The Business of Government and the Future of Government Archives

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Abstract: Several trends affecting government will influence government archives and records programs in the near term. Government is flattening, becoming smaller and more intergovernmental in nature. The increasing use of information technology and telecommunications in government makes its records more vulnerable, more valuable commercially, and more accessible. Government archives will take on new roles as regulator, negotiator, and advocate for the management of records. To be successful in this volatile future, government archives must build expertise in management issues, such as privacy, security, access and retrieval, and long-term retention, and closer ties with constituents within and outside the government.

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MOST GOVERNMENT ARCHIVES and records programs serve both cultural and administrative roles. They preserve records that provide context for a specific geopolitical community, securing the corporate memory of an institution that interacts with that community more broadly than any other. Government archives support the government's need to understand itself, its goals, policies, and actions, as well as the peoples' need to hold the government accountable for its actions.

Government archives programs are integral to the functioning of government; they cannot be separated from the milieu in which they exist. The business of government dictates the future of government archives, and that business, particularly at the state and local levels, is evolving rapidly. What are the significant trends affecting government and government recordkeeping? What are the implications for the future of government archives?

Current Issues and the Government Setting

Government shares its environment with the private sector, and in this shared environment, a major catalyst for change is technology. Information technology enables new business structures and methods, new ways of communicating, and new expectations about services and outcomes. Unlike commercial ventures, however, government is held to ethical standards that require it to consider, as its first objective, the public good. As a result, government reacts differently to change than many of its private sector counterparts.

Technology enables several trends that relate to organizational structure and information management. These have a particular character and importance in the government setting where they can influence accountability and the social contract between the government and the governed. For example, innovation, reengineering, and outsourcing are tools to provide more effective and efficient services. In government, such changes can alter the government's oversight of service provision and have an impact on its ability to be accountable to citizens. Commercial use and reuse of information, particularly personal data, is a volatile issue in the electronic world, where compilations of data are simple to make and easy to market; in government, its resolution is more than a question of risk and profit. Government has a responsibility to be accountable and open its records to public inspection with no questions asked; at the same time, it has an obligation to protect its data subjects from invasive search and seizure. Telecommunications, the Internet in particular, has altered our ideas about responsiveness. We now expect to conduct business transactions or obtain information instantly on request. In the government setting, telecommunications has the potential to change not only where we conduct government business, but how we conduct that business, the structure of government. Some have argued that direct democracy, facilitated by telecommunications, is quicker, cheaper, and more efficient than our representative government.1 The recordkeeping implications of such a system are dramatic.

While the interrelated trends discussed below are not the only factors that are influencing government, they are all referred to frequently in the professional government and government information literature of the past five years. These trends have not yet been

¹Peter Leyden, "The Second Renaissance," in *On the Edge of the Digital Age*, 1996, http://www.startribune.com/stonline/html/digage/main4.htm (accessed 7 August 1997). A hypertext essay "built on more than 50 in-depth interviews with many of the key people who are best positioned to give insights into the coming Digital Age, plus about 50 books on the subject."

resolved nor have they reached their zenith. They continue to have a direct impact on government information and archives because they influence what records will be created, where they will be created, and how they will be retained, managed, and used.

New Ways of Doing Business. Innovation in government, defined as new programmatic or public policy initiatives that have a substantial impact on operations, is widespread. The Council of State Governments surveyed officials and found that 80 percent of the "states were considered to be innovative in at least one policy area."

Innovation takes a variety of forms. Based on legislative, regulatory, executive, or administrative mandates, initiatives for change can result in the elimination of agencies or functions, transfer or reorganization of programs, and new methods of service delivery, including privatization and multi-jurisdictional programs. Nationally recognized programs are licensing private sector professionals to oversee hazardous waste clean-ups in Massachusetts, allowing municipalities to take on the state's traditional responsibility of identifying and managing hazardous waste site mitigation in Kansas, building state/local partnerships to provide intensive supervision to high-profile offenders released into the community in Washington state, and encouraging Massachusetts taxpayers to file their state returns using touch-tone telephones. The "Electronic Parent Locator Network," a program based in South Carolina's Department of Social Services, assists case workers to find "absent parents who owe child support payments The network links personal identification data from 10 southern states that child support workers can use to search for child-support scofflaws Each state pays a fixed cost for running the network, plus a charge for storing the data it generates." The Central Registration Depository, a system owned and operated by the National Association of Securities Dealers, Inc. (NASD), the self-regulatory organization of the securities industry, is used by all fifty states, the District of Columbia, and Puerto Rico to license and monitor securities dealers and brokers. The system "permits individuals seeking to be registered with multiple organizations and states to do so by submitting a single form and combined payment of fees" to NASD. State regulators participate under contract and share the costs of managing and maintaining the data.4

In these innovative programs, state government does less, relying on the private and not-for-profit sectors, citizens, and other government jurisdictions to participate in carrying out government functions. This trend towards collaboration is likely to continue. The fiscal imperative, based on citizens' perceptions of waste in government, will encourage officials to increasingly adopt innovative strategies. An example is outsourcing, wherein the government contracts with a private company to carry out government functions such as constructing or managing public facilities, operating institutions and programs, or collecting and disseminating information. While the fiscal benefits of such projects vary, "studies find an average savings of 25 percent for the same level and quality of services." As a result, while the public sector shrinks, the private sector's public service industry is "likely to grow by 10 to 30 percent within the next few years."

²Keon S. Chi, "Innovations in State Government," in *The Book of the States, 1996–97* (Lexington, Ky.: Council of State Governments, 1996), 541.

³Chi, "Innovations in State Government," 545-46.

⁴National Association of Securities Dealers, "Central Registration Depository," http://www.nasd.com (accessed 11 September 1997).

⁵Diane Kittower, "Serving the Public with Private Partners," Governing 10 (May 1997): 65–66.

