone is a time-sensitive issue. Web use is not. In essence, web use is more of a leisure activity.

- **Flexibility.** They could search for information at their own pace and from whatever location they chose.

Everyone in the rural group uses computers, but they have different levels of experience. Dairy farmers, for example, might use computers to help manage their business. Using specialised software, they maintain herd records, with information on each cow (e.g. milk yield, volume, and content, parentage and offspring), which adds to the value of the herd. They also expressed the view that “the web has been a real boon for farmers.” As one explained, “the web provides access to information that otherwise might be time-consuming to collect. Still, it [the web] can be slow and it can get frustrating when we are bounced back to the opening screen of the homepage.”

Many of those interviewed—regardless of citizen group—view the Internet as only one means by which they gain access to information. They were most emphatic that the Internet should not become the exclusive means of access to information or the sole channel for communication.

### 2.1.2 Discouragement from using the web

As for the kind of things that discouraged their use of the Internet, questionnaire responses can be collapsed into four broad categories.
1. Computer use (cost, connectivity, security, and level of knowledge and searching);

2. Coping with online forms (they can be hard to download, as well as to complete and return online);

3. Information searching (distractions such as pop-up advertisements and finding new but interesting material unrelated to the subject of their original search, hard to navigate web sites, and unsuccessful searching); and

4. Information results (varied quality and relevance).

Focus group interviewees reinforced the above-mentioned points and noted some additional issues (see also section 5, Barriers):

- People (e.g. the elderly, those with disabilities, and Maori) might lack the money to purchase a computer or upgrade an old computer that had limited capability. According to one person with a disability, “I have a computer with Windows 95 that lacks sufficient memory and is slow.” Depending on the level of disability a person on a modest income who does not receive government support would likely be unable to afford to purchase a new computer.

- People with disabilities may not have ready access to the necessary adaptive technologies. All the needed technologies, it was explained, are available, but individuals may not be able to afford to purchase them. While those in the workforce might have jobs in which the employer provides the technologies, such technologies might be too expensive for home purchase.

- Some people have no perceived critical need for a computer or Internet access. As one senior citizen mentioned, “I would love to get on the Internet and there’re hundreds of things you find interesting, but they also tell you at our age you’ve got to be active and so I spend my time in the garden and looking after my house.” Others in that focus group reinforced the need to be active at their age.

- Elderly persons were afraid of becoming ‘addicted’ to the Internet (see previous bulleted item).

2.2 USE OF GOVERNMENT INFORMATION AND SERVICES

Of the 65 participants, 47 (72.3 percent) had contacted national or local government departments in the past year. Table 4, which is drawn from questionnaire responses, identifies the broad topic about which they made contact, and the number of mentions for each, and the relative position of the category in comparison to the other categories. They ticked City Council Matters the most often and Fisheries the least.
Table 4. Topics for Which Government Approacheda

<table>
<thead>
<tr>
<th>Category</th>
<th>#</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Births, Deaths, and Marriages</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Benefits</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Broadcasting</td>
<td>7</td>
<td>25.5</td>
</tr>
<tr>
<td>Business-related Issues (e.g. grants and compliance)</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Consumer Affairs</td>
<td>7</td>
<td>25.5</td>
</tr>
<tr>
<td>Customs</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>Driver Licenses</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Education</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>Elections</td>
<td>12</td>
<td>20.5</td>
</tr>
<tr>
<td>Employment</td>
<td>20</td>
<td>5.5</td>
</tr>
<tr>
<td>Environment</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Farming</td>
<td>7</td>
<td>25.5</td>
</tr>
<tr>
<td>Fisheries</td>
<td>3</td>
<td>32</td>
</tr>
<tr>
<td>Funding Agencies (e.g. social security)</td>
<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td>Health</td>
<td>13</td>
<td>17.5</td>
</tr>
<tr>
<td>Housing/Tenancy</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>Immigration/Passport/Citizenship</td>
<td>27</td>
<td>2</td>
</tr>
<tr>
<td>Legislation (laws and regulations)</td>
<td>20</td>
<td>5.5</td>
</tr>
<tr>
<td>Maps and Land Information</td>
<td>13</td>
<td>17.5</td>
</tr>
<tr>
<td>Occupational Safety and Health</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>Personal/Family Issues (e.g. child safety)</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>Police/Justice</td>
<td>13</td>
<td>17.5</td>
</tr>
<tr>
<td>Policy and Politics</td>
<td>13</td>
<td>17.5</td>
</tr>
<tr>
<td>Recreation and Sport</td>
<td>7</td>
<td>25.5</td>
</tr>
<tr>
<td>Statistics</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>Tax and Finance</td>
<td>22</td>
<td>4</td>
</tr>
<tr>
<td>Tourism</td>
<td>12</td>
<td>20.5</td>
</tr>
<tr>
<td>Transportation</td>
<td>14</td>
<td>14.5</td>
</tr>
<tr>
<td>Treaty Issues</td>
<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td>City Council Matters</td>
<td>29</td>
<td>1</td>
</tr>
<tr>
<td>Regional Council Matters</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>Other (e.g. conservation, defence, disability, food safety, and science)</td>
<td>14</td>
<td>14.5</td>
</tr>
</tbody>
</table>

Figure 1, which offers another perspective on some of the data in that table, identifies the most frequently mentioned topics about which the members of the public participating in the focus group interviews contacted government. Ten topics produced at least 16 responses.
Table 5, which then takes the six most frequently mentioned topics depicted in Figure 1, indicates the specific matter for which respondents made contact. However, most likely, the search for some legislation (i.e., statutes) was through Knowledge Basket, a private sector database vendor. Appendix F, which expands on the table, covers the subject matter listed for all of the topics identified in Table 4.

**Table 5. The Subject Matter Sought**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Subject Matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Council Matters</td>
<td>Building consents (e.g. extension of house)</td>
</tr>
<tr>
<td></td>
<td>Bylaw information</td>
</tr>
<tr>
<td></td>
<td>Drain from house going down neighbours land</td>
</tr>
<tr>
<td></td>
<td>Liaising with council on issues affecting disabled students</td>
</tr>
<tr>
<td></td>
<td>Meeting (minutes and policy)</td>
</tr>
<tr>
<td></td>
<td>Te Ara o nga Tupuna and information on history of area</td>
</tr>
<tr>
<td></td>
<td>Paying rates</td>
</tr>
<tr>
<td></td>
<td>Policy plans and statements of local council</td>
</tr>
<tr>
<td></td>
<td>Safety and environmental regulations, building codes</td>
</tr>
<tr>
<td></td>
<td>Street matters</td>
</tr>
<tr>
<td></td>
<td>Summer events in Wellington</td>
</tr>
<tr>
<td></td>
<td>Water supply and concern over trees in a local park</td>
</tr>
<tr>
<td>Immigration/Passport/Citizenship</td>
<td>Apply for, reissue, or renew passport</td>
</tr>
<tr>
<td></td>
<td>Changes in immigration policies that affected new immigrants</td>
</tr>
<tr>
<td></td>
<td>Details required about getting into New Zealand for a friend</td>
</tr>
<tr>
<td></td>
<td>Family overseas trip</td>
</tr>
<tr>
<td></td>
<td>Family passport problems</td>
</tr>
<tr>
<td></td>
<td>Immigration requirements for my partner</td>
</tr>
<tr>
<td></td>
<td>Information on costs as a result of a dispute</td>
</tr>
<tr>
<td></td>
<td>Migration information for parents</td>
</tr>
<tr>
<td></td>
<td>Residency status of my girlfriend</td>
</tr>
<tr>
<td></td>
<td>Rights of refugees</td>
</tr>
<tr>
<td></td>
<td>Rules for citizenship</td>
</tr>
<tr>
<td></td>
<td>Visa information (e.g. requirements for travel)</td>
</tr>
<tr>
<td>Education</td>
<td>Consultation appointments</td>
</tr>
<tr>
<td></td>
<td>Cost of university for foreigners in New Zealand</td>
</tr>
<tr>
<td></td>
<td>Find out about learning sign language</td>
</tr>
<tr>
<td></td>
<td>Find out entitlements as a returning student</td>
</tr>
<tr>
<td></td>
<td>Funding for study</td>
</tr>
<tr>
<td></td>
<td>Information about NZCEA</td>
</tr>
<tr>
<td></td>
<td>Information on student support for NZers</td>
</tr>
<tr>
<td></td>
<td>List of university courses</td>
</tr>
<tr>
<td></td>
<td>Looking at new school (e.g. ERO reports)</td>
</tr>
<tr>
<td></td>
<td>Looking into private schooling</td>
</tr>
<tr>
<td></td>
<td>Research grant applications</td>
</tr>
<tr>
<td></td>
<td>Status of a tertiary project</td>
</tr>
<tr>
<td></td>
<td>Status of peer support programmes</td>
</tr>
<tr>
<td></td>
<td>Teacher registration</td>
</tr>
<tr>
<td></td>
<td>Information for study</td>
</tr>
<tr>
<td></td>
<td>Information on NZQA</td>
</tr>
</tbody>
</table>

| Taxation and Finance                          | How to get an IRD number |
|                                               | Information about GST |
|                                               | IRD information (e.g. on taxes) |
|                                               | Paying taxes |
|                                               | Personal income tax regulations |
|                                               | Refund of taxes on charity donation |
|                                               | Signed up online GST |
|                                               | Tax code |
|                                               | Tax forms |
|                                               | Tax refund |
|                                               | Tax return |

| Employment                                    | Employment opportunities (e.g. for my partner) |
|                                               | Government jobs listings |
|                                               | Seeking research work |
|                                               | Staff recruitment |
|                                               | Where we stand with time off and wages for our workers |

| Legislation                                   | Bills in the House |
|                                               | Copyright law |
|                                               | Employment law |
|                                               | Issues related to technology, science in society, GM debate, etc. |
|                                               | Legalities of paternity tests |
|                                               | Staff information |
|                                               | Statutes (contents of various acts) |

Figure 2 identifies the method by which participants contacted government departments. The most common method was by telephone with web sites in second position. Because e-mail comprises part of the Internet, the combination of web sites and e-mail strengthen the position of the Internet as an important means of contact. Viewed from another perspective, in-person visits to government departments and agencies are important but less so than contact by telephone and the Internet. Four respondents ticked the “other” category, which included contact at meetings (e.g. hui that government departments held for consultation) and fax. Of the 47 people who had contacted government, 42 (89.4 percent) used multiple means.
2.3 USE OF GOVERNMENT ON THE INTERNET

Most of the focus group participants who had used government on the Internet—made contact through the Internet or e-mail—indicated that their use was limited; only a few individuals make frequent use (at least weekly). Use tended to centre on a search for information or the names of people to contact in departments or agencies.

When asked why they consult government on the Internet (either a departmental or agency web site, or by e-mail), their questionnaire responses reinforced the previously mentioned reasons that either encourage or discourage their use of the Internet in general. Encouragement focused on issues such as anytime/anywhere access and information content (good background or specific information and good coverage of issues). They also mentioned new categories such as finding portable information (e.g. able to download and work on a spreadsheet) and their dislike of being placed on hold when they make a call. Likewise the reasons for non-use paralleled those previously mentioned. However, some respondents noted (1) a preference to talk with someone (create and maintain a personal relationship); (2) the difficulties associated with downloading, reading, completing, and returning online forms (e.g. “I would use government forms if they were easier and more accessible to use”); and (3) the complexity of navigating government web sites, especially if they did not regard themselves as good or highly competent searchers.

2.3.1 Web sites used

The questionnaires and the focus group interviews revealed government web sites that the participants recalled they had used; thus, the list should not be considered as definitive. Furthermore, the list does not indicate the context in which they contacted government. Nonetheless, the web sites mentioned include

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The people who did not use government on the Internet either did not perceive a need for such information or they were satisfied with their current method of gathering information. A factor affecting non-use for some participants was a lack of understanding about the types of information the government disseminates. As one elderly respondent commented, “I assume government sites just contain booklets.” The desire “to stay away from government” was seldom mentioned; one member of the business community and a number of the new immigrants held that attitude.
- Department of Conservation, http://www.doc.govt.nz
- Department of Corrections, http://www.corrections.govt.nz
- Environmental Risk Management Authority, http://www.ermanz.govt.nz
- Inland Revenue Department (IRD), http://www.ird.govt.nz
- Local and regional councils, e.g. Wellington City Council, http://www.wcc.govt.nz
- Ministry of Agriculture and Forestry, http://www.maf.govt.nz
- New Zealand Food Safety Authority, http://www.nzfsa.govt.nz
The participants might also visit the web pages of Cabinet Ministers and make contact with them.

As will be discussed subsequently, one group—the members of the Wellington business community—was extremely knowledgeable about (and made daily use of) government on the Internet. Given their unique use patterns, they were separated from the Auckland business group (See section 2.4.6: Overview of Each Group Interviewed—People in the Business Community—Wellington).

The rest of this section highlights each of the ten broad groups, showing which web sites they had used and for what purposes, and identifies the individuals’ needs, likes, and dislikes. The final part of this section summarises the information-gathering behaviour of the participants. The section of the report on the walk-through observations provides further insights into their information-gathering behaviour.

### 2.4 GROUPS INTERVIEWED

#### 2.4.1 Disabled citizens

Those interviewed tended to be activists, who need information on assorted topics but who also think it is important to be informed citizens. As one explained, “Being informed enriches my life.” They might use government on the Internet anywhere from infrequently to weekly. They gather government information on the Internet (e.g. legislation, policies, and general information, including bus schedules) at the local or national level for their advocacy, work, school, or personal needs or interests. One person uses government information on the Internet for work-related purposes (research and writing reports), as she works on government contracts. Personal use, which is limited (perhaps once or twice a year), focuses on passport regulations, travel advisories, or policy documents. An advantage of government sites for activists is that they can obtain the complete text of a speech (e.g. by the Prime Minister) or a policy document. Newspapers, on the other hand, only provide a synopsis.

Among the web sites they recalled they had used are:

- Local and regional councils (e.g. policies related to pedestrian crossings and answering questions such as, “How well does city council meet national policy?”). They considered the Wellington City Council web site “easy to navigate.”
• The Mental Health Commission
• The Ministry of Health
• Office for Disability Issues
• Parliament
• Statistics New Zealand
• Work and Income New Zealand

2.4.2 Maori

Most of those interviewed use government on the Internet; that use ranged from weekly to monthly, but is not increasing. They definitely like to search for information on the Internet due to its convenience and the fact that they can do it anytime. When searching for information, they might not pay attention to web addresses and did not always realise that a particular site might be government. Most of all, the group wanted to see Maori reflected in government web sites—if not through use of Te Reo, at least through Maori news and events being prominently reported. They might seek government information on careers, education, the environment, legislation, statistics, and so on, from sites such as those of

• Ministry of Economic Development
• Ministry of Education
• Parliament
• Regional councils
• Te Puni Kokiri
• Work and Income New Zealand

Regarding services, two of them use an electronic tendering service and receive e-mail announcements and go to different sites for more information about such opportunities. They might also apply for study grants.

2.4.3 Pacific peoples

All of this group use computers and government on the Internet, but to varying degrees. Their use ranges from occasional to daily. They might seek information or contacts related to agriculture, education, health care, immigration, and so on, from the web sites of

• City and regional councils
Regarding services, they did not engage in online booking. As one participant pointed out, “Who among Pacific peoples has a credit card?” He also commented, “I don’t want to be on the phone forever calling Wellington [from Auckland]. So, I want to know what I want to talk about and to be informed before I place the call.” He questioned the accuracy of the legislation online but realised that this issue is being resolved.

### 2.4.4 New immigrants

The participants (two of whom were on temporary visitor permits) have been in New Zealand for a length of time ranging from four months to more than a decade. Those who have been in the country for a long time indicated they delayed learning English because they could rely on their husbands or children to find out what they wanted. For some, there is a strong desire to avoid contact with government, especially the police (an attitude possibly gained from experiences in the country from which they came). As a result, their contact with government, even through the Internet, is limited and relates to their daily lives.

All of them use computers but some of their use focuses on retaining contact with their old country and its language. Eight have made contact with government through the Internet. Most use of government web sites relates to seeking material to borrow from the city library. They have also used the homepages of the

- City council (for paying rates, and other matters about services)
- Ministry of Education (for school and general information)
- Land Transport Safety Authority (for obtaining a driver’s license)
- New Zealand Immigration Service (for visas, passports, and information on the quota for family entering the country)
2.4.5 People in the business community (Auckland)

Two focus group interviews were conducted with people in the business community, one in Auckland and the other in Wellington. The Wellington meeting is reported below.

