

**What are Public Library Users
Viewing on the Internet?:**

**An Analysis of the Transaction Logs of Burnaby,
Brantford, Calgary, Winnipeg, and Halifax Public Libraries**

Submitted to Industry Canada

December 27, 2002

**By Dr. Ann Curry
Associate Professor
School of Library, Archival and Information Studies
The University of British Columbia**

For further information, contact

ann.curry@ubc.ca

SUMMARY

The transaction logs downloaded from the public library terminals in five Canadian cities (Burnaby, Halifax, Calgary, Brantford, and Winnipeg) were analyzed to determine what Canadians were accessing on public library internet terminals. A total of 19,607 individual web addresses (URLs) were classified by genre and subject, using a classification scheme developed specially for this project. The importance of the results of this research lies in the richness of the data, which shows the great variety of sources that Canadians are accessing. The examples that are given for each genre and subject illustrate the diversity of information needs of Canadians, the importance of public library internet terminals as a source of information, and the full multiculturalism of Canadian life.

PART 1 – OVERVIEW OF THE PROJECT

THE RESEARCH TEAM

Nineteen graduate masters students in the School of Library, Archival and Information Studies assisted me on this project. These students were Ann Fowler, Andrea Gorgec, Agnes Gorgon, Jan Green, Tai Grundig, Shawna Hellenius, John Horodyski, Deb Hutchison, Lorraine Kelley, Susan Laidlaw, Anastasia Leontieva, Debbie Levy, Shirley Lew, Lonestar Littlewolfe, Karen Munro, Camille Noel, Scott Redgrove, Tom Richardson, and Martin Walters. My thanks to you all.

METHODOLOGY

A. DATA SET

The data sampling used was adapted by necessity to conform to the technical capabilities of the individual library systems and the staff time that the system was able to devote to this project. Libraries were given written and verbal guidance regarding the downloading process and the log address requirements of the project, but the differences among systems in the areas of size, staff technical expertise, local software, and presence or absence of filters meant that the data collected is best viewed as “unique” to each library. The transaction logs from the five libraries – Burnaby, Halifax, Winnipeg, Calgary, and Brantford were downloaded for a one-week period. The week selected was at the discretion of the library director, as the downloading often involved considerable staff time. The Burnaby logs were downloaded first – in 2000. These logs were analyzed for Burnaby Public Library at that time, and then were substantially re-analyzed for this project, using the modified classification system. The Halifax, Winnipeg, and Calgary logs were downloaded and analyzed in 2001/2002. The Brantford logs were downloaded in March, 2002. The Burnaby logs contained records for the entire system, as did those for Brantford. Halifax was able to supply logs for the Central Halifax Library, as was Winnipeg. Calgary supplied logs for the Central library and selected branches. The software needed to download system logs is generally located at the proxy server/firewall level. The Net Nanny Internet filters in Winnipeg and Calgary caused considerable difficulty and delay as the research team and the library staffs in both libraries attempted without success for many months to get workable logs. In Winnipeg, this was fully achieved, but in the case of the Calgary logs, the filtering software visited each URL whether the filter was “on” or not, splitting the URL into two parts and recording each part separately, often divided by 10 or more seconds. The research team wrote a software program to eliminate pieces of these truncated web addresses, but the logs remained difficult to analyze. Overall, it required for each library, approximately four months to negotiate downloading and achieve a workable log set for each public library, and another four months to classify the logs, ensuring intercoder reliability.

As the difficulties with the logs were being solved, other libraries across Canada were contacted to see if they could participate. In 2000/2001, no large library systems in Saskatchewan, Quebec, or Maritime provinces were able to participate, mainly because the libraries did not have a central “switching” station (usually a proxy server) that could centrally record all Internet transactions. By mid/late 2002, this situation had changed,

largely due to libraries installing increased firewall protection, and informal information from libraries in these provinces indicates that they could participate in a future project.

These transaction logs contained all of the URL addresses for Internet searching carried out on approximately 150 terminals. These logs were stripped of lines that would not yield usable information pertinent to the study. The lines stripped included:

- 1) Public Library home page URL
- 2) URLs with .gif, .jpg, .js, .class, and .css extensions
- 3) Blank lines with no URL addresses
- 4) Lines with 404 notations, indicating an error in the address or the search
- 5) Banner ad sites which appear frequently in URLs, for example, <http://ad.preferences.com/>

The stripped logs then included the following data fields:

- 1) ID
- 2) Date
- 3) Time
- 4) Desktop
- 5) Activity Code
- 6) Transaction Time
- 7) Terminal
- 8) Desktop Description
- 9) URL
- 10) Page Title
- 11) Activity Description

The resultant dataset contained 537,000 lines of “cleaned” data, from which 19,607 lines were taken by selecting a URL every five minutes (see SAMPLING below). Each of these 19,607 lines were individually “visited” by one of the research team, the site was viewed as the user viewed it, and the site was classified according to genre and subject scheme developed by the researchers.

No logs contained any personal information that could identify any individual user.

B. SAMPLING

A sample of the logs was taken by selecting a URL address every five minutes from the 537, 000 lines of data. For example, a computer terminal designated as “Internet6,” a URL accessed by the user at 9:00:00 a.m. on Monday would be selected, then the URL accessed at 9:05:00, 9:10:00, and so on through the opening hours of the library. Ideally, for each terminal in each library location, 12 samples would be taken for each hour that the library was open. The total number of possible hits for all libraries was approximately 35,000, but the final number in the sample set (19, 607) is lower mainly because of lack of activity at a terminal during a particular time slot, for example, no users at a terminal from 8:30 to 9 p.m. The sample size was also affected by slow typists using their e-mail accounts. When a user took more than one 5 minute period to type a message, that e-mail URL would remain the only one on the log over several designated “hit” times.

The sample size of the log set was also affected in Winnipeg by the filter inexplicably stripping many of the email logons by users, and in Calgary by the filter scrambling some URL addresses. The final log set was comprised of:

Burnaby	4606 logs analyzed
Halifax	1881 logs analyzed
Calgary	1997 logs analyzed
Winnipeg	4272 logs analyzed
Brantford	6851 logs analyzed
Total	19, 607 logs analyzed

This method of sampling was chosen to eliminate the over representation of email URLs and sexually oriented URLs, which occurs when a strictly numerical sample is taken, such as every twentieth URL. This misleading over representation was evident in a previous exploratory research project completed for Burnaby Public Library in March 1999. The methodology error occurs because library users using e-mail or sexually oriented sites generate three to five times more URLs per minute in the logs than users accessing all other types of sites. This leads to the mistaken conclusion that the terminals are being used far more extensively for these activities than is really the case. Sampling by time gives a much more accurate picture of what the terminals are being used for.

C. CLASSIFICATION

Each address was visited by the research team by pasting the URL into the browser Address window and then accessing the actual web site. The site was then classified first by overall genre, which was defined as the information container needed to describe the functionality or authoritative source of the web page. The site was then classified by subject where appropriate. For example, a site mounted by the Government of Ontario which gave information on ferry travel would be classified with the format “Government – provincial” and the subject “travel and tourism” All sites were assigned formats, but not all sites were assigned subjects. For instance, URLs generated by users accessing their email providers to receive or write messages were assigned the format “e-mail”, but no subject headings were assigned.

Subjects were also arranged within larger categories called subject “baskets”, which allowed for easier gathering of subjects within a common area. For example, the three subjects of industry & business, jobs, and personal finance/investment were gathered within the larger basket of “business/economics.”

If the genre and/or subject of a URL could not be determined because the address appeared to be at the beginning of a series of URLs generated by a particular site, the researcher was instructed to scroll down to successive addresses until a genre or subject could be determined.

Sites were also classified by the language of the site. Note that this does not necessarily indicate the language spoken by the user.

Please refer to the glossary section at the back of this document for more information on the exact classification system used.

PART 2 – ANALYSIS OF GENRES

The most frequent genre was Email, comprising an average of 39% of classified sites in the five cities. Corporate Sites (25%): Search Engines, Subject Directories and Portals (10%) and Web Communities (7.5%) ranked highly as well. A full ranking of all genres can be found in Table 2.

The following analysis of sites accessed within each genre focuses on the most Typical Sites in addition to any unusual sites illustrate the variety of internet use in Canada's public libraries.

A. SITES PERTAINING TO INTERACTIVE COMMUNICATION

E-Mail

E-mail (electronic mail) sites provide users with the ability to transmit messages over communications networks. This format ranked first as the most common in the study for all five cities, with an average of 39%. These figures are solid for Burnaby, Brantford, and Halifax, less so for Calgary and Winnipeg. In all cities, Hotmail was by far the most popular email provider, garnering about 70% of the hits: Yahoo was in most cities a distant second place. A phenomenon that requires further study is the lessening of overall email use as the study progressed. This may be accounted for by the differences between cities, but the percentage dropped from 41% (Burnaby) of use to 32% (Brantford) of use over a 30 month period, perhaps reflecting the greater acquisition of email access in customers' homes.

An interesting contrast exists among the sites accessed in the different cities. In Burnaby, foreign language email providers supplied 5% of email access, while in other cities these providers constituted less than 1% of total email traffic. The most common foreign language provider in Burnaby and Halifax was "Hanmail," a Korean email provider. The Japanese version of Hotmail was in second place. Other providers which appeared more than once were German, Serbian, Chinese (Mainland), Chinese (Hongkong), and Portuguese.

Typical Sites:

Analysis of the URLs through which patrons can access Hotmail reveals dozens of routes such as: <http://lw12fd.law12.hotmail.msn.com/>; <http://lw8fd.law8.hotmail.msn.com/>; <http://pv2fd.pav2.hotmail.msn.com/>. This is likely set up by Microsoft in order to accommodate all of the traffic through the Hotmail system.

Interesting Sites:

One interesting e-mail site was Free E-Mail@37.com (<http://email.37.com>), which bills itself as "Free" e-mail. Other interesting but less popular sites were: Absolute Josh Hartnett (<http://joshhartnett.mail.everyone.net>), and Girl of Your Dreams (<http://girlofyourdreams.com>). The trick of these sites is obviously to trade on the names as a way to attract users.

Chat

Chat sites were web sites where real-time communication between two users may be enacted via computer, and Message Board/Bulletin Board sites contained electronic message centres. In approximately half of cases, the subject nature of the chat session could be determined: when it could not, the subject was left blank. The most common reason that the subject could not be determined was that the researcher could not access the actual chat session.

Chat sites comprised an average of 3% of sites accessed in the five cities, ranging from 6% in Brantford to 1.5% in Calgary. The most common subjects of the chat websites were electronic games, entertainment, personal relationships, politics and advocacy, and hobbies.

English was the language of most chat sites, but the presence of Chinese and Korean sites in Burnaby and the presence of European language sites (Polish, Spanish, Serbo-Croatian) in other cities is notable.

Typical Sites:

- Very popular chat sites were (<http://ca.chat.yahoo.com>) and (<http://www.yahoo.com>). The Canada chat room for Canadian teens on Yahoo.com was particularly popular (<http://chat.yahoo.com/?room=Oh%20Canada::1600879644>).
- One of the most popular electronic game chat sites was the Runescape Tips chat site (<http://runetipit.board.dk3.com/viewforum.php?forum=7&3062>), in which users share tips to win the electronic game Runescape.
- Chat sites dedicated to teen music stars like Aaron Carter (<http://www.carterconnection.com/community/register.shtml>) and The Moffatts (<http://pub101.ezboard.com/ftthemoffattsmesssageboard69306frm6>).

Interesting sites:

- A chat site for the Star Wars community (<http://decipher.com/youbgjedi/index.html>)
- A chat site of the Latter Day Saints (<http://www.ldstalk.com/chat.html>)
- The most unusual topic was a chat about lithium polymer batteries at (http://www.darnell.com/forum_bat/messages/153.stm).

Web Communities

Web communities included sites in which membership is required and there is a common interest or background connecting the members such as belonging to a minority group, a specific profession, or sharing a common hobby. They usually feature access to free space for a personal page, email, chat, forums, bulletin boards, and online events; an interactive component is also present in a web community setting. Visits to web community sites constituted an average of 7.5% of total sites analyzed, ranging from a low of 1.6% in Burnaby to a high of 16% in Winnipeg. One site, Neopets (www.neopets.com) accounted for 425 of the 698 web community visits in Winnipeg.

Subjects were assigned to most web community sites. In Burnaby, Brantford, and Halifax, sites about computers or computer games were most popular, while in Calgary, sites pertaining to relationships (dating, personals) were most common. Hobbies (the Neopet

phenomenon) dominated the Winnipeg scene. Overall, the most commonly accessed community sites pertained to computers, games, relationships, personal financing, hobbies,

Typical Sites:

- <https://club.lego.com/eng/> -- Lego Club - especially popular with children
- http://www.neopets.com/games/launchgame.phtml?game_id=82 -- Neopets, which allows one to create a virtual pet, feeding of which takes place through acquisition of points from various electronic games (which the virtual owner is inclined to play, in order to keep the pet alive)
- <http://www.questpersonals.com> -- a site allowing people to post their personal advertisements, as well as search through numerous ones available in their database in order to find a possible friend/date/partner/etc.
- <http://teen.matchmaker.com/read?62> -- site dedicated to possible relationships between teenagers
- <http://fastquote.com:2502/fq/etrade/headlines?> - community for financial investment and stock quotes over the Internet
- <http://mail.idstalk.com/email/scripts/loginuser.pl> - a Latter Day Saints community
- <http://chickmail.com/> - a web community for girls, young women, and mothers with topics such as horoscopes, health and fitness, and entertainment.