Another incentive for innovation is effectiveness. Editor and futurist Hamish McCrae suggests in *The World in 2020: Power, Culture and Prosperity* that the success of privatization and outsourcing raises questions in the public's mind about the "core role of the state." In the future, governments will be smaller and "will be expected to do less,... achieve their aims by regulation, not provision," and will be "much more subject to market discipline than at present." Regulation is more cost-effective than service provision; moreover, it permits governments to "control the quality of services much more effectively and ensure much higher standards of accountability to the public."

The Growth of Intergovernmental Structures and Programs. One area of innovation that has been a major focus over the past five to ten years is intergovernmental structures and programs. This is a natural target for innovation since federal, state, and local programs are closely tied together. The average state receives about 22 percent of its revenue from the federal government; about 28 percent of state expenditures are dedicated to aid for local governments.⁸ State and local governments administer over six hundred federal programs providing funds, services, assistance, and information.⁹

Vice President Gore's National Performance Review (NPR) which aims to "reinvent" government, making it more responsive, effective, and less costly, has compiled a twenty-six-page list of NPR recommendations affecting states and localities. It includes such objectives as IT02, "Implement Nationwide, Integrated Benefits Transfer" and IT05, "Provide Intergovernmental Tax Filing, Reporting and Payments Processing." 10

Federal waivers and other arrangements, such as the "Oregon Option," designed to promote flexibility and results in state and local governments, are increasing. "The new wave of regulatory flexibility is an attempt to extend the waiver concept beyond the traditional areas of health and human services and into job training and education, the environment, workplace safety, natural resource protection and beyond." Oregon has been granted an umbrella waiver based on its proposal for a "special intergovernmental, interagency partnership" for "results-driven intergovernmental service delivery. In exchange for the commitment by Oregon's state and local governments to achieve certain performance goals, federal government agencies waive regulations, funding requirements, and other "micromanagement" practices.

The movement towards intergovernmental programs and structures will continue, simply because it is politically popular, cost effective, and, in some cases, programmatically effective in eliminating overlapping bureaucracies. Initiatives like the NPR demonstrate that a systemic effort can have a significant impact on the culture of government. It is unlikely that future administrations will be able, or willing, to rescind progress in this direction.

⁶Hamish McCrae, *The World in 2020: Power, Culture and Prosperity* (Boston: Harvard Business School Press, 1994), 187.

⁷McCrae, The World in 2020, 195.

⁸Henry S. Wulf, "State Government Finances, 1994," in The Book of the States, 1996-97, 494-98.

^{9&#}x27;'Federal Agencies are Developing New One-Stop Web Site to Benefit State and Local Governments,'' Reinvention Express [Online] 3, http://www.npr.gov/library/express/1997/vol3no5.htm (accessed 2 September 1997)

¹⁰National Performance Review, *NPR Recommendations Affecting States and Localities*, 1 January 1994, http://www.npr.gov/library/fedstat/25b6.html (accessed 2 September 1997).

¹¹Jonathan Walters, "Say 'Regiflex' and Win a Waiver," Governing 10 (May 1997): 13.

^{12&}quot;Executive Summary: The Oregon Option," *The Oregon Option*, http://www.econ.state.or.us/opb/OR_OPT/exec.htm (accessed 21 August 1997).

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Commercialization and Privacy Issues. As use of information technology, innovation, and intergovernmental information-sharing increase, so does the value of government records. Several conflicting government interests converge in this area: the need to be cost-effective, accountable, and responsible. These issues are central to the social contract between government and the people.

Most open records laws are based on the idea that government creates and retains records for the purpose of carrying out its official activities. The cost associated with recordkeeping is a part of the cost of doing business and is supported by taxpayers. Since the public should not have to pay twice for the same product, these laws permit government to charge requesters only the cost of fulfilling the request, that is, identifying the requested records and the actual cost of copying them. In addition to supporting accountability, such laws have encouraged commercial resale of government records and information.¹³

However, the public sector is increasingly entering the resale market. User fees charged by government are not likely to restrict information industry activity, but may have an impact on academic and public interest uses. 14 The impetus for public sector resale is electronic records. "Using a direct-cost model, electronic information can be much cheaper to the requester. The paradox, however, is that it can also be much more valuable. And it is here that agencies frequently balk, asking why they should be giving away electronic data that may well be worth far in excess of direct costs." Some states have passed special legislation to exempt certain records, like GIS data, from the direct-cost provisions of open records laws. 6 Others have formed independent, public-private sales agencies or have privatized access and "data publication" responsibilities.

Sale of government information can be made more palatable to advocates for access if government uses revenue to make broader access possible or to add value to information.¹⁸ But any sale of records at a price above direct-cost conflicts with the intent of open records laws. Even solutions proposed by advocates require compromise. In order to preserve access for the public good, some access advocates are willing to abandon the principle of equal access for any person as well as the principle of unrestricted use.

It may make sense to acknowledge their [GIS] commercial value and design a cost scheme that helps account for that value.... Commercial uses... could be required to pay something more than direct costs.... Perhaps the costs should be tied into a costing model that takes into account the cost of continuing maintenance and updating of the system...

... But [public interest groups] are unlikely to have the funds to pay the higher commercially adjusted rates for such information. In such cases, government should subsidize the availability of the system; this could mean collecting direct costs and

¹³Henry H. Perritt, Jr., "Commercialization of Government Information: Comparisons Between the European Union and the United States," *Internet Research* 4 (Summer 1994): 12.

¹⁴Sherwood A. Dowling, "Information Access: Public Goods or Private Goods?" Social Science Computer Review 12 (Fall 1993): 342.

¹⁵Harry Hammit, "Public Information: Service or Commodity?" *Government Technology* 10 (May 1997): 14.

¹⁶Robert Gellman, "Public Records—Access, Privacy, and Public Policy: A Discussion Paper," *Government Information Quarterly* 12 (1995): 416.