Use of government on the Internet by the Auckland group was “project-driven” and involved, for instance, the use of legislation and policy documents. Depending on the project, their use might be very frequent. As a general (crude) indicator, the use for some is monthly and the others less so. The participants believed their use is increasing. The web sites mentioned include

- Department of Conservation
- Food Standards Australia New Zealand
- Land Transport Safety Authority
- Ministry of Education
- Ministry of Tourism
- New Zealand Food Safety Authority
- Parliament
- Reserve Bank of New Zealand

They also viewed the web pages of Ministers and contacted different Ministers.

2.4.6 People in the business community (Wellington)

With one exception (a retired individual), the group was familiar with government on the Internet, and many had served as consultants to various departments; such consultancies might involve extensive use of the departmental web site. They also seek policy documents, recent reports, information related to funding opportunities, and other material from government web sites. They find online forms and software that helps them complete those forms in a timely manner.

A typical comment they made was, “It would take too long to list and discuss each government web site I have used.” They believed that the list of subjects given on the questionnaire from which respondents could select did not well represent the sciences; however, they realised that the general public might have little knowledge about and use of these government entities. Another observation was that New Zealand universities might be considered as government and that there were numerous quasi-government agencies that should be considered. These comments, again, revealed that their knowledge about and use of government on the Internet far exceeded the knowledge and use that other people have and make. Reinforcing this observation is the fact that they used government on the Internet “every day.” They maintained that their use of government web sites, which, like the members of the Auckland business
community, is project driven, increased two years ago but has now flattened out. They tend to use the same sites repeatedly.

Viewing the above-mentioned list of government web sites as suggestive rather than comprehensive and as not reflecting their specific use or query, they highlighted a few of the web sites they consulted. The list includes:

- Department of Corrections
- Environmental Risk Management Authority
- Food Standards Australia New Zealand
- Foundation for Research Science & Technology
- Inland Revenue Department
- Land Transport Safety Authority
- Local and regional councils
- Ministry of Economic Development
- Ministry of Education
- Ministry of Justice
- Ministry of Research, Science & Technology
- National Library of New Zealand
- Parliament
- Statistics New Zealand

2.4.7 Residents of rural communities

Half of the group has searched government on the Internet for online forms, legislation, maps, tenancy information and landlord rights, but use ranges from infrequently to monthly. The government sites they remembered using include

- Department of Conservation
- Inland Revenue Department
- Ministry of Housing’s Tenancy Services
The group had a good understanding of what government services are available through the Internet. One had filed her tax returns online. As she explained, “I did it because I was running late [the deadline was approaching].”

2.4.8 Senior citizens

This group only made occasional use of government on the Internet and that use centred on seeking tax information or forms—issues related to daily life rather than any specific interests, although some reported recreational use of the web for travel, recipes, radio programmes, and e-mail contact with family. Among the web sites they mentioned were:

- City Council
- Inland Revenue Department
- Land Transport Safety Authority
- Police
- Statistics New Zealand
- Work and Income New Zealand

2.4.9 Students

University students were some of the more frequent users of government on the Internet. Their use ranged from weekly to several times a year. They thought that finding something relevant on government web sites meant that in the future they would likely return to those sites. They distinguished between use for personal reasons and for course assignments. They were more likely to use government web sites for course work, and in those instances they were more persistent in their search. Weekly use might pertain to seeking information for course research such as conservation, policy and legislation. Their use for personal purposes might relate to obtaining a visa, renewing a driver’s license, or seeking information about immigration or about a tax write-off for interest on a student loan. Some of their use was from overseas. One student remarked,

My partner just came over from Estonia so we were trying to find out the immigration stuff. The top level would be really simplistic and our case might be different and so you try to find definite information and then it might appear to be contradictory to what you just read. That’s the good thing about the government ones I’ve found—like on the immigration one you can go to the guide menu—the actual people, the actual immigration officers—whether they should let this person through—but actually when we went to get there it was nothing like it was with the guide and the procedures.

Examples of government web sites they remember using included:

- Department of Conservation (for course research)
• Inland Revenue Department
• Land Transport Safety Authority
• New Zealand Immigration Service
• Regional and local councils
• Waitangi Tribunal
• Work and Income New Zealand

Regarding services, one student mentioned making a submission as part of a conservation public consultation process on the Waimangaroa Mine on the West Coast. Most had some experience of downloading and completing application forms for student loans and allowances from Work and Income New Zealand (WINZ), but commented that to complete the submission process, WINZ sent these forms by mail, for signature.

2.4.10 Working professionals

All of these participants use government on the Internet\(^3\) on a “sporadic” basis; by this, they meant between twice a month and six times per year. They might use the following sites

• Foundation for Research Science & Technology
• Inland Revenue Department
• Meteorological Service of New Zealand Limited
• Ministry of Economic Development
• Ministry of Education
• Ministry of Foreign Affairs and Trade
• Ministry of Research, Science & Technology
• National Library of New Zealand
• New Zealand Food Safety Authority
• Parliament

\(^3\) One person stated on the questionnaire that he did not use government on the Internet. However, during the discussion, he realised his error. As others in the group noted, “you often don’t pay attention to the web address and government has so many quasi-agencies that might or might not be government.” Still, they asked if “such and such an agency was or was not part of government.”
Regional and local councils

The purpose of their use related to funding opportunities for research, finding policy documents, legislation (statutes), and maps; looking for speeches of Ministers and MPs; and seeking advisories about travel abroad and information about music collections and immigration.

As for services, they might have signed up to receive e-mail announcements from a government department or agency. Those announcements might alert them to new publications in areas of interest. They also download forms and one of them has filed her taxes online.

3. INFORMATION BEHAVIOUR

3.1 SOME LIKES

The participants liked government to provide information on the Internet that they could browse at their leisure. A number of them thought that government sites were a “good source of basic information” and that the government’s presence on the Internet would continue to develop. That presence, they suspected, would centre on the increased availability of digital information. They also believed that government would become more responsive to the needs of the public as that presence matures.

Those interviewed liked government web sites to identify contact people so that they had the name of someone they could call. This made the call more personal and provided a level of accountability in that they could also contact that person again. The web site of the Department of Conservation received the most praise for its layout, ease of use, and the high quality of the support staff who answer questions by telephone. Participants also liked the web sites of the Ministry of Tourism, Inland Revenue Department (except for having to negotiate forms), and web sites of Ministers of the Crown. However, they suspected the web sites of Ministers filter information and only tell part the story, that part most favourable to the person.

The new immigrants were very selective in the web sites they visited and the information they use. They found the forms related to visas and passport application easy to download. They also like being able to reserve a library book online.

Those in the rural community, especially, appreciated that their use of the Internet and government sites could be in the evening. Given their work schedule, they might be unable to call departments or agencies during daytime hours when an office is open.

Some members of the Wellington business community appreciated the availability of the online public access catalogue (OPAC) of the National Library as well as the OPACs of other libraries. They liked those government web sites that had good search engines, were well laid out, and easy to use. As one stated, “I like the design of a web site that enables a person to find the same information from different routes.” They also like access to legislation without having to pay for that access.
3.2 SOME DISLIKES

Participants in different focus groups disagreed about whether they liked or disliked a particular web site. They realised it was hard to compare sites, as their expectations differed, especially if they were work related or personal. Furthermore, they recognised that departments and agencies serve different audiences. The Ministry of Tourism, for example, wants to attract a broad international audience, and promote New Zealand. IRD, on the other hand, involves compliance with domestic tax laws.

Those interviewed realised that the functionality of web sites varied from department to department. Some sites require more search skills than others. Also, some sites are better developed than others—i.e. they have better architecture and are easy to use. A number of them wanted more standardisation across government web sites. One member of the Wellington business community stated, “Every government department is learning on the go. They use different language but often mean the same thing. There is much they could do to achieve standardisation of language.” The others in the group agreed.

There was a feeling among many focus group participants that government web sites “packed a lot of information content of varying quality” and that this resulted in sites that “looked cosmetic and not real.” Another criticism was that government sites tended to rely on jargon and not communicate with the public in plain language. The dislikes of the new immigrants relate to the language barrier. They did not want web sites to contain too much information for them to navigate or read and text that is long and does not use simple language. (At those web sites they used, they would prefer text where the content is bulleted.)

Maori participants felt strongly that the contents of web sites were not always well presented, or retrievable, especially for Maori as an audience. The “arrangement may put [Maori people] off ….” In addition, the information appeared to them outdated. When they go to the search option on a web site and insert the word ‘Maori’ the information retrieved might be five to seven years old. Thus, they assume the site has nothing more recent. Or, they find a document that covers Maori but the reference is only on one page—it merely states that Maori were consulted. Such experiences also impact on trust in government (see section 6 of the report).

Members of the Wellington business community reiterated that not all departments and agencies share the same mission or serve the same general audience. They cautioned against making sweeping generalisations. Still, they thought that web sites could be more user friendly and use plain language. They also thought that some sites were cumbersome to search. The example given was the Environmental Risk Management Authority, where it might “take eight to nine clicks of the mouse to find what you need; this is too many [clicks].” Another limitation is that web sites, such as that of the Department of Corrections, might take a defensive view (“be a spin machine”) and try to “sell their view of the world. The result is that a web site might lose its credibility.”

Most of the dissatisfaction centred on WINZ, especially for the perceived low quality of service provided to those visiting it in person. A number of people commented that
dealing with the department might result in an unpleasant experience. Making contact via the Internet, they hoped, might reduce that unpleasantness. Some participants indicated that WINZ robustly encouraged their use of its website; they thought this was an effort to reduce the volume of people coming or calling in, or a reluctance to deal with them as an individual.

A number of participants complained about online forms and the fact that they frequently could not be completed and submitted electronically. Most were unaware of the difficulties in creating a reliable authentication system for handling electronic submissions, although the Wellington business people dismissed this issue as a legitimate reason for delaying the introduction of more online forms and service transactions using forms. The disabilities group noted online forms could be difficult for people with poor sight to read. There was a consensus of opinion among those interviewed who had impairments that government was not trying to make it easier for them to navigate or complete online forms.

Those with disabilities also noted that some of the tables on the website of Statistics New Zealand could be hard to download. On the other hand, the website of the Office for Disability Issues “is very plain,” which “is good for disabled access.” However, even that site can be difficult to navigate: “it is hard to pick out contacts and move around [the site] easily.”

People with disabilities prefer to use standard sites that have been designed with disabled-enabled access in mind. Some complained about sites that were “too bland” and alternative sites for disabled users that are very plain. “Those with disabilities want to ‘go in the front door’ with everyone else. Why should we have to go through the back door?” They favour universal access—just as wheelchair users should be able to make use of the same entry to a building, disabled web users want to use the same web page (with alternative text for graphics, and complying with World Wide Web Consortium (W3C) disability access guidelines) not a separate plain site. “‘Accessible’ does not have to mean ‘boring’. For disabled users, accessing information on web sites still needs to be a pleasurable and useful experience.”

### 3.2.1 Final observations

First, people want the content of the site to be well organised, permitting them to find relevant information with a degree of ease. Second, the website might have an icon or some instruction in a corner of the page, but that information may not show up on a smaller screen at home. They feel “stupid” when they call an agency and are told that the information was on the screen, but they couldn’t see it. They want websites
designed with their home computer in mind. Third, members of the public interviewed want web pages to provide a date for the last time the information content was updated. The older the date, the more likely they assume the content is outdated. No date makes them feel very insecure about the information. Fourth, they believe that any set of Frequently Asked Questions (FAQs) should be based on the most often asked questions and problems the public experiences in searching a particular web site. Fifth, they dislike having to print a long document when they only need one page. They would like to be able to print more selectively. And, finally, they dislike trying to contact a web site at busy times of the day and being unable to get through (much as they resented not being able to get through on the phone).

3.3 INFORMATION-GATHERING BEHAVIOUR

As focus group participants explained, if they need to conduct a general search on a topic new to them, they are likely to search by:

- Google (http://www.google.com), which was the search engine they use most often;
- Guessing the URL (uniform resource locator) of a department or inserting its name between www. _____-govt.nz;
- Checking a site they had previously used; or
- Asking a friend or colleague for assistance.

There was great uncertainty about which government department did what, so even if they knew the name they were unsure if it was the correct department. Some thought that their search behaviour might change (become more sophisticated) if they searched for government information more often, although most disagreed. Almost all respondents combine searching for information on the Internet with use of the phone to make contact with a department or agency. Government on the Internet therefore provides valuable information on which to base an enquiry, or the names of contacts. One person, who is fairly typical of the users, banks online and cannot imagine doing things the old way—in person. Still, when it comes to using government web sites, he continues to combine web and phone use: “If I want to know how to file taxes online, I’d check the IRD site. If I still had a question, I’d use the phone.”

Three other examples merit mention. First, many people commented, “When I know what I’m looking for the Internet is fine, but I usually phone.” They get the number from the phone book, most likely the white pages, not the blue pages. The white pages, however, are selective in their coverage of government departments and agencies. They might even use the white pages to locate web addresses of government departments and agencies. The blue and white pages are far from complete in giving web addresses for government departments and agencies.

Second, some students believed that government web sites are usually harder to navigate than non-government sites. As a consequence, they might pose their question over the telephone. The problem, they felt, with the phone is that they may have to go through a long menu of choices before selecting the right one, and then they would be
placed on hold; there was a strong dislike for being placed on hold, for any length of time.\textsuperscript{5} One student said, “I will look for 5 minutes … and [if unsuccessful, I would] e-mail … [the department].” The department, however, might be “quite slow” in responding. Some students agreed, but one disliked e-mail contact with government departments because “you don’t know when it’s going to come back; A lot of those [sites] say contact us by e-mail so it goes by the web data e-mail address on your computer. So if you are at an Internet café or a public computer they can’t e-mail you back with the information anyway.”

Third, a complication is that the information content on web sites might be broad and detailed, but might not address specific questions. A number of those participating in the study stated that their particular query or problem did not fit the information outlines on web sites, such as in FAQs. As one person noted, government on the Internet provides information but “my questions are very specific.” He continued, “I do not find answers to them on the sites. I get my answers from calling people. I have contacts [by phone and e-mail] and through them I can build a relationship.”

Those with disabilities have specific strategies for gathering the information they want (based on past experience). It seems that they are often part of a close-knit community or interpersonal network, one that shares information. Being less mobile, they have a high need for information, and regard the Internet as a key resource. Still, unless they have a speech impairment, they tend to prefer oral communication and personal contact. Furthermore, sometimes they might order a printed, published document by phone—the print copy is often easier for someone with poor eyesight to read. The decision about whether to seek a printed or online copy might depend on the urgency and type of need, the size, format, etc. of the document; and how hard it is to find online.

Most rural areas cope with poor telecommunication infrastructures and have to run their Internet connections on low bandwidth, and with frequent interruptions, due to interference. Those interviewed had mobile phone coverage, which is not universal in rural New Zealand, but which provides an alternative channel of communication when the phone line is tied up with Internet use, or technical assistance is needed. In other rural areas, use of the one phone line becomes a hotly contested issue because a family cannot use the Internet and the phone simultaneously; the phone takes precedence.

Those people interviewed who live in a rural community use mobile phones when they are away from their home and need to contact someone to fix a problem that just arose. They expressed great dislike of calling a call centre only to find that the person is in Wellington, Auckland, or Australia. They need someone local. In some instances, they might call a 0800 number and ask where they should search on the homepage for information. In some instances, when they cannot find the necessary information on government web sites, they call the agency’s information service, explain that they could not find the information on the site, and ask for guidance in locating it there. Participants in other focus groups confirmed that they might also call a department or agency and request assistance in locating something on that web site.

\textsuperscript{5} A number of participants in other focus groups made the same point.
Maori participants found it difficult to locate web addresses and they preferred to make contact with government agencies through 0800 numbers or to ask a friend or relative for help. However, like participants in all focus groups, they disliked calling a government department or agency and being placed on hold or encountering an extensive menu of options on the phone system. In either case, they might hang up. One explained that when IRD put him through “a lot of rigmarole, I hung up and called my tax accountant.” A participant in another focus group explained that, for people in rural settings, it could be expensive to be placed on hold for a long period of time. The issue is not just one of money but time—time away from completing other tasks.

The Pacific peoples might be looking for information or contacts; contacts are important as they like to interact one-to-one, and they believe that government is more likely to listen if there is human interaction. The Internet is a channel for gathering information but not the best one for receiving answers. Government on the Internet uses “formal English” and the jargon of government; these limit its broad appeal. In their community, some people serve as gatekeepers and pass along information that the community needs. Others in the community might “ring us and we pass along the information to them.” If those interviewed search for information on a topic new to them, they might call an agency and ask where to search on that agency’s web site, or they might “muddle through,” using Ask Jeeves® (http://www.ask.com), “a search engine” (e.g. Google), or guess the name of an agency to insert in www.____.govt.nz. The last option for one of them who was familiar with the government portal would be to check it.

