Northern Exposure: Assessing Citizenship, Democracy and the Great Canadian e-Government Expedition*

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Canadian federal e-government initiatives in the past decade have contributed to the radical redesign and downsizing of Canada’s social system, and in doing so, have exacerbated the democratic deficit. In 2005, the question is whether Canada’s internationally lauded ‘Government On-Line’ and ‘Connecting Canadians’ initiatives have provided the kind and quality of resources necessary to ensure that all citizens have the opportunity to participate in the new information and communications landscape, or whether some will be left out in the cold. Although the federal government has articulated a new national dream to connect all Canadians and provide a new level of e-service delivery, the digital equity agenda may prove to be a great delusion, with serious democratic implications. However, a small window of opportunity exists to create a new national dream that would reposition Canada’s e-government strategy within a human rights and social justice framework.

1 Introduction: Digital E-quality and E-government

While vestiges of Canada’s interest in advancing social justice are evident, neo-liberalism underpins the government’s digital blueprint, leaving vulnerable and marginalized Canadians out in the cold. The democratic deficit has been aggravated by the fact that e-government has not been developed in ways that advance social equality and social justice. With an emphasis on providing those Canadians who have access to computer networks and possess traditional and computer literacy with new e-service opportunities (most of whom live in southern Canada), the government has asserted that it has made gains in renewing citizen-state relationships. However, the abandonment of key digital equity-seeking programs and initiatives envisioned in the ‘Connecting Canadians Initiative’ – such as the ‘Aboriginal Digital Opportunities Initiative’ (Alexander 2001), and the under-resourcing of others, such as the federal ‘Community Access Program’ (CAP) and the federal ‘SchoolNet Initiative’ – has augmented the democratic deficit. There is a deep digital divide experienced by Canadians living in rural and remote areas, by youth and seniors at risk, and by visible minorities including African Canadians and Aboriginal peoples in Canada. Therefore, Canada’s e-government strategy cannot be assessed without a parallel evaluation of its twin strategy, the Connecting Canadians strategy.

Any e-government initiative is fundamentally about citizenship, and not simply about administrative reform or realizing greater efficiencies in service delivery. As Harvard professor Jane Fountain notes in her assessment of e-government initiatives in the United States, our “ability to design technically far exceeds our understanding of what socially needs to be incorporated into a design” (Fountain 2001, p. 44). This recognition suggests that the international community should pay even closer attention to the Canadian e-government initiative, given that e-government initiatives have served to increase the democratic deficit in Canada. With e-government, democracy is indeed, on [the] line. Positioning the e-government initiative within the framework of the neo-liberal agenda has limited the opportunity for many Canadians to access e-learning, e-health and other democratic entitlements in the digital era.

The Government of Canada articulated a new national digital dream that positioned it as a world leader. However, the dream will remain unfulfilled until there is a clear commitment of the political will demonstrated by the allocation of adequate fiscal resources that are necessary to build upon the successful pilot initiatives, to extend the connectivity agenda to rural and remote regions in the country… and to move well beyond the rhetoric. Ensuring that those who are most vulnerable in society have access to the new democratic opportunities – and indeed, entitlements – afforded by e-government is the most important yardstick in measuring the success of such strategies. The fact that e-government has evolved in a way that it has contrib-
uted to the erosion of service provision to Canadians reflects the chilly climate that prevails in the new digital landscape.

2 The Evolution of E-Government and the Persistence of the Digital Divide in Developed Nations

The 1960s and ‘70s were a period of social reform in Canada, with the creation of a national universal health care system, old age security, unemployment insurance and other social programs. Conversely, neo-liberalism contributed to the 1990s “as one of the worst decades for the well-being of working people since the Great Depression” of the 1930s with food bank use doubling in the country, for example, between 1989 and 1999 (Jackson 2000, p. 44). Canada’s reputation recently dropped significantly in an important international comparative ranking system; the United Nations has published an annual Human Development Report every year since 1990, including a Human Development Index (HDI) which compares nation-states, based on their citizens’ life expectancies, educational attainment, and standard of living. Canada ranked at the top of the list for many years, but the geographically vast and resource rich country fell to third place in 2001 and to eighth place in 2003. With this sharp drop, former Prime Minister Jean Chrétien stopped mentioning Canada’s ranking in the HDI in his speeches and focused instead on Canada’s aspirations to become the most connected nation by 2005.