¹⁷Jeremy R. T. Lewis, "Reinventing (Open) Government: State and Federal Trends," Government Information Quarterly 12 (1995): 436–37.

¹⁸Dowling, "Information Access," 334.

providing a written agreement to restrict outside dissemination only to the publicinterest group.¹⁹

Another encroachment on free and open access is the increase in the use of copyright by state governments.²⁰ While the federal government is prevented by Section 105 of the 1988 Copyright Act from holding copyright in its works, "there is no such prohibition on state and local governments holding copyrights, and the future place of public information in a national information infrastructure is likely to be influenced strongly by assertion of copyright in state government information."

If electronic records have precipitated a shift to restricting access for commercial reasons, they have also sparked an interest in restricting access for reasons of privacy. Copyright and use restrictions can serve both policy goals.

One major question raised by information technology is how records, traditionally considered *public* when in paper form, should be restricted now that they are created and retained in electronic form. "Practical limitations on collection, maintenance, use, and disclosure that exist for paper records may disappear when records are electronic and easy to extract, combine, or otherwise manipulate. Some court decisions on access have been significantly influenced by the difference in ease of use and disclosure that exists between paper and computer records." 22

In its 1989 decision in the Department of Justice v. Reporters Committee for Freedom of the Press, the Supreme Court denied access to a computerized rap sheet, a compilation of an individual's arrests, charges, conviction, date of birth, physical characteristics, and other information, on privacy grounds. While this information is publicly available in many disparate locations, and "a diligent researcher may be able to accumulate the same information from public sources, the task can be impossible as a practical matter." The Court wrote, "But the issue here is whether the compilation of otherwise hard-to-obtain information alters the privacy interest implicated by disclosure of that information. Plainly there is a vast difference between the public records that might be found after a diligent search of courthouse files, country [sic] archives, and local police stations throughout the country and a computerized summary located in a single clearinghouse of information."²³

The reaction to such heightened privacy concerns has varied from state to state, in accordance with the characteristics of the state's privacy and open records laws, but overall, "the privacy-access balance has tilted in favor of privacy over time." Will this trend continue? Despite the fact that statutory exemptions, fees, use restrictions, and copyright conflict with open records laws, they will continue to be used by state and local government. This seems contradictory, in light of government's new ability to provide instanta-

¹⁹Hammit, "Public Information," 14.

²⁰"Colorado copyrights all its databases; Washington and many other states copyright their revised codes. Florida... is reported to have had a significant trade in the sale of data and software. Hawaii Inc., a public-access network, charges for access to five databases while making others available free of charge." Lewis, "Reinventing (Open) Government." 436.

²¹Perritt, "Commercialization of Government Information," 14.

²²Gellman, "Public Records," 393.

²³Quoted in Gellman, "Public Records," 406.

²⁴Harry A. Hammit, "Integrating the Disciplines: An Analysis of the Proceedings," in *Report of the National Privacy and Public Policy Symposium* (Hartford, Conn.: The Connecticut Foundation for Open Government, Inc., 1996), 138.

neous, nationwide access to digital government records through telecommunications. It is this ease of access and use, in part, that fuels the shift towards commercialization and strengthens privacy interests.

Telecommunications. A few years ago, governments experimented with 'bringing government to the people.' Government agencies opened up offices in downtown shopping areas and malls. Kiosk technology enabled the concept of 'one-stop shopping,' allowing us to envision a time when citizens could renew drivers licenses, obtain fishing permits, or file for government benefits at ATM-like terminals at the post office or supermarket. For many Americans, this is no longer sufficient. Now we expect to transact our government business from our home computers, at any hour of the day or night. Government should be constantly available and accessible.

Our expectations clearly outpace the current reality. A recent study of municipal World Wide Web sites found that, "city governments overall are underutilizing the full capabilities and potential of virtual city halls." A 1996 sampling of municipal sites found that only a tiny fraction offer on-line forums and forms, the latter for filing crime reports, requests for road repair, and other one-way transactions; most sites offer only general information, descriptions of services, and e-mail links to government officials. No sites offered file transfer, a common and valuable Internet function. These findings were consistent across the full spectrum of size and geographic location. This might represent, in part, some governments' concerns about the capabilities of the technology and the new customer expectations it could stimulate, or fear of being perceived as impersonal.

But despite government's lag in adoption of the Internet, it does understand the benefits of meeting this customer demand. In 1996 members of the National Association of State Information Resource Executives identified access to government information as their top priority.²⁶ Several demonstration projects have proven the "technical capabilities of the World Wide Web as a universal interface" for the delivery of state and local government services to citizens and for conducting business within and among governments.²⁷ The Web interface enables user-friendly, ubiquitous access to information and services. It streamlines the business process by permitting direct entry of data by the user and direct access to information needed to complete the transaction, without mediation by a government employee. Because it "uses open standards for communicating information," it can integrate "multiple applications running on multiple platforms" to customize retrieval of information to users.²⁸

Many governments are poised on the brink of turning these demonstration projects into regular business methods, pursuing "online government" with the idea that "citizens would rather be online than in line." At the time of this writing, twenty-one states had current or pending legislation on the use of digital signatures to permit electronic com-

²⁵S. Nunn and J. Rubleske, "'Webbed' Cities and Development of National Information Highway: The Creation of World Wide Web Sites by City Government," 1996, http://134.68.130.14/cupe/news/list.htm (accessed 3 May 1997).

²⁶National Association of State Information Resource Executives, "Issue Ranking Activity and Discussion," in *The Changing Information Technology Landscape: Helping States Adapt* (Lexington, Ky., 1996), 11.

²⁷Center for Technology in Government, "Project Overview," *Universal Interface Project Report*, 1996, http://www.ctg.albany.edu/projects/inettb/univ/Reports/CH1/introduction.html (accessed 3 May 1997).

²⁸Center for Technology in Government, "Business Applications," *Universal Interface Project Report*, 1996.