Because language is a definite barrier for new immigrants, information gathering has three facets: (1) finding information, (2) understanding it, and (3) checking on its accuracy or how it applies to them. First, to find general information, they may rely on an English language search engine or use one in the language with which they are most comfortable. (For example, Empas (http://www.empas.com) provides information in Korean.) For New Zealand government information, they would often ask a family member for assistance. If that search proved unsuccessful, they would most likely go to Yahoo!, or on occasion Google. A couple of them indicated they might even insert whatever term they are looking for into www.____.govt.nz or consult the blue pages of the phone book to ascertain a departmental or agency web address. A number of them find the telephone threatening. The person on the other end might not understand their accent and have to repeat the information conveyed, but they still might not understand what they are told. It is easier for them to view written information so they can carefully formulate their question and be sure they understand what they read and hear. Second, to understand information content, they would print the material and check a dictionary for words they did not understand. Third, if the information found was not specific enough or they wondered if it covered their circumstance, they would visit in person, or perhaps call the department or agency.

Figure 3 summarises how people find a government web site, what they use, and the relationship between web site and phone use. A large number of those interviewed do not consider themselves to be skilled searchers. This lack of skill, they felt, might explain why their searches may fail or be inefficient.
3.3.1 Exception to the general pattern

The Wellington business people do not follow the same pattern as the other people interviewed. They rely more extensively on e-mail and the web. When they conduct a general search, requiring information from a department not previously known to them, they rely on Google or try to guess the name of the department or agency concerned. If they have a complex question for which they need an answer, they turn to the telephone. They might also rely on the phone to develop and maintain relationships; As one explained, “every once in a while, I’ll call a contact just to keep the relationship going.” E-mail has become part of the way members of the Wellington business community do business; they often send their invoices by e-mail and receive contracts by that medium. E-mail has other advantages. First, people may not be in their office and “you can leave a detailed message. If you called, someone might only record that you called. No message is left.” Second, e-mail saves time in addressing, stamping, and mailing a letter.

3.4 USE OF THE PORTAL

Only 12 people (18.5 percent) had used the portal, although most of these did not find it very helpful. As one explained, “I found it quite slow [e.g. using the alphabetical list of departments and agencies to identify the correct web address] and aesthetically old—it looks very traditional—very English.” For another, knowledge about it has not altered his information gathering. He still relies on guessing a URL or asking someone where to search; he is “very people focused. As a last resort,” he might try the portal. And three others indicated that they might use it to locate URLs, ones that are not easy to guess from the name of the department. As an example, one person mentioned the URL for the Ministry of Education (ww.minedu.govt.nz). As three
others noted, “the portal lists departments and agencies without providing information about their mission, role, or jurisdiction—if you place the cursor over the name of the government body such information does not pop up.” Only two people (out of all participants) have used the search option on the portal.

Four individuals had stumbled across the portal; as each explained, by mistake, “I forgot to enter the name of the department and just put in ‘www.govt.nz’.” Yet, their experience with the portal did not result in it being a natural place for them to begin or even use in their search for government information. Awareness of it did not alter their present method of gathering information. For instance, one person who had used the web portal found it too complicated for someone with her disabilities to navigate. As she explained, “people with mental health issues find a lot of information hard to digest.”

In addition to the previously mentioned 12 people, eight other people expressed some familiarity with the portal, and a few others had a faint recollection of hearing about it, but they still asked, “What is a portal?” One person, a farmer, had read about its launch, and she noted that she finds reference to it at other web sites. Those sites might say, “If you want further information, go to www.govt.nz.” Even so, she does not use the portal. Another person had used the portal without knowing what it was. It is interesting to note that one student who said, “Estonia has one central site which leads to other government sites. From it, government web sites branch out.” Neither he nor the others in his focus group realised that New Zealand had something similar.

When the investigators explained the purpose of the portal, a typical remark was either, “Why doesn’t the government rename it?” (They regarded the word portal as bureaucratic jargon), or “Why doesn’t the government broadcast information about the portal?”—i.e. call their attention to it. Yet, few of them jotted down the web address or seemed to want to include it in future searches.

Another point merits mention. Given the reliance of those interviewed on Google, a number of those interviewed asked, “Why doesn’t government link into Google, with Google providing the general search capability?” Members of the Wellington business community supported this view; they marvelled at the quality of the Google search engine and dismissed the usefulness of the search engines on most government web sites.

All of the Wellington business people had used the portal, but none of them did so frequently. They might use it to locate a web address so they can identify a contact person, but, because they prefer to rely on particular pages in a web site, they find the portal to be too general. Instead of having government continue to invest in a general portal, some suggested the creation (or support) of specialty portals, such as one for science that marries government and non-government or quasi-government sites. “I often do not want to stop to think if this body is government or non-government,” one person explained.

It would seem that someone would need to be familiar with government, its structure and how it functions, to use the portal effectively on a repeated basis. An important question arising from these comments is, “Would they go (or return) to the portal in the future if the department or agency they needed to contact was unknown?” The
answer is likely to be “no” or very infrequently. The government portal obviously has not created a lasting or sustaining impression. The strongest negative opinion on the portal came from a Wellington businessman who had used it often. He compared the portal to fax, a technology he felt was more of the past than the present or future. He wanted government departments and agencies to join Google and “take advantage of a really good search engine.”

4. PERSPECTIVES ON E-GOVERNMENT

4.1 GOVERNMENT ON THE INTERNET

This section presents responses from both the questionnaire and focus group interviews. Of the 47 questionnaire respondents who ticked either “some experience” or “experienced” in their use of government web sites, 22 (46.8 percent) had a negative experience and 25 (53.2 percent) did not. The negative experiences related to their degree of search expertise, limitations of search engines (e.g. the ability of the search engine to guess the right search term if the spelling is close but incorrect, slow response time, and poor or non-existent instructions on how to search), the sending of e-mail but not receiving an acknowledgement or response, problems with web sites (other than with search engines) (e.g. slow response, the use of language that they find difficult to understand, pages where the text moves past the screen too rapidly, and cluttered web sites that pack too much information onto one screen), and problems with online forms—their downloading, completion, and electronic return.

Their use of government information on the Internet related to (arranged in descending order of most frequently mentioned):

- Personal requirements and research/finding information (31 ticks each);
- Work (23 ticks);
- School/study (7 ticks); and
- Other (i.e., volunteer work; 1 tick).

4.1.1 Questionnaire

Both questions depicted in Table 6 used a seven-point scale common to many studies of customer satisfaction. The points on that scale ranged from –3 (“falls short of expectations”) to +3 (“exceeds expectations”), with 0 representing “exactly meets.” First, study participants were asked “whether government falls short of, exactly meets, or exceeds your expectations in protecting any personal information you provide it face to face or over the phone?” Next, using the same scale, the same question was repeated, but this time “face to face or over the phone?” was replaced with “on the Internet (web site or e-mail)?”
Table 6. Extent of Satisfaction

<table>
<thead>
<tr>
<th></th>
<th>Falls short of expectations</th>
<th>Exactly meets expectations</th>
<th>Exceeds expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>Face to face or by phone</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>On the Internet</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

A comparison of the findings to these two questions becomes difficult in part because there was substantial variation in the number of responses to each question (n = 42 and n = 29) and the expectations are not necessarily related to the actual problems they experienced or the specific subject matter they sought. In other words, these questions lack a context. Nonetheless, the results are interesting. The mode for both rests with “exactly meets” and the numbers on both the plus and minus sides of the mode tend to be somewhat similar. In other words, both the phone and Internet met expectations but do not create a climate of the delighted customer. It merits mention that a number of participants provided a written comment about their expectations. They asked “how are we to know what our expectation should be?” In other words, they had not given any thought to the issue and the web sites did not try to raise expectations. (Section 9 of this report amplifies on ways likely to raise expectations.)

The next question asked whether or not “government web sites make it easier to find what you want?” Respondents circled a number between 1 (“strongly disagree”) to 7 (“strongly agree”). Of the 45 respondents to the question, more than half (24, 53.3 percent) circled a number from 5 to 7. With the inclusion of the responses to 4, a neutral response, the percentage increases to 75.6. Thirteen people indicated a number between 1 and 3; however, only two people circled 1 or 2. On the other hand, only three circled 7. In effect, those participants completing the questionnaire believed that government web sites make it easier to find the information they want (mode and median = 5).

Next, the participants were asked “How important is it to you that government information/services are available on the Internet?” The seven-point scale ranged from 1 (“not at all important”) to 7 (“extremely important”). Nobody circled 1 and six people marked 2 to 4. Viewed from the other end of the scale, 21 circled 7 and 36 circled either 6 or 7; 41 people circled 5 to 7. Evidently, the availability of government information and services on the Internet has some importance to them (mode = 7, median = 6).

To provide a better context for the answers to the above questions, one questionnaire item asked “What do you like MOST about access to government information and services on the Internet?” The responses reinforced answers given to previous questions, namely anytime/anywhere access, saving of time, the breadth and depth of information available, and instant communication. Respondents also reiterated their dislike of being placed on hold when they call and for having to “battle the automated call service to find someone one to talk to.” They also mentioned “reasonable anonymity.”
On the other hand, they “LEAST” liked coping with pdf files, trying to locate web addresses for government departments and agencies, being unable to determine when a web page or particular content was last updated, the confusing organisation of different web sites, the difficulty of reading and digesting the information provided, not finding the information sought, conducting a search that turned out to be time consuming, poor search capabilities at numerous web sites, loss of face-to-face contact, the uncertainty about whether or not e-mail communication was received, insufficient provision of contact information, and the presumption that if they could not find the information on a web site, that information would otherwise be very difficult to obtain. One person commented, “There are a lot of statements saying that the information should not be taken as gospel. It is only advice. If it is government shouldn’t there be more facts?”

The final question in this section asked, “If the government could do ONE thing to improve its Internet services and communication with people, what should it be?” The students wanted the placement of kiosks around the country as well as better access to their financial records covering loans for university studies. Others favoured the acknowledgement of e-mail messages, more contact information for departmental personnel, simplification of web sites and the language used, the deployment of more and simple electronic filing, provision of training in searching government web sites, inclusion of all web addresses in the phone book (both the white and blue pages), provision of free Internet access to government web sites from places spread throughout the country, creation of some degree of uniformity for government web sites (including the use of common language and good site design), enabling pages to load faster, improvement in the functionality of the government portal, creation of specialised (supplementary) portals, and advertisements explaining what government does on the Internet, informing people about the information and services available, and facilitation of communication directly with government through e-mail. Several people wanted the inclusion of more information—all except that which it is legitimate for government to withhold.

4.1.2 Impact of the Internet on communication with government

Three questions dealt with bringing the government and the public closer together by means of the Internet. The first two questions covered one-way communication—government to the public—and focused on the provision of government information and services. The final question covered two-way communication—government to the public and vice-versa. The data displayed in Table 7 support the comments made in focus group interviews. People readily recognised the value of one-way communication (particularly for information provision) but did not consider two-way communication as useful, although a few regarded e-mail as a means of communication with government. Of the 46 respondents to each question, 11 people circled 4 or lower for finding information, whereas 21 circled 4 or lower for service provision and 28 indicated 4 or lower for communication with government. Viewed from another perspective, only a small number strongly agreed with any of the statements. (The next section adds clarification to Table 7 and this paragraph.)
Table 7. Participants’ Views on the Impact of the Internet on Relations with Government

<table>
<thead>
<tr>
<th>Government on the Internet brings people closer to government</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making it easier to find information</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Providing better service (service that is convenient to use and reliable)</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Making it easier for people to communicate their views to government</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

4.2 DEMOCRATIC PROCESSES

Except for the Wellington business people, the 65 participants were unfamiliar with e-government in New Zealand, its concept and purposes, as articulated in documents related to the government’s vision and strategy (see http://www.e-government.govt.nz). They also were unfamiliar with the name “e-government” and assumed that e-government referred to online voting. As a result, they had no substantial knowledge upon which to base their answers to questions about the Internet and e-government promoting democratic processes. Nonetheless, the questions let them reflect on the Internet and the direction in which the government is proceeding.

When they thought about government on the Internet, they equated it with government’s provision of information—current information—to the public. They did not see the process so much as involving services or communication from the public to government. In effect, they saw e-government and the promotion of democratic processes as a means of one-way, not two-way, communication. They liked the availability of legislation, policy documents, and other information on the Internet, but they saw great variation among departments and agencies in supplying such information in a way that the public—not sophisticated in information gathering—can find. One person summed up nicely her view of e-government: the government provides “information useful to me. That information informs me.” It is the “citizen’s duty to be informed and government’s duty to inform the citizen.” Some of the Maori interviewed liked it when government web sites provided e-mail announcements that they could forward “to our people. The e-mail shows what government is doing to (not for) Maori!”

For some interviewees, e-mail comprises a means of two-way communication and a means of generating a record of what is written. Some people may shy away from e-mail communication because they are unsure how to word the message or the government department or agency may not acknowledge receipt and provide a written
As two people remarked, “If the message doesn’t bounce [back to you] you know it has arrived (unlike leaving a telephone message). It also provides a record” and “saves finding a stamp and envelope.” For some participants, the creation of e-mail records, with prompt acknowledgement and a formal response, promotes democratic processes. This type of communication, however, disadvantages those who do not have computers with Internet connectivity. One of the working professionals noted that the “Internet is a passive mechanism. You have to make the effort to gain access to the information. This requires time and access to computers.” A few participants mentioned, “Solutions such as the availability of cybercafés and public libraries “don’t work for … everyone.”

Democracy is better served, some remarked, by not relying on only one channel for information provision and communication. “The government should not assume that if information is placed on the web everyone will have seen, read, and understand it.” The importance of human interaction should not be minimised. Such interaction is a critical means of maintaining democratic processes. One other example is informative. One of the Pacific people noted, “You can complain online. E-mail, though, is not as good as doing so by letter or in person. Face-to-face is the best.” Still, this group will not engage in e-mail unless they know the other party. Furthermore, “Making a submission by e-mail does not carry weight like human interaction. I am always surprised when I get an e-mail response from a government department.” They might look for opportunities to provide online feedback, but they still want to attend meetings and voice their opinions and concerns orally. Maori also supported face-to-face or telephone interaction. A businessperson added further clarification; he prefers to call people because he wants information right away and he favours personal contact, to build relationships.

The Maori and Pacific peoples interviewed did not see the availability of government information and services on the Internet as improving or promoting democracy. Some of those interviewed distrusted government. They saw newspapers as informing the public about what government does. Newspapers have the currency, they thought, that government on the Internet lacks. However, one of the Pacific people thought that online submissions for input into policy development promoted democracy.

4.2.1 The exception

As previously mentioned, the Wellington business people were familiar with e-government. They thought that e-government “has the potential to further democratic processes.” To achieve that potential, they wanted all government information not subject to copyright or restrictive statutes placed on government web sites. They also realised that advice given to a Ministry should receive some protection (i.e., submissions, or advice from industry should not be publicly available while policy is still being formed), although they still favoured the release of submissions afterwards.

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6 One Maori sends e-mail messages to government departments and “rings up to see if they were received.”

7 With an e-mail submission, one businessperson mentioned that he sent an e-mail message to a Minister. Presumably, a secretary logged it in and acknowledged the message. Within five weeks, he received a complete reply from the Minister. Such a “service” provided him with a receipt and the detailed information sought. Such services “make life easier.”
Publicly available information must be well organised and presented, and supported by a good archive for information removed from those sites.

For them, democracy is served when the public has input into policy development and refinement. They liked the widespread availability of policy documents, and they thought the real potential of e-government related to e-compliance. E-compliance, they said, would be a real boon for owners of small businesses. For instance, “they need not take off part of the day to go to IRD. Instead, they can work on their compliance in the evenings and on weekends.” If government provides more online transactions—does more of what the private sector does online—there is greater potential for government to serve the public through the Internet.

5. BARRIERS TO USE

5.1 BARRIERS (QUESTIONNAIRES)

The study produced a list of barriers related to both general and government Internet use. The barriers identified on the questionnaires tended to match those mentioned during the focus group interviews (see the next section). Respondents in both instances distinguished between general Internet use and use of government web sites. Regarding general Internet use, several participants mentioned that they encountered too many ‘pop ups’ and online advertising. Such distractions, they felt, were a nuisance. Other problems were that links on a site may not work and that it takes too long to download information. The time-consuming nature of downloading also pertains to the use of government web sites as well as the fact that the public may not find the information it wants.