Interesting sites:

- http://www.facethejury.com/user_favorites.asp -- this web community has been created with one goal in mind: ‘critical analysis’ of one’s peers, in particular their physical features. People are encouraged to post their photographs on the site, and subsequently their pictures are rated on how good/bad they are/look/fake to be.
- <http://www.gunderground.f2s.com/> -- Guerilla Underground is “an Internet based organization designed to report and educate concerned individuals on matters and implications that the corporation backed mainstream media chooses not to touch...we are all bound by the common strand of abhorrence for injustice, the misuse of authority, and our love and respect for all types of life”. Given a subject of Politics & advocacy, this community’s message center addresses issues such as: politics, religion, abortion, euthanasia, just to name a few.
- <http://www.AsianAvenue.com/> -- is a community created by and for people of Asian background, featuring elements such as: chat, personal pages, forums, events, a job banks, and much more
- Although ‘genealogy’ was not a very common subject, twelve different sites pertaining to a family name were accessed. This web page introduced viewers to the history of Tomczak family and offered discussion and interaction amongst members. <http://groups.yahoo.com/group/Tomczak/>

Personals/Classified Ads

Sites categorized as Personals/Classifieds featured personal notices or sales ads similar to those found in newspaper sections of the same name. They constituted an average

of 2% of sites overall, with the lowest number in Calgary and the highest in Brantford. In all cities except Calgary, matchmaking sites were most common; in Calgary, job searching sites like “Classified2000” were most prevalent. Sites featuring classified ads for cars and trucks were also common in all five cities. The personal ads were very similar to those found in a newspaper (i.e. “Male 35, Seeks Female for walks on the beach etc.”)

Typical Sites:

- Yahoo! Profiles (<http://profiles.yahoo.com/> and <http://ca.profiles.yahoo.com>) were the most popular websites allowing for creating one’s profile, encouraging people to solicit personal attention. Some of the postings included links to their personal pages, which oftentimes were full of sexual content. It is clear that Yahoo! Profiles (in both renditions) is quite often used as a lure for further investigation of the ‘profler’.
- CanadaTrader (<http://www.canadatrader.com>) allows one to place an ad and shop for a variety of vehicles across Canada
- Jobspress (<http://jobspress.com/jobsearch.html>) features employment in Atlantic Canada and was a frequently accessed site in Halifax
- Jobsearch (<http://jobsearchcanada.about.com/>) features jobs across Canada

Interesting Sites:

- Matchmaking sites for particular ethnic groups – (<http://www.sikhmatrimonials.com/>)
- Sexual orientation personals – (<http://international.gy.com:8009/servlet/proxy?>)
- Another fascinating site can be found in the ‘Collectible Classifieds’ site (<http://www.collectibleclassifieds.com/cgi-bin/classifieds/classifieds.cgi>)
- Horse classifieds, were maintained on the following site:
<http://www.horseland.com/wsdocs/newstop.html>

B. BUSINESS AND NON-PROFIT ORGANIZATION SITES

Corporate Sites

A corporate site is a web site that is a representation of for-profit companies, including greeting card companies but excluding news sites, e-commerce sites, and any other private sector companies captured by other formats. Corporate hits accounted for an average of 25% of sites analyzed within a city’s logs, with Burnaby, Winnipeg, Calgary, and Brantford all having percentages in the 28 to 34% range, and Halifax having fewer hits at 9% of their total. There were few duplicates in this cache of logs, with approximately two-thirds being unique “corporate” URLs.

The most common subjects assigned to these corporate logs were (in order of incidence) science and technology, products and services (particularly in the computer area), business and economics, and recreational activities.

Typical Sites:

- The Tupperware site (www.tupperware.com)
- The Lego site (www.lego.com)
- A vendor of various software application (www.macromedia.com)

- The Toronto Stock Exchange website (www.tse.com)
- Runescape (www.runescape.com). An online arcade, the central feature of which is the namesake game, Runescape: “a massive 3d multiplayer adventure, with monsters to kill, quests to complete, and treasure to win. You control your own character who will improve and become more powerful the more you play.”
- The National Hockey League Site (www.nhl.com), which received numerous hits in Calgary.
- Workopolis (www.workopolis.com), a bilingual site described as “Canada’s biggest job site,” where users can search for jobs, learn how to write resumes, and get information about qualifications for specific types of work.

Interesting Sites

- Sites pertaining to particular bands or television programs – Pearl Jam (www.pearljam.com) and Survivor (<http://survivor.cbs.com/primetime/survivor2/>)
- Online trading site for Pokemon paraphernalia (www.pokeorder.com/)
- The “biggest and best car site on the planet” – (www.autotrader.com)

E-Commerce

Web sites classified in this area are those whose primary purpose is for the sale of products and services including online banking. Pornographic sites are usually presented in an e-commerce format.

An average of 4.7% of a city’s sites were classified in this area, ranging from 2% in Winnipeg to 8.7% in Halifax. The products being sold on these sites were most frequently associated with banking, computers, arts/culture (e.g. books, music, ticket purchases), and travel.

Typical Sites

Products & Services

- The online auction site Ebay (<http://www.ebay.com/>) was accessed over 25 times in each city, with searches for various items ranging from books, pottery, cars, trading cards and, memorabilia for the pop group The Moffatts.
- A women’s clothing store site hosted by Target (<http://www.chicsimple.com/>)
- On-line banking at the TD Bank (www.tdaccess.ca)
- Stock market deals (<http://stockhouse.com>)
- A Thai-based site selling computer products online (www.applymail.com)
- The Dell site (<http://www.dell.com/us/en/gen/default.htm>). This site allows users to purchase desktop and notebook computers online.

Entertainment

- The Ticketmaster website (<http://www.ticketmaster.ca/>). This site allows people to purchase tickets for concerts and sporting events.

Music

- *Columbia House* (<http://www.columbiahousecanada.com/>), *Hip Hop Infinity* (<http://hiphopinfinity.com/Store/Index-CDs.htm>) and *Psyshop* (<http://psyshop.com/>).

Books

- Amazon.com (<http://www.amazon.com/>)
- Chapters / Indigo (<http://chapters.indigo.ca/>),

Travel & Tourism

- The Rand and McNally site (<http://www.randmcnally.com/>). This site provides maps and tips for road travel.
- Sites that sell airline tickets - (<http://www.cheap-airline-tickets-discount-flights.com/>), and (<http://www.priceline.com/travel/airlines>)

Interesting / Unusual Sites

- An online joke shop featuring items such as two-headed quarters, a “farting” telephone and Santa Claus feet to attach to a car’s trunk to simulate a “kidnapped Santa.” (http://www.lighterside.com/insultscomebacks_lsnat.htm)
- *Clever Island* (<http://www.cleverisland.com/index4.asp>), that sells educational materials for elementary school students to improve reading and math skills.
- Sites selling World Wrestling Entertainment (formerly WWF) merchandise. (<http://shopzone.wwe.com/>)
- A site specializing in collectible Barbie dolls. (<http://www.barbiecollectible.com/index-home.asp>)
- An online store offering an assortment of shopping choices for gays and lesbians (<http://www.kleptomaniac.com/>)
- Most of the sexually related sites were classified in this genre category, and most were considered “soft-core.” Typical examples would be “Alluring Fitness Women” (<http://www.alluringfitness.com>), a site offering videos, posters, and photos of fit women in brief bathing suits, and workout ensembles; and “Older4Me,” (<http://older4me.com/>), site devoted to “mature men and their admirers.”

Philanthropic / non-profit organization sites

Sites in this genre are published by non-profit organizations or clubs, for example, Greenpeace and Amnesty International. A total of 299 sites were accessed in this genre. Overall, this comprised an average of 1.5% of each city’s total hits, ranging from a high of 1.7% in each of Burnaby, Winnipeg, and Calgary to a low of .6% in Halifax. The non-profit sites analyzed were concerned with a great variety of topics – 21 different subject headings were assigned, the most frequent being health/medicine, politics/advocacy, science (generally animals), sports, TV/film, and general humanities (history, religion, literature).

Typical Sites

Health & Medicine

- *American Diabetes Association*. The site accessed dealt with the latest developments in synthetic insulin (<http://www.diabetes.org/>)
- *Internet Mental Health*. This site gives information on treatment programs and strives to improve understanding about mental health in general (<http://www.mentalhealth.com>)

Science & Animals

- *Standardbred Canada*, whose site says that it is “an incorporated non-profit organization whose mandate is to supervise, record, store and distribute information on all registered Standardbreds and to promote harness racing in Canada and beyond.” (<http://www.standardbredcanada.ca/>)
- *Adopt a Greyhound Dog Agency* (<http://easy-finder.com.ghound/adopt.html>)

Sports

- Brooklyn Children’s Baseball & Basketball Association (<http://www.bcba.com>)
- Winnipeg’s Manta Swim Club (www.mantaswimclub.mb.ca)

Politics & Advocacy

- Website of Amnesty International (<http://www.amnesty.ca/stoptorture/join.htm>)
- Association for Democratic Initiatives program for locating refugee family members (<http://www.refugiat.org/>)
- Canadian volunteer and philanthropic agency (<http://www.charityvillage.com/charityvillage/main.asp>)

Humanities (history, religion, literature) Most of the sites in this subject category were mounted by religious organizations.

- *Divine Mercy Prayer League* (<http://dmprayerleague.org/>)
- *The Watchtower* (<http://www.watchtower.org/>). The specific site was viewed by the library customer in Japanese.
- *Buddhist Compassionate Relief Organization* (<http://www.tzuchi.ca/home.html>) This site was viewed in Chinese.
- *Anglican Religion Resources* (<http://justus.anglican.org/resources/bio/206.html>)
- *Non-profit Poets Organization*. The specific site featured biographical information on Ezra Pound (<http://www.poets.org/lit/poem/epound05.htm>)
- *Coffee for Writers* – a site for new and developing authors (<http://www.coffeehouse4writers.com>)

TV & Film

- *Sesame Street Programming Guide* (<http://sesameenglish.com>)
- *PBS Programming*. The site accessed concerned the popular children’s characters Noddy and Caillou (<http://www.pbs.org>)

Interesting / Unusual Sites

- The *Web Standards Project* website (<http://www.webstandards.org/>). This non-profit site promotes the implementation and use of standards on the internet.
- *The National Youth Anti-Drug Campaign* (<http://www.freevibe.com/headsup/marijuana.shtml>). This site discussed the effects and risks of marijuana usage.
- *AethmogenTechnology* (<http://www.aethmogen.com>). Non-profit organization in New Zealand that specializes in clean energy research

C. SITES THAT ACT AS ACCESS POINTS

Search engine / subject directory / web portal

This category includes three different formats: a search engine is a program that searches documents for specified keywords and returns a list of the documents where the keywords were found. A subject directory is an organized listing of web sources by subject. A web portal is a web site or service that offers a broad array of resources and services, such as e-mail, forums, search engines, and on-line shopping malls. As the purpose of this research was to determine most accurately what topics people were accessing on the Internet, hits on search engines, directories, and portals were used as “gateways” to subsequent hits in the logs when it could be determined with a high degree of certainty that the library customer used the search engine, directory, or portals to access a more subject specific site. Sites were only classified in this category when such determinations could not be made, and therefore, only general observations, rather than quantifiable conclusions, can be made.

The most popular search engine in all five cities was Yahoo, with Netscape coming in a close second in Halifax and Calgary but a distant second in the other cities. Several versions of Yahoo were used, including yahoo.com, yahoo.ca, and yahooligans. Other search engines/portals/directories that appeared in most cities, but were accessed infrequently, were Delphi, Google, MSN, Metacrawler, Askjeeves, Looksmart, Excite, Altavista, Workopolis, Webwombat, and Lycos.

Typical/Interesting Sites:

- Yahoo’s finance portal (<http://finance.yahoo.com/>)
- National or regional Yahoo search engines such as Yahoo! China (<http://cn.yahoo.com/>)
- A portal used to search for rental apartments (<http://srd.yahoo.com/srst/688436/apartments/10/3576/>)

Directories

A website is classified in a directory genre when it contains an organized listing of contact information and acts as an access point to non-web related information. This category constituted less than 0.5% of hits in all five cities. The purpose of approximately three-quarters of all searches appeared to be finding and locating people, usually for personal purposes.

Typical sites:

- <http://canada411.sympatico.ca/> was a frequently accessed site used to obtain personal address/telephone information
- <http://www.icq.com/whitepages/> was used to find individuals who use the ICQ System
- <http://www.gocontinental.com> was used to find a company
- Classmates.Com (<http://www.classmates.com/p.tf/registration/?s=5705>) was being accessed as means for searching for long lost classmates/friends, all over the world

Interesting sites:

- BrantFree Net (<http://www.bfree.on.ca/index.htm>) a non-profit organization providing free and low-cost Internet access to the Brantford community.
- An interesting site, presented itself with the 'Find a Church' directory, based in the UK. (<http://www.findachurch.co.uk/area/tq/tq38.html>) displays a listing of various church establishments throughout the UK, also allowing for keyword searches
- Yahoo! Canada's directory site (http://ca.dir.yahoo.com/regional/u_s_states/kentucky/cities/paris/Travel_and_Transportation/) was accessed in order to find accommodation in a specific location (Paris, Kentucky in this case). As a result this site has been assigned to genre: Travel & Tourism
- Poz Productions (<http://www.pozproductions.com/agcanada.htm>) was an interesting directory type site, which included alphabetical listings of talent agencies in Canada

D. GOVERNMENT SITES

Government web pages emerged a total of 542 times in our sample logs of the five cities. These sites comprised an average of 2% in the logs of each city, ranging from a high of 3.8% in Halifax to a low of .5% in Winnipeg. Sites in these categories include Canadian Federal, Provincial, Regional and Municipal governments and foreign governments at all levels.

Government – Federal

The Government – Federal category includes web sites that were created and published by the Government of Canada or one of its agencies. Two hundred sixty of the 542 government sites were in this category. The most frequently accessed sites dealt with employment, taxes, and industry/business.