²⁹Massachusetts Information Technology Division, http://www.magnet.state.ma.us/itd/legal/ (accessed 29 July 1997).

merce, electronic filing, and interactive business transactions in the public and private sectors; a uniform law was in a draft stage.³⁰ Two interactive government Web applications won awards in 1997. Santa Monica's Public Electronic Network permits users to register for library cards, make complaints, file crime reports, consult databases, send e-mail to government officials, and participate in on-line forums. The Oregon Department of Consumer and Business Services Internet Project supports access to an on-line interactive training course on workplace safety.³¹

Use of the Web can accelerate the trend towards intergovernmental programs and structures. Its ability to integrate multiple applications means that a Web interface can retrieve information from several applications at different sites and collect information from the user to be filed at different sites. This capability is important to government since, "'The citizen typically doesn't care whether he is supposed to call the federal, state or local government He simply wants to get his license or his permit." A step in this direction is the Web Interactive Network of Government Services (WINGS) of the United States Postal Service. This intergovernmental project promises to provide the public with easy-to-use, integrated electronic government customer services. Information can be retrieved by government agency name or by subject, "the real life reason you need to be in touch with your government." The Canadian "Intergovernmental On-Line Information Kiosk" takes a slightly different approach. The "InterGov" site provides information about how to access federal, provincial, territorial, and municipal services. It offers a searchable catalog that supports searches by service name, jurisdiction, subject, keyword, and delivery channel (e.g., Web, Gopher, kiosk, telephone, etc.).

To this point, most governments have used the Internet to provide government information and records to the public. In terms of the capabilities of the technology, this is just scratching the surface. The next step is using the Internet to enhance public involvement in government. Futurist Eric McLuhan believes that the Internet could transform government "into something that everyone participates in all the time, electronically.... government by bureaucracy is dead. Hierarchies melt because electricity puts you in an information environment.... As information levels rise, all the specialists simply melt away. It will take a while, perhaps another generation.... What we have to do is figure out how to operate with electronic power, decentralized power."³⁵

Likewise, Alvin and Heidi Toffler argue that the decentralization occurring in the economy, in business and other organizations, has a natural counterpart in government. "The old communications limitations no longer stand in the way of expanded direct democracy. Today's spectacular advances in communications technology open for the first

³⁰McBride Baker & Coles, "State-by State Summary of Digital Signature Legislation," *Government Technology* 10 (April 1997): 54; Massachusetts Information Technology Division, http://www.magnet.state.ma.us/itd/legal/ (accessed 29 July 1997); National Conference of Commissioners on Uniform State Laws, "Uniform Electronic Transactions Act," 15 August 1997, http://www.law.upenn.edu/library/ulc/uecicta/ect897.htm (accessed 21 October 1997).

³¹Diane Kittower, "Winners that Work," Governing 10 (September 1997): 58-60.

³²George Lindamood, former director of the Washington State Department of Information, quoted in Blake Harris, "Technology and the Future of Government," *Technology Trends*, a supplement to *Government Technology* 10 (June 1997): 9.

³³United States Postal Service, "Web Interactive Network of Government Services" home page, http://www.wings.gov (accessed 20 October 1997).

³⁴Canadian Governments On-Line (CGOL) intergovernmental team, "Intergovernmental On-Line Kiosk," http://www.intergov.gc.ca/ (accessed 5 August 1997).

³⁵ Harris, "Technology and the Future of Government," 10.

time a mind-boggling array of possibilities for direct citizen participation in political decision making."36

While direct democracy will not replace or compete with representative government, telecommunications might be used to petition legislators or share in decision making. Before being applied on a broad scale, such experiments are likely to be made at the local level, where they can be controlled and monitored.³⁷ Others concur that changes will likely be made at the local and state levels first: "the stakes are simply too high—and the resultant gridlock too strong—to allow radical experimentation at the federal level."³⁸

Impact on Government Archives

While these are significant trends, they are not the only factors that are likely to influence government, or government archives and records programs, over the next five to ten years. Changes in the economy, workforce, demographics, technology, and other factors not discussed here will play a role. Poorly placed archival programs or less effective advocates may lose out to others—administrative and finance offices or information technology divisions that have better access to funding and political support, or to library, museum, or other cultural agencies that have stronger ties to a broad constituent public.

Among the success factors that may be relevant in the volatile times ahead are organizational placement, the sophistication of electronic records programs and partnerships, and a relationship with constituencies. These are factors that relate to the program's ability to be flexible, responsive, and an effective advocate for its interests. The program that is closer to decision-making authority in the executive and legislative branches will have a better opportunity to make a case for strengthening the archival function to support government activities. Programs that can provide electronic records management expertise, demonstrating the value of the archival function, will win critical allies. Allies outside government are equally important; users of records and information, particularly, can form powerful lobbies to support archival programs.

Setting these unknowns aside, how will the trends identified above influence the future of government archives? And how will archival programs influence the government's reaction to these trends?

Speculating about the future. Ours is an information economy, on its way to becoming an information culture. The centrality of information means that information management and recordkeeping tasks will become more important and more integrated into all facets of business operations. Information technology permits, even requires, archival tasks to be carried out throughout the organization.³⁹ This will require archivists to work more closely with records creators, information technology managers, data subjects, and secondary users of records. Government archives are already facing and meeting these challenges. The conjectures below are part observation and part reflection on near-term possibilities.

³⁶Alvin and Heidi Toffler, Creating a New Civilization: The Politics of the Third Wave (Atlanta: Turner Publishing, Inc., 1995), 98.

³⁷Toffler and Toffler, Creating a New Civilization, 99.

³⁸Ian D. Temple and George Lindamood, "Who Will Lead?" Government Technology 10 (April 1997): 67.

³⁹Richard Kesner, "Information Technologies and the Information Resource Management Challenge," New England Archivists Newsletter 19 (July 1992): 5.