Interviewees also regarded computer use as time-consuming, especially when they are at home. They specifically mentioned the amount of time it takes to turn on the machine, to get it functional, search web sites, and communicate by e-mail. One survey respondent considered the Internet as “a time waster.” Many commented on the speed of the modem they used at home, which can be very slow. A further barrier noted in questionnaire responses is a dislike of reading extensive information and files on computer monitors.

5.2 GENERAL BARRIERS (FOCUS GROUPS)

The initial two focus groups, which examined the issues of security and trust, produced a list of barriers applicable to the Internet in general. The subsequent focus group interviews reinforced that list:

- Horror stories in the press about identity theft and other problems related to general use of the Internet. However, the typical attitude was that anyone using computers must be aware of and deal with these issues.

- Information on web sites is often poorly presented. It might take too long to find what they seek, assuming they were using the correct web site.
• **Price/cost.** If someone does not have a computer at home, he or she would have to pay for access (e.g. at a public library or Internet café). A number of focus group participants were concerned about the “high” cost of high-speed Internet access. They were also concerned that they were being limited to the use of these selected channels.

• **Use of the web can be a time waster.** A person could easily spend too much time trying to find something on the Internet. This barrier fits within some of the other barriers, especially when there is a high level of comfort with how they currently search and find information, usually by telephone.

### 5.3 BARRIERS TO GOVERNMENT ON THE INTERNET

In contrast to the previous section, this one focuses on barriers that respondents specifically associated with the use of government on the Internet. An issue that both the questionnaires and focus groups disclosed is that the public is uncertain about what comprises e-government (section 4.2).

The focus group interviews related to security and trust also generated a list of barriers associated with the use of government web sites. Other focus group participants added to the list. Thus, the resulting barriers included:

• **Comfort with existing methods of information gathering.** Even if their methods are haphazard, they are comfortable with what they are doing. In other words, what worked for them in the past will guide future search behaviour. Except for members of the Wellington business community, the participants tended to be unfamiliar with the government portal and are comfortable with their use of the phone book and the phone.

• **Cost.** Internet use, including in libraries, costs money. Cost issues also extend to the purchase of computer hardware and software, as well as one’s time.

• **Currency of content.** The participants seek current, up-to-date information and, when they use government web sites, they want those sites to provide the date of last revision of content—that date should be no longer than the past week. For them, *currency is a key trust issue.* They noted instances where the date on a web site was not current.

• **A faster means of access.** If someone has a computer at home or work but does not have it turned on all day, it takes too much time to turn it on just to access a government (or non-government) web site. It is much faster to make a phone call. If a phone number and contact person were unknown, the person needing the information might use the web to locate such information. Most likely, he or she would then make a phone call. The first choice would be to check the phone book but if that consultation failed, the web became an alternative source for providing similar information.

• **Government web sites are “text heavy.”** A common perception is that it is very time-consuming to navigate an overwhelming amount of information on a web site to find what they are seeking.
• **Information overload.** As one participant explained, “People are over informed now. So much information is coming in, and the computer only adds to information availability.”

• **Lack of computer skills.** Some were still learning to use computers and suspected that their skills would improve over time. Others had limited search skills. It cannot be determined that if they do indeed improve their search skills, they will automatically use, or increase their use of, government web sites.

• **Limited broadband impacts use.** This is definitely true for numerous rural residents and for groups such as Pacific peoples.

• **Perception that government web sites provide information—nothing more.** A number of participants were unaware that government web sites provide services and might have a role in promoting democratic processes. (The most likely service used by participants other than those from the Wellington business community was to book a reservation at a campground.)

• **No perceived need and lack of prior experience.** Many participants had approached government online but those who had not felt they were unlikely to do, especially if they lacked a perceived need, had not used government on the Internet before, and could find the needed information in other ways. Those who had not used government on the Internet could not think of an instance in which they might do so.

• **Preference for oral communication.** This barrier intersects with the next one. The participants liked person-to-person contact; they considered Internet use as impersonal, and preferred to know the person with whom they were dealing.

• **Presentation of web site content.** Not all of the material may fit on the screen—the person needs to scroll vertically or horizontally (this may present a problem for people with older computers). Furthermore, a screen might contain too much information. Poor presentation interferes with information access.

• **Presentation of the web site itself.** Lack of easy navigation, and differentiation of headings using colour and various fonts was criticised. People easily got lost on web sites, and felt they compared poorly in design and architecture with commercial sites. Furthermore, as was noted, web sites may not comply with disability guidelines and standards. There is a need for alternative text to be used with graphics.

• **Reliance on the phone.** Except for the Wellington business community, those interviewed rely on this method for the following reasons:

  • *Fast and timely (saves time).* However, it can be frustrating to encounter a menu choice (e.g. press 1 for __, 2 for __, etc.), then be placed in a long queue to get the desired information or to speak to a person, and sometimes have to go through it all again.
• **More personal** (“easier to talk with someone; …the phone is instant gratification”). “If you get the name of the person and call again, a **trust relationship** might emerge.” E-mail, on the other hand, is more impersonal and others might read your message—not a secure communication. With e-mail, you can save and track messages. If there is no response, you can follow up. However, the process of getting an answer becomes longer and “you might forget the question you [originally] asked” (back to fast and timely). Furthermore, e-mail may require a number of exchanges to get the desired information.

• **Able to judge the person at other end** (e.g. does that person take you seriously?) and clarify unclear answers. If the public servant to whom you speak makes a mistake, it is taken as an honest mistake—no intention of deliberately providing misleading information.

• **Extremely comfortable (and satisfied) with phone use.** Receipt of the right information via phone is a **trust** issue. This is especially true if the information sought relates to you or your family.

• **Come from a generation that communicates by phone.** As one person noted, “I am a telephone person.”

• **Web sites might not use plain language.** Many respondents considered that government web sites contain a lot of jargon and do not communicate directly to them. They thought that government web sites frequently used confusing language.

A number of the above-mentioned barriers overlap or intersect; they are not all discrete or independent or each other.

### 5.3.1 Disability issues

Those with disabilities suggested additional barriers, in particular:

• **Inadequate compliance with the disability guidelines,** especially the use of alternative text. A site might contain a lot of graphics, which would be difficult for sight-impaired people to navigate. Graphics and use of colour contrast on the site might also present problems for people who are colour-blind; careful attention to colour contrasts and shading is necessary.

• **There might be too many colours around words.** People may not be able to see all of the colours on a page. It may be hard for them to discriminate among colours. (This is a separate issue from colour blindness.)

• **Some web sites seemed to focus on appearance and not functionality**—need to focus on communication.

• **There might be insufficient explanation on the site** (in simple language) about how to navigate it and find the information sought.
• **Information organisation.** It may be difficult to follow all of the information presented on a web page and to sort out the relevant from the not so relevant (that part that meets their information need).

• **Creation of a mirror site.** The temptation might be to establish a mirror site for people with disabilities to use. Some of those interviewed rejected such a consideration.

People with disabilities find the Internet time-consuming to search, and, depending on their disability, it may be difficult for them to sit or concentrate for long periods of time. They find it hard to navigate some sites. They believed that “sites are competitive—each trying to look better than the others.” Web sites might assume a sophisticated look whereas those with disabilities may need something simpler. They also noted that downloading material from the web could pose problems. People with a visual disability may be unable to access and use PDF files. Furthermore, downloading and printing is time-consuming, and it may tie up the one telephone line in the home for a long time. Also, some files may be too large to e-mail from their computer.

One person with a disability wanted those constructing and maintaining web sites to remember that the use of those sites might be equated to “climbing Mt. Everest; the more difficult it is the more likely I’d try later” or find a different way to gather the information. “Disability,” she explained, “means time limitations—someone with a disability may not have the same length of time in a day as someone without a disability.”

For a number of the problems identified, the disability group participants suggested some general solutions, namely

• Clear directions to show how to navigate the site;

• Use of plain language (avoid jargon and long words);

• Information presented in a straight-forward manner;

• Avoid the placement of colour on colour;

• Focus on information provision (provide shortcuts);

• Avoid the use of a small font size; and

• Do not mix font sizes, do not use italics, and do not use small print with text underlined.

### 5.3.2 Taxonomy of barriers

Based on the oral and written comments on the participants, we developed a taxonomy of barriers. The taxonomy represented the four main categories noted in the Introduction and a fifth issue related to information architecture. That taxonomy included the following barriers:
1. Physical

Limited domestic access—competition for computer, phone line, computer not always on, low bandwidth, etc.
Limited access in rural communities—low bandwidth, interference, etc.
Public kiosks not always suitable for task of contacting government
Charges at public libraries
Cost of computer and software
Telecommunications costs

2. Skill-based

Unable to determine which department needed
Lack of knowledge of how government functions
Lack of search skills
Lack of navigation skills
Not familiar with jargon of government agencies
Unfamiliar with portal

3. Attitudinal

Preference for oral contact
Preference for personal contact
Reluctance to spend time/waste time
No perceived need for contact
Comfort with existing methods of contact, especially phone
Concerns over security of information exchange
Concerns over confidentiality of personal information
Concerns over confidentiality of e-mail address

4. Content-based

Concerns over currency of content
Lack of links between government agencies to assist users to find information from an alternative department or agency
Not all information needed found
Information generalised, not personal to user
Sites have poor online assistance

5. Information architecture

Poor navigation aids
Text on sites dense and hard to read
Language used difficult to follow
Problems with site design (e.g. use of colour and labels)
Overall arrangement of site dependent on agency perspective, not user-focused
Problems with font size and type
The participants in the various focus groups believe that government could greatly improve its web sites. The one web site that they tended to praise was that of the Department of Conservation, because it is well laid out and easy to navigate. Some recommendations of the participants for web site improvements include segmenting the information presented by different audiences (e.g. the general public, but perhaps further refining that category). Online forms should be easy to download and complete. People want to be able to submit them electronically. A related problem is that people may not be used to the online completion of forms and find it irritating that they might have missed a box and cannot proceed without completing it, or that they cannot go back and correct something without losing all their earlier effort. The print may be so small that missing an item is easy to do.

It is important for government to remember, as one of the Pacific peoples pointed out, “Government [web sites] should … [adopt] the perspective of what people want and not the perspective of government wanting to just get information out.” As well, the above-mentioned suggestions of the disability group should also guide web site design and presentation.

6. TRUST IN GOVERNMENT

Trust in government is a complex issue that includes cultural, political, socioeconomic, and other factors. Trust includes the public’s perspective on how well government is performing and the issues of the day that dominate public discussion. Because this study did not focus exclusively on trust, all of these issues were not raised in each focus group meeting. Thus, the following provides a general overview, one that highlights confidence in government, the intrusion of government in peoples’ lives, privacy, and security. The examination of these factors, however, does not directly look at or compare the public’s trust in government in general, but looks at trust in government as represented by the Internet.

A further complication is that there is a global dimension to the trust issue. Some governments, as a few focus group participants mentioned, have more of a trust problem with their public. That problem relates to government in general and to the perceived use of government web sites to promote a political party’s political, economic, military, and social agenda. Overt conformity by a government agency, and on its web site to a government’s political agenda, may result in a loss of confidence. One participant, who was born in the United Kingdom and lived there until recently, commented that the public there was “losing confidence in the government and therefore placing less trust in government web sites.” He noted that he had heard the same was occurring in the United States. The other participants in that focus group did not share his distrust of government web sites in New Zealand. However, they pointed out that if a significant problem of trust in government arose, their level of trust in New Zealand government web sites could change.

An advantage that New Zealand has over many other countries is its size. Members of the public tend to feel a closeness to, or connection with, government. They can interact directly with government officials, and they might see these people, for instance, in their city or suburb, on airplanes and in airports.
6.1 THE INTERNET

Focus group participants distinguished between trust in the Internet in general and in government on the Internet. They maintained that the general problems commonly associated with Internet use (e.g. identity theft, pornography, spam, and viruses) do not apply to government web sites. For instance, they viewed spam and viruses as general problems that every computer user faces. They did not consider these as issues related exclusively to use of government web sites. As one participant stated, “Why would government send me spam?,” and another queried, “Why would government send me unwanted e-mail?” They could not imagine government selling e-mail addresses to the private sector.

6.2 CONFIDENCE IN GOVERNMENT

Focus group interviewees interpreted confidence as relating to the quality of the information provided, the currentness of information, and the recency of the publication date on a web page. Some members of the Auckland business community distinguished among types of government information; they saw some (e.g. press releases and statements by Ministers) as likely to be self-serving and less trustworthy than other types of government information. The working professionals agreed; government information on the Internet might reflect the “official line.” They were the only group to question the version of the information they examined—“Is it in draft or final form?” Furthermore, “which version has been archived, and can the public tell the difference?” “Where is the authoritative version if the pdf version is not a faithful rendition of the actual document?” One working professional added, “If I see typos and other errors in proofreading, I assume the document is half-finished and not the final report.”

Most respondents were willing to supply information via the Internet to the extent that they would do so by post, telephone, or face-to-face. Those who took the view “I have nothing to hide” also applied this to Internet-based exchanges. Those who were more sensitive about personal information applied this to their use of the Internet.

Related to this was the widespread belief that government will not misuse the information provided—whether that information relates to their work or personal lives. Confidence would be eroded if they found out that the government cross-matched data or extensively engaged in data mining—sharing data among departments and agencies and culling information from assorted databases to learn more about the public. The Maori group, however, were sensitive to information about their iwi not being broadly shared.

Another aspect of confidence is that government provides some incentives for providing information through the Internet while properly protecting the security of the information provided. The information supplied might be business information, and the incentive is a cost reduction for supplying the information online as opposed to offline. Such incentives (such as that applied by the Companies Office to the ability to register a company online) were broadly approved. Some commented that such incentives could be applied across other departments and agencies.
It merits mention that the members of the public interviewed do not always trust the information supplied by phone. Because the person on the phone might make a mistake, they might ask for the name of the person to whom they speak. One participant added, “If the question is simple and there is not much at stake (cost, time, etc.), then I’d use the web site.”

6.3 INTRUSION OF GOVERNMENT IN DAILY LIVES

Intrusion has different aspects. One aspect occurred in the interview with members of the business community (Auckland) and the working professionals. That aspect related to the belief that government was becoming Orwellian in its adoption of “Big Brother.” The number of people who mentioned this term, however, was small.

6.4 PRIVACY

The members of the public interviewed believed that personal information “is out there. What can I do about it?” An area of limited concern relates to the handling of personal information that the public might be asked to provide online. One person asked, “How secure is personal information in filing cabinets of a department?” Obviously, information can never be entirely secure. However, if a government web site claimed that the information provided was secure, focus group participants would believe it. Still, they would like government web sites to indicate (1) that they protect information provided and (2) how they protect it. Nobody interviewed mentioned either the Privacy Act or the Office of the Privacy Commissioner when they discussed government’s handling of personal information that they supplied to government. (However, we did not insert a prompt in the discussion to refer to either the Commissioner or the Act.)

6.5 SECURITY

Those interviewed assumed that government blocks viruses and that computer hacking of government sites has not yet presented a problem in New Zealand. However, if someone were to create a mirror site that involved a scam and that sought credit card information, their response to trust in government sites might change. There is a definite belief that any site address containing “.govt” is official and therefore is trustworthy. Furthermore, if a government web site promises secure transactions, the public is likely to believe it.

An area of limited concern, but a concern that might grow in the future, related to the security of e-mail messages. A number of focus group participants wondered, “How well would government protect e-mail messages they might send?” They realised that recipients can “forward” messages, perhaps to large groups. Forwarding capability relates to the content of a message but also the protection of one’s e-mail address. They definitely wanted their e-mail address protected and not shared without their permission. If government web sites use cookies, both the type and its use must be carefully explained on the opening screen of the homepage. Cookie use could lead to a level of distrust in government web sites.

The members of the Auckland business community thought that the quality of security varied from department to department. For them consistency and
standardisation promoted a sense of security in their dealings with government on the Internet. An element of security for the Wellington business community is that government could preserve e-mail correspondence. Even if departmental personnel deleted e-mail, it still resides on the hard drive and could be accessed. Still, the question for them is, “How significant is the risk if staff passed a computer to someone else in (or outside) the department?

