

# 2007 Center Review: Self Evaluation Report





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#### **Preface**

This report was produced for the University at Albany's vice president for research, in response to a policy requirement calling for periodic reviews of research centers and institutes. The report, prepared by Center staff, covers the period from the Center's founding in 1993 through 2007. It includes an overview of the Center's history, where we stand today, and our vision for the future. Although the audience for this report was originally external to the Center, preparing the report gave us a valuable opportunity to reflect on our fifteen years of research and project efforts to improve government through IT innovation. As a result, we have a new appreciation and pride in the contribution our work has made to the practice of government in New York State and beyond, as well as to the study of digital government worldwide. Through this report, we are sharing our vision and our progress with our University colleagues, the broader academic community, and our government and private sector partners and friends.

# **Executive Summary**

In 1993, the State of New York made an investment in its ability to make intelligent use of information technology to serve the needs of government. That investment, a \$1 million allocation to create the Center for Technology in Government (CTG) at the University at Albany (UAlbany), has been renewed by New York fifteen times and has been used to leverage millions more in external funding for research and application projects that are now international in scope. Since its inception, the Center has conducted applied research projects in active partnership with dozens of state and local government organizations in New York and other states, in the US federal government, and in other countries. Today, CTG is a world leader in digital government research and a globally acknowledged expert in connecting research and practice.

Since 1995, the Center has won 17 research awards from the National Science Foundation, the US Department of Justice, the National Historical Publications and Records Commission, and the Library of Congress, among others, totaling more than \$7 million. In total, the Center has conducted 26 projects involving nearly a dozen countries, 63 state and federal agencies, scores of local governments, 43 companies, and 14 research organizations. Together, these efforts have led to the development and evaluation of 12 prototype systems, and generated approximately 450 publications and other products for both academic and practitioner audiences. These include more than 100 practitioner focused reports, guides, and online resources; 33 academic and practitioner journal articles; 18 book chapters; 83 conference papers; 167 conference and other venue presentations, posters, and panels; 6 government practitioner focused magazine articles, as well as 66 news stories written about CTG and its people and projects.

The Center remains the only organization of its kind in the United States thanks to a unique approach that combines academic excellence and deep engagement with government partners in the discovery and learning process. CTG and its staff have been recognized for innovation, excellence, and leadership by nine state and national awards including the Ford Foundation *Innovations in American Government Program*, several National Association of State Chief Information Officers *Best Practice Awards*, *Governing Magazine*'s Public Official of the Year Award, and the Rudolph Giuliani Award for Leadership.

This self evaluation report summarizes fifteen years of experimentation, development, and innovation, highlighting the Center's history, mission, products, and impacts.

# I. CTG: A University Level Research Center

# A. Mission, Strategic Goals, and Relationship to UAlbany Mission and Strategic Goals

The Center for Technology in Government (CTG) at the University at Albany (UAlbany) is a university-wide applied research center that works with government to develop well-informed information strategies that foster innovation and enhance the quality and coordination of public services. We carry out this mission through applied research and partnership projects that address the policy, management, and technology dimensions of information use in the public sector. CTG's research interests and expertise are focused on government problems or issues that are complex, cross-boundary, and multi-dimensional. Current thematic focus areas are inter-organizational information sharing and integration, international digital government research, digital preservation, and IT-enabled innovation and value generation in the public sector.

CTG's top priority for the next several years is to maintain and solidify our leadership position in digital government research and practice. The four themes noted above will continue to drive our research agenda and our relationships with funders, sponsors, and partners. In addition to this research strategy, our existing business model is essential to continued success. This model rests on mixed and dynamic funding sources, actively managed human and capital resources, and multi-year financial and program planning.

Within this context, our major goals for the next two years are to:

- 1. Continue to support the core strategies of the NYS Chief Information Officer Council and state and local agencies through applied research projects that address key New York State needs and lead to additional externally funded research projects.
- 2. Extend our research in cross-boundary information sharing and integration to new sponsors (such as the United Nations and Department of Homeland Security), to the local government level in New York State and elsewhere, and to new focus areas (such as immigration and border control).
- 3. Emphasize the production of scholarly publications from all of our research areas, including mining the enormous quantity of qualitative case data that has been amassed over the past 15 years.
- 4. Extend our work on digital preservation of government information through continued work with the Library of Congress and state and national partners.
- 5. Extend our work in public return on investment, building on current international research efforts, to have greater impact on government decision makers.
- 6. Continue implementation of our four-year, \$1.5 million international digital government community building grant from the National Science Foundation (NSF), including an international reconnaissance study, establishment and evaluation of international working groups, and design, implementation and evaluation of an annual digital government research institute for doctoral students.
- 7. Initiate a research and practice partnership with academic and government partners in China, building on relationships established this year under the auspices of NSF.

CTG's goals and achievements are well-aligned with those of UAlbany (shown in Figure 1 below). Center staff offer graduate education programs and contribute to excellence in Rockefeller College, the College of Computing and Information, School of Education, and the Department of Communication. The Center's association with these academic programs is widely acknowledged as a major factor in the #4 US News and World Report ranking of the Information Technology and Management specialty in Graduate Programs in Public Affairs. In addition, we have made substantial and long-term contributions to the research and teaching missions of the Information Science Doctoral Program and its successor, the multi-

disciplinary Informatics Program of the new College of Computing and Information. Across both programs, CTG research projects have supported more than 20 dissertations, master's theses and internships.

#### **Draft University Goals and Priorities, September 2006**

Demand excellence in intellectual achievement across the undergraduate curriculum and an effective administrative infrastructure in order to strengthen the recruitment, retention, graduation, and placement of a diverse and prepared student population.

Strengthen graduate programs and faculty in areas with potential for further international and national distinction, as measured by accepted barometers of academic and scholarly achievement.

Expand and diversify the revenues of the University by targeting private philanthropy, and a stronger flow of dollars from the federal government and for-profit corporations.

Dramatically boost the meaningful scholarly exchange of people and ideas by further internationalizing and diversifying the University with regard to composition of the student and faculty bodies, and the content of the curriculum.

Fortify University identity and spirit by developing athletic, recreational, intellectual, alumni and public relations programs.

Fully exploit the natural linkages between University, city, region and state, its people and its businesses, to foster economic transformation, job creation, and a social foundation built on the ideals of knowledge and discovery.

The Center's strong record of attracting a diverse mix of funding and other resources has clearly contributed to UAlbany's related goal and has provided new research opportunities, not only for CTG itself, but for faculty and students across the campus. Given our standing as an interdisciplinary university-wide research center, we have supported more than two dozen graduate students from a variety of departments with graduate assistantships and dissertation and thesis topics and supervision. Students who have had the opportunity to work at CTG have gone on to faculty positions and research careers that expand the cadre of digital government scholars in the United States and around the world. Similarly, faculty from many programs including public administration, management information systems, political science. and communication have been supported by and actively engaged in our research program.

#### Figure 1 - Draft UAlbany Goals and Priorities

Through extended collaborative partnerships with many US-based government agencies, universities, corporations, non-US governments, and international agencies, we have built diverse linkages and exchanges across the United States and in over a dozen other countries. Our work in just the past year involved agencies of the US federal government as well as the United Kingdom, Turkey, China, Canada, Mexico, the United Nations, and the European Commission.

In short, the Center's broad and deep portfolio and associated results have earned the respect of academics and practitioners around the United States and the world. Our international reputation enhances not only the Center itself, but UAlbany as a whole.

#### **B.** Historical Summary and Background

The Center for Technology in Government (CTG) was created by the State of New York in 1993 as a research and demonstration resource devoted to the needs of New York's state and local governments. Its initial purpose was to be a place where government agencies could experiment with new ways to use information and technology to improve the cost-effectiveness and coordination of public services. The Center was placed within the Research Division of the University at Albany and supported by a special annual appropriation, which has since become a direct base allocation to UAlbany. Since 1993, CTG has used this dedicated annual funding to conduct applied research projects in active partnership with dozens of state and local government organizations in New York. These projects have included ground-breaking work in government use of the World Wide Web; interorganizational information sharing to support human services, public finances, and criminal justice; and exploration of new ways to connect state agencies and local governments in their joint responsibilities for services to citizens.

CTG could have remained successful while focused solely on the needs of New York, but instead chose to capitalize on opportunities for a broader program. By the third year of operation, we began to actively expand our mission to include formal academic research in the emerging interdisciplinary field of digital government. The Center was the first academic program in the United States to be invited by the National Science Foundation to define the social science and public management dimensions of its nascent Digital Government Research Program. That work, including CTG's widely-cited 1997 report *Some Assembly Required: Building a Digital Government for the 21*<sup>st</sup> *Century*, became an important part of NSF's blueprint for this ongoing national research effort. As a result, CTG began a successful journey toward national and international leadership in this field. We have gone on to win substantial digital government research grants (several on the order of a million dollars or more).

Since 1995, the Center has won 17 research awards from NSF, the US Department of Justice, the National Historical Publications and Records Commission, and the Library of Congress, among others, totaling more than \$7 million. In 2005, we obtained our first corporate research grant (from SAP) to explore five international case studies in "public return on investment" from government IT spending. These projects are among a total of 26 involving nearly a dozen countries, 63 state and federal agencies, scores of local governments, 43 companies, and 14 research organizations. Together these efforts have led to the development and evaluation of 12 prototype systems, and generated approximately 450 publications and other products for both academic and practitioner audiences.

These grants support a remarkable reinforcing synergy between the NY-funded work and the academic research environment. The applied NY projects provide extraordinary access to highly detailed longitudinal data about real public organizations struggling with contemporary problems of governance and management. The research grants then allow us to fully exploit that data in formal multidisciplinary investigations. This arrangement yields two complementary results: empirically grounded new knowledge in organizational behavior, public administration, communication, computer science, and other fields and research-driven practical guides and executive education material for government managers that are in use world wide.

The results of CTG research is widely known and well-respected, but this is only half of the story. The Center's unique philosophy and innovative research methods are regarded as the most effective in the world for working in the digital government domain. This approach makes substantial contributions to both scholarship and practice – and to forging mutually beneficial links between them. Nearly all projects involve a partnership with government agencies in which CTG and the agency staff play interactive and interdependent roles. By following the basic tenets of an approach we call "Making Smart IT Choices," we engage government managers and leaders and their constituencies in active analytical and problem-solving roles. As a consequence, governments not only receive benefits associated with assessing and solving a particular information-related problem, they also learn a set of tools and techniques that can be re-used to help them solve different problems in the future. This mutual discovery and learning process is at the heart of CTG's success and is something that other researchers and government organizations continually seek to emulate.