1. Government archives will regulate private sector recordkeeping.

In many jurisdictions, when a government privatizes a function, contracting with a private vendor to perform a government function, it retains legal responsibility for the records that result. Provisions for the creation, management, and disposition of records are often specified in the contract itself; at a minimum, the contract will state that the records are state property. Because some of these records will have long-term value, government archives will have to extend their reach in order to meet their documentation goals. In the case of paper-based records, this may mean establishing a records schedule, offering training to recordkeepers, and acquiring records as they become inactive.

This becomes more complex with the use of electronic records systems. The archives may have to negotiate with the vendor and the government's program manager to ensure that preservable records are created and retained. Where a vendor does not provide services exclusively to the government, there is the additional problem of segregation of records. As the use of privatization accelerates, archives may not be able to review every records system at an early enough stage to successfully intercede for the management of long-term records. Some archives may develop regulations, promulgated, perhaps, under the aegis of the agency responsible for central purchase of services. Such regulations might include provisions relating to the creation of discrete, segregable, preservable records, accessibility of records, and the media and format in which records must be maintained for long-term retention, and the requirement that a custodian be appointed, with the approval of the archives or public records administrator, for the full life cycle of the records. Government archives may certify private or corporate archives to manage such government records of long-term value.

2. Government archives will innovate to face intergovernmental challenges.

Intergovernmental structures and programs raise profound questions about the management of government records. The "Electronic Parent Locator Network" links personal data from ten states. National welfare reform requires the development of a seamless, coordinated systems for tracking and managing services to clients across the country. Retention periods, open records laws, and fair information practices vary from state to state—how will these issues be resolved? If a data subject moves from one state to another, will portions of the record be managed differently, according to the laws in the relevant states?

State and local governments have begun to share data collection and maintenance responsibilities for certain functions. The "Motor-Voter" law, passed by Congress in 1993, requires states to provide wider access to voter registration opportunities outside of the voter's home county building or town hall, including opportunities to register at any town hall, government benefits office, and motor vehicles registry. Some states have met the requirements of the law by creating a central voter database of registration and voting information. Such solutions raise questions about the custody, management, and accessibility of records. Paper-based records are generally considered to be public and of long-term value. Will the central database create and retain records of registration and voting

⁴⁰Wayne Hanson and Marie Fusilero, interview with Dr. Costis Toregas, president of Public Technology, Inc., in "Government Technology Interview" *Government Technology* 10 (October 1997): 21.

⁴¹Michael Nelson, "Records in the Modern Workplace: Management Concerns," *Archivaria* 39 (Spring 1995): 81.

transactions that are preservable? Will individual records have a different public records status once they are compiled in the central database? How will government archives provide for the preservation of long-term access to these records?

Initiatives at the federal level raise similar questions. The NPR proposal for a "single information flow" for wage and tax reporting at all jurisdictions is an example of the "close, cooperative intergovernmental and interagency relationships that eliminate unnecessary duplication of effort and promote enhanced citizen access to information and services." The necessary information technology is available now to support single filing; proponents consider the proposal feasible, with no new legislation required. Most would agree that the confidentiality of these records precludes long-term retention, although the proposed system could enable the retention of a redacted data set at an aggregation level that could permit manipulation. The proposal is useful, however, as an example of the extent to which complex intergovernmental programs are becoming a reality.

Efforts made thus far by government archives, programs, and associations to develop intergovernmental strategies for records management are in their infancy. The "Intergovernmental Cooperative Appraisal Program," described by Marie Allen in this issue of the *American Archivist*, is the first of its kind. The scope and importance of such strategies will increase dramatically in the coming years. As government programs cross boundaries, so too must government archives. Government archives can react in several ways. In the short term, negotiation among the creators, holders, and users of information at all levels is critical; in the long term, intergovernmental activities could result in the creation of new intergovernmental archives and interests.

Government program managers and archivists of all jurisdictions must be involved in a focused, ongoing dialogue about the creation, custody, management, accessibility, and preservation of the records of our increasingly intergovernmental government. While this must be a partnership to succeed, national program managers and archivists must make a serious commitment to leading in these efforts since intergovernmental programs are largely initiated at this level. As a part of the NPR, working groups could be established on documenting government activity in various functional areas. Such working groups, led by national program managers, could include agency records officers, National Archives archivists, and state and local program managers, agency records officers, and archivists. Information sharing might be significant first task, but such groups could analyze government business functions, develop recordkeeping requirements, and, with the help of users and outside experts in subject areas, negotiate documentation plans and retention schedules.

In the absence of national leadership, or in the case of state-state or state-local intergovernmental programs, negotiation is needed to make recordkeeping decisions. Recordkeeping requirements, standards, and documentation goals for intergovernmental systems can only be effective when developed by a full spectrum of records creators and holders. Professional associations and other nongovernmental organizations should play an important role in coalescing support for these efforts.

Another possibility is leadership by users and customers, the people who are served or regulated by government, and secondary users of the records that result from these transactions. The recent discussion about privacy protections for medical records demonstrated the contraction of the records demonstrated the records

⁴²National Performance Review, *Reengineering through Information Technology*, 1993, <www.npr.gov/library/reportsd/it.html> (accessed 6 September 1997).

strates that such groups are not always natural allies; a crisis might be required to inspire a coalition of interests.⁴³ As the influence of these groups is recognized, however, intergovernmental records management proponents will include data subjects and users in documentation planning efforts. Development of formally organized groups may follow; such groups can serve as advocates for the documentation of government activities in a region, function, or subject, in the same way that the Center for the History of Physics at the American Institute of Physics advocates for the documentation of that science.

At the present time, some state archives acquire local government records; some local government records programs care for records of both county and municipal governments. Are integrated intergovernmental archives that difficult to imagine? Such an organization might be concerned with documenting government activities and their impact in a particular region or in a particular functional area. More probable in the near term are arrangements among specific governments or government offices to manage records of specific programs and functions, as has been suggested elsewhere.⁴⁴

Another possibility is development of virtual archives supported by a single access point. This is a natural outgrowth of efforts towards a global government information locator system and intergovernmental kiosk services like the Canadian InterGov project.