6.6 MAJOR AREAS OF DISTRUST

Although many groups placed trust in New Zealand government on the Internet, five groups were less trustful. These were the working professionals, students, some of the people with disabilities, Pacific peoples, and the Maori interviewed. Maori were very vocal about their distrust. They distinguished between government as “politicking” and as “governing.” The two may overlap and government bureaucrats may not be responsive to the needs of the people, they explained. “Government,” as one stated, “does not communicate well with us.” She continued, “We are used to being watched!” Their distrust is related more to government itself than to the information provided. Nonetheless, before using government information, they wanted to know who wrote the document, when it was written, and, in the case of web sites, when pages were last updated. Furthermore, if their search of a government web site did not turn up current information, they assumed the fault rests with the department. They also commented that there could be great variation in content among types of government information. Press releases, for example, might not be accurate; they might be self-serving. If government asks for advice only from Internet users, such requests do not instil much confidence in government. There is no evidence that the advice given feeds into policy development and refinement. Finally, they discussed trust as relationship building and maintenance. Without such a relationship, they believed trust was impossible. The discussion ended with one person saying, “He who has the gold makes the rules.”

The students, the working professionals, the Maori, and Pacific peoples referred to government as “Big Brother” engaged in surveillance of them and their Internet use. Students and some people in other focus groups distrusted the service that WINZ provided them. As one of them explained,

If I complete any WINZ form I want to get a receipt saying that I’ve handed something in to them. If I don’t get a receipt and they say that they’ve never got it—then I have to go back to the start. So you physically go down there? Well if it’s just the form—I give it to them and say look would you mind just signing so I’ve got something to stand on if they say they’ve lost it. Since they lose so much I don’t trust them.

Finally, despite the view of some with disabilities that government on the Internet promoted trust, there were others who disagreed. The major points regarding distrust for this group were:

- “The Ministry of Health does not provide up-to-date information about drugs. It passes along drug company information. [That] information is not independent. [It reflects] what drug companies say.”
Government serves some of the population on the Internet but not everyone. This perceived selectivity raised a concern about trust in government itself.

They felt that if government sites claimed they were “secure,” they would not believe it. They do not provide personal information online and seemed unlikely to ever do so.

Trust involves easy to find and up-to-date information. Government should not mislead or misinform. This is a reference to the previously mentioned drug information on the Ministry of Health web site.

They thought that government departments shared personal information, such as health information.

The group thought that some of the questions that government asks on numerous forms reflected a stereotypic image of people with disabilities. They might ask for a declaration of the specific disability. To them, this is “personal information.” Insensitivity of people is an aspect of trust to them; “If I don’t reveal my disability, they won’t do what I want.” This perceived insensitivity has trust implications.

The public interviewed saw the Internet currently as means of one-way dialogue: government to the people rather than the people to government. Trust issues focus on the accuracy and objectivity of the information supplied, and on the availability of policy documents for their examination and use. Once e-government evolves and emphasises two-way dialogue trust issues might become more significant, depending on how government responds to two-way communication. Those interviewed did not associate government on the Internet with e-commerce; they could not imagine government ever trying to sell them anything. They also did not think that departments and agencies such as the Department of Inland Revenue and Statistics New Zealand would ask for personal information online. Such bodies, they thought, were more likely to request such information through other channels.

Once the public identifies e-government with the provision of services and people make more use of those services, service performance will become another factor influencing trust. For small businesses, once they could engage in e-compliance on a larger scale, their use will also have trust implications.

Trust can relate to one’s patterns of past experience with a department. Repeated use of government web sites, with each experience being positive, promotes trust. Trust is reinforced when government personnel are responsive to public enquiries. Those with disabilities complimented the New Zealand Office for Disability Issues because their dealings with it have all been satisfactory.
7. OBSERVATION OF SEARCH BEHAVIOUR

7.1 WALK THROUGHS

Six participants in the series of observed walk throughs searched for information on a set of pre-selected topics on government web sites, and indicated how they would go about answering the question. The tasks involved finding information on:

1. The justification and risks of spraying areas in Auckland for the painted apple moth (this information was available on the MAF site);

2. Information and necessary forms that must be completed by landlords and tenants as part of setting up a rental agreement (this information was available on the Tenancy Services web site, which is linked from the Ministry of Housing);

3. Information for the participant’s [fictional] recently widowed mother about how much she will receive on the single pension, with a living alone allowance, and how much additional income she can have without penalty (this information is on the Work and Income web site, under the heading Get financial assistance/Main benefits/ New Zealand Superannuation);

4. Information about facilities, and whether you can make a booking for the DOC camp site at Elaine Bay, in Pelorus Sounds (information is available on the DOC web site, but the camp site is not bookable);

5. Information behind a recent news announcement that Maori life expectancy had increased slightly, and recent figures on Maori health status (a number of sources are need to compile this information).

None of the six participants, who ranged from a young male computer expert to a retired female civil servant, were able to complete all of the tasks fully and completely although some got much further than others. Some only managed to tackle three tasks in the allotted time for the walk-through sessions (1 hour). Participants used a range of search strategies, but the approach of each individual to each of the set of tasks was relatively consistent.

Most participants in the walk-throughs started their search in one of two ways: if they knew or could guess the URL of the web site they would enter that directly into the address box. Once they reached the web site of the agency they would then search either by navigating through the site, using headings, menus or textual links. Although some later used a search box on a government web site, this was later in the search. Alternatively, they would employ a search engine (either Google, or MSN (because MSN search was the more obvious option on the PC being used, although some participants were less familiar with it). Once they had opened a search engine, participants did one of two things: they would either enter the department name, or what they thought was part of its URL, or the topic they wished to search for (a small number of searches combined the two—name and topic). In total ten of the searches started with MSN, six using the department name and four focused on topic; five started with Google (two using the department name, and three the topic), and eleven
started with the URL (ten of which then proceeded to navigation through headings and links, and one employed a search engine). Table 8 shows how effective participants were in their search strategies.

**Table 8. Number of Clicks Taken to Reach Target Information in Walk-through Observations (Compared with the Number Needed)**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Task 1 (No of clicks needed = 6)</th>
<th>Task 2 (No of clicks needed = 4)</th>
<th>Task 3 (No of clicks needed = 5)</th>
<th>Task 4 (No of clicks needed = 4)</th>
<th>Task 5 (No of clicks needed = 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>15+ FC</td>
<td>10 FC</td>
<td>10 FC</td>
<td>15+ C/P</td>
<td>NA</td>
</tr>
<tr>
<td>Two</td>
<td>NA</td>
<td>9 FC</td>
<td>15+ NC</td>
<td>12 C/P</td>
<td>NA</td>
</tr>
<tr>
<td>Three</td>
<td>6 C</td>
<td>4 FC</td>
<td>12 NC/P</td>
<td>12 C/P</td>
<td>3 E</td>
</tr>
<tr>
<td>Four</td>
<td>4 C</td>
<td>4 FC</td>
<td>4 NC/P</td>
<td>6 C</td>
<td>7 NC</td>
</tr>
<tr>
<td>Five</td>
<td>10 NC</td>
<td>6 C/P</td>
<td>6 NC/P</td>
<td>9 C/P</td>
<td>NA</td>
</tr>
<tr>
<td>Six</td>
<td>8 FC</td>
<td>6 FC/P</td>
<td>13 NC/P</td>
<td>NA</td>
<td>11</td>
</tr>
</tbody>
</table>

Task (Number of clicks needed to fully complete the assignment, depending on which final version of information is considered to answer the question)

NA = Task not attempted
NC = Task not completed
C = Task essentially completed, although participant has not identified information exactly
FC = Task fully completed—participant can identify relevant information
E = Task ended for another reasons
P = Participant would phone at this point

On many occasions participants had reached the right part of a web site to retrieve the information they were searching for, but did not fully recognise this. On 10 out of 26 occasions participants indicated they would phone the department in question, whether or not they had retrieved the required information. Their reasons for this were largely uncertainty that they could now act on the information retrieved, and a reluctance to trust an online booking. Two out of the six participants had heard of the government portal, but they would not use it for this kind of search. Some would arrive at it as part of their search, but showed no recognition of what it was.

The list of verbal instructions given to walk-through participants is included as Appendix D, and a full account of the tasks, the ideal solution, and how each participant coped with the tasks they tackled, is included as Appendix F.
7.2 PROBLEMS PARTICIPANTS ENCOUNTERED

The sorts of problems participants encountered as they attempted to complete the tasks were that they were:

- Not sure which agency web site would contain the information, and, if they knew which one it might be, what its URL was;

- Not sure which agencies were parts of which department, or the structure of a department, and “who does what”;

- Not sure whether a particular heading would take them where they wanted to go on the site, or how information on the site was categorised;

- Lacking skill in being able to interpret the results of a search by Google or MSN, or to read the keywords, or URLs given in annotations on search results;

- Lacking some basic knowledge of web navigation, and protocols (e.g. links changing colour once activated);

- Unskilled in using search engines (e.g. in choice of search terms, or restriction to New Zealand sources);

- Failing to read all the information on the page that would answer a question, especially if it was a lengthy pdf file (as in the DOC campsite information brochure);

- Not employing the same language as agencies (e.g. many people continued to search for the commonly used term pension, although the information they sought required them to recognise that it was found under the heading New Zealand superannuation);

- Complaining about the size of fonts (especially on the portal if they ended up there);

- Not always seeing links or important headings that required scrolling vertically or horizontally;

- Stymied by a lack of live links to critical information within web sites, and especially from parts of the portal (an exception was the Tenancy site, where forms are well linked and labelled);

- Wanting more links to have explanatory notes of what they linked to, and terms and headings to be more clearly defined;
• Failing to link to critical information on other government web sites (e.g. the failure of the Ministry of Health site to suggest users also check the Statistics NZ site for life tables).

Searching was often a question of hit and miss, going backwards and forwards, sometimes over the same territory, often with a rising sense of frustration, and resulting in “at this point I would call the department.” The problems listed above can be attributed to two main causes. The first is lack of user skills. Agencies need to take this into account and provide more support for unskilled users of their web sites. The second cause is poor design, and lack of user-friendly web site organisation and navigation, and the fact that the language is not focused on the needs of those approaching the site. In some cases brochures put on the web as pdf files do not permit links out to useful information, and internal web site search engines do not search contents of pdf files very well. Many online brochures in pdf format need to be redesigned for web use, and the habits of web users, in order to relinquish their information more easily—an example is the difficulty for web users in putting two separate pieces of information together (as in the case of the Department of Conservation booklet on South Island conservation camp sites, which explained in one place that standard camp sites are not bookable, and then several pages further on, that the Elaine Bay site is a standard camp site. What users quickly see in print, they do not see on a computer screen.) By contrast, users were able to get tenancy information in pdf format or printable files, and link from information pages to forms. This was the task most successfully completed by participants.

8. SUMMARY

The questions posed in the introduction to this report underpin the entire project. Given the extent of their coverage in the body of the report, they need only summarising here.

*How do New Zealanders interact with government in their daily lives, either as individuals and citizens, or in relation to their roles in the workplace?*

A wide range of New Zealanders, from different socioeconomic backgrounds, and from many different sectors in society were interviewed for the study. The amount of contact they had with government was very dependent on their personal circumstances, and their role in society. For most people not dependant on benefits, their contact is limited to routine tasks motivated by compliance with government regulations—filing tax returns, licensing of motor vehicles, animals, drivers, or firearms etc., or prompted by temporary issues in their daily lives (e.g. travel plans, children’s school projects, or current events). If they have a personal interest in social issues (such as education or conservation) they are more likely to seek information about these issues online, looking for information and policy documents. People with a deeper concern about such issues, who see themselves as ‘advocates’ for a particular cause are even more active in seeking this kind of information. Such groups include the disabilities groups, and the Maori and Pacific people we interviewed. Students, superannuitants, sickness and other beneficiaries have an additional need to contact WINZ, but their other contact with government agencies is little different from the dominant patterns. Two other main groups have higher use than average of government web sites. These are business groups (especially the Wellington business
group), and students, whose studies may give rise to the need to find government information.

What government information and services have they used, either online or through more traditional channels, and how do they view those experiences?

Section 2 of the report highlights the government agencies contacted by participants in the study, and the agencies most used. (Appendix E lists specific issues.) All those interviewed, whether they are experienced computer users, and high users of government information, or have little contact with government, used a variety of channels for that contact, relying on the telephone as well as face-to-face contact to supplement any use of web sites. All channels interact—phone use might lead to following instructions to locate information on the web, or web site use might lead to a phone contact, or a need for personal contact to follow up. Their information seeking is based on their preferences and experiences. Use of government sites has not altered their information seeking or understanding of what is available through these sites.

Apart from three groups—the Wellington business community, which was in daily contact with government, and using government web sites to exchange data and tender for contracts; some other individuals who were also contractors tendering on the web; or people isolated in some way by distance—few respondents had much knowledge of services on the web, or much interest in taking up any services available. They are unaware of the full potential of e-government and all that the government provides on web sites. They think of the sites as only providing contact and basic information, which they may need to confirm or supplement through other channels.

How they felt about their experiences of contacting government was dependant on a number of factors—their success in accessing the information sought, the time and difficulty of accessing it, and the extent to which they felt ‘valued’ in the process. The focus on personal contact suggests a view of government as a collection of public servants rather than an impersonal entity or a monolithic portal. While the web per se does not add value to their interaction with government, they are appreciative of the convenience of being able to access information at any time, and from anywhere, and of the amount of information that is now available to them. This favourable view is greatly enhanced in the case of those with special needs, such as rural people, the business community with its daily contact with government, and people with disabilities.

How do they locate the government information and services they use?

Unless they had regular contact with a particular government agency—for work, study, or personal reasons—the majority of respondents have little idea of which agency they might need to contact, or how the department is internally structured. If they have some idea of the likely URL they will try this, but the majority find which department they want, or the information they want, by using a search engine. Google was the most commonly used, although MSN featured more in the observed walk-throughs because of the home page the exercise started from. The telephone directory, (blue or white pages) is also a common way of identifying which agency they might need, or which section of a department.
Has access to the Internet changed the way in which they seek government information and services?

Most respondents did not make high use of government web sites, and felt their use was not increasing at present, largely because they had no increasing need to contact government. Only in the high use groups was there a dramatic change in the way they made contact, and interacted with government, as a result of the advent of the Internet. However, there were some cases in which agencies use incentives (Companies Office) or persuasion (WINZ) to get people to make more use of their web sites, and there was some interest among respondents in greater use of financial incentives for this purpose.

What barriers, if any, does the public encounter in seeking government information and services both online and through traditional channels?

Barriers to the use of government information online are defined in detail in section 5 of the report. They were defined there in five categories: physical (i.e. technical and infrastructure), skills-based, attitudinal, content-based and web page design and architecture. In addition, lack of knowledge that the information is there, and where to seek it, inhibits use.

How might barriers be overcome?

There are several measures that respondents suggested, or that emerged in other ways from the study to overcome these barriers. These are best addressed under the five categories:

- Physical infrastructure: participants believed that the government could do much more to promote access to the Internet for geographically isolated or socially or economically deprived communities, helping fund groups or individuals to get computers, eliminating charges in libraries for Internet access when people were only accessing government sites, doing more to develop broadband access in rural areas, and finding some way for access to government sites to be on some form of free access code, as with 0800 telephone numbers.

- Skills-based: respondents suggested that as well as web sites being better designed for ease of use, with user needs to the fore, they could also contain more online assistance, and guidance on the web sites themselves. They would welcome more publicity on government on the web, more information about the portal, and more generally available assistance on search skills, and the best way to access government on the web. Attention could also be paid to the role the phone book plays in helping people identify which government department does what, what part of the department they need to contact, and what e-mail and web addresses of various sections are.

- Attitudinal: this was not an area where one might expect much change. Given the preference of many for a mixture of channels through which to communicate with government, the best strategy might be to accept the Internet as one among many channels, and take care not to place too heavy a reliance on online information at the expense of telephone-based information services, or print-based alternatives. Measures to reassure people that information provided (or even the fact of their accessing a web site) was treated as confidential would be welcomed, and
awareness among agencies that they should use techniques such as blind carbon copy to send out messages to groups could be fostered.

- Content-based: protocols that required all information on a web site to be dated would assure users of the currency of content. The desire for links between agencies (if necessary to sites outside government), would be helpful and lead to less of an impression that departments are “buried in their silos” as one participant commented, and not part of “the whole of government”. Polling users to establish what information they seek (especially capturing the views of those who leave without finding what they want) would help agencies focus their web site development on user needs.