#### C. Outreach and Service Activities

CTG's service and outreach activities are intended to share knowledge and maintain communication and engagement with key constituencies. As a publicly funded organization, we seek to serve the public through education and no-cost dissemination of all research results. This is accomplished through well-placed media stories, an extensive Web site, an email news subscription service, dissemination of print and online publications to our contact database of more than 2,000 individuals, and public events. These efforts highlight ways in which our work can be a resource for government professionals, academic colleagues, and corporate partners. Integrated outreach and communication activities not only share new knowledge, they also help attract external funding and build and strengthen partnerships.

Many outreach activities revolve around projects. Therefore, every project includes the preparation of an outreach plan that specifies goals, target audiences, activities and outreach vehicles, such as special events and identification of CTG-generated articles or press releases and the target publications. The primary vehicles are publications, presentations, events, and Web-based resources, all summarized below.

#### **Publications**

## **Project Reports**

CTG project reports and related publications, such as toolkits and handbooks, are released regularly at milestones in the projects. We disseminate these products to stakeholders to share insights and tools that our government colleagues can use to solve problems in their own organizations. CTG also announces these products through press releases, the Web site home page, and an email subscription service, *Web News*.

#### Annual Report

The CTG *Annual Report*, a signature publication, has continually been upgraded to serve as a key outreach vehicle. The *Annual Report* showcases the expertise of CTG staff through a series of articles on important issue areas. In addition, the report highlights projects and activities from the past year, including resources, scholarly articles, awards, and conference presentations.

#### Press Releases and Press Relations

Press releases are prepared to announce a new project, a new award or recognition, receipt of a grant, hosting of a public event, release of a publication, and other events judged to be newsworthy. Drafts are shared with the UAlbany Media Relations Office to ensure a consistent message and coordinated distribution. The UAlbany Media Relations Office sends the release to mainstream outlets in the Capital Region and throughout the nation, depending on the subject and scope of the story. CTG sends the release to all government and technology trade publications on a continually updated press relations list. The CTG communications manager acts as the main contact for reporters and feature writers and coordinates interviews with project staff. In addition, through a long-standing relationship with the NYS Forum, we periodically publish articles in their monthly newsletter, *Open Forum*, and place items of interest on the Forum Web site. These are economical and effective ways to reach an important group of stakeholders – NYS government agency professionals.

#### Supplementary Materials

A variety of materials, such as the general and specialized brochures, and standard and vendor-oriented information packets are produced for our overall marketing effort. These are often used in combination with project reports for distribution in various venues, such as display tables at conferences, to highlight a particular tool, report, case study, or event.

#### **Events**

#### Research Discussion Breakfasts

Research Discussion Breakfasts are designed to highlight research-in-progress on a variety of government IT topics. Speakers can be either from within CTG or outside guests from UAlbany or visitors from other institutions and countries. Often these events are held at the end of a project to informally discuss research results. Outside speakers bring their own research and serve to promote CTG as a thought leader in government IT issues.

#### Conferences, Workshops, and Panels

A core aspect of CTG's mission is to take an active role in the community of researchers and practitioners focused on building knowledge about information and information technology in government. We accomplish this, in part, through leadership and participation in local, national, and international academic and professional conferences. Some of the more significant examples include the International Conference on Digital Government Research (dg.o), the Hawaii International Conference on System

Sciences (HICSS), and the International Conference on the Theory and Practice of Electronic Governance (ICEGOV).

- The International Conference on Digital Government Research. In 1999, dg.o was created as the first formal meeting for principal investigators of National Science Foundation funded digital government research projects. Since that time, the conference has evolved into a more broadly based research conference involving researchers from throughout North America and beyond as well as from a wide range of disciplines. CTG staff, students, and alumni have all played significant roles including conference co-chair, program co-chair, student chair, and poster and demo chair. CTG staff participate regularly in the conference through research paper presentations, poster sessions, panels, and workshops.
- Hawaii International Conference on System Sciences. HICSS is a highly respected forum in computer and information systems and technology for the exchange of ideas among research and development communities around the world. CTG staff were instrumental in developing the Electronic Government Track at the conference, which now includes eight mini tracks. The full track and several of the mini tracks are chaired by CTG staff and alumni. Many papers based on CTG research have been presented at the conference, including several best paper nominees and a best paper winner. The 2007 conference included for the first time a one-day symposium on digital government research and practice. This symposium, proposed and organized by an international team, including CTG, now provides an annual venue to highlight meritorious research in digital government, as well as extensive discussions about key questions facing the community.
- The International Conference on the Research and Practice of Electronic Governance. ICEGOV was launched in 2007 through a partnership between CTG and the United Nations University International Institute of Software Technology (UNU-IIST). CTG staff served as conference co-chair, program co-chair, and academic keynoter. The conference was designed to provide a venue for bringing together those involved in the research and practice of electronic governance throughout the world. The inaugural conference, held in December of 2007 in Macau, China, was a success drawing over 150 submissions from 50 countries, including from the developing world. CTG will continue to be a partner on the conference, along with the United Nations Department of Economics and Social Affairs (UNDESA) and the Commonwealth Telecommunications Organization (CTO).

CTG papers are also presented at other academic conferences including the American Society of Public Administration (ASPA), the Academy of Management (AoM), the Association of Public Policy Analysis and Management (APPAM), Americas Conference on Information Systems (AMCIS), American Political Science Association (APSA), DEXA eGov and eChallenges (both in Europe), among others.

In addition, staff are regularly invited to participate in workshops and panels in a variety of venues addressing issues of interest to researchers and practitioners. For example, we participated in several workshops and panels throughout the U.S. related to the Center's work in criminal justice information sharing, electronic health records, and critical infrastructure response coordination. Staff are regularly tapped to participate in workshops and panels within the NYS government community. The NYS Office of the Chief Information Officer and the Local Government Information Technology Directors Association frequently invite CTG as an expert speaker to their workshops and conferences. Similarly, CTG experts are sought after in the area of digital preservation and have participated as invited speakers at the annual conference of the Society of American Archivists (SAA) and the annual conference of the National Electronic Commerce Coordinating Council (eC3).

# **Education and Training Programs**

#### Faculty and Guest Lectures

CTG staff serve as both regular faculty and guest lecturers at UAlbany. Two courses are offered in the MPA program of Rockefeller College: PAD550 – Foundations of Government Information Strategy and

Management; and PAD650 – Building a Case for IT investments in the Public Sector. Both courses draw heavily on CTG research results, keeping them fresh and tied closely to contemporary issues and new developments in the field. Students give both courses top ratings for teaching effectiveness. CTG-based faculty have also taught three doctoral seminars in the Information Science Ph.D. program: INF702 – Information Theory, INF703 – Information & Society, and INF704 – Information Policy. In addition, we serve as guest lecturers in other courses related to government information issues such as EAPS 764 – Computer Applications in Educational Administration and Policy Studies, PAD 504 – Data, Models, and Decisions I, and PAD/INF 523 – Fundamentals of Information Management in Public Administration.

#### **Training for Government Practitioners**

Building the capabilities of government officials is central to CTG's mission. Over the time period covered in this report our training and staff development work has covered the full gamut of methods and materials. These run from more general printed and Web-based materials, such as toolkits, how-to guides, and best practices reports, to intensive one-on-one interactions with partners in testbed projects, workshops, and a myriad of collaborative problem-solving and development activities. CTG staff also regularly conduct training workshops and classes for government agencies and related organizations in New York State, at the US federal level, and internationally.

In New York these include training under the NYS Public Management Intern Program, UAlbany's Public Services Development Program, the NYS Training Council, and in professional graduate programs in the Rockefeller College of Public Affairs and Policy, the School of Education, and the College of Computing and Information. Staff regularly present training workshops for NYS officials as part of the annual Government Technology Conference in Albany. Training activities that were embedded in projects are described in a separate section.

Examples of training activities outside New York State include work at the federal level and at other state and university settings. At the federal level, this includes professional training programs in IT management and planning for the US Office of Personnel Management. CTG staff have conducted training and development programs at several state locations, including the University of Minnesota, Shippensburg University (Pennsylvania), University of Washington, and the National Academy of Public Administration (Washington, DC).

Current international activity includes work with individual country-level and international organizations. For example, CTG has conducted a series of training workshops for the United Nations on records management and digital preservation in NY headquarters, the Netherlands, and Italy. In addition, we are collaborating on the development of training materials with the UN Department of Economic and Social Affairs (UNDESA) and Microsoft. We also recently presented at workshops in Mexico and at an EU-sponsored workshop in Ireland, as well as training activities in Portugal, Austria, and Canada. Training and materials translation projects with the government of China are currently underway as well.

# **Web-based Resources**

#### Web Site

The CTG Web site, <a href="www.ctg.albany.edu">www.ctg.albany.edu</a> (home page shown in Figure 2 on next page), is the primary medium for making our research and project results available to the world. The Web site meets accessibility standards as defined by NYS Mandatory Technology Standards S04-001. All center research and project results are freely available on the site in both PDF and HTML formats. The information can be retrieved by type of result, project name, or subject matter. The home page is visited by more than 50% of the users as the main entry to the site and as such contains leads to full information about the most recent results, news, reports, projects, and events. Detailed visitor analysis software is used to track outreach efforts, report usage, and identify referring sites.



Figure 2 - CTG Home Page

#### Web News and RSS

Web News is an email subscription service sent at least monthly to a distribution list of 1,500 subscribers. It includes short descriptions of new CTG projects, publications, activities, and Web site information and features with direct links to the full stories or resources. RSS (Really Simple Syndication) is a subscription service by which users are immediately notified of changes on the CTG Web site in areas of their personally specified interest.

#### D. Sponsored Funding Profile by Year

CTG operates on a business model designed to be self-sustaining and financially stable. Funding is deliberately diversified across multiple sponsors (e.g. federal, corporate, and state-funded special projects), award periods, budgeting categories, and award amounts. This model employs four related, but distinct, strategies for generating new revenue streams and maintaining existing ones. The first employs the Center's base annual allocation to provide the sustained support and flexibility to allocate resources for both direct service to NYS agencies and entrepreneurial activities to develop new revenue sources. The second is to seek small and medium-sized projects for research and service to NY state and local government programs that provide research opportunities and open possible expansion options to new areas of work. The third is to seek research grants from NSF and other sponsors to pursue the scientific inquiries made possible by our deep engagement with government IT initiatives. The fourth is to expand

our engagement with US and foreign governments, through training and research-related activities, as a way to both generate revenue and open opportunities for research collaborations and intervention projects.