Reputedly, Canada’s performance has hit a new high in the international assessments of maturity and leadership in electronic or e-government initiatives. As the Government stated in a May 2004 news release, “We are leading the way in e-government in terms of service breadth, service depth and customer relationship management” (Public Works 2004). The core of the neo-liberal agenda in the realm of e-government is realizing new efficiency gains, providing flexibility of service delivery to an increasingly smaller group of citizens who meet new, tighter program eligibility requirements (Bashevkin 2001, p. 114). An alternative to the neo-liberal model would situate e-government within the tradition of social justice that pre-dated the dominance of neo-liberalism in Canada since the Eighties. The editors of a new book, *Restructuring and Resistance: Canadian Public Policy in an Age of Global Capitalism*, assert: “If Keynesianism was about the politics of limited inclusion, neoliberalism is about the politics of aggressive exclusion. In an effort to shrink the state, neoliberal restructuring attacks core aspects of the Keynesian social contract... The social distress, inequality and marginalization that are the lived consequences of such policies only confirm the exclusivist character of neoliberalism” (Burke et al. 2000, p. 12). Against the tide of neo-liberalism, e-government initiatives need to embrace those values which distinguished the Canadian federal system in the post-war era.

As this paper illustrates, e-government is not a value-neutral initiative. Harvard professor Deborah Hurley adopted a human rights perspective in her international comparative analysis of the digital divide, *Pole Star* (2003), which included an assessment of Canada’s connectivity initiative. Drawing on Hurley’s assessment, this paper argues that Canadians who are most in need of more effective and efficient service delivery, including those in remote and rural areas, cannot benefit from e-government initiatives since they are not connected. The Assistant Deputy Minister of Industry Canada (the federal department that has taken the lead in the country’s connectivity agenda) observed that in 2003, only 27 per cent of those Canadians who earned less than $23,000 per year used the Internet, compared to 82 per cent of those who earn more than $70,000, and 65 per cent of those who earned between $40,000-$69,000 (Binder 2004, p. 29). Any effort to contextualize Canada’s reputation as a “mature” e-government must also be informed by the fact that only 26 per cent of those with less than a high school education used the Internet in 2003, compared to 79 per cent of those who possessed a university degree. To assess the maturity of Canada’s e-government strategy would therefore necessitate a parallel analysis of the success of another major federal initiative that affects the ‘reach’ of e-government. The federal ‘Connecting Canadians’ initiative promised to advance digital equity. However, the commitment to realizing the digital equity agenda was not strongly supported among elected politicians, evidenced by the lack of funding and other resources that would have advanced the laudable vision.
Canada was a world leader in its vision and in establishing ground-breaking digital equity pilot programs, ranging from connecting schools, to providing community access points for low income Canadians to access the Internet, to creating programs to provide youth with opportunities to gain digital skills while creating distinctive Canadian contents. The Canadian government conceived of such social justice initiatives, piloted them, and then severely under-funded them, even in a period of consecutive budget surplus; “...the 2004 federal budget stripped away many of SchoolNet’s initiatives – including the popular Grassroots, Digital Collections, and Librarynet programs” (Shade and Dechief 2005, p. 9). A shift away from the dominance of neo-liberalism upon Canada’s blueprint is unlikely in the near future. As the Canadian Centre for Policy Alternatives stated: “The federal government will have an estimated $ 45 billion in surplus over the next three years – money that could significantly reduce poverty and inequalities in Canada...” (2005). Instead, the federal government is warning of tough economic times ahead and is choosing not to invest in ways that regain the socio-economic ground that many Canadians lost in the Nineties. In the 1990s, e-government played a significant role in the withdrawal from the social justice agenda that defined the post-war era.