Typical Sites:

Jobs

- Human Resources and Development Canada's Job Bank website (<http://www.jobbank.gc.ca/>) was the most frequently accessed government site in Burnaby, Halifax, Winnipeg, and Brantford. Job Bank on the Internet is an electronic listing of jobs and work opportunities provided by employers from everywhere across Canada.
- HRDC's Job Futures website provides employment outlooks by occupation and field of study (<http://jobfutures.ca/doc/jf/index.shtml>).
- HRDC's National Occupation Classification (<http://cnp2001noc.worklogic.com/e/groups/1.shtml>)
- The Department of National Defence's Career Profiles (http://209.82.43.54/html/careers/career_profiles/mili_poli.html) including profiles for the navy and the military police.
- Sites about the most frequently administered qualifying exams, e.g. Administrative Support: the Office Skills Test (http://www.psc-cfp.gc.ca/ppc/assessment_pg2_ba_e.htm)

- RCMP recruiting page (<http://www.rcmp-grc.gc.ca/html/recruit.htm>)
- Industry and Business
- The Interactive Business Planner from Canada Business Service Centre appeared 7 times (http://www.cbcs.org/ibp/home_en.cfm). This interactive tool allows users to create their own customized business plans.
- Industry Canada's Strategis site, both the intellectual property office (<http://cipo.gc.ca/>) and the business/consumer site (<http://strategis.ic.gc.ca/>) were accessed in Halifax and Calgary
- Personal Finance / Investment
- All 35 Federal Government sites in the Personal Finance / Investment category came from the Canada Customs and Revenue Agency website. Most of these sites dealt with income tax, such as <http://www.ccr-aadrc.gc.ca/tax/individuals/menu-e.html>. Most of these hits (26 of 35) came from the Brantford logs, a reflection of the fact that the logs were stripped in March 2002, shortly before income taxes are due.

Interesting / Unusual Sites:

- *On-line Information Kiosk* was accessed to find a list of educational institutions by province (<http://www.intergov.gc.ca/edu/index.html>)
- An Environment Canada site pertaining to weather in Nova Scotia (http://www.cmc.ec.gc.ca/climate/normals/E_NS_NDX.HTM)
- *Canada's Guide to Festivals and Events* (<http://www.festivalseeker.com/>). This site contains a listing of events across Canada.
- *Canada's Digital Collections* (<http://collections.ic.gc.ca/industrial/gurney.htm>) was accessed to view information about the history of the City of Hamilton.
- The National Library of Canada website was accessed to view information on Canada's Prime Ministers (<http://www.nlc-bnc.ca/2/4/index-e.html>).
- A Public Works and Government Services Canada page was accessed to find out how to purchase government surplus items (<http://crownassets.pwgsc.gc.ca/text/howtobuy-e.htm>).
- The Canadian Passport Office (<http://www.dfait-maeci.gc.ca/passport/menu.asp>).

Government – Provincial

This category includes sites published by any of the provincial or territorial governments of Canada. One hundred thirty-four sites were in this category. Overall, the most frequently accessed subjects, in descending order, were:

- Jobs/Employment - 71
- Travel & Tourism - 21
- Health - 12
- Law & Legislation - 18
- Education - 6

Typical Sites:

- Jobs
- *BCWorkInfo Net* (<http://www.infor.net.bc.ca/>)

- *Manitoba Government jobs*
(<http://www.gov.mb.ca/csc/jobs/admin.clerical/5367.html>)
- *Nova Scotia Dept. of Labour* (<http://www.gov.ns.ca/enal/>)

Travel

- *Ontario Parks* site (<http://www.ontarioparks.com/>)
- *Royal Tyrrell Museum* (<http://www.tyrrellmuseum.com/>)
- *Travel Manitoba* (<http://www.travelmanitoba.com/contents.html>)

Health

- Three Vancouver Hospital sites giving information on post-cancer operation breast reconstruction
- *Alberta Alcohol and Drug Abuse Commission*
(<http://www.gov.ab.ca/aadac/services/treatment/halfway.htm>)

Law & Legislation

- The Ontario Rental Housing Tribunal web page. This organization resolves disputes between landlords and tenants. (<http://www.orht.gov.on.ca/home.html>)
- The Alcohol and Gaming Commission website (<http://www.agco.on.ca/en/b.alcohol/bl.types.html>) was accessed to find information regarding liquor licenses.

Education

- The Ontario Ministry of Education website
(<http://www.edu.gov.on.ca/eng/general/elemsec/elemsec.html>)
- Website for Nova Scotia's Colleges (<http://www.international.ednet.ns.ca/>)

Interesting / Unusual Sites:

- A Government of Ontario *Festivals and Events* search page
(http://207.61.131.69/bgs/owa/tourism_search.search_page?p_qpg_id=97&p_lcode=E)
- *BC Film Commission* (<http://www.bcfilmcommission.com/>)
- *Alberta Liberal Party* (<http://www.liberalparty.ab.ca/>)

Government-Regional

This category includes sites created and published by regional governments in Canada such as the Greater Vancouver Regional District and the Halifax Regional District. Only 7 (less than 1%) sites were in this category. Sites accessed dealt mainly with regional policing and transportation. A typical site was the Greater Vancouver Translink Transportation site (<http://www.translink.bc.ca>)

Government – Municipal

Municipal government sites appeared 84 times in total within the samples, with the greatest number of hits in Calgary (41), and the fewest in Winnipeg (5). The most frequently

accessed sites in all cities pertained to jobs/employment, with tourism/recreation and law/legislation placing second and third.

Typical Sites:

- The *Brantford Employment Services* website lists jobs available with the City of Brantford. (<http://www.brantjobs.on.ca/>)
- The Calgary Fire Dept.'s recruitment page lists jobs available (<http://www.gov.calgary.ab.ca/fire/recruitment>)
- Recreation information from *Surrey City of Parks* (<http://www.city.surrey.bc.ca/ParksRecCulture/CurrentFuture.htm>)
- The main site pages of cities were also accessed – (<http://www.city.vancouver.bc.ca/>)
- Municipal bylaws were accessed in three cities: (<http://www.city.vancouver.bc.ca/bylaws/>)

Government – Foreign (international)

Fifty-seven sites published by foreign governments were accessed, with customers from Winnipeg (15) and Calgary (20) accessing them most frequently. Most sites were U.S.-based, and dealt with immigration, the environment, or travel.

Typical Sites:

- U.S. Immigration & Naturalization Service (<http://ins.usdoj.gov/graphics/index.htm>)
- Official website of Iran tourism (<http://itto.org/attract/niasar/index.htm>)
- Pennsylvania Visitors Network I (<http://www.pavisnet.com/bradford>)
- U.S. Environmental Protection Agency (<http://www.epa.gov>)
- NASA Information (Accessed in three cities) (<http://pds.jpl.nasa.gov>) and (<http://antwrp.gsfc.nasa.gov>)
- CIA Information Site (<http://www.cia.gov>)

Interesting / Unusual Sites:

- The *Railroad Commission of Texas* website (<http://www.rrc.state.tx.us/divisions/afred/residential/rescost.html>) was accessed twice. The particular page compares the costs of Propane vs. Electricity for home use.
- The Minnesota Office of Environmental Assistance website page that discusses how to reduce Mercury in the environment (<http://www.moea.state.mn.us/berc/mercury.cfm>)
- The New Jersey Department of Transportation homepage (<http://www.moea.state.mn.us/about/index.cfm>).

E. EDUCATIONAL INSTITUTIONS

Web sites classified in this format focussed on the theory and practice of learning and instruction, or presented an overview of accredited institutions/schools of learning, admissions, course offerings, scholarships, and other related issues. An average of 2% of a city's sites were classified in this area, ranging from .7% in Brantford to 3.6% in Burnaby. In

each city, approximately three-quarters of the sites accessed were Canadian educational institutions, and most of those were the sites for colleges and universities in that city. Other institution sites were in the U.S. (most commonly), Norway, Wales, the Caribbean, and Singapore. The theme of most sites visited was admissions-related, pertaining to registration procedures, admission requirements, program outlines, course descriptions, and general advice/information for prospective students.

Typical sites:

- Humber College (<http://humberc.on.ca/index.html>)
- McMaster University (<http://www.mcmaster.ca/>)
- University of Manitoba (<http://webapps.cc.umanitoba.ca/calendar02/>)
- Simon Fraser University (<http://www.reg.sfu.ca/adm/>)

Interesting sites:

- University of Victoria Fine Arts Department (Graduate Faculty – <http://www.finearts.uvic.ca/visualarts/graduate/>)
- Teacher-prepared websites, as well as class notes, mounted on the institution's server, were also a common occurrence. Examples: <http://www.wsu.edu:8000/~dee/ENLIGHT/SCIREV.HTM> and <http://academic.brooklyn.cuny.edu/history/virtual/core4-4.htm>

F. MAGAZINES AND NEWSPAPERS

E-Zine

Ezine is short for *electronic magazine*, a magazine that exists in digital format only. Ezines comprised less than 1% of sites in all five cities. In all locations, it appeared that library customers were seeking information related to their hobbies and personal leisure interests rather than their professional or educational interests. Only 64 sites in total were analyzed: the most common subjects assigned to these sites were (in descending order) sports, entertainment, and news.

Typical sites:

- Many sports sites accessed were on the domain (<http://www2.sportnet.ca>). Three of the sites dealt with the National Hockey League, and one focused on lacrosse.
- A motor-racing sport e-zine (<http://www.atlasfl.com/>)
- A science fiction entertainment e-zine *Entertainment Tomorrow* (<http://www.entom.com/books/books.html>)
- A Chinese language news e-zine (<http://lifemag.appledaily.com.hk>)

Interesting sites:

- Republica Gay (<http://www.republicagay.com>), the Spanish-language Venezuelan ezine for gay men.
- African news site (<http://allafrica.com>)
- "The socio-political magazine for the hip-hop generation" (<http://www.politix.net>)
- Teenage fan magazine (<http://marykateandashley.com/>)

- An e-zine for aspiring beauty queens – Turn for the Judges (<http://www.tftj.com/miss/USA01.htm>)

Magazines

Magazines - defined as electronic versions of an existing print magazine - comprised less than 1% of sites in all five cities, and only 74 sites in total. A wide range of subjects were represented: the subjects of cars, entertainment, sports, news, and computer games appeared most frequently.

Typical Sites:

- Motor Trend Magazine (<http://www.motortrend.com>) and Truck Trend magazine (<http://www.trucktrend.com>)
- Sporting News Fantasy sports sites (<http://fantasygames.sportingnews.com/hockey/fullseason/fantasy/login.html>)
- TV/Film Information (<http://www.reelwest.com>)
- Spanish language news magazine titled *La Republica* (<http://www.larepublica.com.pe/>)
- On-line versions of *Men's Health* magazine (<http://www.menshealth.com/>)

Interesting sites:

- Girls Life Magazine (<http://www.girlslife.com>), which features discussions about current issues in the news, entertainment reviews, celebrity gossip and contests.
- A Turkish language entertainment magazine (<http://www.plus7dni.sk/>)
- A soft-core monthly magazine devoted to “sexy smoking” (<http://www.smokesigs.com>)

Canadian News Media

This genre includes non-newspaper web pages whose primary purpose is to provide news services (e.g. CBC). In each city, these sites comprised approximately half of one percent of sites. In total, 61 sites were analyzed: most were concerned with current news events.

Typical sites:

- CBC Main page (<http://cbc.ca>)
- Global TV Atlantic Canada (<http://atlantic.globaltv.com/mar/news/stories/new-20010126.html>)

Interesting sites:

- One user visited a Canadian Broadcasting Corporation news story on the airline company Westjet (http://www.cbc.ca/stories/2002/03/20/westjet_020320).
- Ontario's Indymedia site (<http://ontario.indymedia.org>), a site designed by political activists describing recent and upcoming political protests and mobilizations
- An investment news site (<http://canada.bigcharts.com/>)

International News Media

Sites in this genre are non-newspaper web pages whose primary purpose is to provide news services. The web sites must have been created and initially distributed in a country other than Canada (e.g. CNN). It appeared that the primary motivation of library customers for accessing this type of web page was to learn about global events and investments, along with sports scores

from games played in countries not covered by the North American sports media. A total of 216 sites were analyzed for this genre, with 17 languages represented. These sites appeared most often in Burnaby (2.5%) and least often in Winnipeg (.1%) and Halifax (.42%) Most sites were concerned with news, entertainment, and sports.

The languages of the international news media sites included English, French, Albanian, Portuguese, Spanish, Polish, Somali, Italian, Gujarati, Chinese, Serbo-Croatian, Japanese, Korean, Turkish, German, Danish, and Arabic.

Typical/Interesting sites:

- The BBC News (<http://www.bbc.co.uk>)
- Albanian sites, such as the BBC news in Albanian (<http://www.bbc.co.uk/albanian/020323162819.shtml>)
- German information site (<http://logout.tvspielfilm.de>)
- Turkish news (<http://www.milliyet.com.tr>)
- Religious news media site Spirit Daily (<http://www.spiritdaily.com>)

Canadian Newspapers

Sites in this genre are web-mounted Canadian newspapers (local, city, national, or other) that are created and distributed in Canada and written in either of the two official languages. Fifty-four sites in total were analyzed in this category, representing less than 1% of sites for each city. This site type was accessed most frequently in Calgary.

Typical/Interesting sites:

- *The Brantford Expositor* (<http://www.brantfordexpositor.com>).
- *The Toronto Star* web site (<http://www.torontostar.com>).
- *The Cape Breton Post* (<http://www.capebretonpost.com>)
- *Vancouver Chosun* (<http://vanchosun.com/>)
- *Winnipeg Free Press* (<http://www.winnipegfreepress.com/>)
- *Halifax Daily News* (<http://hfxnews.southam.ca/>)
- *The National Post* (<http://www.nationalpost.ca>).
- The comic strips in the *Montreal Gazette* (<http://www.canada.com/montreal/montrealgazette/specials/aislin>).