A detailed profile of CTG's sponsored funding since inception is presented in Appendix A. This funding profile has evolved over the last 15 years. During the early years, CTG relied almost exclusively on the UAlbany base budget along with in-kind contributions from government agency and corporate partners. Over the years, as capabilities, resources, expertise, and reputation have grown, CTG has been more and more successful in expanding its funding portfolio to include an increasing amount of federal grants and government and state contracts.

# **E.** Leveraging the University Investment

Over our 15 year history, we have used two main strategies to successfully leverage UAlbany's investments: partnerships and synergy. Leveraging was critically important, especially in the first two years, because UAlbany's investment was modest and the Center's goals were both ambitious and risky. The long term results, however, have been substantial. To see how leveraging worked at the Center it is necessary to first describe the nature of the initial investment.

The initial UAlbany investment dating from the Center's beginning has been in the form of facilities, graduate student support, and donated faculty time. The Center began as the Government Solutions Laboratory, housed in an unused TV studio area on the main campus. The Office of the Vice President for Research allocated one graduate student (stipend valued at approximately \$12,000) to an initial experimental project with the NYS Department of Motor Vehicles in 1992, a commitment that has continued to date. The synergy made possible through the combination of UAlbany's independence and expertise with agency partnerships and corporate support made an attractive target for further state investment. The success of that first project prompted enthusiastic state agency support for Governor Cuomo's proposal in his 1993 State of the State address to create the new Center.

Consequently, that modest but strategic investment led to a \$1 million state appropriation to formally create CTG and at least half as much in the form of in-kind contribution from UAlbany faculty and corporate partners. Much of that success was based on the foundation of partnerships with state agencies and UAlbany faculty that predated the formation of the Center. In its first year, UAlbany additionally invested \$90,000 in renovating the Solutions Center Laboratory for ongoing use. The laboratory attracted support from corporate partners who contributed substantial hardware and software to use in the lab. The director's previous work with state agencies and IT professionals enabled a smooth and effective collaboration in making the transition from an experimental project to a fully operational program. The partnership extended to two senior faculty members from Computer Science and Public Administration who devoted sabbaticals and volunteered considerable time starting the laboratory and working on an initial set of projects.

Partnerships with faculty, resulting in much contributed time, strictly speaking cannot be viewed as part of UAlbany's institutional investment in the early years of the Center's development. This volunteer activity was a personal one on the part of faculty, since these efforts were voluntary and on top of regular duties. These faculty worked intensively with the Center director in starting the Center and in the execution of early projects. In fact, more than a dozen other faculty members worked in the Center on a volunteer basis and/or on sabbatical over its life span. However, no records were kept of the overall amount of donated faculty time, so an estimated dollar value would be inappropriate. However, these resources obviously contributed value to Center activity.

UAlbany's investment continued following the initial appropriation of NYS funds. The investment took the form of office space, first in the Chemistry building, and later in the Performing Arts Center, along with ongoing support for one graduate student. However UAlbany's space contribution ended in 1997, when the Center outgrew its quarters and moved to rented space at 1535 Western Avenue and then to our current rented location on Wolf Road in 2003. UAlbany's contribution of support for a graduate student for

the Center has continued to date, averaging approximately \$15,000 per year. There are no firm estimates of the actual costs of space usage over the Center's approximately five year stay in various campus locations. An estimate can be based, however, on the overhead rate used for state-funded projects during that time: 5.6 %. If charged against the approximately \$4 million total appropriation over the 1993-97 period, the value of contributed space on campus would be approximately \$224,000. These investments of space and graduate student support amount to approximately \$420,000 to date.

From 1993 on, the main NYS contribution to the Center's activities has been in two parts. The first is an annual allocation in the UAlbany budget for CTG. The amount was a separate line item in the State budget until 1998, when it was transferred to UAlbany's base funding. This allocation has provided the base of support on which we build our program of research and intervention for NYS agencies, as well as many other government organizations. The second contribution of state resources has been in the form of substantial commitments of agency personnel to work as partners in projects. This partnership model of project execution has been an integral part of all NYS projects and with most other organizations. This method allows a much larger concentration of resources to be devoted to a particular problem than would be available from CTG sources alone. It also ensures that the solutions developed are well suited to the problem context.

This pattern of partnership and synergy continues to date. Corporate partner contributions, donated faculty time, and in-kind contributions from state agency partners support not only their target projects, but also build a foundation of collaboration and shared knowledge for other work. This includes UAlbany's direct investment in support for one graduate student, but CTG has not received any OTPS¹ funds from UAlbany for a number of years. The Center is also the only unit on campus for which UAlbany provides neither physical facilities nor funding for facilities. Corporate partner contributions, with three major exceptions, are limited to commitments of staff and technical resources to work on specific projects. The exceptions are the funding of a research project by SAP (approximately \$346,000), a \$25,000 gift from Microsoft, and a \$20,000 grant from AT&T.

The overall return on UAlbany's investment, as a result of leveraging, can thus be divided into five kinds of resources: donated faculty time, corporate partner contributions, the annual base allocation, externally funded project and research revenue, and reputation. The totals from the annual appropriation and externally funded projects and research are shown on page 32. The totals for the first three kinds of return are based on often rough estimates of the financial value of the resources (e.g., the amount of contributed time, etc.) and are only approximations, and likely underestimates, of the actual values. These represent approximately \$7 million of faculty contributions, corporate contributions, and government agency resources. The reputational returns are summarized in section II. Quality Assessments.

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<sup>&</sup>lt;sup>1</sup> OTPS stands for Other Than Personal Service

# **II. Quality Assessments**

## A. Current Projects, Participants, and External funding

The Center for Technology in Government is devoted to improving government and public services through policy, management, and technology research and innovation. Through this program, the Center generates new knowledge and provides government organizations with an array of tools and resources designed to support the development of effective digital government. At the same time, CTG projects contribute to scholarly development in fields such as organizational behavior, public management, and information science.

Appendix B includes all CTG projects covering fiscal years 2006-2008. Of these 21 projects, several involve multi-year funding and either started or will extend beyond this reporting period. Three recent research efforts, two funded by New York State and the other by NSF, are good illustrations of the range and depth of CTG's research excellence, practical relevance, and multi-faceted leadership:

- NYS IT Workforce Skills Assessment Project. We recently completed work initiated by the State Chief Information Officer Council to conduct an Information Technology Workforce Skills Assessment for the entire state government. This crucial topic for the future of public management is also one of high sensitivity for the state and its employee unions. The CIO Council turned to CTG as a trusted advisor, as well as an accomplished research organization, to design and carry out this important work. Through jointly defined goals and processes, extensive employee and leadership surveys, and expert data analysis and interpretation, CTG and its NYS partners produced a set of profiles, strategies, and policy recommendations that are now being addressed by a state-level IT workforce action team.
- Mobile Technology Evaluation for Child Protective Services. We are currently in the third phase
  of a project to assess the pilot testing of mobile technology deployed to over 400 Child Protective
  Services case workers in over 20 counties of the state, sponsored by the NYS Office of Children and
  Family Services. The project involves intensive interaction with children's service professionals, as
  well as the management, administrative, and technical systems through which they do their work.
  The project is a first-ever look at the policy, management, and service implications of a mobile human
  services workforce in New York.
- Building and Sustaining an International Digital Government Research Community. Our most recent NSF grant confirms CTG's national and international leadership in Digital Government through a four-year, \$1.5 million program to build and sustain an international Digital Government research community. Working with research sponsors and investigators all over the globe, we are assessing the current state of Digital Government research; fostering three diverse international working groups; and developing and offering an annual international summer research institute for doctoral students who will become the next generation of digital government scholars.

#### B. Relationship of Current Projects to Unit's Mission and Goals

Each project in the current portfolio supports multiple goals. The Center's goals are repeated here from the initial statement on page four.

 Continue to support the core IT strategies of New York State through work with the Chief Information Officer Council and state and local agencies through projects that provide solid research findings relevant to New York State needs and opportunities for additional research projects.

- 2. Extend our research work in cross-boundary information sharing and integration to new sponsors (such as the United Nations and Dept. of Homeland Security), to the local government level in New York State and elsewhere, and to new focus areas (such as immigration and border control).
- 3. Emphasize the production of scholarly publications from all of our research areas, including mining the voluminous qualitative case data that has been collected over the past 15 years.
- 4. Extend our work on digital preservation of government information through continued work with the Library of Congress and other national partners.
- 5. Extend our work in public return on investment, building on current international research efforts, to have greater impact on government decision makers.
- 6. Continue implementation of our four-year, \$1.5 million international digital government community building grant from NSF, including an international reconnaissance study, establishment and evaluation of international working groups, and design, implementation and evaluation of an annual digital government research institute for doctoral students.
- 7. Initiate a research and practice partnership with academic and government partners in China, building on relationships established this year under the auspices of NSF.

Table 1 below shows the relationship between CTG's goals and 2006-2008 project portfolio.

2006-2008 Projects	CTG Goals Supported
Modeling Interorganizational Information Integration	2, 3, 4
US and EU Workshops	2, 4
ITR Library of Congress Collaboration for Preservation of State Government Digital Information	2, 3, 5
Public ROI – Advancing Return on Investment Analysis for Government IT	2, 3, 6
Building and Sustaining an International Digital Government Research Community of Practice	1, 2
NYS IT Workforce Skills Assessment Project	2, 7
A Cost Benefit Analysis of an Electronic Medical Record for NYS DOCS	6, 7
Leveraging Investments in the Electronic Commons Project	4
Web Site Management Using XML: A Testbed Project	2, 6, 7
Balancing Growth: Building performance measurement capability in the Town of Bethlehem, NY	4, 6, 7
Assessing Mobile Technologies in Child Protective Services: Phases 1-3	1, 3
Exploring Regional Telecommunications Incident Response Coordination	3, 7
UN Curriculum Development and Delivery for Record Keeping	4, 5
Performance Management in the Public Sector	4, 6
Translation of CTG Materials into Chinese	1, 2, 3
Training for Chinese Government Executives	3, 6

Table 1 - CTG's Goals and 2006-2008 Project Portfolio

# C. Summary of Project Outcomes and Impacts

CTG projects have produced more than 100 practitioner focused reports, guides, and online resources; 33 academic and practitioner journal articles; 17 book chapters; 79 conference papers; 166 conference and other venue presentations, posters, and panels; 6 government practitioner focused magazine articles, as well as 66 news stories written about CTG people, projects, and the Center in general. See Appendix C for a summary of the quantity and types of these products broken down by project and Appendix D for a listing of 254 CTG scholarly publications and project related reports and articles. While this record of substantive products is impressive, the Center's work has also had significant impacts on government programs and operations. The examples below and at the beginning of this section illustrate these long-term impacts.