3 Re-inventing Government: Harnessing Technology to Retreat from the Post-War Social Contract

In the 1980s and 1990s politicians and citizens alike were persuaded that the public sector needed to be reformed. Information technologies were seen as the most important vehicle to ‘re-invent government’ (Osborne and Gaebler 1992). At the outset of the Internet Revolution the key question that citizens and public officials alike asked was: Why can’t government be more like business? Shields and Evans astutely observe that the “New Public Management can be thought of as software for reprogramming the state” (p. 72). It is not surprising that in the last twenty years, the promise of computer technology to renew citizen-state relations was fuelled by the dot.com phenomenon. What is surprising is that there was so little resistance. Graham Longford concludes that the “extent to which Canadian democracy will be enriched depends less on putting government on-line and bringing broadband access to every citizen and more on addressing the institutional, political, and socio-economic context in which these technologies are employed.” (Longford 2002, p. 4) Instead, the federal government seized upon computer systems as the means to realize new efficiencies by introducing, for example, on-line single service windows for ‘customers’ of public services. In an effort to streamline the business of government, the ‘bottom line’, narrow based definitions of efficiency took precedence over ‘top line’ values such as equity.

The focus of Canada’s e-government initiative in 2004 remains consistent with a priority expressed in 1996 by Industry Canada, the federal department mandated to connect Canadians: “[t]he shift to provision of government services electronically will bring about a qualitative improvement in the responsiveness and accessibility of government. The new technology also promises to enhance the affordability of government, allowing it to do more for less – an important consideration in these times of fiscal strain.” Deep cutbacks in the public sector payroll in the mid-1990s were seen as one means to realize fiscal restraint. The federal central agency responsible for corporate ICT strategic development, the Treasury Board Secretariat, issued a key policy document in 1993, the *Blueprint for Renewing Government Services Using Information Technology*. During a period of fiscal restraint the Government of Canada was prepared to invest heavily in ICTs, including maintenance, training, and other related expenditures, to realize greater efficiencies. It was also imagined that citizens’ cynicism and falling levels of public trust in government could be addressed by providing streamlined services delivered through diverse channels, including 1,800 toll free call centres, self-serve kiosks in public spaces, and via the World Wide Web (WWW). The focus on citizens as customers, a public management approach, would realize greater satisfaction by reducing waiting times, increasing convenience, and providing more timely information about public services, programs and policies. Alternative service delivery opportunities could be realized by harnessing network technologies such as the Internet; in the process, it was conceived that labour delivery costs associated
with the provision of services would be dramatically reduced. As Longford’s study indicates, this has not always been the case.

In 1994, Treasury Board initiated a public management inspired initiative, the Program Review, which would engage public sector employees in a comprehensive review and rethinking of the federal government’s responsibilities in delivering public goods and services; the initiative called for $17 billion in expenditure reductions over three years, a target to be realized by employing ICTs to streamline administrative processes and eliminating ‘non-essential’ programs and services. The number of public service employment fell to 186,314 in 1999, from 231,000 in 1994, a reduction of almost 20 per cent of the public service. (Treasury Board, Employment Statistics, p. 8) It is significant to note that over the course of Program Review, according to a 1998 Human Resources Development Canada (HRDC) report, overall federal expenditures on e-government rose from $3 billion to $5 billion, a 66 per cent increase, while total ministerial spending on personnel costs fell, modestly in light of the objective, by six per cent; however, full employment was reduced by 20 percent during this period. Interestingly, the number of ‘service kiosks’, introduced in 1998 as the Human Resources Electronic Service Delivery Network, rose sharply from fewer than 2,000 in 1995 to more than 5,000 in 1998. During the Nineties, the number of HRDC local and front-line offices in Canada fell to 320 by 1998, and the workforce in some offices, such as HRDC’s Niagara Area office in south-western Ontario, was reduced by nearly 50 per cent.