International Newspapers

This genre contains any web-mounted newspaper (local, city, national, or other) that is created and distributed in a country other than Canada. Individual web pages within a newspaper were sometimes be classified by subject, otherwise they were designated as “news”. Two hundred fifteen sites in this category were analyzed. Sites from this genre were most frequently accessed in Burnaby (3.4%), but represented only .5% of sites in the four other cities.

The languages represented in this category were English, French, Albanian, Polish, Spanish, Italian, Gujarati, Serbo-Croatian, Chinese, Korean, Arabic, Turkish, Japanese, German, Russian, Urdu, and Danish.

Typical/Interesting sites:

- *Deccan Chronicle*, an Indian newspaper, (www.deccan.com)

- Gujarati newspaper, *Sandesh* (<http://www.sandesh.com>).
- Italian newspaper, *Messaggero Veneto* (<http://www.messaggeroveneto.kataweb.it/>)
- English language *Kurdish Observer* (<http://kurdishobserver.com/>)
- Chinese language *China Times* (<http://www.chinatimes.com.tw/>)
- Laotian newspaper *Vientiane Times* (<http://www.vientianetimes.com/>)
- News from Haiti (<http://www.ahphaiti.org/ndujour.html>)

G. TELEVISION AND RADIO

Television

Television sites feature the ability to view television signals via video streaming on the world wide web. Only 11 sites in total from this genre were accessed. Three sites were news TV programs, three were films, four were music shows, and one appeared to be an electronic game.

Typical/Interesting sites:

- The cable music channel, Much Music (<http://muchmusic.com>).
- Videos from the Nickelodeon television show Amanda Please! (<http://www.nick.com/amandaplease/video/index.jhtml?vidName=twinkle>)
- “The Pod People” – A short film online at RSUBox (http://www.rsubox.com/podpeople/pp_opening.swf)

Radio

Radio web sites have the ability to listen to radio programs via audio signals on the world wide web. These sites are different from a radio station’s promotional site. Only 22 sites in total were accessed in this category, representing less than .5% of each city’s total accessed sites.

Typical/Interesting sites:

- Radio station playing music of the 1970s and 80s (<http://www.1050chum.com>)
- CBC “Roundup” (<http://radio.cbc.ca/programs/roundup/sadie.html>)
- Radio Afghan Dari News (<http://www.powerup.com.au/~afghans/news.ram>)

H. PERSONAL WEB PAGES

A personal web page site is one where authority is attributed to an individual (usually the case) or individuals. An average of 2.5% of a city’s sites were classified in this area, ranging from 4.6% in Winnipeg to 1.6% in Brantford. These personal sites pertained to a great variety of subjects, but the most common were showcases for an individual’s favorite music or movie celebrity (e.g. Mel Gibson), personal online portfolios or galleries (e.g. Barbara’s Personal Lair), or showcases for someone’s hobby (e.g. raising pug dogs)

Typical Sites:

- Personal websites featuring information about various electronic games’ shortcuts (<http://db.gamefaqs.com/>) or (<http://www.tip.it/runescape/>)

- Motherboard manuals, data, and more (<http://venus.spaceports.com/~canada/webhq/search.htm>) where volunteer hobbyists provide (for free) computer manuals online and general assistance.
- Website dedicated to *Lord of the Rings* (<http://www.thelordoftherings.net/>)
- Website largely dedicated to pictures of tennis player Anna Kournikova (<http://www.geocities.com/Colosseum/Stadium/1078/index.html>)
- A fan site for actor Jet Li (<http://www.kathychau.com/jetli/movies.htm>)

Interesting sites:

- Clones of the popular Neopets website, such as (<http://www.geocities.com/neopetmadness/>) appeared frequently
- A few sites included under the music subject, have been created as databases for guitar tabs, chords, etc. (<http://www.tabrobot.com/>) -- ‘Music Robot’ website, featuring a database of guitar tabs, searchable by band name, artist name, song title, beginning letters and numbers
- <http://www.mulletsgalore.com/> - a site that celebrates and defines the “mullet” hairstyle
- <http://www.babynames.com/V5/index.php> -- is a database of baby names, presumably accessed when trying to decide on a name for a new member of one’s family
- <http://sailfish.exis.net/~spook/cheetxt.html> -- is a personal web page catalogued under the ‘Science & animals’ subject. This particular site is a very simple report on the cheetah
- <http://www.pugcentral.com/holidaypugs/> -- has been created by a Pug (dog breed) enthusiast, with particular consideration given to pictures of the featured breed throughout the Christmas holiday season
- <http://www3.sympatico.ca/taniah/Canada/> -- is a web site proudly attributed to the Canadian culture, introducing links to Canadian sites, graphics featuring images representative of the culture, information about facts of Canada as a country, and much more
- <http://www.cblocals.com/> --is about underground music and skateboarding on Cape Breton Island
- http://www.realhaunts.com/canada/british_columbia.htm -- is about “real haunted houses” in B.C.

PART 3 – ANALYSIS OF SUBJECTS

A. ART & POPULAR CULTURE

Arts, performing and fine

This subject focuses on web sites featuring artistic content, including dance, painting, theatre, and related areas. Few sites were accessed: an average of only .4% for each city, so no generalizations can be made.

Interesting sites:

- Keibunsha – the art of tattooing (<http://keibunsha.com/Nonshocked/indexnon.html>)
- <http://www.artofmotiondance.com/hiphop.html> -- is a website dedicated to dance classes of various genres, and for people of all ages
- Banff Centre corporate site (<http://banffcentre.ab.ca/Theatre/Drama/default.htm>)
- <http://www.bustamove.com/> -- an especially fascinating type of a web community, involved in online dance instruction. This web site creates a network of people interested in various forms of dancing, including information on dance events in one's area, featuring articles and news clips particular to this discipline, as well as allowing its members to establish personal relationships with each other

Books

This subject encompasses web pages that focus on books and book reviews. An average of approximately .5% of each city's logs fell into this classification. Most of the hits were on-line bookshops.

Typical Sites:

- <http://www.amazon.com/> -- Amazon.com was the most popular source for e-commerce transactions particular to the bookselling business, followed closely by:
- <http://chapters.indigo.ca/>

Interesting Sites:

- <http://www.omnibusol.com/medieval.html> -- this is a website posted by a Foothill College professor (the website itself is not affiliated with the institution), and is "an Internet book on the Medieval/Renaissance/Reformation world"
- <http://www.globebooks.com/interviews/shieldscarol.html> is an e-commerce site that focuses on books, book reviews, and interviews with authors
- <http://www.sparknotes.com/> -- Spark Notes, a corporate image similar to Coles Notes, is a website devoted to promotion of study guides, available in a wide range of topics: from English literature to biology and math
- <http://www.everyman.uk.com/> -- Everyman Publishers is a UK based publishing company, sponsoring their image through this website
- <http://www.PoeticLimericks.com/> -- a personal website created by the book's author, has been created as an advertising vehicle for this poem compilation

- <http://www.artoftravel.com/04cheapflights.htm> -- Art of Travel is an ebook covering tips on various aspects of traveling. The book is available online in its entirety

Entertainment

The content of the “catch-all” entertainment subject encompasses entertainment options other than the arts, books and music. Fashion magazine sites, as well as professional wrestling web sites are embraced by this subject. Brantford and Burnaby libraries appeared to have a solid cadre of Pro Wrestling fans who frequently accessed a variety of professional wrestling sites. An average of 2% of sites for each city were in this category: most were corporate sites.

Typical Sites:

- <http://www.prowrestling.com> -- ProWrestling.com is a highly popular website featuring various issues surrounding the World Wrestling Federation. The website includes: latest news, biographies, pictures, chat forums and much more
- <http://www.wrestlemania.com/> -- Wrestlemania.com is yet another well-liked web site, addressing the World Wrestling Federation
- the E-commerce genre was most frequently available through: https://ticketing.ticketmaster.com/cgi/purchasepage_ca.
- An “anything goes” chat site called VIP Lounge for those interested in chatting about pop culture (http://staging.papermag.com/cgi-bin/VIP/www_protect.cgi/)
- <http://www.kidonet.com/> -- KidoNet is a web community site for children, encompassing the 3 –12 year old age group. “KiddoNet’s mission is to offer kids an on-line space with high quality content and web tools that allow them to create, learn, play and communicate safely.”

Interesting sites:

- <http://www.barbie.com/kellyclub/home.asp> -- is a Mattel, Inc. based web site, featuring various electronic games for children (girls in particular)
- <http://www.pollypocket.com/home.asp> -- yet another web site sponsored by Mattel, Inc., providing user with “personal entertainment, information, education, and communication”
- <http://www.whatsherface.com/> -- an additional entertaining website sponsored by Mattel, Inc. for the enjoyment of the younger female population
- <http://www.ucomics.com/cathy/> is a Web based source for comic strips. As a registered user (free registration), various features, such as a custom email delivery, electronic games, etc. are accessible through this site

Music

The music subject is defined as: a website with content focusing on any style of music, including fan sites, as well as sites providing music and tools for downloading. This subject heading excludes radio stations’ sites. An average of 2.5% of each city’s sites correspond to this subject area, and most of these sites were commercial sites mounted by the entertainer or a record company.

Typical Sites:

- <http://www.eminem.com/> -- official website of Eminem
- <http://www.britneyspears.com> - official website of Britney Spears
- <http://www.nsyncworld.com/> -- official 'NSync website
- <http://www.mp3.com/> -- a site dedicated to digital music in MP3 format. Free and value added (small monthly charge) subscriptions are available. MP3.com features music files characteristic of many musical genres.
- <http://www.trurez.com/> -- Trurez Crew is a hip hop group representing the Six Nations culture. "The themes of their music range from partying and having fun to serious native issues such as suicide and first nations pride."
- <http://www.carterconnection.com/> -- this website features the Carter Family band
- The Chat/message/bulletin board genre, featured the following Typical Site: <http://pub101.ezboard.com/fthemoffattsmessageboard69306frm6> --this website is a chat room for the Moffats fans
- Electronic commerce (<http://www.columbiahousecanada.com/>)

Interesting sites:

- <http://www.torontoraves.com/> -- this website provides for a discussion highlighting the rave scene in Toronto and the surrounding areas. Chat topics include: general chat, rave forecasts, party (rave) reviews, and finally a music forum
- <http://www.classicalmusic.co.uk/viewlinks.asp?group=9> -- a UK based Classical Music site
- <http://www.cmt.com/> -- the Country Music Channel, an Internet based 'interpretation' of the radio station, allows for live radio broadcasting, amongst other features (programming list, news, artist info., etc)
- <http://www.realbluesmagazine.com/> - Online edition of a popular magazine

TV/Film

This subject depicts websites with content that focuses on the television/film industry, including performers, performances, and general interest information. An average of only 1.5% of sites for each city were in this category, and most were general corporate sites mounted by TV networks or corporate sites focused on particular TV programs.

Typical Sites:

- CBS site (<http://www.cbs.com/network>)
- Bay Watch (<http://www.baywatch.com>)
- <http://www.thesimpsons.com/> -- an online episode guide to the popular series Simpsons
- Chat site with conversations revolving around the soap opera called *Passions* (<http://ckhottie.friendpages.com/cgi-bin/fp/site/guest.cgi>)
- <http://www.foxkids.com/> -- a website featuring the Fox TV network for kids, described as a "site that extends the Fox Kids experience by featuring well-known TV characters and programming information online."

- <http://www.famousplayers.com/showtimes.asp> -- is a site created by Famous Players, which allows its visitors to locate movie theatres, and determine the playing show times

Interesting sites:

- <http://www.cinemaniacs.co.uk/> -- a UK based cinema web community designed for kids. The website features latest and future movie releases, games and competitions, and interactive elements
- <http://www.badmovies.org/> -- this website glorifies the 'bad movie scene'. Movies are reviewed based on how terrible they are... it serves as a database of movies that one should NOT run to see!
- PBS Kids (<http://pbskids.org/>), supported by the National Institute on Early Childhood Development and Education in the U.S. Department of Education. This website offers children the ability to play and interact with the wide range of TV characters, supported by the PBS Television Network

B. BUSINESS & ECONOMICS

Industry & Business

Sites in this subject area focus on prime industries, providing information on corporations, their governance, structure and operations. These sites accounted for an average of 0.75% of sites, with the fewest in Halifax (0.5%) and the most in Brantford (1.28%). In Calgary, Burnaby, and Winnipeg, the majority of visits were to the websites of companies, while in Brantford, search engine hits on this topic were most numerous.

Typical Sites:

- Suncor Energy (<http://suncor.ca/>)
- BC Rail (<http://bcrail.com/>)
- Banner Advertising Company (<http://oz.valueclick.com/>)
- Sable off-shore drilling (<http://soep.com/soep-bin/search/>)
- Highliner Seafood (<http://www.highliner.com/>)
- The Yahoo! Canada Finance (<http://ca.finance.yahoo.com/>) site was accessed four times. This site is a portal to information on companies for investment purposes.

Interesting / Unusual Sites:

- A site showing the earnings of Pepsi Corporation for the 4th Quarter of 2001 (http://www.pepsico.com/earn/earnings_release_20014.shtml).
- The website of the American Pipe and Supply company (<http://www.americanpipe.com/>).

Jobs

Job searches are an important aspect of Internet searching at the public library, comprising an average of 4% of hits. The content of sites in this subject area focuses on job seeking and/or employment, and employment issues. Federal, provincial, and municipal government employment sites were very popular, comprising approximately 40% of the job sites in this category. Almost rivalling the government sites in frequency in most cities were corporate sites belonging to companies offering searchable job listings.