# Creating a Statewide Spatial Data Repository and GIS Data Cooperative Project

CTG's work on this project resulted in several innovative and long-term improvements to government operations in New York. These improvements included the creation of a permanent Geograph Information System (GIS) coordinating body with specific goals, duties and structure; establishment of a statewide clearinghouse for spatial information; and modifications to state legislation to allow for:

- license agreement authority information sharing among state, local and federal agencies as well as universities; and
- amendments to the Freedom of Information Law (FOIL) to authorize local and state agencies to set fees for commercial use of GIS data, to use those fees to defray GIS costs and expand public access to GIS information, and to limit liability for spatial data providers.

This project propelled New York State from "the back of the pack" to a position of national leadership in GIS coordination and analysis. This foundation gave the state and city of New York a set of tools and interorganizational relationships that were crucial in the response to the World Trade Center attack, as well as for a wide variety of traditional governmental functions and programs.

# **Kids Well-Being Indicators Clearinghouse Project**

In 1998-99, CTG worked with the NYS Council on Children and Families to develop a prototype Web-accessible data base to replace the paper-based KIDS COUNT statistical report. In 2003, based on that prototype and the many policy and operational decisions that it presented, the Council launched KWIC, an operational, one-stop data warehouse with data from numerous Council member agencies that expands public access to information about the health, education, and well-being of New York State's children. KWIC continues to be available to data users in the public, private, and nonprofit sectors twenty-four hours a day, seven days a week.

#### Adoption of Making Smart IT Choices Methods in the Office of the NYS Comptroller

CTG's work with the Office of the NYS Comptroller (OSC) demonstrates deep and long lasting impacts. OSC was a partner in the Using Information in Government project, a major CTG effort beginning in 1997, and a second project beginning in 2001. The results of the first project included the development of a prototype for what ultimately became a very successful development and deployment of an agency wide information repository and data sharing system. OSC continued to employ the practices developed during that project and to collaborate with CTG on research that led to two dissertations and several published papers, one of which won a Best Paper award at an international research conference. This experience also led to a much larger and more significant second project that initiated the use of Smart IT-based planning and system design methods aimed at the development of a new state wide accounting and financial management system. Those methods remain in use to the present.

# **Capability Assessment Toolkit for Justice Information Integration**

Development of the *Capability Assessment Toolkit* for justice information integration included testing in actual government settings. The director of the Sacramento County (CA) Integrated Justice Information Systems Program (IJIS) agreed to test the toolkit with the program staff and executive leadership. At that

time, IJIS had been in existence for approximately three years and was in the midst of expanding the scope of work, so capability assessment was a topic of substantial interest. The IJIS staff and leadership agreed to conduct an assessment with the toolkit and share the results with CTG for analysis and interpretation. They completed the assessment without external assistance and sent the data to CTG. After analyzing the results, CTG's project director presented a report to a meeting of the executive leadership, who were both pleased and surprised by what they saw. Overall, the capability profiles were quite positive, but there were some marked differences in perception across executive leaders, managers, and technical staff. As a consequence, the executive leadership decided to change their reporting arrangements and enhance their capability to share technical and operational information.

#### **Business Process Analysis at the NYS Department of State**

Meeting the needs of external constituents with a high level of professional practice is a priority for all public organizations, but many agencies do so with little attention to internal administrative functions. The NYS Department of State, Division of Coastal Resources engaged CTG in a close look at the administrative functions and core business processes that support their ability to work in partnership with all levels of government to help communities make the most of their waterfronts by achieving conservation, economic development, and quality of life goals. These functions entail managing about 450 contracts worth about \$118 million.

CTG conducted business process analyses for four key program areas: Environment Protection Fund, Brownfields Opportunity Areas, Consistency Review, and Local Waterfront Revitalization in order to learn more about the agency's core administrative processes. From this study, five functional processes and five generic tasks were identified as foundational pieces to a majority of administrative work done within the division. This information was and continues to be a critical component of all internal investment decisions such as infrastructure, personnel, and information technology choices. The Division has since evaluated workflow solutions and was able to develop criteria for selection based on a thorough understanding of their own internal environment.

# Use of Parcel Data in New York State: A Reconnaissance Study

Land parcels are the foundation of many aspects of public and community life. A study completed by CTG was the foundation for the Real Property Tax Administration Technology Improvement Program, a grant program developed by the NYS Office of Real Property Services to provide users of parcel level data with more effective and efficient access to the information they need through the sharing of parcel level data and advancements in the use of technology and integrated real property systems. Findings describe the many attributes of parcel data, illustrate the wide range of uses, express the value to a variety of stakeholders, and show typical data flows across organizational boundaries. The report now is required reading for grant applicants and continues to be referenced as the cornerstone of understanding parcel data use in New York State.

#### CTG Project and Research Results Used by Other Academic Institutions

An impressive number of academic institutions across the country have incorporated Center project results and other research materials into undergraduate and graduate courses. CTG's Smart IT handbook and research reports in the areas of digital preservation, electronic records management, capability assessment, and information sharing are included in course syllabi in Information Science, Library Science, and Public Administration. The following list provides examples of these institutions and the courses taught that use CTG materials:

 University of North Carolina, Chapel Hill School of Information and Library Science

Course title: INLS 525 Electronic

Records Management

 University of Baltimore School of Public Affairs
 Course title: PUAD 626 Information Resources Management

 North Carolina State University
 Course title: PA 542 Public Information Technology Valdosta State University

Course title: PADM 7110 Information

Management

Syracuse University

Maxwell School of Citizenship and

Public Affairs

Course title: PPA 730 Information Strategy And Management In The

Public Sector

The Alfred P. Sloan Foundation
 An Online Educational Module Based on the Citizen-Driven Performance

Measurement Project

Course title: Information Technology

and Public Administration

George Mason University

Course title: PUAD 680-001 Managing

Information Resources

 University of Maryland University College Maryland in Europe

**Distance Education Programs** 

Course title: INSS685A Issues in E-Government

Northern Illinois University
 Division of Public Administration

 Course title: PSPA 554 Information

Systems and Government

Southeastern Louisiana University
 Course title: Management 695 Seminar in the Business of Government

 Catholic University of America School of Library and Information Science

Course title: LSC 874 Special Topics in

Librarianship

University Of Arizona

Course title: PA 502 Public and NonProfit Management Information

Systems (PNPMIS)

Georgetown University

Course title: SEST-551 Science, Technology, and Homeland Security

#### Master's Theses and Doctoral Dissertations Based on CTG Research Data

The Center's research has also been used by UAlbany graduate students to support their master's and doctoral degrees. UAlbany students made use of CTG research data to produce three master's theses and 11 doctoral dissertations. The following list highlights the results of this important enduring relationship between the Center and UAlbany academic departments and graduate students and includes additional information on the degrees awarded and the academic or government positions these students accepted after graduation.

#### Master's Theses

Schwartz, Benjamin (2004) New Developments in Intergovernmental Information Systems: The New York State-Local Internet Gateway Prototype. M.A. Public Affairs and Policy (Information Strategy and Management concentration), University at Albany, Rockefeller College of Public Affairs & Policy. Now research analyst, Local Government Services and Economic Development Department, NYS Office of the State Comptroller.

LaVigne, Mark (2003) *Mobilizing Actors in an Intergovernmental Collaboration: An Actor-Network Theory Approach*. M.A. Communication (Organizational Communication concentration), University at Albany. Now communication director, NYS Association of Counties.

Canestraro, Donna (2000) *The Construction of Knowledge*. M.S. Education (Curriculum Development & Instructional Technologies concentration). University at Albany. Now program manager, Center for Technology in Government, University at Albany.

#### **Doctoral Dissertations**

Gil-García, J. Ramón (2005). *Enacting State Websites: A Mixed Method Study Exploring E-Government Success in Multi-Organizational Settings*. Ph.D. Public Administration and Policy, University at Albany, Rockefeller College of Public Affairs & Policy. Now assistant professor, Division of Public Administration, Centro de Investigación y Docencia Económicas, Mexico.

Luna-Reyes, Luis (2004) *Collaboration, Trust, and Knowledge Sharing in Information Technology Intensive Projects in the Public Sector.* Distinguished Dissertation Award; Ph.D. Information Science, University at Albany. Now assistant professor, Business School, Universidad de las Americas, Puebla, Mexico.

Zhang, Jing (2003) Cross-Boundary Knowledge Sharing: A Case Study of Building the Multi-Purpose Access for Customer Relations & Operational Support (MACROS) System. Distinguished Dissertation Award; Ph.D. Information Science, University at Albany. Now assistant professor, Graduate School of Management, Clark University, Worcester MA.

Neely, Pamela (2002) A Framework and Associated Software Tool for the Analysis of Source Data for a Data Warehouse: Development and exploratory study. Ph.D. Information Science, University at Albany. Now assistant professor, Management Information Systems, Rochester Institute of Technology.

Zeng, Jihong (2002) *Using Keywords/Phrases in Automatically Generating Hypertext Links: An Exploratory Study.* Ph.D. Information Science, University at Albany. Now assistant professor, Management Information Systems, New York Institute of Technology, Old Westbury, NY.

Powers, Jennifer Goodall (2001) *Network Formation and the Development of Trust in Interorganizational Relationships.* Ph.D. Information Science. Now associate dean, College of Computing and Information, University at Albany.

Kelly, Kristine (1999) A Systems Approach to Identifying Decisive Information for Sustainable Development. Ph.D. Information Science, University at Albany. Now business dynamics associate, Global Practice, McKinsey & Co.

Pardo, Theresa A. (1998) *Reducing the Risks in Innovative Uses of Information Technology in the Public Sector: A Multidisciplinary Model.* Ph.D. Information Science, University at Albany. Now deputy director, Center for Technology in Government, University at Albany.

Han, Charles (1998) *Exploring a Path to the Formation of Network Collaboration*. Ph.D. Public Administration, University at Albany, Rockefeller College of Public Affairs & Policy.

Giguere, Mark (1995) Electronic Document Description Standards: A Technical Feasibility Study of Their Use in the Microform Preservation of Contextual Cues Embedded in Structured Electronic Documents During Digital/Analog/Digital Reformatting. Ph.D. Information Science, University at Albany. Now electronic records specialist, National Archives and Records Administration.

Bajjaly, Stephen (1993) *Managing Emerging Technology in the Public Sector: The Case of Document Imaging*. Ph.D. Information Science, University at Albany. Now director, Library and Information Science Program, Wayne State University.