- Information architecture: users overwhelmingly wanted cleaner, clearer sites with better navigation aids, and simple language, and fewer large chunks of text. They seek better use of colour to help distinguish major navigation points, and headings, and larger font sizes. They would prefer text to be in html, scannable, and searchable rather than in pdf format. They want forms that are easier to fill in online and to be able to submit them online. Overall they wanted a user perspective built into the site, and not arranged and using language based on the departmental priorities. Better compliance with the W3C and New Zealand Government Web Guidelines, with more understanding of the difficulties that people with disabilities face, would remove some additional barriers for the disabled community. Sites which attract approval from users (e.g. the DOC site, or MAF) could be used as examples of good web site design. A method to identify problems with architecture and navigation would be transactional log analysis of user behaviour while searching a site.

Do they consider the government portal (http://www.govt.nz) as a way to overcome obstacles to the receipt of government information and services?
The majority of users simply do not know of or make use of the portal, and those that have tried it do not return to it, or build it into their search strategy. Those that accidentally alight on it are unaware where they are, and do not find it easy to get from the portal to the site they want, because of the lack of live links, and the tendency of the portal to try to provide information directly, and duplicate information on agency web sites. When the idea is explained to people they approve of the concept, but the portal clearly does not meet needs in the way that was intended. Consequently, the portal therefore needs to be re-examined, and probably redesigned.

How much trust and confidence does the public place in the information and services that the government provides on the Internet?
The public do not seem to have any lower perception of trust and confidence in government information and services than they do of either government information and services generally, or the Internet itself. Although responses on this issue were generally positive, those that have suspicions of how government manages their personal information transfer that suspicion to Internet based services. Only in certain groups, with particular grounds for suspecting lack of attention to their cultural needs (e.g. Maori and Pacific peoples), were additional concerns raised.

What factors affect their levels of trust and confidence?
Trust and confidence were dependant on general levels of trust in the ‘bureaucracy’ independent of a person’s judgement of the government in power. Most people put mistakes in information supplied down to human error and incompetence, rather than anything more sinister. Assurances over the currentness of information, and a willingness to indicate who could be contacted raised levels of trust and confidence about information sought. Being treated courteously, and having their individuality respected was an important factor in building confidence in people’s relations with government agencies (this is shown clearly in negative statements made about WINZ services both on and offline).

Do they distinguish between trust in the Internet as a secure means of accessing information and services in general and trust in government web sites for the information and services provided?
These issues are largely answered in the summaries above, and in the text of the report, section 6. Positive perceptions of government in terms of integrity of transactions affected responses on this issue. People do not believe the government agencies would send spam, or willingly allow private information to be onsold to a third party. However, they were more inclined to believe that through naivety or incompetence there might be breaches of privacy or security at times. This was not a major concern. Some concern was expressed about the need to know the authority behind information on the web, and whether print formats took precedence over web material. A related issue concerned the need to find outdated material that might be evidence supporting a past decision. The lack of any established process for archiving material removed from government web pages, or any accessible public archive was a concern to many.

Do demographic characteristics (e.g. personal, educational, cultural, and geographic) influence responses to the previous questions?
To the extent that people in different occupations, and in different socioeconomic groups, or with different levels of dependency through disability, sickness or lack of employment opportunities have different needs of government, this is reflected in the use shown. From those with minimal contact, to the business group with daily contact with government, there are clear differences in frequency of use, need for specific content and services, and expertise and confidence in accessing and using government on the web. The major motivators emerging from this study are therefore the role(s) that a person is currently playing: as taxpayer, parent, business person, advocate, activist, Maori, contractor or consultant to government etc. rather than the more obvious demographic differences. (See Figure 4.) The second major motivator is personal preference for certain styles of communication, and lifestyle choices.
Figure 4 also shows that the public identifies government on the Internet largely with information provision. However, some realised a service role and only the business community advocated e-compliance. Finally, the public is unfamiliar with the term “e-government” and look to government on the Internet largely for policy documents and other information.

It is evident from Figures 3 and 4 that generating greater and more effective use of government on the Internet, including the government portal, will be more difficult than merely promoting their presence. The public needs to relate information-gathering from these sites to specific information needs, and to determine that the information found is preferable to what they can obtain elsewhere. Furthermore, it will need to be evident to them, that they can gather information with ease, understand and apply it. They also need to understand the concept of e-government, realise that it does not displace other means of access, but offers more information, and that it can provide useful services, such as helping small business owners with e-compliance.

9. RECOMMENDATIONS

From the information provided by respondents across all focus group interviews, summarised above, a number of recommendations to help remove barriers and encourage greater use by citizens of government web sites for information and services, emerge. The recommendations should be viewed within the context of past accomplishments and opportunities for future improvements. A worthy challenge is to level the playing field as much as possible, creating the opportunity for e-government to become more vital to the public in coming years.
• Standardise web sites, and create ‘seamless searching’ across government, with links, if necessary, between sites, if relevant information is held on another site. Web sites should be attractive, well laid out, and quick and easy to navigate, and provide easy-to-read content. In essence, a web site that meets such criteria encourages use, and draws people to the site.

• Provide more information on content, and annotate headings and links so that the public can quickly determine relevance to their information need.

• Ensure that all government web sites include contact information (names, phone numbers, and e-mail addresses) of relevant personnel.

• Ensure that web pages provide the date of revision and that the date is current.

• Promote a policy of multi-channel communication between citizens and government, recognising that e-government only comprises one channel, and that there are other channels that are as important (or more important). Channels permitting human interaction remain very important.

• Monitor compliance with the New Zealand Government Web Guidelines\(^9\) more pro-actively, to ensure that those with limited bandwidth for Internet access, or special needs (such as the needs and requirements of people with disabilities) have equitable participation in government on the Internet, allowing all to enter web sites from the ‘front door’. This is not just a matter of ensuring that the criteria listed in the Guidelines are ‘checked off’; it is also a matter of complying with the spirit as well as the letter of the law.

• Ensure that online assistance is available to users of government web sites, and find ways to assist the public in gaining the necessary Internet and search skills to maximise their use of government on the Internet.

• Following the example of some departments and agencies, encourage agencies to invite the public to receive e-mail updates and announcements.

• Set standards for response times to e-mail enquiries and submissions. These should be timely and when someone sends government an e-mail message, that message should be promptly acknowledged and responded to in a timely manner.

• Improve online forms, enabling the public to complete and return them electronically without problems.

• Promote the concept of e-government, explaining its components and how different sectors of the public might use them. Ensure that web addresses are included in both the blue and white pages of the telephone book. Any promotion must show the value of government on the Internet, seeking to alter information-gathering behaviours. That dialogue should take place around the country, with government going to the people (and doing so with the absence of jargon).

Specific audiences might be the targets of promotion, and government web sites might segment information for those different groups to promote ease of use.

- Revisit the purpose of the government portal and improve the portal’s functionality to enhance searching for government on the Internet. Priorities in how information is presented on the portal, and limits to actual information provided (as opposed to live links to departmental web pages) should be investigated. Links on the portal to government web pages should be effectively annotated (perhaps with pop-up explanations) so that the public can better determine each department’s mission, purpose, and relevance to their information need. Given that so many people use the search engine Google to find information, government might explore a relationship with that search engine (and perhaps with others). Consideration should be given to the development of further specialty portals such as one dealing exclusively with science.

- Create ways for the public to tap into government on the Internet without those having computers and Internet connectivity having to pay. Provide acceptable and free access use of some form of Internet 0800 number.

- Develop kiosk access in supervised public places, to support access to government on the Internet for those without computers and Internet connections, and make the 0800 free government access facility accessible from libraries and cyber cafés.

- Provide incentives for online use and e-compliance.

- Acknowledge and reward government web sites that are outstanding for their quality, ease of use, and service.

A focus on service quality

The literature on the effectiveness and efficiency of government web sites tends to focus on ‘performance metrics’ that are output based (focus on productivity, including the number served) and outcomes based (typically here the focus is on results). A type of outcome considers customer satisfaction. The marketing literature is focused extensively on service quality, which often examines the match between customer expectations and the service actually provided. Attention to service quality should be a central concern when government evaluates the effectiveness of its services, including the dissemination of information and services through the Internet.

A key tenet of service quality is the need to understand and respond to the different markets, or audiences, for a product or service. In the case of e-government, as well as the expressed preferences of the majority of respondents, the role(s) they play in society is the primary determinant of their use of government on the Internet. High quality e-government information and services will increasingly depend on an understanding of these roles.
REFERENCES


The purpose of this questionnaire is to provide us with some background information for understanding the views and perspectives you express in the focus group interview.

COMPUTER/INTERNET USE

1. Please indicate your experience with computers:
   - No experience
   - Some experience (e.g. e-mail, basic word processing, and office computer applications)
   - Experienced (e.g. competent with a number of computer applications)

2. Please indicate your experience with the Internet (the Internet includes e-mail and web sites):
   - No experience (If you ticked this box, please skip to question 6)
   - Some experience (e.g. e-mail, online purchasing, games, and/or some searching for information)
   - Experienced (e.g. dedicated surfer)

3. If you indicated either “some experience” or “experienced,” do you use the Internet from? (tick all that apply)
   - Home
   - Work
   - School or place of study
   - Internet café
   - Library
   - Elsewhere (please specify)

4. What kinds of things encourage you to use the Internet?

5. What kinds of things, if any, discourage you from using the Internet?
USE OF GOVERNMENT INFORMATION/SERVICES

6. On which of the following matters have you contacted national or local government departments in the past year? (please tick the "matter")

- 1. Births, Deaths and Marriages
- 2. Benefits
- 3. Broadcasting
- 4. Business related issues (e.g. grants or compliance
- 5. Consumer affairs
- 6. Customs
- 7. Driver licenses
- 8. Education
- 9. Elections
- 10. Employment
- 11. Environment
- 12. Farming
- 13. Fisheries
- 14. Funding agencies (e.g. social security)
- 15. Health
- 16. Housing/Tenancy
- 17. Immigration/Passport/Citizenship
- 18. Legislation (Laws and Regulations)
- 19. Maps and land information
- 20. Occupational Safety and Health
- 21. Personal/family issues (e.g. child safety)
- 22. Police/Justice
- 23. Policy and politics
- 24. Recreation and sport
- 25. Statistics
- 26. Tax and finance
- 27. Tourism
- 28. Transportation
- 29. Treaty issues
- 30. City Council matters
- 31. Regional Council matters
- 32. Other issues (please specify: ____________

Please indicate what you wanted to know in the space below: (Be sure to indicate the number that identifies the matter.)

7. For those matters ticked in question 6, by what method(s) did you contact government departments?

- Phone
- In Person
- Letter
- E-mail
- Web site
- Other (please specify)

USE OF GOVERNMENT INFORMATION/SERVICES ON THE INTERNET

Government on the Internet links national and local government to information and communication technologies (including the web and e-mail) to enhance the access to and delivery of government information and services, and to enable people to interact directly with government. The goal is to achieve better government.

8. Please indicate your level of experience with using government web sites:

- No experience  (If you ticked this box, skip to question 20)
- Some experience (e.g. e-mail and some use of government web sites)
- Experienced
9a. For any of those matters specified in question 6 for which you consulted the government department’s web site or contacted government by e-mail, why did you do so?

9b. For question 6, if you indicated that you did not use either a web site or e-mail to contact government in the past year, why not?

10. Have you had any negative experiences in any of your dealings with government web sites?

☐ Yes  ☐ No

If you ticked “yes,” please describe that experience:

11. Please indicate whether government falls short of, exactly meets, or exceeds your expectations in protecting any personal information you provide it face to face or over the phone? (Please circle an appropriate number ONLY if you have had some contact with government in the past year.)

<table>
<thead>
<tr>
<th>Falls short of expectations</th>
<th>Exactly meets</th>
<th>Exceeds expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>0</td>
<td>+1</td>
<td>+2</td>
</tr>
<tr>
<td>+3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Please indicate whether government falls short of, exactly meets, or exceeds your expectations in protecting any personal information you provide it on the Internet (web site or e-mail)? (Please circle an appropriate number ONLY if you have had some contact with government in the past year.)

<table>
<thead>
<tr>
<th>Falls short of expectations</th>
<th>Exactly meets</th>
<th>Exceeds expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>0</td>
<td>+1</td>
<td>+2</td>
</tr>
<tr>
<td>+3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Government web sites make it easier to find what you want? (Please circle your response)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

14. How important is it to you that government information/services are available on the Internet? (Please circle your response)

<table>
<thead>
<tr>
<th>Not at all important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

15a. Government on the Internet brings people closer to government by making it easier to find information. (Please circle your response)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
15b. Government on the Internet brings people closer to government by providing better service (service that is convenient to use and reliable). (Please circle your response)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

15c. Government on the Internet brings people closer to government by making it easier for people to communicate their views to government. (Please circle your response)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

16. What do you like MOST about access to government information and services on the Internet?

17. What do you like LEAST about access to government information and services on the Internet?

18. If the government could do ONE thing to improve its Internet services and communication with people, what should it be?

19. What is your main reason for using government information on the Internet? (tick all that apply)

- Personal requirements
- Research/finding information
- School /study related
- Work related
- Other (please specify)

**BACKGROUND INFORMATION**


21. Please specify any disability that prevents you from accessing government information (either in person, on the telephone or via the Internet) ________________________________

22. What is your gender?

- Female
- Male
23. With which ethnic group do you mainly identify?
- NZ European
- Maori
- Pacific Islander Please specify: ______________________________
- Asian Please specify: ______________________________
- Other Please specify: ______________________________

24. To what age group do you belong?
- 15-19
- 20-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- 50-54
- 55-59
- 60-64
- 65-69
- 70-74
- 75-79
- 80+

25. Please indicate the highest level of formal educational qualifications you hold.
- School Certificate
- 6th Form Certificate/UE/ Bursary
- Trade/Vocational Certificate or Diploma
- Business Diploma
- Bachelor’s degree
- Postgraduate degree
- Other qualification

26. What is your main source of income?
- Employment (Please indicate your employment as specifically as possible, e.g. public servant, self-employed, trades person, hotel industry worker)
- Home maker sharing partner’s income

27. Please indicate the current level of household income?
- $0-$9,999
- $10,000-$19,999
- $20,000-$29,999
- $30,000-$39,999
- $40,000-$49,999
- $50,000-$59,999
- $60,000-$69,999
- $70,000-$79,999
- over $80,000

28. What is the main language that you use in your daily life?

Please list any other languages that you use in your daily life.
APPENDIX B. FOCUS GROUP QUESTIONS: SECURITY AND TRUST

These questions were used as a script, constantly asking people why they responded as they did, and asking for examples.

1. How much confidence do you have in using the Internet to contact government?
   a. Trust in government?
   b. Security (confidentiality)?
   c. Providing personal information?
   d. Anything else?

2. Do you think that government on the Internet improves democratic processes by:
   a. Keeping you informed about government activities
   b. Keeping you informed about government policies
   c. Letting you communicate with government officials
   d. Providing services useful to you

   Have you had any experience with any of the four activities?
   What was that experience? Was that experience favourable?

3. In the survey we asked about factors that might encourage your use of the Internet in general. Are there any factors that might apply to the use of government information or services, or the provision of personal information to government?

4. In the survey we asked about factors that might discourage your use of the Internet in general. Are there any factors that might apply to the use of government information or services, or the provision of personal information to government?

5. Do you have any more comments about the extent of confidence you can place in government on the Internet?
APPENDIX C. FOCUS GROUP QUESTIONS: GENERAL COVERAGE

These questions were used as a script, constantly asking people why they responded as they did, and asking for examples.

1. Do you seek government information or services on the Internet?
   a. If yes, how often?
      Has the frequency of your use increased, decreased, or remained about the same since last year?
   b. If no, **SKIP** to non-use (question 7)

USE

2. When seeking government information or services on the Internet,
   a. Are there particular web sites you use most often?
   b. What do you like about those sites?
   c. What do you dislike about those sites?

3. Do you think that government on the Internet improves democratic processes by:
   Keeping you informed about government activities
   Keeping you informed about government policies
   Letting you communicate with government officials
   Providing services useful to you

   Have you had any experience with any of the four activities?
   Was that experience a favourable one?

4. How much confidence do you have in using the Internet to contact government?
   a. Trust in government?
   b. Security (confidentiality)?
   c. Providing personal information?
   d. Anything else?

5. Has access to online government information or services improved your life or contributed to your work?
   a. How?
   b. Why not?

6. If you were seeking government information on the topic of ___________, how would you go about trying to find it on government home pages?