The state-sanctioned withdrawal from the overarching meta-narrative that traditionally framed, structured and distinguished Canada from the United States has influenced 21st century e-government initiatives in Canada. The neo-liberal agenda that underpins e-government initiatives becomes clear when the rhetoric of inclusiveness is brushed aside. The federal government’s Government Online initiative was conceived and implemented as a “whole-of-government approach”. Announced in 1999, the commitment was made to provide Canadians with access to government information and services on-line, at the time and place of their choosing. (Chief Information Officer 2004) The priority of e-government has been focussed on information dissemination and on service-based transactions.

Treasury Board Secretariat’s 2003 Government Online report asserted that through “the GOL initiative, our goal is to use information and communication technology to enhance Canadians’ access to improved and integrated services, anytime, anywhere and in the official language of their choice by 2004.” The target will likely be pushed back further, given the persistence of the digital divide in Canada, and the will, initiative, and expense that will be required to overcome it. While the target date shifts, the objectives of the GOL, as articulated by the Treasury Board Secretariat, have remained consistent:

- Make government information and services more accessible and serve all Canadians through a multi-channel system.
- Make online service delivery more effective, more timely, and more responsive.
- Build trust and confidence in transacting online.

There are three stages involved in reinventing government through the GOL initiative: infrastructure, access and service transformation. In the first stage, information is posted on the World Wide Web. The significant change is that, following the creation of the Common Look and Feel (CLF) standards in 2001, the government organized access to information and services through the perspective of three client groups: Canadian individuals; Canadian businesses; and non-Canadians. Organizing government information and services in this way was conceived as the result of focus groups with Canadians about how they would like to access government. Information was organized through this lens, and three points of access, or portals, were created to organize information and service around a ‘no wrong door’ “Gateway” approach. Moving from a primary Government of Canada portal site in 1995 to a Gateway approach in 2001, the government has gone on to design “Clusters” designed to provide a ‘single window’ for electronic delivery of services to specific client groups. By 2005, the Clusters are intended to provide a total of 135 government services of which 88 will be focused on Canadians, 29 on Canadian Business needs and inter-
ests, and eight for non-Canadian client groups. Gateways and Clusters have been designed from a functional and client-centered approach. Treasury Board has allocated $ 66 million to be allocated in five rounds between 2001/02 and 2005/06, which has supported the creation and governance of Gateways and Clusters. However, during a round of interviews with senior public officials in the federal government in February and March 2001, one public official stated that the objective of getting government online by 2004 was an ambitious and under-resourced objective. He stated: “There’s no money, no blank cheque anywhere. …It’s an artificial deadline and there’s no cash.” The April 2004 progress report, that offers an assessment of the Government of Canada’s electronic single-window service delivery initiative, found that 55.6 per cent of 64 of the 200 public officials who responded to an online survey, conducted between October 21 and November 20, 2003, “believe that adequate funding will not be available for the Clusters’ full development in medium term” (Brown, Isakovic 2004, p. 15). In 2001 the ‘Secure Channel’ was introduced for departments to store, receive and exchange information. In 2002, government policy on Security and Privacy Impact Assessments was revised, and a new authentication service, called ‘epass’, was introduced. However, despite these innovations, senior public officials surveyed by Sanford Borins’ research team in fall 2003, have rated security overall as poor, with only 37.5 % of participants believing it is “well or very well implemented” (Brown, Isakovic 2004, p. 16)

The Gateway and Cluster model was created to respond to focus groups’ expressed concern that government was too complex, and that as clients, they did not care which government department, or which government, provided the information or service, or indeed which level of government within the federal system did so. Focus groups stated that they just wanted to access the information or the service easily. Further, only 9.6 per cent of participants stated that they “feel that the existing [Gateways and Clusters] committee structure provides the necessary leadership and coordination for implementation to a great extent. Similarly the lack of satisfaction with the division of responsibility for content among Clusters shows that overall co-ordination needs improvement…54.7 % of respondents find it unclear” (Brown, Isakovic 2004, p. 17). Perhaps most important for those concerned the democratic implications of such an initiative is the following survey response:

In addition to blurring inter-jurisdictional and inter-departmental accountability lines, horizontal initiatives [such as Gateways and Clusters] also complicate the vertical governance and accountability structures within a single department or Cluster. The GOL community seems to be aware of this problem as 66.7 % of participants agree that Clusters are fully accountable for their work – an arguably low figure considering that a majority of respondents (68.2 %) identified themselves as a Director, Manager or Program Officer. Furthermore, 54.8 % disagree that top management are accountable. (Brown, Isakovic 2004, p. 18)

The administrative and policy challenges are significant. For example, “only 12.5 % of participants describe the Sustainability and Clusters beyond 2005/06 as very good or good” and “can be attributed not only to the financial insecurity, but also to the lack of integration between and unclear mandates of the departmental and Cluster sites.” Inter-jurisdictional collaboration between governments in the federal system compounds the accountability and security and coordination issues.

Within the Gateways and Clusters organizational approach, a broad range of services and programs have been conceived and implemented to deliver e-government to Canadians.

In 2004, the Chief Informatics Officer Branch remains consistent in articulating the objectives of the GOL initiative, which is that the GOL must be:

- Co-ordinated: to achieve progress across the government (common infrastructure, policies, etc.).
- Collaborative: across departments and jurisdictions, involving the private and not-for-profit sectors.
- Cost neutral: increase use of self-service channels for routine transactions across service delivery channels.
- Transformative: move towards service re-engineering and integration, over time and when it makes sense.
Interoperable: to exchange information and business processes that underpin services across government. (Brewer 2004, p. 11)

By 2005, the objective is that 135 of the federal government’s most commonly used information and transactional services will be on-line, including 88 for Canadian citizens, 39 for Canadian businesses, and 8 for international clients. The concerns of public officials expressed in the Fall 2003 survey notwithstanding, the creation of Gateways and Clusters has provided a starting point: it created momentum for rethinking how government information and services are organized; it initiated a culture change for public officials to work horizontally by providing a technological platform for integrated service delivery; the process identified key issues in realizing horizontal integration of information and services, from governance, to accountability, to content management issues, to service standards. The emphasis clearly remains on the technological and administrative dimensions of e-government, rather than on the twin pillars of federal citizenship (citizenship entitlements across the vast geographic landscape of the federation, coast-to-coast-to-coast) and democratic egalitarianism.

4 Conclusion: Embedding Social Justice in the New National Digital Dream?

The stakes are increasingly high in the digital world. Online resources have become an increasingly important way to access timely, relevant, reliable information. Accessing high quality public services increasingly presupposes broad bandwidth connectivity. Participation in the knowledge economy increasingly depends upon new competencies. Engagement in political and policy discourse is increasingly mediated by digital technologies. It is in this context that the 2004 and 2005 federal budgets delivered a blow to those who pinned their hopes on federal digital equity initiatives. The implications of the ongoing cuts and demise of significant connectivity pilot initiatives are enormous for marginalized regions, communities and individuals. For example, without access to the network hardware and skills development support provided by the national Community Access Program (CAP), the move towards sustainable community development in Atlantic Canada will be stalled; potentially, without the appropriate technological infrastructure, Canadians living along the country’s eastern coastal shore may find that the historic economic dependency relationship that has plagued the region since Confederation will persist. CAP sites located in communities across the country have provided opportunities to gain the training required to become fully engaged in the Knowledge Based Economy and Society (KBES). Despite the fact that the program was seriously under-funded (compelling federal CAP sites to rely on community volunteers) the initiative provided enormous value for the investment. For many Canadians, accessing online government services is only possible through the public Internet access points that CAP provides.

Clearly, the Government of Canada positioned itself thoughtfully by embracing two parallel initiatives, Government Online and Connecting Canadians. Although the initiatives have been articulated effectively, they were not supported by the political elites who chose instead to resource the programs inadequately and more recently, cut them wholly. It is in this context that we can understand how e-government initiatives can serve to increase the democratic deficit in Canada. Clearly, any comprehensive assessment of e-government must necessarily include an evaluation of effectiveness and efficiency that measures the ‘reach’ of e-government information and services into those communities and policy constituencies whose citizens have the most to gain from them, living as they do at the geographic periphery and socioeconomic margins of society.