In any case, archivists and others who manage access to records must become familiar with the creation, content, and value of intergovernmental records. The primary and secondary users who benefit from archivists' expertise in this area can advocate for archival involvement in intergovernmental program planning.

3. Government archives will change focus or structure.

It has become a truism to say that new information technologies are designed to empower the end user, providing every worker with, among other things, the ability to create compound documents; develop, populate, and manipulate databases; gather data from stores of information on the network or Internet; and communicate broadly within the organization and beyond. The control imposed by centralized access to resources, such as the file room of paper-based records or the computing power and data held in the mainframe computing facility, is gone.

Now the records creator must be his own archival practitioner, "concerned with the provenance, original order, appraisal, and preservation of records of enduring value."

The role of the archivist will be similarly transformed to that of an expert advisor, a meta-data designer, and a standards coordinator. In this context, the archivist will work with other IRM professionals to design and implement organization-wide information architectures, as well as the procedures governing database access, information presentation, and document preservation. He/she will instruct users on the tools and rules (i.e. meta-data) of document creation . . . new ways to represent and preserve ideas and information through multi-media document formats . . . [and] will . . . police usage and the observance of standards.⁴⁵

^{43&}quot;Health Records Privacy Urged," Boston Globe (12 September 1997), A14.

⁴⁴David Bearman and Margaret Hedstrom, "Reinventing Archives for Electronic Records," in *Electronic Records Management Program Strategies*, edited by Margaret Hedstrom (Pittsburgh: Archives & Museum Informatics, 1993), 93–94.

⁴⁵Kesner, "Information Technologies," 5.

This points to an important educational role for archivists. State and local government archives have already taken on the challenge of educating records creators and users, establishing guidelines, standards, directives, and training programs on desktop files management, electronic mail, security and back-up procedures, and similar topics. Archives programs are identifying, describing, and scheduling systems. Programs like the Kentucky Department of Library and Archives review agency information resource plans to identify significant electronic systems for scheduling and assist in the development of recordkeeping requirements for those systems.⁴⁶

It is true that the vast majority of archival holdings and current government records are (and will be for the near term) paper-based, but the ratio of paper-based to electronic records will change over time, more rapidly in some areas than others. Two government functions that traditionally generate archival records, case management and the legislative process, are currently targets for development of "paperless" systems. And geographic information systems are being used in many government functions, including public health, education, public safety, and environmental protection.

Those government archives that have the resources to meet the growing need for expertise and training in this area can take advantage of customer demand to achieve greater visibility and credibility, more adequate funding, and a stronger performance in all aspects of their programs. Those without the confidence or necessary resources to stake a claim in the management of electronic records may face a lessening of resources. For these programs, there are few possible courses: determine that they cannot assist records creators in this area; try to meet the need, and, if they fail to do so, risk losing credibility and control; or build an alliance with an agency that will be capable of filling the demand for expertise. In some governments, this will be a library, information technology services or policy office, administrative office, or legal agency. If a government archives program can articulate the benefits of adequate recordkeeping on the basis of a central government need, like accountability, openness, or service delivery, it will be successful in locating a partner. The archives will take the major responsibility for developing the recordkeeping policy and procedures; its partner will take major responsibility for marketing and implementation.

Could a growing focus on an educational role, whether directly or through partnerships, lead to changes in program structure and organizational placement? Some have predicted the rise of "information utilities" that will manage the full records and information life cycle, carrying out the tasks of information policy, technology, media production, library, and archives units.⁴⁷ Will government archives be subsumed into information technology departments? While there are some obvious benefits to this approach, this seems more likely to occur in the corporate sector, where there is less need for archives to support public accountability or play a cultural role, and a greater emphasis on information assets and profitable reuse of records and information.

There are two other possibilities. One is a structural change that would split government archives' dual mission. There are tensions in many archival programs caused by competition for resources to both manage existing holdings and also to deal with prospective holdings, including electronic records still in creating offices. Some of these may not be physically acquired. These conflicts are exacerbated by a contradictory staffing

⁴⁶Among other sources, see Hedstrom, Electronic Records Management Program Strategies.

⁴⁷Kesner, "Information Technologies," 4.

situation: new graduates of masters and doctoral programs often have electronic records skills that are very much in demand. They can ask for, and get, salaries higher than senior staff who are highly skilled and experienced in managing paper-based records. Furthermore, government officials are more likely to associate paper records with an archives' cultural role and electronic records with its administrative activities. In fact, some information technology departments have established a policy function that conflicts directly with archives programs' traditional or statutory mandate.

Separation of these missions is not in the best interests of government and the public; government archivists must continue to argue for the integrated nature of government archives objectives. Archives can make that point by promoting the government's use of archival holdings for analysis of current public policy issues. The Vermont State Archives, for example, took advantage of the state's bicentennial in 1991 to sponsor community meetings throughout the state, where audiences were given a conceptual overview of a topic then became "citizen legislatures" and debated the issue. The archives used this opportunity to emphasize "the persistence of certain core issues associated with self-government.... The State Archives, as the repository of government records with continuing value, provides unique insights into how each generation has addressed these issues within the context of its particular social and economic realities and expectations." Two of the issues selected for the project have since become the subject of legislative action; legislators have referred to archival records in their debates.

The second possibility is a shift in organizational placement that would move government archives programs into the library function. The library community has successfully translated its traditional cultural role into the modern information age, managing paper-based and electronic information. At the state level, an increasing number of state libraries have responsibility for the archival and records management function. If the archival responsibility for ensuring accountability is respected, this can offer a distinct advantage for archival programs that have few advocates among legislators and users; libraries are generally better funded and more influential in both government and user communities.