Typical Sites:

- The Federal Government sites Job Bank (<http://www.jobbank.gc.ca/>) and Job Futures (<http://jobfutures.ca/doc/jf/index.shtml>) were very popular across the country.
- A typical provincial site (http://www.gov.ns.ca/dtc/employment/casual_employment_app.htm)
- Typical commercial job search sites were Workopolis (<http://www.workopolis.ca/>); Monster.ca (<http://jobsearch.monster.ca/>); Career Cruising (<http://www.careercruising.com>); and JobsPress (<http://www.jobspress.com/cgi-bin/uncgi/dosearch>).

Interesting / Unusual Sites:

- One user looked at a job posting on the AgriSupport Online webpage for a job as Milk Production Manager in Ismalia, Egypt (<http://www.agrisupportonline.com/findjob47.htm>).
- One user looked at a “Salary Wizard” to view typical salaries for Accountants. (http://netscape.salary.com/salarywizard/layoutscripts/swz1_titleselect.asp?geo=&narrowcode=FA01&zipcode=18&metrocode=).

Online Banking

Sites in this category comprised less than 0.5% in all cities except Burnaby where they constituted 1.2% of sites. This may be due to the fact that the Burnaby logs were downloaded in 2000, when fewer customers had home access to a computer, and therefore did their on-line banking (generally a “personal” transaction) at the public library.

Typical Sites:

- CIBC (<http://www.cibc.com/solution/home.jsp>), Bank of Montreal (<http://www.bmo.com/>) and Scotia Bank (<https://www.scotiaonline.scotiabank.com/pcbanking>).
- The Epost online bill payment system was also accessed once (<http://www.epost.ca/main/nav/ie-index-English.html?portal=yahoo>). This site allows users to pay bills from a variety of sources online.

Personal Finance / Investment

In Halifax, Calgary, Winnipeg, and Brantford, this category constituted 1-2% of sites, but in Burnaby, 7% of sites were in this category. The content of sites in this subject area focuses on banks, banking, taxes, credit cards, mutual funds, stocks and other investments or investment opportunities, but excludes actual banking transactions. Many of the hits in the Brantford logs were federal government sites related to income tax, reflecting the time (March) when the logs were downloaded. Sites that gave stock market advice were very popular in this category. International banking sites also appeared in this category, particularly in Winnipeg.

Typical Sites:

- The Canada Customs and Revenue Agency's website (or searches leading to the site) Many of the hits were for forms, possibly for taxation purposes (<http://www.ccra-adrc.gc.ca/formspubs/menu-e.html>).
- Toronto Stock Exchange site (<http://www.tse.com/>)
- Chinese e-trading site (<http://www.quote888.com>)
- Globeinvestor.com (<http://www.globeinvestor.com/>). This site bills itself as “stocks, investing and financial news from a Canadian perspective”.
- Online application for a credit card (<http://www3.nextcard.com/beginapply/>)

Interesting / Unusual Sites:

- Part of the Globe and Mail website, the Ultimate Investor Challenge page that sponsors a contest for whoever can build the best performing mock stock (http://www.mackenziefinancial.com/national_post_contest/fund_description/funds.shtml)
- Investment advice site hosted by Motley Fools (<http://www.fool.com/portfolios/rulebreaker.htm>)
- German banking site (<http://dre.com/knowhow/index.html>)

C. HUMANITIES

As few hits occur in this area, the humanities “basket” is widely comprehensive. It includes history, religion, literature, education, political science, sociology, anthropology, and genealogy .

Education

Education web sites focus on the theory and practice of learning and instruction and include course offerings at educational institutions. Users accessed education sites an average of 2% of logs in the individual cities, ranging from 0.8% in both Brantford and Winnipeg to 4% in Burnaby. Most customer visits (approximately 75%) were to individual educational institutions. Other visits were to government or corporate sites and to search engines.

Typical Sites:

- University of Waterloo (<http://www.adm.uwaterloo.ca>).
- University of Victoria (<http://www.uvic.ca/>),
- University of British Columbia (<http://www.ubc.ca>)
- Lawrence College in Newfoundland (<http://www.lawrencecollege.com/>)
- Information about ESL courses at St. Mary's University in Halifax (<http://www.stmarys.ca/academic/tesl/iep/tiemtbl.htm>)
- Application for international student entry at the TAFE in Brisbane (<http://www.brisbane.tafe.net/course/brochure/c2as.asp>)
- Site that gives information on TESOL training and on opportunities for Canadians to teach abroad (<http://www.teachandtravel.com/>)
- Yahoo College Search (<http://www.petersons.com/cgi-bin/yahoo.pl>)

- Government of Ontario Ministry of Education (<http://www.edu.gov.on.ca/>).

Interesting Sites:

- University of Norway (in Norwegian) (<http://www.uio.no/>)
- University of the Philippines (<http://www.upd.edu/~ph/>)
- Dong-a University in South Korea (www.donga.ac.kr)
- Vancouver Film School (http://www.filmaction.com/vancouver_film_school.htm)
- Saint Thomas Academy (<http://www.cadets.com/main.php>), a “Catholic all-boys, college-preparatory military day school” in Minnesota.

Genealogy

This category was rarely accessed: no searches on this topic appeared in the samples in Halifax or Calgary, and 10 or fewer in the other cities. Web pages in this subject area focus on the study or investigation of ancestry and family histories as performed over the Internet. Sites analyzed included commercial companies offering genealogical searches, a church records site, visits to helpful non-profit organizations, and several personal websites.

Typical Sites:

- A church records site (<http://rootsandbranches.com/>)
- Rootsweb (<http://www.rootsweb.com>), an on-line database, network, and vendor of genealogical data
- Family Tree Maker (<http://familytreemaker.genealogy.com>). Similar to Rootsweb, and also the registered trademark for a Genealogical Software product sold by the giant software and book vendor The Learning Company.

Interesting Sites:

- One interesting site in this category was in one of the many Yahoo Groups (<http://groups.yahoo.com/group/Tomczak/>). This site features a large picture of an elderly woman, a descendent of Polish immigrants who came to the Canada over 111 years ago.

Humanities (history, religion, literature)

Humanities web sites focus on subjects such as history, religion, spirituality, and literature. Users accessed humanities sites an average of 1% of total sites, ranging from a high of 1.5% in Brantford to 0.3% in Halifax. No patterns or typical sites could be discerned in these searches, as the variety was extremely eclectic. However, in each city, religious web sites were popular.

Interesting Sites:

- Spirit Daily (<http://www.spiritdaily.com/>). This site focuses on Catholic issues but also addresses general spirituality and the supernatural.
- Religious web community fostering web chat (<http://www.edepot.com/religion/shtml>)
- Site for teenage girls involved in the theatre who are looking for appropriate monologues (<http://www.geocities.com/foxfire321>)

- Information on the Wiccan religion (<http://wiccan-refuge.com>)
- Sources for poetry and quotations (<http://weddingromance.com/poemslist>) and (<http://www.cs.virginia.edu/~robins/quotes.html>)
- Notes on the book *Animal Farm* (<http://pages.citenet/users/charles/af-notes.html>)
- Hints on Japanimation Story Writing (http://members.xoom.com/_XMCM/otherwords/newstory.html)
- Japanese site [no title] (<http://www.watchtower.org/languages/japanese/library/jt/index.htm>). This site is actually part of the Watch Tower Bible and Tract Society of Pennsylvania.

Social Sciences (political science, sociology, anthropology)

Very few social sciences related sites were visited – approximately 0.2% of the total in each city, so no general patterns or conclusions could be made.

Interesting Sites:

- Amnesty International page on how to stop torture throughout the world (<http://amnesty.ca/stoptorture/join.htm>)
- Politix Mag Dot Com (<http://www.politix.net/>), “The socio-political magazine for the hip-hop generation.” Through this site users can subscribe to a mailing list, read interviews and editorials, and find out what’s going on in media and sports of concern to members of the hip-hop sub-culture
- Editorial cartoons by Ron Moffatt (<http://www.mostlyhotair.com/>). This site, Mostly Hot Air, is described as “a humorous peek into the world of Canadian and International politics as conveyed through the medium of cartooning.”

D. LIFESTYLE

Home and Garden

Home and garden web sites focus on matters pertaining to home improvements, home decorating, do-it-yourself projects, cooking and gardening. Users visited home and garden sites infrequently - an average of 0.15% of a city’s hits. Most sites were hosted by corporations.

Typical Sites:

- Martha Stewart’s web site (<http://www.marthastewart.com>).
- Choosing and growing roses (www.suite101.com/article.cfm/gardening_great_lakes/91383)
- Recipe sites (<http://www.epicurious.com>)
- The Canadian decorating magazine, *Style at Home* (<http://www.styleathome.com>).

Personal Relationships

The web pages in this subject area focus on non-professional inter-personal relationships, such as personal ads and information on how to get along with family and friends. This subject was introduced into the research after a increasing number of hits appeared in this area as the project progressed, so the analysis only includes Brantford and Halifax. In

Brantford, these sites constituted 8.4% of hits; in Halifax, 2.3%. In both cities, nearly 60% of these sites were personals/classified sites - matchmaking sites.

Typical Sites:

- Yahoo profiles sites were extremely popular. There were many hits on various individuals' personal pages on the (<http://ca.profiles.yahoo.com>) domain.
- Quest Personals web site (<http://www.questpersonals.com>) was popular, as was Outpersonals (<http://www.outpersonals.com>)
- The personals page on (<http://www.gay.com>) received several hits in both cities.
- One user spent an hour reviewing the quirky personals site, Face the Jury (<http://www.facethejury.com>), where users rate each other online.
- Classmates.com (<http://www.classmates.com>), a directory of high school alumni in the United States.

Work Life

The web sites in this subject area focus on topics dealing with work-related issues such as stress, repetitive strain injury, and employment/management problems. This subject was used only with the Brantford and Halifax logs. Only 0.06% of sites at Brantford fit this subject heading; none were classified with this heading in the Halifax logs.

Typical sites:

- Nonprofit Risk Management Center's web site about grievance procedures and internal dispute resolution (http://www.nonprofitrisk.org/nwsltr/archive/nl100_1.htm).
- A site about managing workplace diversity (<http://alexia.lis.uiuc.edu/~lis405/diversity/intro.htm>).

Culture

Web sites in this subject area focus on contemporary culture. Only in Brantford and Halifax was this subject used: in Brantford, 0.5% of sites were under this subject, in Halifax, only 0.26%. Most sites were either chat sites or websites about general cultural events in another country.

Typical sites:

- A personal web page, called "Canada, Eh?," that extols the virtues of Canada (<http://www3.sympatico.ca/taniah/Canada>).
- A site about culture in Bangladesh (<http://www.homeviewbangla.com/english/index.php3>)
- A Yahoo chat room about indigenous peoples (http://ca.chat.yahoo.com/?room=Indigenous+Peoples::1600326612&ayb=btu&identity=cam_bear&client=Java).

E. MEDIA & PUBLIC SOCIETY

Law & Legislation

The web sites in this subject area focus on law firms, laws and legislation, and legal institutions (e.g. Justice Institute of BC). Library users in the five cities accessed these sites an average of 0.4% of hits. Most visits were to provincial or municipal government sites, or to sites hosted by associations.

Examples of Canadian government sites accessed include:

- Brantford Police Service (<http://www.police.brantford.on.ca>).
- Winnipeg Police Service (<http://www.freenet.mb.ca/wps/index.html>)
- Insurance Corporation of BC to view a driving record (http://www.icbc.com/license/req_f.html)
- Ontario Ministry of Community, Family and Children's Services (<http://www.gov.on.ca:80/CSS/page/news/news2000/mar2700b.html>) .
- Ontario Ministry of Public Safety and Security (<http://www.solicitorgeneral.msg.gov.on.ca/english/police/default.html>)

Interesting sites:

- Ontario Government web site - Child and Family Services Act (<http://www.search.gov.on.ca/compass?scope=ontario+child+and+family+services+act&ui=sr&chunk-size=10&page=3&taxonomy=Compass>).
- The Hamilton County, Tennessee, District Attorney's web site devoted to domestic violence (<http://www.chattanooga.net/da/domvio03.html>).
- The Alcohol and Gaming Commission of Ontario web site, which lists information about types of liquor licenses for commercial institutions (<http://www.agco.on.ca/en/b.alcohol/b1.types.html>).
- Press releases from the Attorney General's Office, Federal Trade Commission (<http://www.ftc.gov/opa/2000/03/biz.htm>)
- Searches through the forms and FAQ's regarding requirements for immigration to the U.S. (<http://www.ins.usdoj.gov/>)
- Canadian Bar Association (<http://www.cba.org/home.asp>)

Libraries & Information Services

Web sites in this subject area include information services run by both corporate, for-profit entities such as businesses providing competitive intelligence, and non-profit information agencies such as public, academic, and school libraries and archives. This subject area also includes accessing reference tools such as dictionaries and commercial databases. Users accessed an average of 0.6% of sites in this subject area: the sites were mainly online reference tools and the catalogues of other libraries.