Too often, in Canada, the needs of citizens living along the 49th parallel, have dominated the policy agenda with scant political attention devoted and limited resources allocated to those who live ‘North of 60’. E-government initiatives must begin by mapping the assets of communities and undertaking a comprehensive needs assessment to see what the prerequisites are for take-up of e-government information and services, and what the communities’ diverse needs are with respect to service delivery. Such an asset mapping and needs assessment approach must begin with those communities that are already marginalized within the Canadian political and policy system. Geo-politically, a social justice framework is imperative, given that 90
per cent of Canadians live along the long thin band of civilization that stretches across the relatively narrow, 5,000 kilometer border with the United States. Within this model, the top priority for e-government innovations would be to reach those relatively few Canadians who depend on e-health, e-commerce, e-learning and other e-government services that would support the development of self-sustainable communities. Interestingly, perhaps, while the global digital divide is contextualized in north-south terms, with global citizens in the south defined as the information have-nots, within the Canadian geographic context, northern Canadians face the chilly climate of the digital divide, sharing the lack of ‘virtual’ space with other communities of interest who have been marginalized within the neo-liberal state. The opportunity exists for a new national dream that ensures that Canadians coast-to-coast-to-coast enjoy the full benefits of citizenship.

With almost twenty years experience in using ICTs to increase very narrow, economic-based definitions of service efficiency and effectiveness, the Government of Canada can now position itself to use its international reputation as a mature e-government to demonstrate a response to ‘what now, what next’ in e-government by redefining the yardstick by which most governments are measuring success. The new federal administration led by Prime Minister Paul Martin, who has tried to distinguish himself from his predecessor and must do so politically given his minority government, can chart a course based on advancing a vision of e-government as a democratic initiative. The current political administration can distinguish itself by articulating a new ‘national dream’ in which the power of network technologies is harnessed to achieve social justice objectives.

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References

Alexander, C., 2001: Wiring the Nation! Including First Nations? Journal of Canadian Studies, 35(4), pp. 227-239

Bashkevkin, S., 2001: Welfare Hot Buttons: Women, Work and Social Policy Reform. Toronto: University of Toronto Press

Brewer, A., 2004: Government On-line: Serving Canadians in a Digital Age. Treasury Board Secretariat, Chief Informatics Officer Branch. Powerpoint presentation to Carleton University, 24 February 2004, unpublished

Brown, D.; Isakovic, M., 2004: Gateways and Clusters: The Government of Canada’s Experience with Client-Oriented Single-Window Electronic Service Delivery. Ottawa: The Public Policy Forum; http://www.ppforum.ca

Burke, M.; Mooers, C.; Shields, J., 2000: Critical Perspectives on Canadian Public Policy. Introductory Chapter in their edited book: Restructuring and Resistance: Canadian Public Policy in an Age of Global Capitalism. Halifax: Fernwood

Fountain, J., 2001: Building the Virtual State: Information Technology and Institutional Change. Washington, D.C.: The Brookings Institute Press

Heeks, R.; Bhatnagar, S., 1999: Understanding success and failure in information age reform. In: Heeks, R. (ed.): Reinventing Government in the Information Age: International practice in IT-enabled public sector reform. New York: Routledge

Human Resources Development Canada, 1998: Performance Report: For the Period Ending March 31, 1998. Ottawa: Minister of Public Works and Government Services Canada

Hurley, D., 2003: Pole Star: Human Rights in the Information Society; http://www.ichrdd.ca/english/commdoc/publications/globalization/wsis/PoleStar-Eng.html

Industry Canada, 1996, Building the Information Society: Moving Canada into the 21st Century. Ottawa: Supply and Services

Innis, H.A., 1951: The Bias of Communication. Toronto: University of Toronto Press

Jackson, A.; Robinson, D., 2000: Falling Behind: The State of Working Canada. Ottawa: Canadian Centre for Policy Alternatives