#### D. Evaluative Statements on CTG and Its Personnel

The Center for Technology in Government and its staff are recognized leaders in digital government research and practice among state, national, and international organizations. The sections below summarize this important aspect of the organization and its personnel.

#### **New York State Local and State Government Practitioners**

CTG's leadership team and project managers have participated in over 70 IT-related governance committees in New York State since 1995, averaging five or six committees a year, with many being multi-year commitments. Representatives from CTG are asked to participate based on CTG's reputation and their individual expertise in specific subject areas, as well as for their hands-on experience working

with state agencies and local governments. In addition, the Center director is a member of the Advisory Board of the Government Technology Conference-East, an annual industry and practitioner meeting sponsored by *Government Technology*. CTG's cumulative tenure on various committees from 1995 to the present represents more than a decade of service and commitment to helping serve New York State. Recent examples of this kind of service includes:

2007 – present: Commission on Local Government Efficiency and Competitiveness Academic Advisory Group

2006 - present: NYS Office of Cyber Security and Critical Infrastructure, Local Government Committee

2004 - present: NYS Forum Standing Committee on Project Management

1997 – present: NYS Office for Technology and Office of the Chief Information Officer, Intergovernmental Subcommittee

1995 – present: NYS Forum Executive Committee

1999 – 2002: NYS Technology Entrepreneurial Fund Executive Committee

1996 – 1998: Capital Region Information Service of New York, Board of Directors

CTG has regularly been recognized by a variety of NYS organizations for both organizational and individual expertise and accomplishments. In October 1999, CTG was presented with the Archives Week Award by the NYS Archives and the NYS Regents for Excellence in State Agency Archival Program Development. The award recognized CTG's innovative work in helping government agencies create, manage, and preserve electronic records. Many of the NYS Forum's Best Practice Awards to state and local programs recognize initiatives that deeply involved CTG projects as part of the development or evaluation process. In 2006, CTG's NYS IT Workforce Skills Assessment Project was awarded Best of New York Award by *Government Technology Magazine* for demonstrating the best IT collaboration among organizations; that same year, another CTG project, the XML Toolkit, was recognized by the NYS Forum for innovative use of Web technology by NY state and local governments.

In 2005-07, Sharon Dawes, CTG director, received four awards: the Rudolph W. Giuliani Leadership Award established by GTC East in 2001 to recognize outstanding public sector executives in the state of New York, the Charles Evans Hughes Award from the Empire State Capital Area Chapter of the American Society for Public Administration in 2006 for superior management and administration within New York State, the Distinguished Public Service Award from the Rockefeller College at the University at Albany in 2007, and the Distinguished Alumna Award from the University at Albany Alumni Association.

#### **Federal Government Practitioners and National Governing Bodies**

CTG's leadership team and project managers have participated in close to 50 federal government and national governing organizations' advisory panels. Since 2001, CTG's presence on these types of committees has increased and from 2005 CTG leaders have been consistently engaged with this community, serving on average ten panels per year. While these panels are generally one year commitments, several are multi-year appointments. One example is CTG's work with the National Electronic Commerce Coordinating Council (eC3) Annual Symposium Steering Committee. For the past three years Deputy Director Theresa Pardo has facilitated the annual symposia and workshops with nationally recognized speakers and panelists from the transformational arena identifying best practices for strategic change within government. For the 2006 eC3 and National Association of Secretaries of State symposium, Theresa Pardo facilitated the workshop and senior program associate Brian Burke authored the symposium report.

Another example is the appointment of Sharon Dawes to advisory committees of federal agencies such as the US Government Accountability Office Information Technology Executive Committee, the National Archives and Records Administration, Advisory Committee on the Electronic Records Archives, and the National Science Foundation Business and Operations Advisory Committee. In addition, Sharon was inducted into the National Academy of Public Administration in November 2002.

Over the years, panel activities have ranged from providing assistance in overall direction of certain topic areas such as archives and records management, information technology and management, telecommunications, and technology transfer programs to advisory panels focused on developing specific

guidelines for certain topic areas such as public access to information or examining research issues, developing research agendas, or acting as grant reviewers.

CTG has earned recognition from national organizations for both organizational accomplishments and the individual expertise and service of our staff. During 1994, CTG was named the top information policy and management initiative in the fifty states by the National Association of State Chief Information Officers (NASCIO). In 1995, the Ford Foundation awarded the Center \$100,000 and named it one of the Innovations in American Government award winners. The award program, now centered at the John F. Kennedy School of Government at Harvard University, honors exemplary initiatives at the federal, state, and local levels that provide creative solutions to important public problems.

The National Association of State Information Resource Executives (NASIRE) has also honored CTG with two awards. In 1996, CTG's NYS Spatial Data Clearinghouse was honored as the best intergovernmental application, and in 1998, CTG's *Tying a Sensible Knot*, the New York State-Local Information Systems Project, won the award for excellence in information technology for statewide policy initiatives. This project was the first attempt in the United States to analyze and document successful practices in intergovernmental information systems.

In 1997, Director Sharon Dawes was named the Public Official of the Year by *Governing Magazine*, a publication for state and local governments, for collaborative strategies in coordinating synergy and innovation in New York State's information management infrastructure. In 2005, Dr. Dawes was named one of *Government Technology's* Top 25 Doers, Dreamers, and Drivers.

# **International Government Practitioners and Governing Bodies**

CTG is increasingly being recognized by the global community for its expertise in digital government research and practice. This recognition can be seen in the variety of activities staff are involved in with a focus outside of the U.S. In particular, the recent appointments of Anthony Cresswell, Sharon Dawes, and Theresa Pardo as advisers to the State Information Center, PR China. Sharon also serves on the advisory board of the United Nations University Institute for Software Technology. These appointments complement other activities focused primarily in Europe, such as CTG's role in the European Union's Roadmap 2020 project. As the only US partner on the project, Sharon Dawes and program manager Meghan Cook contributed the US perspective to an international digital government research agenda. In addition, Theresa Pardo serves as a member of the EUReGov Expert Working Group. This working group is focused on laying the foundation for pan-European digital government initiatives. Theresa is one of a small number of non-European participants in this working group.

The Center is also involved in two international initiatives with the United Nations, both led by CTG Deputy Director Theresa Pardo. The first is a partnership established in 2007 with the United Nations Department of Economic and Social Affairs (UNDESA), CTG, and Microsoft Corporation. CTG, along with Microsoft, was selected by UNDESA to help the organization develop a ready-to-use interactive Webbased tool, called METER2, to assist governments in monitoring and refining their enabling environment for e-government. This effort will build on the current UN egovernment readiness index initiative launched in the late 90's and used since that time to assess and rank member states in terms of egovernment readiness. In addition, Dr. Pardo is a member of the International Research Advisory Committee on Mobile Technology in the Public Sector, which supports the creation of a UNPAN (United Nations Online Network in Public Administration and Finance) Compendium on the use of mobile technology throughout different regions of the world. Her work with UNPAN also included participation as an expert speaker in Vienna, Austria at the 7th Global Forum on Reinventing Government: Building Trust in Government in June of 2007.

# **Among Peers in the Academic Community**

CTG has been actively involved in creating a vibrant, interdisciplinary research community focused on government information and IT systems. While the traditional measure of academic excellence is peer-reviewed publications (see the extensive list in Appendix D), CTG staff have additionally held leadership roles in the field's major conferences and on the editorial boards of the field's dedicated journals. Since 2001, CTG staff have been instrumental in establishing an E-Government track at the Hawaii

International Conference on System Science (HICSS) and from 2005 to the present, CTG has taken a very active role in the development and expansion of the international dg.o conference, as well as a founding member of the international ICEGov conference. A number of CTG staff have also served as journal and conference paper reviewers. Conference research papers by CTG authors have been recognized by peers in several research conferences:

- Theresa Pardo, Jing Zhang, and Fiona Thompson were awarded the Best Paper Award at the Academy of Management Conference in 2001 with their paper entitled, *Interorganizational Knowledge Sharing in Public Sector Innovations*.
- Anthony Cresswell, Theresa Pardo and Brian Burke were awarded a Best Poster Award at the International Digital Government Research Conference, dg.o 2007 for their poster, Advancing Return on Investment Analysis for Government Information Technology.
- Anthony Cresswell, Marijn Janssen, and Luis Luna received the Best Paper Award at the 2005 eChallenges conference, Ljubljana, Slovenia for a paper titled, Modeling Methods for Information Integration: Comparative Cases in e-Government.
- Anthony Cresswell, Jing Zhang, and Sue Faerman received a Best Paper Award in the E-Government Track at the 2006 HICSS Conference for a paper titled *The Effects of Organizational Factors and the Nature of Knowledge on Knowledge Sharing*.

CTG Deputy Director Theresa Pardo has served as a member of the editorial board of *Government Information Quarterly* since 2002. In addition, she was co-editor of a recent special issue of *Government Information Quarterly* focused on interorganizational information sharing as a key enabler of digital government. During that time, she has also served as co-editor of a special issue of the *IEEE Computer* focused on digital government research, while Sharon Dawes was co-editor of a special issue of *Social Science Computer Review* on digital government research in the social sciences.

CTG is also a recognized source of leadership for the new Digital Government Society of North America. Formed in 2006, Sharon Dawes was elected the first president and Theresa Pardo currently serves as sponsorship chair and was recently elected, along with CTG Alumnus J. Ramon Gil-Garcia, from a field of eleven candidates to the five member board of the Society.

#### In Local, National, and International News Media and Practitioner Trade Journals

The Center or its projects are mentioned in national newspapers (*New York Times* and *Washington Post*), international newspapers (*Haaretz* in Israel), as well as in local newspapers focusing on issues in New York State government. During 2006 and 2007, Center staff and projects received over sixty placements in local and national print and online media outlets. CTG is most often recognized in practitioner trade journals at the national and international levels. One good example is the following excerpt from *Federal Computer Weekly* describing the easily accessible and free knowledge bank CTG provides: "The fruit of the Center's research labors is freely available online or in the form of downloadable reports.... The Center's recent publications include a handbook on understanding value and risk in government IT investments and an online guide describing collaboration models for delivering government services."

Other examples include attention to the Center and its senior staff, and invited articles by CTG staff in such publications as *Public CIO* and *Government Technology*. Articles authored by CTG staff in *Public CIO* have included *Solving the Integration Puzzle* in 2005, *Partnering for Preservation* in 2006, and *Breaching the Wall* in 2007. In addition to these invited articles, an example of the kind of in-depth coverage given to CTG is found in the November 2007 *Public CIO* feature on CTG's XML toolkit and research paper series, which provided direct links to the XML toolkit and guidebook. Other CTG projects and research covered by *Public CIO* and *Government Technology* include the State-Local Internet Gateway Prototype (2004), the NYS IT Workforce Skills Assessment Project (2006), and Advancing Return on Investment Analysis for Government IT (2007). Specific CTG staff who either authored or were interviewed for the pieces mentioned above include Brian Burke, Donna Canestraro, Meghan Cook, Tony Cresswell, Sharon Dawes, Theresa Pardo, and Derek Werthmuller.