Types of library and information sites accessed:

Databases

- Novelist
- Electric Library
- Encyclopaedia Britannica Online (<http://search.britannica.com>)

- Services Documentaires Multimedia Inc. – database for French-language materials, based in Quebec (<http://choix.sdm.qc.ca>)
- CBCA, looking up “gender bias and politics” (<http://cbca.micromedia.on.ca/application/interlink/>)

Examples of Other Libraries/Archives

- TriUniversity Group of Libraries catalogue, serving Guelph, Laurier and Waterloo (<http://trellis2.tug-libraries.on.ca>).
- Internet Public Library (<http://www.ipl.org>) – accessed at least once in 4 of the 5 cities
- Vancouver Public Library (<http://vpl.vancouver.bc.ca>)
- National Archives of Canada (<http://www.archives.ca>) – accessed at least once in 3 of the 5 cities
- National Library of Canada (<http://www.nlc-bnc.ca/2/4>). – accessed at least once in 3 of the 5 cities

News

The web pages in this subject area focus on recent events or happenings, updates, press releases or “what’s new” pages, including news services, newspapers, magazines, or electronic news sites, which are periodically updated, usually daily. Unlike most subjects, the percentage of hits for this subject varied widely among the cities: Burnaby – 6%, Brantford – 1.6%, Winnipeg – 1.4%, Calgary – 0.9%, Halifax - 0.7%, for an average of 2.1% of logs for the individual cities. International newspapers online and international news services dominated this subject area, and the languages of these papers and services included English, French, Albanian, Polish, Spanish, Italian, Gujerati, Portuguese, Chinese, Serbo-Croatian, Korean, Turkish, Arabic, Japanese, Russian, German, Farsi, and Vietnamese.

Discussions about the typical/interesting news sites have been broken into categories of language, in alphabetical order:

Albanian. These three sites were accessed at least once in 3 of the 5 cities: news articles on the BBC’s Albanian web site (<http://www.bbc.co.uk/albanian>); the web site for the Albanian newspaper, the Korrieri (<http://www.korrieri.com>); and (<http://www.kosovapress.com>)

Chinese. The most commonly accessed Chinese-language site in Burnaby was (<http://www.chinatimes.com.tw>)

English. Most of the English sites pertained to news about Canada, the U.S., and the U.K./Ireland

Typical North American sites were the Canadian news web site Canada.com (<http://www.canada.com>), the *Washington Post* (<http://www.washingtonpost.com>), CNN (<http://www.cnn.com>), and the *Orlando Sentinel* (<http://www.orlandosentinel.com>).

Typical News sites in Europe were: *The Irish Times* (<http://www.ireland.com>), the British BBC site (<http://www.bbc.co.uk>), and the *International Herald Tribune* (<http://www.iht.com>).

Other interesting sites in English were Kurdish news sites (<http://kurdishobserver.com>), a pan-African news site - AllAfrica.com (<http://www.allafrica.com>), and the *South African Dispatch* (<http://www.dispatch.co.za/2002/03/22/easterncape>).

French. Users accessed France's national newspaper *Le Monde* (<http://www.lemonde.fr/article/0%2C5987%2C3212--265512-%2C00.html>) several times, but most French news sites pertained to events in African countries. Users accessed such sites as pages in the *The Observatoire de l'Afrique Central* (Central African Observer) newspaper (<http://www.obsac.com>), the Digital Congo web site (<http://www.digitalcongo.net>), and a newspaper from Senegal (<http://www.lesoleil.sn/>)

German. This daily news source was very popular in Winnipeg (<http://logout.tvspielfilm.de.gmx.htm>)

Polish. Polish portal and news site Onet (<http://www.onet.pl>)

Serbo-Croatian. Sites with varying political viewpoints were accessed in Burnaby, Brantford, and Calgary. An example: (<http://www.blic.co.yu>)

Spanish. El Salvador news sites comprised all the hits for Spanish web sites in both Winnipeg and Brantford: El Nacional (<http://www.el-nacional.com>), and El Diario de Hoy (<http://www.elsalvador.com>). But in Burnaby, a Spanish language newspaper published in San Antonio was accessed frequently (<http://www.laprensa.com/>)

Politics & Advocacy

Web sites in this subject area focus on the political or advocacy activities engaged in by a politician, political party, or interest group. An average of 0.3% of sites were classified in this area. Most sites visited had been mounted by philanthropic/non-profit agencies, by individuals (personal web pages), or by groups wanting a chat forum. A great variety of sites were visited, so no typical sites could be identified.

Interesting sites:

- Several First Nations sites were accessed including: Native Youth Movement (http://www.ayn.ca/news/0109/native_youth_movement.htm) and the Innu Nation web site (<http://www.innu.ca>).
- Ontario Public Employee Service Union pages, including one about bargaining for unclassified workers (<http://www.opseu.org/ops/bargaining/unclassindex.htm>).
- An activist chat forum and web site, Guerrilla Underground (<http://www.gunderground.f2s.com>).
- The anarchist site Raise the Fist, (<http://raisethefist.com/index.html>)
- The pro-Taliban site, Taliban News (<http://www.taliban-news.com>).
- Association for Democratic Initiatives, which provides online refugee search service (<http://www.refugiat.org>)
- Sites for individual politicians (<http://herbdhaliwal.com/write.htm>)

- Sites for political parties – Progressive Conservative (<http://www.pcparty.ca/En/index.shtml>)
- An online email archive dealing with Kurdish/Turkey politics (<http://burn.uscd.edu/archives/kurd-1/>)
- A child abuse prevention advocacy site (<http://www.childabuse.com>)

Radio

Web sites in this subject area focus on information by or about the radio industry (e.g. CFOX fm, Z93.5 fm), not actual radio broadcasts. Only 0.1% of all sites accessed pertained to the radio industry, making this one of the smallest subject areas. All of the sites were in English. Users were generally using search engines to search for particular radio station sites. In five cases, users accessed the CBC radio programming pages (<http://www.radio.cbc.ca/programs.shtml>) and freelance information (<http://radio.cbc.ca/programs/outfront/freelancers/index.html>).

Most Intriguing Site:

- (<http://www.artbell.com/>) Site about the radio program “Coast to Coast AM with Vanna and Art Siegel”. The program focuses on unexplained phenomena such as UFOs, Crop circles, Ghosts, etc. Vanna, it appears, is a cat!

F. PRODUCTS & SERVICES

Cars & Automotive

The content of the ‘cars & automotive’ subject focuses on motor vehicles (new as well as used) and concerns related to automotive care. Approximately 0.5% of sites are represented by this subject in each city, with most being corporate sites pertaining to car sales or sites of particular car companies.

Typical Sites:

- <http://www.guildclassiccars.com/> -- A Guild of Automotive Restorers
- <http://trader.ca/> -- an Internet interpretation of the used vehicle ‘magazine’
- <http://listings.ebaymotors.com/aw/listings> -- the EBay site was accessed for price verification, and it seemed to be the most popular subject in the ‘Ecommerce’ category
- <http://volvocars.com/> - the official Volvo site
- <http://www.trucktrend.com/> -- Motor Trends’ Truck Trends is an online magazine, featuring information about various aspects of car business, car ownership, and car repair

Interesting sites:

- <http://www.faurecia.com> -- a European automotive equipment supplier’s website
- <http://auto.progressive.com/> -- a website created by the Progressive auto insurance company, outlining their services through this site
- <http://www.seizecars.com/> -- Auto Auction Center is a website carryover of a company involved in auctioning of seized vehicles
- <http://www.manheim.com/subscribe/freereg.mpl> -- a resource for auto dealers, outlining future car auctions, providing the user with market indexes

- <http://www.carsurvey.org/> -- is a non-profit organization, which delivers numerous reviews to potential car buyers

Greeting Cards

Creation and delivery of electronic cards is the primary focus of this subject heading. An average of 1% of sites fit into this category, almost all of which were corporate.

Typical Sites:

- <http://greetings.yahoo.com/> -- was the most popular company dealing with greeting card distribution; accompanied by its Canadian representation (<http://ca.greetings.yahoo.com/>)
- <http://www.msn.egreetings.com/> -- Microsoft-based greeting card delivery system
- <http://www.beatgreet.com/beat/egrt-music/pg/start> - The Blue Mountain site that allows you to send cards with music

Interesting sites:

- <http://www.cutegreetings.com/> -- a free international electronic greeting card company, with a special regional interest in India (www.India.Cutegreetings.com)

Miscellaneous Products & Services

The focus of this subject is on commercial products or services, such as consulting, accounting, graphic design, telecommunications, and delivery services. An average of 2.5% of each city's sites were classified in this subject, most of which were either e-commerce (where one could actually purchase a product) or corporate (the official website of a company where no e-commerce was possible)

Typical Sites:

- <http://cgi6.ebay.com/> -- Ebay was the main vehicle site behind sales of products
- Other common online shopping stores were:
 - <http://www.futureshop.ca/> -- Future Shop
 - <http://www.dell.ca/> -- Dell – online computer sale
 - <http://www.thebrick.com/> -- Furniture store – The Brick
 - <http://www.searshomecenter.com/> -- Sears
- Typical corporate sites were:
 - <http://www.fido.ca/> -- the cell phone company Fido
 - <http://www.tupperware.com/today/>
 - <http://www.divinechocolate.com/>
 - <http://greencanyon.com/products/c100026.htm> - health products
 - <http://content.gay.com/shop/> - products of interest to the gay community
 - <http://www.hotwheels.com/> - toy cars
 - <http://www.asahi-net.or.jp/en/guide/americas.html> - information about Asahi Net, a Japanese Internet service provider
 - <http://www.motuekalodge.co.nz/tarriff.htm> - information about a hotel in New Zealand

Interesting sites:

- <http://crownassets.pwpsc.gc.ca/text/howtobuy-e.htm> -- ‘sponsored’ by the Crown Asset Distribution Centers (CADC) within the Public Works and Government Services Canada, concerns itself with removal of all moveable federal government’s surplus
- <http://www.thekidswindow.co.uk/> -- site featuring European and UK designed clothes for children
- <http://www.bcakes.com/> -- is a corporate site advertising wedding cakes
- <http://www.vintageassessments.com/va.html> -- Vintage Assessments is a (self-proclaimed) best buying guide for the wine connoisseur
- <http://www.barbiecollectible.com/index-home.asp> -- is a site selling collectible Barbie dolls
- <http://www.bridal-invitations.com/florentina-wedding.html> -- website devoted to wedding invitation sales
- <http://www.polly-robot.com/home.html> - an unusual robotic parrot advertising site
- <http://www.nonleathalforce.com/> - site selling a variety of guns, tasers, pepper spray, etc.
- <http://www.multieducator.com/NAVY/battle/Iowa2.html> - Web site providing U.S. Navy history and on-line purchase of Navy products and gifts

Real Estate

Real estate is a subject encompassing websites that focus on buying, selling, or renting land, buildings, or accommodation. An average of 0.5% of sites in each city were in this category, with most sites of a corporate nature.

Typical Sites:

- <http://www.mls.ca/mls/listing.asp> - Multiple Listing Service, a website sponsored by the Canadian Real Estate Association
- <http://www.remax.ca/> -- an online representation of Remax
- <http://www.realtylink.org/> - RealtyLink online
- <http://www.bcal-north.com> - British Columbia Assets and Land Corporation
- <http://rentcanada.com/winnipeg> - a rental information site for Winnipeg
- <http://admwww1.ucis.dal.ca/housing/loc/results.cfm> - a search for housing information at Dalhousie University

Interesting sites:

- Web sites created by ‘freelance’ agents, affiliated with a particular real estate company, were also found. In this particular example, the agent was associated with the Remax: (<http://www.sellinggrandbend.com/>)
- Canadian Co-housing Network (http://www.cohousing.ca/about_ccn.html) a “non-profit organization that promotes the creation of co-housing communities as a model for sustainable development by raising public awareness about co-housing.”
- The search engine of choice appeared to be Yahoo!, with the following keywords being typical of those searched:
 - real+estate+Ontario
 - MLS

G. RECREATIONAL ACTIVITY

Gambling – Lotto, games of chance

The content of sites in this category focuses on activities of chance where the user has a the opportunity to win money or prizes. This may include web sites featuring lotteries - often these sites are part of e-commerce or corporate sites. The vast majority of sites are free, but some require registration, and the sites note that the site owner may distribute the collected demographic information to advertisers. Free on-line games may include poker, bingo, and dice, and free give-away gifts. Some sites, such as www.officepools.com allow users to set up sports pools at work, using the website service for free. Other sites offer full-fledged gambling including games like roulette and poker where users place cash bets. An average of 1.5% of sites were in this category.

Typical Sites:

- Electronic Arts' *Pogo* (<http://www.pogo.com>) site was a very popular site in the Gambling category. This site allows users to play various games such as cribbage, checkers, euchre and solitaire for cash prizes. It is free to play, but users must register.
- Board games, dice, cards (<http://www.gamesville.com/>)
- On-line lottery offering millions of dollars in prize money (<http://www.freestatelotto.com>)
- Web site of the magazine *Daily Racing Form* (<http://www.drf.2002.com>)
- A sports pool site - Yahoo! Sports Men's Tournament Pick'em (<http://tournament.fantasysports.yahoo.com/men>).

Interesting / Unusual Sites:

- A site from Slot Machine Universe that gives tips for winning at slot machines in real-world casinos. (<http://www.slotmachineuniverse.com/secrets/slot-machine-secrets.php>).

Hobbies

The percentage of hits in this category varied widely from city to city, with Burnaby at 0.7% being the lowest and Brantford at 4.64% being the highest. This may be due to the increasing richness of the Internet in covering hobby topics: the Burnaby logs were downloaded first (in 2000), and the Brantford logs last (in 2002). The content of sites in this subject area focuses on an activity or interest pursued outside one's regular occupation and engaged in primarily for pleasure. This includes web sites featuring horoscopes and astrology, pets, crafts and stamp collecting, but does not include home and garden activities. Most sites in this category were mounted by web communities devoted to a particular hobby.

Typical Sites:

- The most popular site in this category was NeoPets (<http://www.neopets.com>), with many hits in Halifax and Brantford. NeoPets is a Web Community because it requires users to create, and identity a pet. The site then provides support with a variety of activities such as games, chat, email, shopping and news. The primary purpose of NeoPets is to create and maintain a virtual pet.

- A web site for chess aficionados (<http://www.corusgroup.com/coruschess/home.html>)
- Horoscope sites were also popular. Specific horoscope sites accessed include: MSN Astrology (<http://astrology.msn.com/Horoscopes/>) and Netscape Horoscopes (<http://channels.netscape.com/ns/atplay/horoscopes.jsp>).