PROMPT: portal, www.govt.nz
NON-USE

7. Have you ever used government on the Internet?

8. If “no,” why not?

9. [Users and non-users] Is there anything that the government might do to encourage your use of government web sites?
APPENDIX D. INSTRUCTIONS FOR CONDUCTING THE WALK-THROUGHS

1. Greet, thank participants.

2. Explain we are evaluating how easy it is to find information on government websites, not the user’s skills.

3. Government agencies seeking an honest opinion, anything you say and do is ‘right’.

4. Describe the project, explain about confidentiality of data, and right of withdrawal, and present information sheet and consent form to be read and signed.

5. What will happen:
   “I will set you a series of tasks. I’ll give you an instruction and then watch how you go about completing the task. It helps if you can ‘think out loud’, talking about what you are doing, and why. Please tell me when you think you have completed each task. At the end I may want to ask a few questions about why you did certain things. I’m not able to help you during the test, but I can help you with some techniques afterwards if you’d like.”

6. At end, thank participants, ask about how they found the test, and go over unsuccessful attempts—useful insights can be gleaned at this point.
APPENDIX E. SPECIFIC MATTERS FOR WHICH PARTICIPANTS CONTACTED GOVERNMENT
(Categories nominated by respondents)

Births, Deaths, and Marriages

Apply for marriage licence
Checking family history
Copy of birth certificate
Copy of marriage certificate
Historic data and status of online research facilities
New birth certificate
Procedure for obtaining birth certificate

Benefits

Application for student allowance
Application for student allowance/loan while overseas
Applications, problems with payment
Availability of student allowance for myself, support for my partner
Confirming date of superannuation
Disability allowance
Eligibility for grants and financial support while studying
Enquiry about niece’s requirements
Find out benefit eligibility
Proving level of income
Requirements for disability allowance and sickness benefits
Unemployment benefit

Broadcasting

Iwi radio
News
Seeking programme information

Business Related Issues

Environment Waikato grants for fencing waterways
Grants
New business funding
Rules for incorporated societies

City Council Matters

Building consents (e.g. extension of house)
Bylaw information
Drain from house going down neighbour’s land
Liaising with council on issues affecting disabled students
Meeting (minutes and policy)
Te Ara o nga Tupuna and information on history of area
Paying rates
Policy plans and statements of local council
Safety and environmental regulations, building codes
Street matters
Summer events in Wellington
Water supply and concern over trees in a local park

**Consumer Affairs**

Issues related to vehicle ownership and use
Ongoing work relationship
Product recalls
Things for sale

**Customs**

Restrictions on what a traveller may take into New Zealand
Visas
What to declare

**Drivers License**

Checking what my Australian girlfriend needs to do to change license
Regulations for replacing lost items
Reissue/renewal of drivers license

**Education**

Consultation appointments
Cost of university for foreigners in New Zealand
Find out about learning sign language
Find out entitlements as a returning student
Funding for study
Information about NZCEA
Information on student support for NZers
List of university courses
Looking at new school (e.g. ERO reports)
Looking into private schooling
Research grant applications
Status of a tertiary project
Status of peer support programmes
Teacher registration

**Elections**

Accurate electoral roll information
Polling booth
Time frame for next election, employment possibilities
Employment

- Employment opportunities (e.g. for my partner)
- Government jobs listings
- Seeking research work
- Staff recruitment
- Where we stand with time off and wages for our workers

Environment

- Find out about whale stranding
- Issues related to technology, science in society, GM debate, etc.
- Lease conditions, buildings, etc.
- Policies being introduced on environmental issues
- Policy wording for a contract project
- Resource management
- Weather information

Farming

- Dairy company issues
- Looking at Fonterra (e.g. milk collection and weather)
- Record keeping

Fisheries

- Update law books fisheries

Funding Agencies

- Information about research funding (from MORST)
- See what is going on

Health

- Issues related to technology, science in society, GM debate, etc.
- A matter regarding compensation
- Mental health issues and publications
- Seeking a copy of a discussion document

Housing and Tenancy

- Had bad tenant and wanted to know rights as landlords
- Information on costs as a result of a dispute
- Tenancy rights/agreement

Immigration, Passport, and Citizenship

- Apply for, reissue, or renew passport
- Changes in immigration policies that affected new immigrants
Details required about getting into New Zealand for a friend
Family overseas trip
Family passport problems
Immigration requirements for my partner
Information on costs as a result of a dispute
Migration information for parents
Residency status of my girlfriend
Rights of refugees
Rules for citizenship
Visa information (e.g. requirements for travel)

Legislation (Laws and Regulations)

Bills in the House
Copyright law
Employment law
Information for study
Information on NZCEA and NZQA
Issues related to technology, science in society, GM debate, etc.
Legalities of paternity tests
Staff information
Statutes (contents of various Acts)

Maps and Land Information

Boundaries of property
Finding streets
Finding the quickest routes
Information on a site for a geography project
Land information
Land title
LINZ data
Maps for holidays
Maps of Wellington
Toured New Zealand and relied exclusively on the web for information

Occupational Safety and Health

Paying OSH

Personal/Family Issues

ACC
Reporting on an incident
Was pregnant and working with child, youth, and family

Police/Justice

Americas Cup security
Handing in a law related to a burglary
Information on sexual abuse
Issues related to technology, science in society, GM debate, etc.
Prowler and car theft outside my gate
Reporting on an incident
Respond to a submission to law commission
Seeking clarification on facts or official interpretation of what I have read or heard
Statements by Ministers
Status of DARE support programme

Policy and Politics

Concerns about a child
Latest policy and statements that the government has issued
Politics
Release from restricted security rating for thesis written while in the defence force
Reserve Bank exchange rates
Seeking general information and policies
Research work
Various government policies

Recreation and Sport

Book a play trailer for kindergarten
Grants for sports club
Results of rugby matches
What is occurring around Wellington?
Virtual Super 12

Regional Council Matters

Building permit for local marae
Installation of water meters
Permits and consents
Regional district plan information
Regional growth plan
Timetables
Treaty issues
Update law books regional council
Water supply information

Statistics

Copies of forms
Information on Maori population and language fluency
Seeking data (e.g. on research work or GST payment)
Seeking population and other online statistics
Tax and Finance

- How to get an IRD number
- Information about GST
- IRD information (e.g. on taxes)
- Paying taxes
- Personal income tax regulations
- Refund of taxes on charity donation
- Signed up online GST
- Tax code
- Tax forms
- Tax refund
- Tax return

Tourism

- Information about immigration
- Milford Sounds walk
- New Zealand referrals
- Tourism

Transportation

- Information on policy for accessing trains
- New trailer regulations
- Policies being introduced on transport issues
- Public transport (fares and timetables)
- Warrant of fitness regulations

Treaty Issues

- Information for study
- Information on specific issues or fact
- Issues

Other

- Community groups involved in GETs
- Copies of submissions and commission pages
- Disability issues, strategies, and pertinent building codes
- Events: Date of birth of a friend’s child that had been advertised
- Seeking career information
- Seeking information on a government department
- Updating myself: finding out what is going on (especially in relationship to my key sectoral and personal interests)
APPENDIX F. DESCRIPTION AND TRANSCRIPTS OF WALK-THROUGHS

Participants in early focus group interviews were invited to take part in an observed walk through, searching for information on a set of pre-selected topics on government web sites, to indicate how they would go about answering the question. During April and May, these observations were conducted at Victoria University in the office of one of the investigators. Participants sat at a computer, opened on to a neutral web home page and had a telephone book nearby. They were asked to show how they would go about a search to answer the pre-selected questions (see Appendix D for the instructions), and to explain their strategy, and the reasons for selecting particular options. Participants were allowed approximately 10 minutes for each task (some took longer), and not all completed all five tasks within the hour allotted to each person. The tasks were developed after consultation with staff at the E-government Unit.

The tasks were:

1. The controversy over painted apple moth is in the news again. Your married daughter and grandchildren have moved into the spray zone, and you heard recently on the radio that there were new concerns over the safety of the chemicals used. You are keen to find out more about the issue, and to find MAF’s reasons for doing the spraying, and why they think it is safe. Where would you look?

2. You have to manage the renting out of a family property. You have some idea that there are forms that the tenant and landlord fill in as part of this process, and that a bond (against damage etc.) is sent somewhere, but you have not done this before. See if you can find the necessary information and forms on the appropriate government web site.

3. Your recently widowed mother will have to have her pension adjusted to a single pension, with a living alone allowance. You think she may be entitled to some other benefits because of her declining health. What can you find out about her entitlement to these additional benefits and the living alone allowance, and how much private income she can have before losing these?

4. A friend has told you of a wonderful DOC camp site at Elaine Bay, in Pelorus Sound. You are interested in including it in your planned summer tour of the South Island. See if you can find out what facilities the site has, and if you can make a booking for the camp site for early December.

5. For research purposes you need to find the report that was issued recently stating that Maori life expectancy had increased slightly, and compare this with the most recent figures on Maori health status. You thought these were issued by the Ministry of Health, and decide to start there . . .

Each of these tasks, except for the final one, which required some knowledge of the authors of the report, could be found by a skilled searcher by retrieving readily available sources on a government web site. Even if the last task could not be satisfactorily completed on government web sites, related and useful information on Maori life expectancy could be found by a skilled searcher.
The participants were:
Participant one, a young male professional, was experienced with computer software and applications, but his experience with government web sites was limited. Completed four tasks in the time. Had not heard of the portal, and being told about it, stated he would not have a use for it.

Participant two, a retired female civil servant with experience of the web and specialised software, but little general experience of government web sites. Attempted three tasks. Had used the portal in the past but did not do so after retirement.

Participant three, a middle aged female familiar with the Internet through personal use, and as mother, supervising children’s homework, projects etc. Attempted five, and completed four tasks.

Participant four, a female working in an administrative /secretarial role, with good computing and general web experience. She did not know the portal and had never seen it. She thought it would be a good tool to use but noted the small writing on it when shown it. Commented that she likes to look at things anonymously on the web. Attempted five, completed three tasks.

Participant five, a professional musician and mother with school age children. Attempted three tasks and completed one.

Participant six, a young female graduate in mid 20s engaged in contract work across several agencies, including government departments from time to time. Knew of portal which she had used to locate jobs in relation to an HR contract, but stated would not otherwise use it “because I know the URLs”. Attempted five and completed four tasks.

Solutions to the five tasks
Task 1. Painted apple moth. On the Ministry of Agriculture Homepage, the major heading Pests and Diseases lists ‘Painted apple moth’ in its subheadings. (This is well down the page and on most computers the user would need to scroll down to find it.) Clicking on either subheading takes the user to a page dedicated to the painted apple moth, and the user can scroll down and click on either ‘Answers to frequently asked questions about the painted apple moth’, or ‘Answers to frequently asked questions by painted apple moth zone residents’.

Under the “Aerial spraying” heading, the user can click on a subheading “What is involved in aerial operations”, to find the information:

"An environmental impact report was prepared in 1996 when Foray 48B was used to eradicate the white spotted tussock moth. The report concluded that it is unlikely to have any long-term adverse effects on New Zealand’s soils, waters, plants, food sources, mammals, birds, and fish. A publicly available independent health risk assessment carried out by the Auckland District Health Board in 2002 concluded that Foray 48B has never been implicated in any significant health effects on humans in 35 years of use. “
On the main page for Painted apple moth, there is also reference to an Environmental Impact Assessment of Aerial Spraying Btk in NZ for painted apple moth, with the explanatory note “MAF is planning an eradication programme for painted apple moth using the biological insecticide based on Bacillus thuringiensis kurstaki (Btk)”, with a link to a more detailed explanation of the chemicals used in the spray. The page also contains a phone helpline number for residents to call.

Using the portal, a search on painted apple moth gives a list of links, the first three of which are press releases, the fourth is a direct link to the MAF Painted apple moth pages (described above). The report on health risks of these chemicals, prepared by the Ministry of Health, which gave rise to the news item, was not made available on the MOH web site until near the end of the walk-throughs. It still does not appear on the first page of results from a search on “painted apple moth” on the portal.

Task 2. Tenancy information and forms. This information is accessible through the Ministry of Housing web site, but the user needs to know a URL or find some other way of accessing the site, since “Ministry of housing” does not find it (The URL is www.minhousing.govt.nz.) On the Ministry of Housing home page there is a large notice, headed “Tenancy Services”, which asks “Are you a tenant or a landlord?” Clicking on the sign, or the statement “Enter Tenancy Services” takes the user to a dedicated web site. A prominent notice on the right hand side (and a small sidebar menu) contains the headings “Tenancy Forms” and “Tenancy Information”. The URL www.tenancy.govt.nz also finds the Ministry of Housing home page and the link to Tenancy Services.

On the portal, clicking on the top link “Services” offers a page of services, on which, well down, is found the heading/link “Housing, property & local environment”. On the page linked from here 12 items are available and a side bar lists a heading for “Rental Housing” under the general heading “Housing”. Clicking on this takes the searcher to another page, with another 12 miscellaneous items on it, some of the lower ones of which suggest links to Tenancy services to resolve problems that arise with tenancies. A small heading on the side bar “Tenancy”, links to a further page which has some helpful links to appropriate parts of the Tenancy Services site. Typing “tenancy” in the search box on the homepage of.govt.nz produces a similar set of relevant links.

Task 3. Single superannuation, and allowances. This information is on the WINZ (Work and Income New Zealand) site. WINZ is a division of the Ministry of Social Development (at www.msd.govt.nz) which has a link to “Work and Income” in the text of its first paragraph (but no navigation link). On a side bar menu the fourth heading links to the page “Get Financial Assistance”. On this page, there is a right hand menu bar, which includes the heading “Main benefit information”. The second paragraph in the centre of this page has a heading “New Zealand Superannuation” and the explanation “New Zealand Superannuation gives people a retirement income once they reach the qualifying age of 65”. Further down the page are listed other benefits: invalids benefit, widows benefit, etc. Clicking on “New Zealand Superannuation” takes the user to a long document, with structured headings at the top. Either scrolling down, or clicking on “How much will I get?” the user arrives at a table which shows
the “the maximum fortnightly payments for Super” and includes the category “Single (living alone)”. Further down there is additional information about other benefits available to those under 65, and information about the amount of additional income that can be received before personal tax is levied.

Using the portal, and entering the term “superannuation” the searcher is taken to a portal page on benefits, with links to information on pensions, and a link further down to more additional information on superannuation, and the WINZ 0800 number. A large number of information documents in pdf format are listed, and the MSD web site.

Task 4. DOC camp site. (The DOC home page has been redesigned since this exercise was conducted). On the DOC home page, there is a sub-heading “Huts, cabins and campsites”, under the major category “Explore”. On the “Huts, cabins and campsites” page, there are two small text links on the side-bar menu (which are also noted in the text on the page.) Clicking on the heading “Conservation campsites” takes the user to a site with two further headings on the central panel: “North Island conservation campsites” and “South Island conservation campsites” (which note that they are pdf files—there is also a link to information about pdf files). More items also appear on the side bar, notably the names of provinces where such camp sites can be found.

Clicking on Nelson-Marlborough on the left-hand menu takes the user to a further web page with map of the region, and two further items on the side-bar, including “List of Nelson-Marlborough camp sites”. Clicking on this (or the appropriate part of the map) takes the user to a page with another set of links in the centre panel: five locations, of which Pelorous Sound is one. Clicking on this link takes the user further down the same page where information about the Elaine Bay camp site is found. It is a ‘standard’ camp site, which has a water supply, and picnic tables, and toilets. Its location is given and the fact that it is accessible by road and boat.

Information well down on the “Conservation camp sites” page (several pages back), states that standard camp sites “generally do not have booking arrangements and operate on a first come first served basis” when scrolled down. The same information can be found on the pdf file on South Island camp sites. The same information is available on a panel on the first page of the pamphlet (the pdf file), which also has a map, and a list of sites and facilities.

Task 5. Maori life expectancy. On the Ministry of Health web site there is a heading “Maori health” in the central panel, which takes the user to the MOH Maori health pages, and a link to the separate Maori Health web pages. However, the needed information is only available under Publications, and is most easily found by searching MOH publications using the terms “Maori” and “life expectancy”. The most recent report available is the Health and Independence Report 2002, released 23 December 2002. The user would need to search outside the site to find more recent data, available in the New Zealand Life Tables (2000-2002) on the Statistics New Zealand site, and research carried out by the staff at the Wellington Medical School which was the source of the press release that prompted the question.