4. Government archives will be affected by restrictions on secondary use.

As government records become increasingly electronic, the changing view of their value and confidentiality will tend to restrict secondary use. Government archives will find themselves negotiating with records creators for custody and control of records, and negotiating with data subjects and records creators regarding access and use of records. By their nature, such restrictions place government archives in conflict with their parent organizations.

In the post-custodial archives model, records remain in the physical care of the offices that created them. The archives regulates, monitors, and assists records creators in preserving and providing access to records, referring users to appropriate records in creating offices. As the progress reports of several electronic records projects reveal, this model does not suit every case. Unless records have ongoing usefulness, creators are reluctant to maintain records of continuing archival value. There is little incentive for creators to take on the expense and labor of satisfying secondary users.

The commercial value of electronic records and information may provide that incentive, particularly where legislation or copyright provisions allow the creator to control the resulting revenue stream. Some information, like that contained in geographic information systems, increases in value as it accumulates; such systems are likely to be retained in creating offices. Instead of providing free and open access to government records, archives may find themselves in the position of serving as a *Consumer Reports* for government records, evaluating and advising users on the accuracy, cost-effectiveness, and convenience of various sources.

Copyright, statutory use restrictions, or fee provisions can be used to generate revenue; they can also be used to limit access and protect the privacy of data subjects. When restricted records are transferred, the archives may be required to collect and return fees to the creating office. The archives may be required to differentiate among users, something that government archives have traditionally avoided. Archives may also need to monitor how records are used or defend itself against violating provisions of the government's copyright on records based on its traditional approaches to reference service.

Because electronic records are so easily manipulated, linked, and compiled, the potential for violation of privacy is great. Controlling access to individual systems may not be enough. Some argue that the only reasonable solution is to let data subjects decide how their records will be used. An example is the Driver's Privacy Protection Act of 1994. "Instead of treating all records as open or confidential, the subject of each record is allowed to determine the degree of public disclosure of his or her own record.... individual choice offers a way of balancing interests on a case-by-case basis. It may be appropriate to break down choice even further. For example, an individual could be offered a choice about the disclosure of elements of a record."

This will be onerous for the creating agency to administer while records are still relatively current. Who bears the cost of contacting the data subjects? Is a database still complete if 20 percent of its data subjects decline to share their records? Is its value for research damaged? After records are inactive and they have been transferred into the custody or control of the archives, this provision is more difficult to manage, as data subjects may be harder to contact. The movement away from the common-law view of privacy, where privacy is considered a right that dies with the individual, complicates matters further. Once the data subject dies, who is responsible for authorizing access? How does the archives locate this person?

Archival programs will be forced to become more sensitive to these issues, perhaps even including the potential for privacy violations in their appraisal of records. In an analysis of the federal records disposal act, a privacy expert stated,

One problem . . . is that the statutory standard does not address privacy interests at all. The focus of the standard is on the value of the records. There is nothing that suggests that the Archivist should consider the possibility of harm that might result from the continued maintenance of personal data. The statute is not entirely clear in its intent, but it suggests that the decision turns on mostly historic and economic issues The statute could require consideration not only of the value of records and the cost of maintaining them but of the harmful consequences of continued maintenance as well.

But even an express statutory recognition of privacy interests, he concludes, will be ineffective in the face of lobbying by a dedicated research constituency.⁵⁰

While not directly applicable to the situation of state and local government archives, the parallels are clear. Many government archivists have had the experience of being unable to persuade some creators to transfer custody of records containing personal data. Other creators have circumvented public records laws, choosing to destroy records rather than retain them at all. With electronic records, such creators will have stronger arguments against preservation. To counter these views, archivists will become expert at managing use restrictions and more careful in analyzing potential uses of records. The justification for records retention will still be an assessment of the records' value for operations, as evidence, or for subject research, but now new factors will be added: the records' potential financial worth and the potential legal liability the records represent. By thoroughly analyzing and articulating the benefits of broad secondary use of records, archivists can advocate for a reduction of restrictions. In this effort, archives will benefit from close ties with user communities.

5. Government archives will provide decentralized access.

Networked telecommunications will alter the way government archives provide information and services to records creators and users. Networks also change the way in which the government and the governed communicate; it may even change the structure and nature of government and thus the role of the archives.

Use of the Internet, the Web in particular, can help archives reach new constituencies. "We are confronted with what amounts to an unparalleled niche marketing tool, a way to eliminate the barriers of time and distance and expense that have traditionally limited our efforts Because publication is so inexpensive, and because the market reached is such a vast one—everyone with access to the Internet—we can reasonably expect use numbers to explode." As governments are increasingly turning to the Web to disseminate information, most state government archives programs and many local programs have a Web presence. Most sites provide basic information about operations and holdings, the type of information that users seek to obtain over the phone. A smaller number provide access to government information locators or series-specific indexes and still fewer to images or content of records. This will change as greater numbers of users, and their increasing expectations and demands, pressure archives to provide or facilitate remote, decentralized access to electronic records.

Centralized archives were based on "local political traditions," "economies of scale, the convenience of a central repository, and the need to consolidate resources and expertise;" they are no longer required in every case. 53 Networked telecommunications enable government offices to communicate with each other and the archives, and share access to data stores. Decentralized access to records makes post-custodial archives practical. The phys-

⁵⁰Robert Gellman, "Government Information Practices and Freedom of Information," in *Report of the National Privacy and Public Policy Symposium*, 272.

⁵¹Roy Turnbaugh, "Plenary Paper," National Association of Government Archives and Records Administrators, 1995 Annual Meeting.

⁵²National Association of Government Archives and Records Administrators, "The NAGARA Web," http://www.nagara.org (accessed 21 July 1997).

⁵³Charles Dollar, *Archival Theory and Information Technologies*, Informatics and Documentation Series 1, Oddo Bucci, ed. (Macerata, Italy: University of Macerata, 1992), 75; Bearman and Hedstrom, "Reinventing Archives," 96.

ical location of the records is trivial when users can gain "equal access over networks to an electronic version of the record regardless of its storage location." The archives will need to set standards, regulate the management of long-term records in agencies and offices, and facilitate access to records.