In addition to the press coverage mentioned above, CTG also receives requests for interviews from the media. The requests are frequently generated from press releases that CTG has sent out on specific projects and publications. For example, the Center received numerous requests for interviews as a result of CTG's outreach efforts from the Advancing Return on Investment Analysis for Government IT project, resulting in quotes in *Federal Computer Week, State Tech Magazine*, and *VAR Business*, and international media outlets such as *InterGovWorld.com*. The Center's government digital preservation project work with the Library of Congress and the XML project work with New York State government agencies resulted in requests for interviews on both topics in such media outlets as *Federal Computer Week, Information Week*, and *Public CIO*. In 2007, Natalie Helbig, project manager, along with members of the NYS Office of the Chief Information Officer Council were interviewed by Forrester Research about the Center's NYS IT Workforce Skills Assessment Project. The interview along with the Center's published results of the project were used by Forrester to develop a case study entitled, *New York State Government's Skills Assessment Framework*. This published document was marketed to "global leaders in business and technology."

In addition, the Center also receives general requests, based solely on CTG's reputation and expertise, to comment on issues such as information sharing and collaboration or related to speeches being given by CTG staff. For example, Theresa Pardo was recently the keynote speaker at the Institute of Public Administration of Canada's conference in Nova Scotia and was interviewed by a Canadian magazine, *CIO Government Review,* as a result. Also, CTG Program Manager Donna Canestraro has been interviewed for her expertise in project management and featured in such project management related publications as *PM Network*.

#### E. Collaborative Research Activities

All of CTG's projects can be characterized as collaborative research activities. As emphasized throughout this report, the Center's research interests and expertise are focused on government problems or issues that are characterized as complex, cross-boundary, and multi-dimensional. Therefore, a truly multi-disciplinary project management and research approach is essential. One of CTG's greatest strengths as an applied research center is the collaborative partnerships that the Center has developed and maintained with a diverse group of individuals, organizations, and institutions. For the most part, CTG's collaborative partners fall into one of the following categories:

- Corporate partners private sector companies that provide a skill set or technology beyond the
  expertise and skill set of CTG and the other project partners.
- Government agencies CTG works with government partners at the local, state, federal, and
  international level. For all projects related to helping government agencies solve a specific
  problem or improve the way they operate and provide services, our government partners provide
  the in-depth knowledge and expertise on the business processes and policy issues being studied.
- External research institutions CTG will partner with external research partners that either share
  an interest in studying a particular government issue or complement CTG's expertise and skill set
  making for a stronger and more effective research approach.
- UAlbany academic departments several University at Albany academic departments comprise some of CTG's most valuable collaborative partners. Experts from UAlbany's College of Computing and Information, Public Administration, Communication, and Business School have partnered with the Center over the years to provide the multi-disciplinary research approach for CTG projects.

CTG's collaborative research partners provide CTG with a virtual toolbox of resources to leverage in the Center's work. CTG designs all of its collaborative research activities based on the needs of the project. Below are some examples of CTG collaborative research activities representing the diversity and multi-disciplinary nature of CTG partners.

#### Public ROI: Advancing Return on Investment Analysis for Government IT

The purpose of this project was to develop new methods for defining, measuring, and communicating public returns from information technology (IT) investments in the government sector and to offer government officials recommendations for using these methods in planning and decision making. SAP, the leading provider of enterprise software solutions for public sector organizations looking to increase process efficiency and transparency while delivering public value to their constituents, provided exclusive funding and guidance for this project.

CTG completed three main research goals during the project: (1) conducting an international workshop with experts in government IT to develop a research agenda and conceptual themes for public return on investment (ROI) assessment; (2) conducting five case studies of public ROI in governments internationally to include the United States, Canada, and Europe, and (3) developing a white paper presenting a new methodology for assessing public returns on government IT investments. SAP was involved in all stages of the project, directly collaborating with CTG to develop workshop content, conduct the case studies, and provide guidance in writing the final report.

In addition to the key partnership with SAP, this project also relied upon the expertise of individuals from other private sector companies, academia, and government. The most intensive government collaboration in this project occurred while conducting the five case studies in Austria (The Austrian Federal Budgeting and Bookkeeping System), Israel (The Government of Israel's Merkava Project), Canada (Service New Brunswick), and the United States (The Commonwealth of Pennsylvania's Integrated Enterprise System and The Washington State Digital Archives). Each of the five case studies involved collaborative partnerships with key government contacts who helped arrange the site visits, identify government and private sector experts to participate in the interviews, and review the final case study reports and project white paper.

# **Modeling Interorganizational Information Integration**

The purpose of this research is to develop and test dynamic models of information integration in complex government settings, focusing on two critical policy areas: public health and criminal justice. The public health cases focus on the immediate response to and subsequent preparation for the West Nile Virus outbreaks in Colorado, Oregon, Connecticut, and New York. The criminal justice cases include cross-boundary information integration initiatives in the states of New York, North Carolina, Colorado, and New York City.

The Modeling Interorganizational Information Integration project is currently in its final phase, in which the project team is testing its comprehensive model of information integration using a nation wide survey of government managers. The ambitious scope of this project requires a strong multi-disciplinary approach. As the project has evolved, CTG has drawn upon the considerable expertise of the UAlbany community. The following faculty members have all made significant contributions to the development of this research:

- David Andersen, Distinguished Service Professor, Department of Public Administration and Policy, Rockefeller College of Public Affairs and Policy, University at Albany, SUNY
- François Cooren, former Associate Professor, Department of Communication, University at Albany, SUNY and now with Département de communication, Université de Montréal
- George Richardson, Professor, Department of Public Administration and Policy, Rockefeller College of Public Affairs and Policy, University at Albany, SUNY
- Anna Sidorova, Assistant Professor, Department of Management Science and Information Systems, School of Business, University at Albany, SUNY
- Tomek Strzalkowski, Associate Professor, Computer Science, University at Albany, SUNY
- Giri Tayi, Professor, Department of Management Science and Information Systems, School of Business, University at Albany, SUNY

 J. Ramón Gil-García, former CTG post-doctoral fellow and now with Centro de Investigación y Docencia Económicas, Mexico

Not only have these UAlbany partners been involved in the development of the MIII project, they have also collaborated with CTG staff members to produce a variety of academic publications based on the data collected, including peer-reviewed conference papers and journal articles.

#### **New Models of Collaboration for Delivering Government Services**

This project was a multinational research study focused on the benefits, barriers, and results of organizational innovations to support the delivery of public services. The project was carried out by an international network of field researchers in Canada, the United States, and Europe who prepared case studies of apparently successful collaborations in their countries. The major research partners were CTG and CEFRIO (Centre Francophone d'Informatisation des Organisations), a liaison and transfer centre in Quebec Province committed to helping organizations become more productive and contribute to public well-being through information technologies as a means of promoting change and innovation.

The relationship between CTG and CEFRIO, which was formally initiated during this project, has itself proven to be a successful collaboration. In addition to the completion of this project's research agenda, including a variety of academic and practitioner publications, the two research centers also held a CEFRIO-CTG Research Exchange in 2005. Today, CEFRIO and CTG continue to jointly work on a variety of information sharing activities, conferences, and committees in the area of digital government.

#### New York State-Local Internet Gateway: Prototype Project

Amidst growing numbers of computer networks in government, this project created a prototype Internet Gateway to test and evaluate mechanisms for government to government (G2G) business relationships among state and local government organizations in New York State. The project consisted of two phases: In Phase One, CTG worked with government partners to develop an ideal government gateway; in Phase Two, CTG led the development, testing, and evaluation of the prototype in conjunction with corporate partners and the prototyping team. Overseeing all of the project activities was an advisory committee of 29 experts from government, academia, and the private sector.

The collaborative research partnerships for this project were diverse and significant. Eighty individuals representing eight state agencies, nine counties, nine cities, 18 towns, two universities, two professional organizations, and two private sector companies participated as Prototype Team Members, Advisory Committee Members, and field testers. In addition, 15 individuals from the four corporate partners joined seven CTG staff in this effort. The Prototype Team worked with CTG and corporate partners (CGI Information Systems & Management Consultants, Inc. and Keane, Inc.) on Prototype planning, design, and development. CTG was the primary project manager and liaison between the Prototype Team and corporate partners, while corporate partners were the primary Gateway Prototype developers. Two additional corporate partners provided resources to the project: AT&T Foundation made a grant award of \$20,000, which was used to support local involvement and extended evaluation; and Microsoft provided the software used to build one of the Prototype applications.

# Kids Well-being Indicators Clearinghouse

This project advanced the use of indicators of children's health and well-being as tools for policy development, planning, and accountability at the state, county, and community levels by making the necessary data available in a more timely and accessible way. Working with the NYS Council on Children and Families, CTG developed a well-organized, Web-based, data rich electronic resource that brings existing indicator data and supportive resources together in a publicly accessible information repository, and expands both the kinds of data available and its usefulness for smaller jurisdictions and communities.

CTG often relies upon collaborative relationships with other organizations to offer different perspectives to bear on a problem within government. In the development of KWIC, the NYS Council on Children and Families served as the Center's key collaborator and source of knowledge. Several other organizations and individuals also brought their own unique perspectives to the KWIC project, including the NYS

Archives and Records Administration; Chapin Hall Center for Children at the University of Chicago; Charles McClintock, Professor and Associate Dean, Department of Policy Analysis & Management, Cornell University; and the Annie E. Casey Foundation, a non-profit group dedicated to children and families. The development of the clearinghouse was made possible through the Center's ability to effectively engage multiple organizations in collaborative relationships and to foster collaboration among those stakeholders who would actually use KWIC.

# **Creating a Statewide Spatial Data Repository and GIS Data Cooperative**

This project was a model of collaboration. CTG, the NYS Department of Environmental Conservation, the State Archives and Records Administration, and the NYS Forum for Information Resource Management all participated in the project. The University at Buffalo's National Center for Geographic Information and Analysis participated, as well as faculty and students from the University at Albany. More than 400 experts contributed ideas and their own collected data to the effort.

The project also contributed to the work of the NYS Temporary GIS Council by forging new working relationships among state, local, federal, and private organizations. These relationships, along with the project results, have helped Council members understand the issues and the opportunities for GIS coordination in New York State.