Task completion
1. Painted apple moth (completed by four participants)
The first participant opened the MSN search engine, and searched for MAF, and selected the home page for MAF from the resulting top hits. On the MAF home page he entered “apple” into the search box, which produced one media report. He then went back to the home page and clicked on the “Pests & Diseases” link, and on that page the subheading “Painted Apple Moth” which linked to the Painted apple moth page. He scanned through that page and clicked on the “Environmental Impact Report 2003”, and scanned through that report. Satisfied with the information on impacts in the report and that it was commissioned by MAF, he then searched further for any updated information on the effects of spraying. He clicked on “Recent releases”, and, still in search of recent reports, returned to the MSN site and searched for “apple moth+MAF”, trying several links offered by the search, some of which were to MAF pages, and some of which included press releases by other bodies or political parties. He finally tried the NZoom.co.nz news web site but could not identify the press report in question. He had found all information about the spraying programme that was currently on the MAF web site.

Participant three also started with MSN, and entered “MAF”. Looking at the search results the participant stated that she was unsure if she was looking for an official report or a newspaper report. She clicked into the MAF web site from a link from her search, and through the “Pests & Diseases” link to the “Painted Apple Moth” page. Scrolling through the information, she clicked on “FAQs by residents” and “Are there viable alternatives”, and finally, returning to the Painted Apple Moth page, clicked on “Where can residents get more information?” where she found contact details for MAF, and some explanation of why spraying was necessary. She was satisfied with this.

Participant four typed “www.MAF.govt.nz” into the address bar (stating that she usually does this if she knows or can guess the URL, otherwise will use Google to get there.) She clicked on a link to the Painted Apple Moth pages from the MAF Home page, and scrolled down to “FAQs by residents”, checked the task, and stated that she could click into any of the links on this page for the necessary information. She confirmed this by clicking on “What should you do if you live in or near?” and indicated that she had completed the search.

Participant five opened Google and entered “MAF”, with a resulting set of news reports and links to the MAF web site. Scrolling down, she rejected a page labelled “Ministry of Agriculture and Fisheries”, and selected the “MAF Quarantine” page. After trying a few links here— “General enquiries” and “Border control” —she decided she was getting too far from the topic, and returned to a general search page, ending up by accident on the MSN search page. Entering “painted apple moth” she got eight relevant hits listing MAF, and scrolled down, reading carefully, stating that she was looking for something that mentioned health. Selecting an Auckland city site, she found she was reading a Green Party press release on the issue. She stated that she needed to look up MAF, and went back to the list of hits from her search, clicking on a link to a MAF index of items on the painted apple moth. This took her to a list of press releases on the MAF web site, so she went to the side menu bar on the left, clicked on “research”, which took her to a list of recent MAF research reports, which she scanned for a while before ending her search.
Participant six typed “www.maf.govt.nz” in the address bar, and on the MAF website, clicked on the direct “Painted Apple Moth” link. On the painted apple moth site she clicked on several FAQ links on general topics, and the “FAQs by residents”. She scrolled up and down the site, and not finding anything about health, and the chemicals used, went to Google, and entered “painted apple moth” “Ministry of Health” restricting to New Zealand, and found the report which had just been released by the Ministry of Health, and was on that site.

2. Tenancy forms
Using MSN search, participant one entered “tenant” and, on getting a large number of hits, amended the search to “tenant +New Zealand.” Finding still a large number of hits which did not seem exactly relevant he then entered “tenant + New Zealand + govt”, and got a link to the Ministry of Housing’s Tenancy Services high on the list. On this site, he clicked on “Tenancy Services” and “Tenancy Forms”, then “Quick Information”, which described the forms needed. He then clicked on the pdf file “Renting and you”, which also describes the forms. After trying the link, “Starting a tenancy”, which still did not provide the link to the forms needed, he eventually identified the correct link to the tenancy forms, and identified the correct form for registering a bond, and a tenancy, including the property inspection form at the end of that. He commented that the link to the forms did not have an adequate explanation, and that there was no direct link to the forms from several points where they were mentioned (in fact, this was not so).

Participant two started her search with Google, entering “Tenancy govt NZ”, and selected the fourth hit in the resulting list, which was to tenancy information on the govt.nz portal. She complained that the small type face was hard to read, but did find that the portal listed a www.tenancy.govt.nz web site, but this was not a live link. She returned to her Google search results, paused at the second link to the Ministry of Housing web site (which she then rejected as not relevant) and continued scrolling through her original search results. She finally clicked on a link to the brochure “Renting and you” in pdf format, which she scanned before returning to the Google search list, and clicking a second time on “Tenancy Agreements” (although the colour of the link had changed she was unaware that this indicated she had visited that link.) The link took her to the Tenancy Services site of the Ministry of Housing which she now realised had relevant information, and scrolled down the page to the link “Tenancy Agreements”, she clicked on this, and found information, but no form, re-examined the site, and found the link to the tenancy forms. Commented that key links are not clear—she had passed it by because it was not obvious.

Participant three started with MSN, entering “tenancy/law/NZ”, and clicked on the link to “Tenancy Services” that came up in the resulting list. She found the link to “Tenancy Agreements” and scanned the file looking for the relevant forms. She found the link she needed under the heading “Tenancy Forms” and retrieved the correct forms in pdf format.

Participant four typed www.tenancy.govt.nz in the address bar, which took her straight to the Tenancy Services site, where she found the tenancy forms she needed, and the brochure “Renting and you”. She stated that she had done this before.
Participant five brought up Google, and entered “tenant and landlord forms in rental properties”. This brought up sites from the UK and USA, which she scrolled down, trying a site for commercial landlords in the US. She then commented that she needed a government site, and that she had maybe typed in too much information. She thought she should have put in “bond and tenants”, and returned to Google to type in “bond form for tenant and landlord”, which retrieved links to two Ministry of Housing web sites. After some hesitation, she selected the first link, which retrieved the brochure “Renting and you” on the Tenancy Services site, and shortly after she discovered the heading “Tenancy Information” and finally, the “Tenancy Forms” link on the left. She was happy to find phone numbers are also provided in this set of links.

Participant six knew how to find the Ministry of Housing web site through the address minhousing, and once there clicked on “Tenancy Services”. On this page she quickly found the links “Tenancy Forms”, “Tenancy Agreements, and “Tenancy Information”, although she thought this wasn’t really aimed at landlords. She knew she needed a tenancy bond form, and had found all the needed forms, but would now call them.

Task 3. Changing to single superannuation
Participant one started with an MSN search on “pension + New Zealand”, and the first search result was a link to the WINZ site. Using the WINZ search box he entered the word “pension” and got an extensive list of links to war veterans pensions. He returned to the WINZ home page, and selected the heading “Get financial assistance”. This listed services (but no live links, he complained) and the participant chose the heading “New Zealand superannuation”. From a variety of headings he then chose “What if I need extra assistance”, but this did not contain the wanted information, so clicked on “Living alone allowance” and scrolled up and down the pdf file at this point, finding the Table of Allowances, including the Living alone supplement. Looking for information on other income allowed, tried “How can I get it?” and finally the heading “Receiving other income” which provided the information sought.

Participant two started with a Google search on “WINZ pension widow”, and on finding no relevant hits, amended this to “WINZ NZ”. She clicked on the first search result, a link to the WINZ home page, stating she wasn’t sure if this was the right place. She then looked for the site map, noting that there is a lot of information on the site, and chose a link to “Financial assistance—widows benefits”. She looked at the question again, noted that the widow in the task question already had the pension, so scrolled down through information about widows benefits noting the WINZ helpline. She then returned to the link in the top menu bar “What other help can I get”, noting that this includes information about the community services card. She returned again to the top menu bar, selecting “Part time temporary work”, that provides information about how much those on the widows benefit can earn, and then tried “What other help can I get”, looking for information on the living alone allowance. After trying the “Checklist of information” link, went back to “Get financial assistance” by using the scroll bar at the top of the page, but decided this was not helpful. She went back to Google, and entered “WINZ NZ” and then amended this to “WINZ NZ living alone”. From the search results list, she selected SSA Gov, (a US site summarising benefits around the world), but seeing nothing of relevance to widows, tried another link from the search results, and clicked on a link to a pdf file on census information. Finally, she tried another Google search “NZ widow living allowance”. Initial results from
this search are to information about Irish benefits. The participant gave up at this point, but on later discussion pointed out that none of the links she looked at explained that the term used for an old age pension is superannuation, and that widows of 65 and over are on this benefit.

Participant three searched on “widows benefit in NZ”, using the MSN search facility, which resulted in a number of hits, and news items. She amended the search to “benefits and allowances in NZ”, and selected a link to the govt.nz portal. She scrolled through the portal (noting that it was hard to read because of the colour of the text), clicking on a link to “social services”, stating she was not sure she was in the right place. She went back and clicked on the “Benefits and allowances” link in the portal, which provided three headings, and of these chose “retirement benefits and allowances”. This also resulted in a number of results, of which she chose “Get work and income assistance”, commenting again that it was hard to read the page, and there were a lot of services to choose from. She clicked into a pdf file, which was a booklet entitled “How can we help you?” This did not appear to contain the needed information, but she scrolled down to a section on the widows benefit, with the heading “Your partner has died”. Commenting that there are no live links in this pdf file, she then scrolled down the page to find a number to call. Finally, she clicked back to the portal, and clicked on a link on the disability allowance and declining health, and then “Extra financial assistance—a guide for people on super” which is another booklet. Stating that she was not getting the information she wanted from the booklet, she said she would make a phone call at this stage.

Participant four typed in the URL www.WINZ.govt.nz, to get to the WINZ home page, and clicked on “Get financial assistance”. She then clicked on “Main benefit information” thinking “the lady might be able to get the sickness benefit”, and when that didn’t look promising, the heading “Widows benefit”. At this stage, not finding an answer she said she would call the WINZ 0800 number displayed, but would do so reluctantly because “you get 10 different answers and it’s unreliable”.

Participant five began with the statement “I need to know what these things are called”. She then used the Google search engine, and entered “single pension”, searching the New Zealand pages only. Initial search results include a link to the pages headed “Get a surviving spouse pension” on the govt.nz portal, and other information about superannuation and war veterans pensions. She clicked on the first item which takes her into a pdf pamphlet style file entitled “Extra Financial Assistance: a guide for people receiving superannuation or a war veterans pension.” She scrolled down this, and found instructions about applying, and an 0800 number to call. She returned to the portal, and clicking on the heading “Things to know when” on the top menu bar, selected “There’s a death in the family” but decided “it’s of no help...”

Participant six typed in the address of the Ministry of Social Development (as www.msd.govt.nz) and on that site clicked on “Work and Income”, a link in the central text. Looking for an index (her usual approach) she opened the site map. Under the heading “Get Financial assistance”, she clicked on the subheading “Domestic purposes and widows benefits” and then, within that page on “What other help can I get?” Within the first paragraph on that page is a reference to Family Support, which she clicked on. Finding that mainly details additional support for
children under 15 she returned to “What other help”, scrolling up and down the screen, and stopping to read the Tables called “How does income affect my benefit?” Nothing here seemed to answer the question, so she continued scrolling, went back to the site map, to check the “Extra help”, the third major heading under “Get financial assistance” option. Rejecting this she clicked on the alternative heading “Sickness benefits”, before giving up, saying “I don’t have much patience. If I don’t get it quickly, I’d call.”

Task 4. DOC campsite at Elaine Bay
Participant one used the MSN search tool, and typed in “DOC + camp”, which pulled up a wide range of information about camping in New Zealand. He then redefined his search to include quote marks around the statement, which produced an alternative range of headings. Several other search attempts were made using “DOC + campsites”, and “DOC”. Finally, he clicked on a link to the DOC web site, and entered “Elaine Bay” in the DOC search engine. He did not identify Elaine Bay in the resulting list of hits, but clicked into a file with camp site names and prices. He tried the search again using “camp site +Elaine bay”, which reduced the number of hits to 7, from which he chose “Nelson/Marlborough”. Pelorous Sound came up, and a list of facilities at Elaine Bay camp site. Searching for booking information, he then went to the main DOC page, and clicked on the heading “Huts/cabins/campsites”, and from the left-hand menu link accessed the heading “Conservation camp sites”, and on the following page “Conservation camp sites—South island”, which opened a pdf file booklet, scrolling up and down looking for information on bookings. At this point the participant stated that he would call the DOC visitor centre, noted at the top of the booklet. He also scanned the map showing where sites were, but again stated he would call DOC.

Participant two used the MSN search tool, and typed in “DOC NZ” which brings up several pages of links which she scanned. She amended her search to “DOC NZ Elaine Bay” and clicked on a link about holiday homes to rent. Tried another link which led to tourist information about Peloruous Sound, and which listed a link to the DOC site, which she clicked on, which contained information about the Elaine Bay camp site, but no booking information was found. She returned to the MSN search site, and redefined the search as “DOC NZ Elaine bay bookings”. This produced a number of hits, including one titled “Marlborough Sounds accommodation”, which she opened, searching for accommodation in Pelorous Sounds. She found a link to a DOC hut and cottage in the sound, then went back to the MSN search site, and after scanning more search results, entered “DOC NZ Elaine Bay campsites”. Again found the DOC information on Elaine Bay and stated that was the best she could do. She would ring DOC at this point. She realised afterwards that she had missed the main DOC site in her first search results, the search results not being very easy to read.

The third participant also opened MSN search, and typed in “DOC”, and went straight to the DOC web site, where the participant clicked on “Explore”, and found the link to “Huts, cabins and camp sites”. Using the left-hand menu link to “Conservation camp sites”, and the link to “Conservation camp sites—South Island” she opened the pdf brochure. Clicking on the map found Elaine Bay and Pelorus Sound. She scrolled to the end of the file without success, looking for the necessary information on bookings, and then went back to “Huts, cabins and camp sites” looking for the same information without success, and decided to enter the word “bookings” in the DOC
search box. Although the word appeared in lots of files, no search results appeared relevant. She tried the links “About DOC” and “Explore” again, and “Huts, cabins and campsites” without finding the information. Looked at brochure again, and found nearest DOC Visitor centre which she said she would call.

Participant four entered “www.DOC.govt.nz” in the address bar, and on the DOC home page clicked on “Huts, cabins and campsites”, under the heading “Explore”. On the left-hand menu chose “Conservation camp sites—South Island”, and “Nelson-Marlborough”, then the map, and the link to Pelorus Sound through the map. She scrolled down through the brochure, without finding any booking information, trying to click on sections to see if they were live. Went back to “Huts, cabins and campsites” again before giving up, stating that the information was “too ambiguous”.

Participant five entered “www.DOC.govt.nz” in the address bar, and on the DOC home page looked for a search box, and entered “Elaine Bay”. One of the resulting documents lists Elaine Bay, with an address, but unsatisfied, the participant went back to Google, searching on “Elaine Bay Pelorus Sound”, scrolled through first screen of several pages of resulting search results, and added “Bookings” to search. She scanned the resulting documents, and then decided to go back to the DOC site via its URL, searched on “Elaine Bay book”, and from several options chose the pdf brochure. She scanned the brochure and found a contact for the DOC visitor centre in Nelson. After a further search on Pelorus Sound looking for a nearer visitor centre, she found the Pelorous Sound centre, and phone number. At this point she said she would prefer to call, and would not normally book online. She commented, the site is “not presented for quick information”.

Task 5. Maori life expectancy
Participant three searched for “Ministry of Health” using the MSN search engine, and clicked on the first result to reach the Ministry of Health web site, where she clicked on the link to “Maori health.” Server problems made continuation of the search difficult, and it was ended.

Participant four typed the URL “www.moh.govt.nz” into the address bar, and on the Ministry of Health web site clicked on the “Maori health” link. Clicked on “News and Issues” and scrolled through information. She returned to the main Maori health page, and tried the link “Media and Publications” but noted that there were no recent reports, and no search engine on the page. Returning to the Maori health page tried the link “Maori health strategy” and a list of media releases, without success, and ended the search.

Participant six entered the URL for the Ministry of Health into the address bar, and clicked on “Maori Health”, scrolling down the page to the link for “Maori health publications”, without finding anything that appeared relevant. She then entered the URL for Statistics New Zealand, saying that she knew where the Life Tables are found. On the Statistics site she selected the link on the left-hand menu “People and Society”, and then “Maori” from the “Communities” listed on that page, and “Maori Population” from the page on Maori statistics. Scrolling down to New Zealand Life Tables she found statistics for 1995-97. She clicked into some sections “to see what’s there”; and returned to the main New Zealand Life Tables, commenting “I should be in the right thing . . . I would have thought the answer would be more obvious”. She
found an article under the heading “Life expectancy and death rates”, which is part of the report “New Zealand Now Maori (1998)”. “I knew it would be in Stats—looking for something specific, they would direct me to a web page, so I’d persevere. I wouldn’t use Google for factual information. But I’m usually impatient and will call if I need things quickly. I write down the name of who I’ve spoken to, and the time, for a record.”