Decentralized access will not happen because it is technically possible or desirable from an archival point of view. It will happen because it is cheaper and more efficient for government and secondary users. As soon as a government office agrees to permit its records and information to be remotely accessed by another government office, remote access by secondary users will follow. This is more likely to happen in jurisdictions where a broad information policy encourages records creators to view records and information as assets that belong to the government, and the people, as a whole. User expectations will push government records creators and archivists to establish the policy and procedural basis for decentralized access and services.

In meeting new user expectations, government archives programs have the advantage of significant support for access to records and a close relationship with records creators through records schedules and ongoing acquisitions activities. Because all public government records are accessible to users, regardless of their activity level or location, reference archivists are accustomed to referring users to creating offices, perhaps as frequently as they refer to records physically centralized in the archives holdings. Government information locator projects at the state and local level are beginning to serve as inventories of records that can support decentralized access. Some locators are available from government websites and some provide links to on-line records and information.⁵⁵

These characteristics of the government climate offer support for development of true decentralized services. Government archives must now develop or adopt the reference strategies and tools to provide access to records not in archival custody, both when records are active and over time.⁵⁶

The Post Post-custodial Archives

We are unlikely to see a strictly custodial or post-custodial future, where government archives programs hold *all* records or *no* records. Archives will continue to acquire records, paper-based and electronic, and carry out custodial functions; at the same time, the number of archival records series retained and preserved by their creators is likely to increase rapidly. We can be certain of one other thing: government archives and records programs of the near future will be challenged to do much more with much less. In addition to functions well established by statute and tradition, archives programs will be asked to take on new, or enhance existing, roles and responsibilities outside the walls of archives buildings. The archives program will:

Regulate: establish or identify standard practices and monitor compliance for both public and private sector creators of government records;

⁵⁴Bearman and Hedstrom, "Reinventing Archives," 96.

⁵⁵National Association of Government Archives and Records Administrators, "GILS State by State," Crossroads: Developments in Electronic Records Management and Information Technology 2, http://www.nagara.org/crossroads/1997_1.html (accessed 27 October 1997); United States Geological Survey, "Government Information Locator Service (GILS), U.S. States GILS Sampler," http://www.usgs.gov/gils/us_state.html (accessed 27 October 1997).

⁵⁶Dollar, Archival Theory, 79.

Negotiate: collaborate with program managers, archivists, data subjects, and secondary users at all levels of government to determine policies and procedures for records creation, management, access, and preservation;

Advocate: protect the interests of data subjects and secondary users against those that would seek to unfairly profit from or block access to government records; and

Educate: work with records creators to promote the creation of accurate, comprehensive, intelligible, preservable records in all media and the use of records by primary and secondary users.

All of these roles require greater expertise in information technology and electronic records management. The traditional archival functions of access and preservation also demand greater technology expertise. Government archives and records programs will hire archivists with information technology knowledge or will seek technology specialists with archival interests. Archives staffs will become much more diverse as archival responsibilities broaden.

Further Speculation: The Start of the Future

As with government archives, networked telecommunications will influence the way in which government offers information and services, allowing government transactions to take place in a variety of settings, including the home. This will demand archivists' attention to recordkeeping requirements, collection of metadata, long-term preservation of electronic records, and so on. However, transactions are transactions. In the long term, the Internet may have a greater impact on the way in which government and constituents interact outside of preset transactions. Services offered by government on World Wide Web sites, such as on-line forums, are an example. Do these forums create official records, parallel in some respects to open or town meeting records? Since no official business is being conducted, are such records a new series, with its own character? Would such records reveal aspects of the community not easily documented elsewhere? Electronic mail links to government offices and officials were created to accommodate the need for general correspondence, the comments and queries residents have traditionally communicated to government offices in the form of paper-based mail or by phone. Are e-mail patterns of use and content similar to general correspondence, however, or do they reveal the emergence of a new relationship with the government?

Users are accustomed to communicating and responding to websites in a particular way; they are likely to respond to government websites as websites first and government second. Communications will be less formal, premeditated, and easily categorized than records of other government transactions. There are few barriers to communicating via an e-mail link; as governments increase the information and services provided through the World Wide Web, and as more residents use it, the volume of e-mail messages will grow. Will that part of the community that uses e-mail have an influence that is out of proportion to its size? Will users push government out of traditional ways of interacting and into a more free-form role? Like records of on-line forums, these records may reveal much about the community and its views of government. Part of the archivist's task will be to preserve these messages along with the context of the message: the content, look, and feel of the government's website.

These changes in the way government and society interact are the start of an evolution that will decentralize and flatten government. Many futurists predict that the hierarchical bureaucracies we are familiar with will no longer be necessary. "The nation-state . . . does not mesh with the digital form of the future our highly structured and centralist world will morph into a planetful of loosely connected physical and digital communities." In our centralized federal system, government archives programs are located close to the seat of government, often in the same building where the state legislature, county board, city council, or selectmen deliberate. If deliberations, and implementation of the decisions made by deliberative bodies, are decentralized, what does this mean for government archives? If our highly structured bureaucracy, where human services or public safety programs are carried out at three or more levels of government, is flattened, how will government archives be affected? Will archives programs be carried out by certified intergovernmental archivists regionally, from their home servers and Internet accounts, or from private organizations contracting with communities to document government activities?

Electronic communication will hold these future communities together, allow members to participate in self-government, and plan multi-community activities. All such speculations are fueled by the power of electronic communication; at the heart of these transactions is the electronic record. In the new, decentralized structure predicted for government, the record is even more central to administration, accountability, and the community. Government archives, whatever their form, will continue to support our changing society.

⁵⁷Nicholas Negroponte, "On Digital Growth and Form," Wired 5 (October 1997): 208.