#### **World Trade Center Project**

This exploratory study was a collaborative partnership led by CTG with involvement from Urban Logic, Inc., a New York City nonprofit organization that was intimately involved in the response to attacks on the World Trade Center on September 11, 2001. In addition, a multi-disciplinary team of researchers from UAlbany were also involved in the project. This team included:

- Bruce Cahan, president, Urban Logic, Inc., New York City
- Tom Birkland, associate professor, Department of Public Administration and Policy, Rockefeller College of Public Affairs and Policy, University at Albany, SUNY
- Teresa Harrison, professor and chair, Department of Communication, University at Albany, SUNY
- Thomas Stewart, director for research, Center for Policy Research, Rockefeller College of Public Affairs and Policy, University at Albany, SUNY
- Giri Tayi, professor, Department of Management Science and Information Systems, School of Business, University at Albany, SUNY

The research strategy and collaboration among the multi-disciplinary team resulted in the ability to follow and partially document the network of relationships, information flows, and actions that represented a range of governmental responsibilities among key players involved in the response effort.

# The Institute for Informatics, Logics and Security Studies (ILS)

The Center has collaborated with the ILS for several years. The Institute's director, Professor Strzalkowski, participated as a member of the research team for the MIII project, and Dr. Cresswell is a member of the evaluation team for a current research project at the Institute.

# F. Summary of Future Research Plans, Goals, and Funding Projections

The strategic goals for future research are to:

- Continue and strengthen current research in IT capabilities and effectiveness in New York State Government
- Continue investigation in the areas of information integration, public value assessment, and IT capability in government
- Expand research opportunities in international settings
- Identify emerging areas of research needs for government information systems and strategies
- Continue to participate in the development of digital government research capabilities in the United States and internationally

Table 2 below captures our pending project proposals.

Topic	Sponsor	Anticipated Funding Level	Planned Submission Date	PI
Information Security Impacts on Performance	NSF-IIS	\$400,000	Dec. 10, 2007 (submitted)	Cresswell
Assessing Justice Information Integration System Impacts	National Institute of Justice	\$230,000	Feb. 20, 2008	Cresswell/Pardo
Assessment of Information Systems for Performance Budgeting	Ministry of Finance, Republic of Turkey	\$150,000	Dec. 20, 2007	Cresswell
IT Innovation in Government	NSF-IOC	\$350,000	Feb. 2, 2008	Pardo
Collaboration Technology in NY State Government	New York State	ТВА	Jan. 15, 2008	Cresswell
Public Value Assessment of Government Investment	State Information Center, Peoples Republic of China	\$150,000 (approximate)	March, 2008 (TBA)	Cresswell/Pardo
Capability for Justice Information Integration	Tompkins County/New York State	\$100,000 (approximate)	TBA	ТВА

**Table 2 - Pending Project Proposals** 

# III. Associates, Affiliates, and Research Staff and Administrative Structure

#### A. Current CTG Staff, Graduate Assistants, and Center Affiliates

One of the Center's greatest resources is its people. CTG projects depend on a dedicated staff comprised of professional and graduate assistant personnel, as well as ongoing collaborative partnerships with UAlbany and external faculty and other researchers and practitioners. CTG staff and affiliated personnel represent the diverse and multi-disciplinary expertise that CTG leverages in all of its work. Curriculum Vitae for all CTG staff and the Center's faculty affiliates can be provided upon request. See

Figure 3 for the Center's current staff and their titles.

#### **CTG Staff**

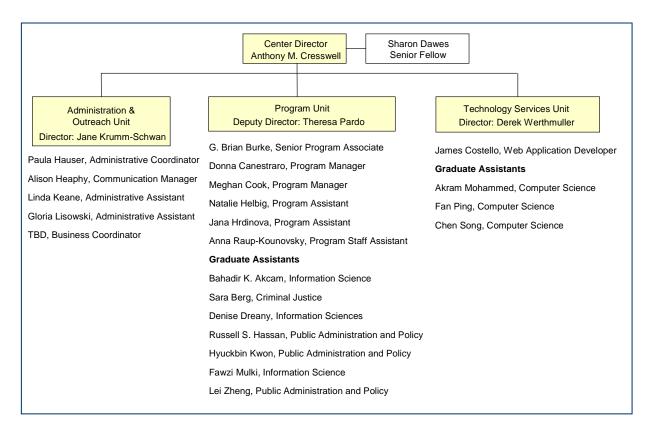


Figure 3 - CTG Organizational Chart

# **Faculty Affiliates**

Faculty from UAlbany and external institutions play a very important role in CTG projects. They provide the Center with additional capacity and expertise to call upon depending on the needs of the project. The affiliates listed below represent a toolbox of multi-disciplinary skills that the Center can use to address the multi-dimensional and complex challenges government are faced with and that CTG addresses in all of its projects.

#### **UAlbany Faculty**

David Andersen, Public Administration and Policy and Information Science

Teresa Harrison, Communication

George Richardson, Public Administration and Policy and Information Science

Tomek Strzalkowski, Computer Science and Institute for Informatics, Logics & Security Studies

Giri Tayi, Management Science and Information Systems

#### External Faculty

Alan Borning, University of Washington

François Cooren, Département de communication, Université de Montréal

Stephen Curwell, University of Salford, UK

Ophelia Eglene, Middlebury College

Enrico Ferro, Polytechnic of Turin and Istituto Superiore Mario Boella, Italy

Patricia Diamond Fletcher, University of Maryland-Baltimore

Jane Fountain, University of Massachusetts-Amherst

Jon Gant, Syracuse University

J. Ramón Gil-García, Centro de Investigación y Docencia Económicas, México

Valerie Gregg, Information Sciences Institute, University of Southern California

Marijn Janssen, Information & Communication Technology, Technology, Policy and Management, Delft University of Technology

David Landsbergen, Ohio State University

Luis F. Luna-Reyes, Business School, Universidad de las Américas-Puebla, México

Ignacio Martinez-Moyano, University of Chicago-Argonne National Laboratory

Lise Prefontaine, Université du Québec a Montréal

Jochen Scholl, Information School, University of Washington

Jing Zhang, Graduate School of Management, Clark University

#### **B. Other Affiliated Personnel**

# **Advisory Committee**

Since its inception, the Center has employed the advice and strategic guidance of a standing committee, composed of New York State government IT experts, to assist in planning and implementing projects. The committee links the Center to the NYS Forum membership and its Executive Committee, and more broadly to the state and local governments throughout New York State. Committee members bring a diverse mix of policy, management, and technology backgrounds to their role of advising the Center on project solicitation, development, selection, and evaluation. The Committee members are selected based on their personal qualifications and interest in helping guide the direction of the Center's work. In general, their role is to work in partnership with Center staff in:

- identifying new areas of concern to government and needed research;
- identifying and evaluating proposed projects to be conducted at the Center;
- helping select overall themes and priorities for work at the Center; and
- documenting and disseminating project results in cooperation with Center staff.

#### Current Committee Members 2007/2008:

- Gregory Benson, Jr., NYS Forum for Information Resource Management
- JoAnn Bomeisl, NYS Insurance Department
- William (Bill) Johnson, NYS Cyber Security and Critical Infrastructure Coordination

- Alex Roberts, Division of Criminal Justice Services
- Thomas Ruller, NYS Education Department
- Brian Scott, NYS Department of Health
- Onnolee Smith, NYS Governor's Office of Employee Relations
- Tom Herzog, NYS Department of Correctional Services
- Nancy Mulholland, NYS Department of Transportation

The Committee meets on the third Friday of each month.

# **Visiting Scholars**

The Center has built collaborative relationships with scholars in other countries, in part through opportunities for them to spend extend extended periods at CTG, working on projects with CTG staff. Since 1999, three such scholars have spent time ranging from two months to one year in residence at the Center. The engagement with the visiting scholars has produced jointly authored papers, collaboration on research conference organizing, and fruitful ongoing professional relationships.

- Marijn Janssen, Technical University of Delft, Netherlands (2002)
- Enrico Ferro, Mario Boello Insitute, Torino, Italy (2000)
- Lin Zhu, Shanghai Jiotong University, China (2007-08)

#### C. Current Governance and Administrative Structure

The Center for Technology in Government is headed by a director who is responsible for overall organization management, facilitating strategic planning and providing future direction for the Center's endeavors. He is assisted in his work by a deputy director, a director of administration and outreach and director of technology services who are each responsible for leading the three separate units within the organization. Namely, the Center is divided into a program unit, a technology services unit, and an administration and outreach unit. Although each unit has its own role and a set of responsibilities, they cooperate closely with each other.

The main role of the program unit is project management and execution. It is comprised of program managers, senior program associates, program associates, program assistants, and program staff assistants. In addition to full time staff, the program unit also hosts and supervises a number of graduate assistants who have various appointment lengths depending on their academic programs. Each Center project is typically led by a project director, managed by a project manager, and supported by a combination of professional staff and graduate assistants.

The technology services unit focuses on IT in the context of center projects and forward looking technology that looks to support common government information use needs. The unit is comprised of a director and a Web application developer, who jointly supervise a number of graduate assistants from the Computer Science department. The Center's technical infrastructure and development environments are also managed by the technology services unit.

The main focus of the administration and outreach unit is providing the administrative infrastructure necessary for the Center's day to day operations. This includes, but is not limited to, financial management, grant administration, human resources, purchasing, and outreach activities which support the Center's projects. The unit consists of a director, communications manager, administrative coordinator, business coordinator, administrative assistants and a secretary.

#### D. Plans for Further Staff Development and Collaboration

#### 1. Development of Research Staff

The Center maintains an ongoing series of internal training activities, both formal and informal, to develop research skills. These include training classes on specific skills, such as qualitative data analysis, regularly scheduled discussion groups on selected topics, ad hoc brown bag sessions to explore new topics, and invited Research Breakfasts at which visiting scholars present their current work. Junior research staff are thoroughly integrated into proposal preparation and operational activities of research under the supervision of senior staff, and as co-authors on research papers. The Center also provides financial support for staff and graduate students to present papers at research conferences.