Interesting / Unusual Sites:

- The *Ontario Federation of Snowmobile Clubs* website (<http://www.ofsc.on.ca/>).
- Sites on paper making through Ask Jeeves (<http://www.askjeeves.com/main/askjeeves.asp?ask=What+is+a+good+site+for+paper+making%3F&o=0>).

Sports

Sports sites accounted for approximately 2% of hits in each city. These sites focus on activities involving physical exertion and skill that is governed by a set of rules or customs and often undertaken competitively (e.g. hockey, basketball, skate boarding) and may include sports news, athletes, fitness and sports as an industry. This does not include professional wrestling.

Most sites were corporate, but subject directories/portals, non-profit organizations, and personal web pages also appeared.

Typical Sites:

- Sites on Power Lifting were popular, with 15 hits to sites such as The Gym Shop Power Lifting Equipment (<http://www.powerlifting.ca/>) and U.S.A Power Lifting (<http://www.usapowerlifting.com/>).
- NBA (<http://nba.com>)
- Sports news and features in *Sports Illustrated Magazine* (<http://sportsillustrated.cnn.com/baseball/mlb/ml/teams/blue.jays/index.html>)
- Sports news in Turkish (<http://www.hurriyet.com.tr/hur/turk/01/01/23>)
- International soccer and rugby sites giving worldwide scores were popular in all cities (<http://www.dailysoccer.com/globalsoccer.html>)
- NHL.com (<http://www.nhl.com/>) and FaceOff.com (<http://faceoff.com/NHL/gamesummaries/summary.html?team=Sabres&dt=03/19/02>)

Interesting / Unusual Sites:

- Fan sites devoted to figure skater Elvis Stojko (<http://www.angelfire.com/wi/StojkoMosaic/031702.html>) and (<http://heartofgold.topcities.com/3/elvisp.html>).
- Several sites for mixed martial arts (<http://www.sherdog.com>) or ultimate fighting (<http://www.pridefc.com/>)
- Site giving information on a nude volleyball tournament in Ontario (<http://odyssey.on.ca/~pmerrifield/1998.htm>)

Travel & Tourism

An average of 1.5% of a city's sites were classified in the Travel & Tourism subject area. Sites in this subject area focus on travel plans and travel arrangements and include web sites featuring transportation schedules, travel guides and all-in-one travel portals. This may also

include parks, and bed and breakfast establishments where appropriate. Most sites were corporate, e-commerce, search engines/subject directory/portals, or government.

Typical Sites:

- MapQuest (<http://www.mapquest.com>). This site provides maps and driving directions all across North America.
- ClubMed (<http://www.clubmed.com>)
- Online versions of travel guides such as the Rough Guide (<http://guides.travel.roughguides.com/content/4532>)
- Ireland's Tourist Board (<http://www.ireland.travel.ie>)
- E-Commerce sites such as Travelocity (<http://www.travelocity.com>) and Rail Europe (<http://www.raileurope.com>)
- Travel/accommodation in Newfoundland (<http://public.gov.nf.ca/tourism/mainmenu/wheretostay/search/accomtypes.asp>)

Interesting / Unusual Sites:

- Personal website about one individual's bike trip in France (<http://webhome.idirect.com/~tottton/france98/estmichelle.html>)
- The site in German for a hotel in Zermatt, Switzerland. (<http://www.zermatt.ch/seiler/stellenangebote/>).
- Web site for a Lucy Maud Montgomery museum in Bala, Ontario. (<http://www.bala.net/museum/index.html>).
- A site for planning a wedding at Disney World. (<http://disney.go.com/vacations/disneyweddings/weddings/index.html?1015241>).

Weather

Weather sites were accessed an average of 0.3% in the five cities. These sites focus on weather forecasts or related weather issues, and include meteorological data, weather forecasts, and/or some type of imagery to depict the weather (i.e. satellite images). These sites were mounted either by a corporation (TV station), an educational institution, or the federal government.

Typical Sites:

- Environment Canada's weather page (http://weather.ec.gc.ca/index_e.shtml)
- Weather portal at Yahoo! was used in Winnipeg to check the weather in Halifax (http://weather.yahoo.com/forecast/Halifax_CN_c.html)
- The Atmospheric Science Dept. at the University of California-Davis gives detailed weather information by state (<http://www.atm.ucdavis.edu/~wxauto/fos/states/Ohio.html>)
- The Weather Channel site (<http://www.weather.com>)

H. SCIENCE & TECHNOLOGY

Computers - support and instruction

Sites in this subject area focus on technical support, instruction, tutorials and web publishing. There were only 13 hits in total in the category – none in Winnipeg or Calgary. The small number of hits is likely because this is the type of website most often accessed at home

when one is installing software or trouble-shooting a computer program, and one needs to have the malfunctioning computer near at hand. Most sites were corporate sites, but two sites were based in educational institutions.

Typical Sites:

- Online support from Microsoft (<http://support.microsoft.com/directory/onlinesr.asp>)
- Operating system tutorial (<http://www.ualberta.ca/~maldridg/tutor/vt/prog/opsys.html>)
- Japanese page on how to prevent computer viruses (http://www.quality.co.jp/solution/virus/virus_solution_index.html).

Computers - current trends and issues

Only 17 sites were in this subject area. Sites in this area focus on current computer trends and issues, including recent news and current information about viruses. Most sites were industry newsletters from individuals or corporations, or were news stories.

Typical Sites:

- A trade newsletter with information on how to increase traffic to your website (<http://www.ezinefactory.co.za>)
- An online issue of *NanoTechnology* magazine (<http://nanozine.com>)
- Intel Zone, a Corporate Site that provides articles on computer issues (<http://www.intelzone.com/>)

Computers - commercial products and services

An average of 3.5% of a city's sites were classified in this area, led by Winnipeg that had 4.7% of its logs in this area. Sites in this subject focus on software, hardware, products, web-hosting services, telecommunications and searching for information on email. Most sites were corporate and in English, but several German, French, and Albanian sites also appeared.

Typical Sites:

The sites in this subject area were very diverse, with no single site dominating.

- Free Website hosting and development services at uPublish! (<http://www.theglobe.com/upublish/>)
- Paralogic Software that allows you to create web communities and chat services (<http://www.parachat.com>)
- Search engine toolbar providing business information for sites (<http://www.alexa.com>)
- Elance.com, a computer consulting firm, (<http://www.elance.com/>).
- FlamingText.com (<http://www.flamingtext.com/>), an online tool for generating web graphics.

Interesting / Unusual Sites:

- A site called Miss Ink Drop that sells printer cartridges (<http://www.missinkdrop.com/>).
- Albanian-language site for downloads of digital photos and screensavers (http://ekart.mynet.com/ask_e_kart.shtml)

Games, electronic

Unlike most other categories, the individual city percentages varied widely in this category, with Brantford leading the group at 21.7% of that city's hits (793 of 6581 sites analysed). The other cities recorded 10% - Winnipeg, 5% - Calgary, 1% - Burnaby, and 0.4% - Halifax. Sites in this subject area focus on video games, or those played in the online environment of the internet. Most sites were corporate sites, followed by web communities, and most were in English. However, several sites in Japanese, Russian, and German appeared.

Typical Sites:

- One of the most popular sites in Brantford was RuneScape, which offers a variety of multiplayer and single person online games, including its title game RuneScape, a 3D multiplayer adventure game. Traditional games such as checkers and solitaire are also available.
- A site based on characters from the Fox Network (<http://www.foxkids.com>)
- Coffee Break Arcade was very popular (<http://www.coffeebreakarcade.com>).
- Achaea.com, an online role playing game was also popular with 13 hits.
- "Cheat" sites were also popular: these sites offer tips and hints for winning at electronic games and include: <http://www.cheatplanet.com/>, <http://www.supercheats.com/>, and <http://www.apluscheats.com/>.
- Yahoo!Games was the most frequently accessed site in the electronic games subject area

Interesting / Unusual Sites:

- A site providing online jigsaw puzzles (<http://www.jigzone.com/>).
- Online version of the television show *Who Wants to be a Millionaire* (<http://abc.abcnews.go.com/primetime/millionaire/funandgames/fastestfinger/index.html>)

Health & Medicine

An average of 2% of sites in each city were in the Health & Medicine subject area. The content of these sites focuses on pharmaceuticals, nutrition and health-related issues and procedures, as well as popular diets, aromatherapy, and beauty products. This category also includes web sites featuring counselling and psychology, whose contents focus on information on emotion or psychological assistance or development, including support groups. Most visits were to the sites of non-profit organizations or corporations (often pharmaceutical)

Typical Sites:

- The American Diabetes Association (<http://www.diabetes.org/main/application/commercewf>)
- Mayo Clinic's osteoarthritis self-care guide (www.mayoclinic.org/mayo/9706/htm/osteoart.htm)
- Breast reconstruction following a mastectomy (www.vanhosp.bc.ca/breastreconstruction/)
- U.S. National Youth Anti-Drug Media campaign (<http://www.freevibe.com>)

Interesting / Unusual Sites:

- A site called "Brace Face" (<http://www.braceface.com/>), the site of a children's orthodontist
- Information on narcotics (<http://www.hyperreal.org/drugs/mdma/FAQ-MDMA.htm>)

Science & Animals

Few hits on this topic appeared – an average of 0.75%. The content of sites in this subject area focuses on subjects such as physics, chemistry and biology, and includes web sites featuring food, nutrition, thermodynamics or veterinary care. Most sites were hosted by either non-profit organizations or educational institutions.

Typical Sites:

- An ABC News article about space junk
(<http://abcnews.co.com/secions/science/DailyNews/spacetrash000302.html>)
- A page on thermodynamic entropy
(<http://www.math.utoronto.ca/~pivato/latex/dis/node17.html>)
- Dogs (<http://www.fortheloveofdogs.com>)
- A site discussing “Nanocomposite Polymer Electrolytes for Lithium Battery Applications” (<http://www.ccmr.cornell.edu/~giannelis/research/polymer-electrolytes.html>)

Interesting / Unusual Sites:

- An article from the Jehovah’s Witness newspaper *The Watchtower* discussing human cloning (http://www.watchtower.org/library/g/2000/9/22/article_01.htm).
- “Science news and information about the Sun-Earth environment”
(<http://www.spaceweather.com/>)

I. SEX

The subject of sex was broken down into three smaller classifications: soft-core sex, hard-core sex, and sex-information and products. These classifications are defined within each section. Because of ongoing discussions regarding users accessing sexual information on the Internet, more detailed tallies of hits will be given in this section. It must be noted again, however, that due to the exploratory nature of this research – the variance in sample size among the five cities and the time lapse between downloads in various cities - comparisons between different cities are invalid.

A total of 246 of the 19,607 hits for all five cities were classified within one of the three ‘sex’ categories, comprising 1.25% of the total logs. The percentages for the individual city logs are Brantford -0.7%, Burnaby – 1.1%, Winnipeg – 1.3%, Halifax – 4.1%, and Calgary -0.5%. It should be noted that at the time the logs were downloaded, Burnaby and Halifax had no Internet filters on any terminals, Brantford had filters on terminals in the children’s area, and that Calgary and Winnipeg had optional filtering on all terminals. It should also be noted that most of the Halifax hits in this area were logged during one 2-hour session on a terminal in the adult area during one afternoon in the survey week.

Analysis of the logs during a session when a user was accessing sites of a sexual nature reveals that these images are frequently viewed for a very brief time, measured in seconds. The logs consistently record a much more rapid sequence of homepages and primary pages than is the case with any other subject.

Sex – Soft Core

Soft Core sex sites focus on nude or erotic images, and the fundamental purpose of such sites appears to be to provoke a sexual response in a viewer. These sites may feature photographs of nude or scantily clad women and men, erotic stories with or without graphics and photographs, and video clips of pornographic shows. Users accessed soft core sex sites a total of 128 times (or 0.65% of all accesses). Ninety percent of sites were either e-commerce or corporate in nature, in which videos or additional Internet screen images were marketed. In both cases, a credit card was required.

Typical Sites:

- Photographs of nude or scantily clad women (<http://www.legs-r-us.freemove.com>)
- Erotic stories with no graphics, just text (<http://www.chinesesex.net/index1.html>)
- Individuals (<http://www.lizaharper.com/index.html>)
- Site featuring nude cartoon characters (<http://sailor-hentai.com/>)

Sex – Hard Core

Hard core sex sites focus on explicit images of sexual intercourse, sex involving violence, children or animals, and whose fundamental purpose is to provoke a sexual response in the viewer. This includes web sites featuring erotic stories, movies and pictures. Users accessed hard core sex sites 111 times in the five cities over the cumulative period of five weeks (0.56 % of all accesses). As with soft core sex sites, most were e-commerce or corporate sites, requiring membership, statement of adult age, and payment to access photos and services. Of the non-commerce or non-corporate sites, 10 were classified as web communities, 8 were chat sites, and 4 were personals/classified. Some sites advertised “teenage girls”, but actual ages were not given, and the women portrayed could have been over 18. In the opinion of the research team (none of whom have legal training) none of the hard core sites, although very explicit, likely contravened the law on obscenity as defined by the Criminal Code.

Typical Sites:

- (<http://www.fuckingfreemovies.com/>)
- (<http://www.nastygirls.com/>)

Sex – Information and Products

Web sites in this area focus on instruction, advice or discussion about sex and sex-related issues such as STDs, contraceptives, etc. Users accessed sex information and products sites 7 times (0.035% of total logs)

Interesting Sites:

- Sissy Maids and Service (<http://www.bobbiswan.com/docs/junprom1-01.htm>). A company that sells erotic housecleaning!
- Sex-related products and clothing (<http://cleansheets.com/masthead/toys.html>)

GLOSSARY AND METHODOLOGY NOTES

GENRE

Chat sites/message board/bulletin board – a web site where real-time communication between two users may be enacted via computer. *Message Board/Bulletin Board* – an electronic message centre. If the subject nature of the chat session can be determined, then do so, otherwise leave blank. Language designation refers to the language of the host site.