McBride, S., 2001: Paradigm Shift: Globalization and the Canadian State. Halifax: Fernwood Publishing
Osborne, D.; Gaebler, T., 1992: Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector. Reading, M.A.: Addison-Wesley
Shade, L.R.; Dechief, D.Y., 2005: Canada’s Schoolnet: Wiring Up Schools? Forthcoming in: Carr-Chellman, A. (ed.): E-Learning and Democracy: Critical Perspectives on the Promise of Global Distance Education. Thousand Oaks, CA: Sage Publications
Shields, J.; Evans, B.M., 1998: Shrinking the State: Globalization and Public Administration “Reform”. Halifax: Fernwood Publishing
Treasury Board of Canada Secretariat, 1999: Employment Statistics for the Federal Public Service: April 1, 1998 to March 31, 1999. Ottawa: Minister of Public Works and Government Services Canada

Selected Online Sources

**Government of the United States of America**
Closing the Digital Divide:
http://www.digitaldivide.gov/

**Department of Commerce, Assessment of Technology Infrastructure in Native Communities:**
http://www.doc.gov/eda/html/reports.htm

**Federal Communications Commission: Indian Initiatives:**
http://www.fcc.gov/indians/

Kennard, W.E., 29 Sept. 2000: Indian Telecom Training Initiative (ITTI) 2000: Fulfilling the Promise; http://www.fcc.gov/Speeches/Kennard/2000/spek021.html

**The Digital Divide Project:**
http://www.washington.edu/wto/digital/

**The Federal Government of Canada**
Aboriginal Canada Portal: Connectivity Data:
http://www.aboriginalcanada.gc.ca/abdt/interface/cac_stats.nsf/engdoc/1.4.html

Binder, M., October 2004: Canada and the Network Economy. Presentation to GTEC 2004. Ottawa: Industry Canada; http://www.gtecweek.com/ottawa2004/conference_program/indexd236.html#

**Canadian Heritage, 2002: The Digital Divide: From Definitional Stances to Policy Initiatives, unpublished paper by Leslie Regan Shade, Policy and Program Forum**

**Chief Information Officer, 2004: Chief Information Officer Branch Principles;**
http://www.cio-dpi.gc.ca/cio-dpi/princip_e.asp

**Human Resources and Development Canada and Industry Canada, February 2002: The Innovation Strategy:**
http://www.innovationstrategy.gc.ca/cmb/innovation.nsf/Backgronders/BG05-NS

**Indian and Northern Affairs Canada, March 2002 National Connecting Aboriginal Canadians Forum,**
http://www.aboriginalcanada.gc.ca/abdt/lookups/cacwebsitegraphics.nsf/vDownload/summary_day1.ppt/$file/summary_day1.ppt

**Indian and Northern Affairs Canada, 2001: Connecting Aboriginal Canadians, an interview with Shirley Serafini, Deputy Minister.**

**Industry Canada:**
Broadband for Rural and Northern Development; http://broadband.gc.ca/index_e.asp

**Report of the National Broadband Task Force;**
http://broadband.gc.ca/Broadband-document/english/executive_summary.htm

**Online Journals, Newspapers and Magazines**

Longford, G., 2002: Rethinking E-Government: Dilemmas of Public Service, Citizenship and Democracy in the Digital Age. Paper presented to The Workshop on Public Sector Innovation, University of Ottawa and published in The Innovation Journal: The Public Sector Innovation Journal; http://www.innovation.cc/

The Canadian Centre for Policy Alternatives, February 2005: News Release: It’s Time: $ 45 billion surplus could fix federal-provincial woes and address poverty, Says Alternative Federal Budget; http://www.policyalternatives.ca/index.cfm?act=news&call=1016&pa=BB736455&do=Article

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Primary Teaching Resource co-created by Dr. Alexander funded by SSHRCC, The Digital Agora:
http://ace.acadiau.ca/polisci/aa/digagora/agora.html

Related Current Research URLs:
Equity and Technology SSHRCC Research Alliance: http://techequity.acadiau.ca

Nunavut Policy Symposium SSHRCC Research Grant:
http://plato.acadiau.ca/courses/pols/nunavut@5/index.htm