Corporate site – a web site that is a representation of for-profit companies, including greeting card companies but excluding news sites, ecommerce sites, and any other private sector companies captured by other formats.

Directory – a web site which contains an organized listing of contact information and act as access points to mainly non-web information (e.g. Yellow Pages, telephone numbers, postal codes, etc.)

E-commerce – short for *electronic commerce*, a web site where the primary purpose is for sales of products and services including online banking (conducting business online). Pornographic sites are usually presented in an e-commerce format.

Education institutions – the content focuses on the theory and practice of learning and instruction or on accredited institutions/schools of learning (public and private), admissions, course offerings, scholarships and other related issues.

Email – short for *electronic mail*, the transmission of messages over communications networks. Language designation refers to the language of the host site.

Ezine – short for *electronic magazine*, a magazine that exists in digital format only.

Government – federal – a web site created and published by the federal government of Canada or a federal agency

Government – foreign (international) -- a web page that is attributed to a foreign government (irrespective of level) (e.g. Holland). United States government sites may dominate this category.

Government – municipal -- a web page that is attributed to a municipal government in Canada (e.g. Timmins, ON). Some examples could be City Parks, Police Department, or Public Library websites.

Government -- provincial -- a web page that is attributed to a provincial government in Canada (e.g. Saskatchewan). Samples could be provincial job sites, provincial archives, or provincial parks sites.

Government -- regional -- a web page that is attributed to a regional government organization or initiative (e.g. Greater Vancouver Regional District).

Magazine -- an electronic version of an existing print magazine.

News Media, Canada (other than newspapers) – non-newspaper web pages whose primary purpose is to provide news services (e.g. CBC).

News Media, International (other than newspapers) – non-newspaper web pages whose primary purpose is to provide news services. Web sites must have been created and initially distributed in a country other than Canada (e.g. CNN).

Newspaper, Canada – web-mounted Canadian newspapers (local, city, national, or other) that are created and distributed in Canada and written in either of the two official languages.

Newspaper, international -- any web-mounted newspaper (local, city, national, or other) that is created and distributed in a country other than Canada. Individual web pages within a newspaper can sometimes be classified by subject. If not, they are designated as “news”.

Personal web pages – a web page where authority is attributed to an individual or individuals.

Personals/classified – a web site/page that features personal notices or consumer information that has been arranged into classes. This may also include a subject if specified and clear.

Philanthropic, non – profit organization/NGO – a web site where the authority is attributed to a non-profit organization (e.g. Greenpeace). This may also include clubs.

Radio – a web site with the ability to listen to radio programs via audio signals on the world wide web. Note that this is different from a radio station’s promotional site.

Search engine /subject directory/web portal – this category includes three different formats: a search engine is a program that searches documents for specified keywords and returns a list of the documents where the keywords were found. A subject directory is an organized listing of web sources by subject. A web portal is a web site or service that offers a broad array of resources and services, such as e-mail, forums, search engines, and on-line shopping malls.

Television – a web site with the ability to view television signals via video streaming on the world wide web.

Web communities – a web site in which membership is required (e.g. Geocities) and there may be a common interest connecting members together and they usually feature free space for a personal page, email, chat, forums, bulletin boards, and online events. There will also be an interactive component to participation in a web community.

SUBJECT

Arts, performing and fine – the content focuses on subjects such as dance, painting, theatre, etc.

Books – the content focuses on books or book reviews

Cars/automotive – the content focuses on cars (new and used) or automotive related concerns (e.g. repairs, parts, etc.)

Computer, commercial products and services – the content focuses on software, hardware, products, other related services, web-hosting services, telecommunications, and searching for information on email.

Computer, current trends and issues – the content focuses on current computer trends and issues, including recent news and current information about viruses.

Computer, support and instruction – the content focuses on technical support, instruction, tutorials and web publishing.

Culture – the content focuses on contemporary culture. These web sites often act as an avenue for ex-patriots to retain or develop their cultural ties to their homeland.

Education – the content focuses on the theory and practice of learning and instruction and will include course offerings at educational institutions.

Entertainment (other) – the content focuses on all other entertainment options other than the arts, books and music. This may include web sites featuring fashion magazines (e.g. *Elle*, *GQ*) and professional wrestling.

Gambling -- the content focuses on games or activities of chance where the user has the opportunity to win money or prizes. This may include web sites featuring lotteries. Often, these sites are part of e-commerce or corporate sites. The vast majority of sites are free, but some require registration. Free on-line games may include poker, bingo, and dice; or free give-away sites and sites that allow users to set up sports pools at work. Other sites offer full-fledged gambling including games like roulette and poker where the users place cash bets.

Games, electronic – the content focuses on video games, or those games played online environment on the Internet.

Genealogy -- the content focuses on the study or investigation of ancestry and family histories as performed over the Internet.

Greeting Cards -- the content focuses on the creation and delivery of electronic greeting cards.

Health and medicine -- the content focuses on pharmaceuticals, nutrition, and health related issues and procedures, as well as including popular diets, aromatherapy, and beauty products. This category also includes web sites featuring counselling and psychology, whose contents focus on information on emotional or psychological assistance or development, including support groups.

Hobbies -- the content focuses on an activity or interest pursued outside one's regular occupation and engaged in primarily for pleasure. This includes web sites featuring horoscopes and astrology, pets, crafts, stamp collecting. This does not include home and garden activities.

Home and garden -- the content focuses on matters pertaining to home improvements, home decorating, do-it-yourself projects, cooking and gardening.

Humanities (history, religion, literature) -- the content focuses on subjects such as history, religion, spirituality, and literature.

Industry and business -- the content focuses on prime industries, providing information on corporations, their governance, structure and operations.

Jobs -- the content focuses on job seeking and/or employment, and employment issues.

Law and legislation -- the content focuses on law firms, laws and legislation and legal institutions (e.g. Justice Institute of BC, Employment Standards Act, etc.).

Libraries and Information Services -- includes information services run by both corporate, for-profit entities such as businesses providing competitive intelligence and non-profit information agencies such as public, academic, and school libraries and archives. Also includes accessing reference tools such as dictionaries, commercial databases such as Gale Group or CBCA, etc.

Lifestyles -- includes websites focusing on family or personal issues, including relationships, home life, and work life.

Music -- the content focuses on any style of music, and includes fan sites and sites that provide music and tools for downloading. This does not include a radio station's site.

News -- the content focuses on recent events or happenings, updates, press releases or "what's new" pages, including news services, newspapers, magazines, or electronic news sites, which are periodically updated, usually daily.

Online banking and trading -- the content is designed to provide access to business and/or personal financial records and accounts with the opportunity to conduct financial transactions electronically.

Personal finance and investment – the content focuses on banks, banking, taxes, credit cards, mutual funds, stocks and other investments or investment opportunities.

Politics/advocacy – the content focuses on the activities engaged by a politician, political party, or interest group. This includes web sites featuring conspiracy theories.

Products and services – the content focuses on a commercial product or business service such as consulting, accounting, graphic design, telecommunications, delivery services, etc. This includes web sites featuring “free-stuff” for the user.

Radio – the content focuses on the radio industry (e.g. CFOX fm, Z93.5 fm).

Real Estate – the content focuses on land, including natural resources and permanent buildings on it in the interest of buying or selling (e.g. house/property listings, and web pages of real estate agencies).

Relationships, personal – the content often focuses on non-professional inter-personal relationships, such as personal ads and information on how to get along with family and friends.

Science – the content focuses on subjects such as physics, chemistry, and biology. This includes web sites featuring food, nutrition, thermodynamics, or veterinary care.

Sex – hard core – the content focuses on explicit images of sexual intercourse, sex involving violence, children or animals and whose fundamental purpose is to provoke a sexual response in the viewer. This includes web sites featuring erotic stories, movies and pictures.

Sex – information and products – the content focuses on instruction, advice or discussion about sex and sex related issues such as STDs, contraceptives, etc.

Sex – soft core – the content focuses on nude or erotic images and whose fundamental purpose is to provoke a sexual response in a viewer. These sites may feature photographs of nude or scantily clad women, erotic stories with or without graphics and photographs, and video clips of pornographic shows.

Social Sciences (political science, sociology, anthropology) – the content on subjects such as political science, sociology, and anthropology.

Sports – the content focuses on activities involving physical exertion and skill that is governed by a set of rules or customs and often undertaken competitively (e.g. hockey, basketball, skate boarding) and may include sport news, athletes, fitness, and sports as an industry. This does not include professional wrestling.

Travel and Tourism – the content focuses on travel plans and arrangements. This includes web sites featuring transportation schedules, travel guides, all-in-one travel portals, and accommodations. This may also include parks, and bed and breakfasts.

TV/Film – the content focuses on the television/film industry, including performers, performances, and general interest information.

Weather – the content focuses on the weather forecast or related weather issues. This includes web sites featuring meteorological data, weather forecasts, and/or some type of imagery to depict the weather (e.g. satellite images).

Work Life – the content focuses on topics dealing with work related issues such as stress, RSI's etc.

TABLE 1 – Classification Codes

Genre Code	Genre	Subject Code	SUBJECT
406	Error – researcher	1 = Art & Popular Culture	
		10	Arts, performing & fine
CH	Chat, message board, bulletin board	12	Books
		14	Entertainment
CO	Corporate sites	16	Music
DI	Directory	18	TV/Film
EI	Educational institutions		
EC	Ecommerce	2 = Business/Economics	
EM	Email	20	Industry & business
EZ	Ezine	22	Jobs
GF	Government – Federal	23	Online banking
GI	Government – Foreign (international)	24	Personal finance/Investment
GM	Government – Municipal	3 = Humanities	
GP	Government – Provincial	32	Education
GR	Government – Regional	34	Genealogy
MA	Magazine	36	Humanities (history, religion, lit)
MC	News media, Canada (other than newspapers)	38	Social sciences (polysci, soc, anthr)
MI	News media, international (other than newspapers)		
NC	Newspaper, Canada	4 = Lifestyle	
NI	Newspaper, international	40	Home and garden
PW	Personal web pages	42	Relationships, personal
PC	Personals/classified	44	Work life
NP	Philanthropic, non-profit organization/NGO	46	Culture
RA	Radio	5 = Media & Public Society	
SE	Search engine/subject directory/portal	50	Law & legislation
		52	Libraries & information services
TV	Television		
WC	Web communities	54	News
		56	Politics & advocacy
		58	Radio
		6 = Products & Services	
		60	Cars & automotive
		62	Greeting cards
		64	Products & services

		66	Real estate
		7 = Recreational Activity	
		70	Gambling – lotto, games of chance
		72	Hobbies
		74	Sports
		76	Travel & Tourism
		78	Weather
		8 = Science & Technology	
		80	Computer, support and instruction
		81	Computer, current trends and issues
		82	Computer, commercial products & services
		84	Games, electronic
		86	Health & medicine
		88	Science & animals
		9 = Sex	
		90	Sex – hard core
		92	Sex – information & products
		94	Sex – soft core

TABLE 2
Average Number of Times for the 5 Cities
That a Subject was Classified within
Each Genre (Ranked)

Note: Because these are individual averages, no total percentage is given

Description	Percent
Email	39
Corporate Site	25
Search engine/subject directory/portal	10
Web communities	7.5
E-commerce	4.7
Chat, message board, bulletin board	3
Personal web pages	2.5
Personals/classifieds	2
Education institutions	2
Philanthropic, non-profit organization/NGO	1.5
Government - Federal	1.3
News media, International (other than newspapers)	1.1
Newspaper, International	1.0
Directory	0.45
Government - Provincial	0.42
Magazine	0.4
Government - Municipal	0.3
Ezine	0.3
Newspaper, Canada	0.3
Government - Foreign (international)	0.3
News media, Canada (other than newspapers)	0.3
Radio	0.1
Television	0.05
Government - Regional	0.03
Error - researcher	0.02

TABLE 3
SUBJECTS (Arranged by “Group”)

Note: These are averages of the classification in the five cities, so no total percentage is given. Also, not all logs were classified by subject.

Subject Code	Subject	Average % of total logs
1 = Art & Popular Culture		
10	Arts, performing & fine	0.4
12	Books	0.5
14	Entertainment	2.0
16	Music	2.5
18	TV/Film	1.5
2 = Business/Economics		
20	Industry & business	0.75
22	Jobs	0.4
23	Online banking	0.4
24	Personal finance/Investment	2.0
3 = Humanities		
32	Education	2.0
34	Genealogy	0.12
36	Humanities (history, religion, lit)	1.0
38	Social sciences (polysci, soc, anthr)	0.2
4 = Lifestyle		
40	Home and garden	0.15
42	Relationships, personal	5.35
44	Work life	0.06
46	Culture	.38
5 = Media & Public Society		
50	Law & legislation	0.4
52	Libraries & information services	0.6
54	News	2.1
56	Politics & advocacy	0.3
58	Radio	0.1
6 = Products & Services		
60	Cars & automotive	0.5
62	Greeting cards	1.0
64	Products & services	2.5
66	Real estate	0.5

7 = Recreational Activity		
70	Gambling – lotto, games of chance	1.5
72	Hobbies	3.0
74	Sports	2.0
76	Travel & Tourism	1.5
78	Weather	0.3
8 = Science & Technology		
80	Computer, support and instruction	0.1
81	Computer, current trends and issues	0.1
82	Computer, commercial products & services	3.5
84	Games, electronic	7.6
86	Health & medicine	2.0
88	Science & animals	.75
9 = Sex		
90	Sex – hard core	0.65
92	Sex – information & products	0.03
94	Sex – soft core	0.56