#### 2. Planned Collaboration with Other Units

Planned collaborations include other university-based researchers, UAlbany units, government agencies, and international organizations. Discussions are underway for collaboration to develop an IT training program with the United Nations University and additional materials with UNDESA and Microsoft (as discussed above). CTG staff are key participants in the North American Digital Government Working Group (NADGWG), supported under the current DGI grant from NSF. That group involves researchers from organizations and universities in Canada, Mexico, and the United States, and is developing plans for long term cross-national research projects. CTG also has a long standing partnership arrangement with CEFRIO in Canada, which is now connected to the NADGWG activity, and will be jointly participating in the 2008 Digital Government Research Conference. Dr. Cresswell plans to continue participation in research work with ILS (Institute of Informatics, Logistics, and Security Studies) on automated language analysis projects. Drs. Cresswell, Dawes, and Pardo will continue teaching and student advisement activities with the Public Administration Program in Rockefeller College and the Informatics program in the College of Computing and Information. We also plan to continue collaboration on research with faculty from the Communication Department, in particular Professors Harrison and Guney. A recently submitted proposal to the NSF includes collaboration with four NY state and local agencies as well: Office of the Chief Information Officer, Transportation Department, Public Services Commission, and Ontario County.

#### 3. Development of Associates and Affiliates

The development and recruitment of new affiliates and associates results from several ongoing Center activities and working principles. The Center provides financial and staff support for research participation and presentations at research conferences by associates partnering in research projects. We also provide workspace in the Center facility when needed, training in research methods, and participation in interactions with government agencies and other project partners. We maintain contact and active communication and support for associates outside Albany or the United States through conference calls, participation in online collaboration sites, and planned meetings at national and international research conferences. We also maintain active outreach to current and potential new associates through Web site, Web news service, distribution of toolkits and training materials.

#### IV. Resources and Facilities

#### A. Resources Available to the Center

As shown in Figure 4 below, CTG's FY 2006-2007 funding portfolio was varied and included both multiyear and short-term collaborations at the local, state, national, and international levels. About half of our funding comes from federal grants, one quarter from contracts, and the remainder from our UAlbany base budget and other resources. Of note, the below funding information represents the book value of current projects and not the funds available at the time of this report.

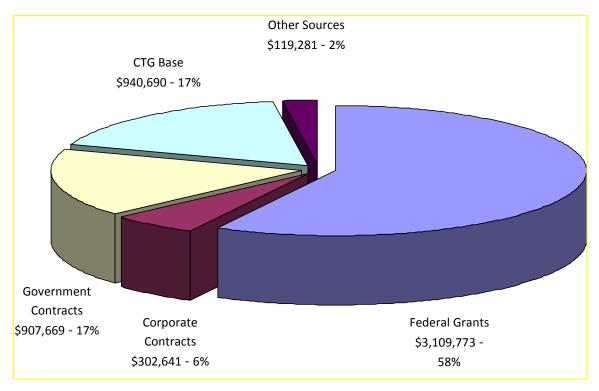


Figure 4 - Resources Available to the Center

#### B. Facilities Available to the Center

When the Center for Technology in Government partners with government agencies, our facilities provide us with an ideal location as well as the capacity to facilitate multi-day workshops and training sessions, convene small meetings, and conduct presentations and discussions.

The Center is located off campus at 187 Wolf Rd in Albany, New York. Our close proximity to the Albany International Airport, Interstates 87 and 90, and the Albany-Rensselaer Train Station, as well as a wide range of hotels and restaurants, provides the Center with an ideal location for hosting both local and out-of-area visitors and project partners, whether it be for short duration meetings or longer, multi-day workshops. The Center's facilities are both large (12,344 square feet) and versatile enough to host a wide range of different types of meetings and workshops to support our project work.

The Center's reception area provides CTG with a place to accommodate visitors, whether it be to register participants for a CTG event or workshop or to provide a place to wait for formal or informal meetings with CTG staff. In addition, it offers a place for us to display past awards and highlights of CTG events.

The Center's large seminar room can accommodate up to 40 people. The large seminar room can also be reconfigured for small working groups and theater style seating for up 65. The small seminar room (often used to teach university courses in addition to research and presentations), can accommodate up to 25 people in a seminar configuration and can be reconfigured as well to accommodate on-site working lunches. These two spaces and the associated breakout rooms constitute one of the best-designed group interaction venues in the Capital Region. High quality presentation technologies, re-configurable furniture, extensive white boards and other display equipment all contribute to our group-oriented methods of problem definition, process and analysis, exploration of alternatives, and decision making.

The Center also has a number of smaller rooms that can serve a variety of purposes:

- The conference room is ideal for breakout groups or meetings of up to ten.
- Three small meeting rooms are located just outside the large seminar room. Each of the three meeting rooms are ideal for small breakout groups.
- A fourth meeting room at CTG is a more informal space for brainstorming sessions.
- The Center's library offers an ideal space for quiet work and houses information technology journals and publications.

The center core of our office space is where our professional and graduate student staff work. This space is arranged both to stimulate and facilitate communication among CTG staff. Additional facilities provided to support CTG staff include a computer lab, staff lounge, kitchen, production area for making copies and assembling meeting and workshop materials, and a storage room, as well as the meeting rooms described above. Some recent examples of events hosted by CTG as part of our partnership projects that leveraged the versatility of our facilities include the following:

#### Public ROI - Advancing Return on Investment Analysis for Government IT

An international workshop was held with 25 experts in government IT to develop a research agenda and conceptual themes for public return on investment (ROI) assessment.

#### Web Site Management Using XML: A Testbed Project

A six month long Testbed was conducted with five NYS agencies who convened monthly at CTG for hands-on workshops, training sessions, and small discussion groups to develop an XML prototype for their agency.

#### Leveraging Investments in the Electronic Commons Project

CTG staff facilitated a post-project meeting attended by all the grantees to document the experiences of each project team, examine the factors critical to success, and share lessons learned.

#### Assessing Mobile Technologies in Child Protective Services

Participants in the NYS Office of Children and Family Services' mobile technology pilot program gathered to share their experiences through CTG facilitated workshop sessions.

#### Research Discussion Breakfast on the Russian Digital Library

Professor Oleg Karasev from Moscow State University visited CTG and discussed the University Information System RUSSIA, a digital library for research and education in economics and social sciences. This presentation is one example of the Center's research discussion breakfast series hosted by CTG and open to both the UAlbany community and general public.

### C. Other Support Services

The Center relies on several support services provided by UAlbany that are critical to its day to day operations. These support services include the UAlbany telecommunications infrastructure, which provides the Center with its phone and Internet access. Although the Center's office building is off campus, it is networked with a high speed microwave link as though it were on campus. High speed Internet and connection to the UAlbany phone system is supported through the microwave link without leased line charges. Business continuity plans, a secondary server site, and encrypted off-site backups are all strategies used to secure and protect the Center's technology resources. In addition, Center staff rely on the UAlbany library system to support research as well as publication activities. Finally, the Center has an off-site storage facility used primarily as an archive of completed project materials.

### D. Resource Implications for Proposed New Areas of Research Activity

CTG has effective plans for maintenance and upgrade as well as expanding commitment of resources. Being capable of collaborating and taking advantage of the latest technology requires a yearly upgrade plan. This upgrade plan keeps up to date equipment and software on center staff desks and in the server room.

Maintaining or increasing resources will be important for the pursuit of several of the Center's goals described above. International collaborations require more resources for travel and coordination of work. Much of the current and planned future work necessarily involves intensive field research, including especially large volumes of interview and other forms of qualitative data, and requires expanded staff time for data collection, analysis, and interpretation. Expanding the scale of research to sites and participants outside the immediate Albany area or New York State may require increased financial support for both CTG staff and participant travel, workshop expenses, etc. These added expenses are largely provided for in projects proposed to NSF, but the development and maintenance of international projects and relationships are a growing expense and not fully supported by existing funding streams.

### E. Evaluative Commentary on Resources and Facilities

#### Resources

#### The UAlbany Base

The continued commitment of the University at Albany's annual \$1 million allocation provides a strong foundation of support for our core mission. That commitment has survived two changes in Governor and political parties since 1993. Maintaining that commitment at the state level is crucial to retaining the Center's superb staff and physical facilities currently in place. Since that funding has moved to the UAlbany budget, it is equally crucial to maintain that commitment in campus-level resource decisions, especially in the times of financial exigency that are all too common in the SUNY system. The Center's approach to all work activities includes careful attention to this situation, expressed in efforts to maintain and improve relationships and value delivered to state agencies and the UAlbany community. These efforts will remain a top priority in the Center's overall strategy.

#### Human Resources

The Center's ability to continue successful operations depends first and foremost on our human resources. The current staff brings a wealth of experience, formal education, motivation, and energy to all our activities. In addition, our staff allow the Center to draw on a cross-disciplinary skill set for all of its projects and research. This cross-disciplinary skill set includes Public Administration, Business Administration, Education, and Computer Science, among others. Many staff have high levels of technical, managerial, and academic qualifications and experience that are in demand in the labor market. This requires maintaining a comfortable and professional work environment as well as annual staff compensation with discretionary raises and incentives. This requirement is a central part of overall

management strategy and depends on both effective personnel administration and adequate funding for salaries and other compensation.

#### **Facilities**

Our Wolf Road facilities are a highly valuable asset. In terms of location, the Center's proximity to public transportation, hotels, and restaurants is ideal for visiting project and research participants, as well as other visitors. The facility is designed for highly collaborative and creative work, and functions very well in that regard. The individual work spaces provide a high quality environment for personal productivity and allow for easy exchange of information and interpersonal interaction, while the meeting spaces are vital resources in the day-to-day interactive work of the Center. The variety of large and small group meeting rooms provide productive spaces for internal meetings and the frequent events with external guests and workshops that are essential to our research and project methods. While the rent is a substantial part of our current budget, the expense is justified in terms of the high value of the facility for all aspects of work.

The value we receive from use of this facility is in part a consequence of our willingness to seek new ways to improve our capabilities and working conditions. If current or future campus facility planning and development provide similar opportunities, we will be ready to explore new possibilities. However the characteristics of our current facility are central to our overall operations and success.

There are two central reasons to consider new facility opportunities. One is to enhance our connections with related campus units, such as the College of Computing and Information, Rockefeller College, and others. The other is to reduce the current high rental costs that absorb scarce resources that are not then available to launch new initiatives and take somewhat riskier research directions. CTG has achieved its current success in large part through creativity, prudent risk taking, and making the most with its available resources. That success could very likely be expanded significantly with resources currently devoted to commercial rent.

# Appendices

Appendix A – Detailed Sponsored Funding Profile by Year

**Appendix B – Description of Current Projects, 2006-2008** 

Appendix C – Outcomes by Project

Appendix D – CTG Scholarly Publications and Project Reports and Articles

## Appendix A. Detailed Sponsored Funding Profile by Year

### **Projects Funded Mainly by NYS Base Budget Allocation**

Projects Funded Mainly by NTS base budget Anocation							
Year	Project	Funding Sources					
1993	Improving Customer Service Through Title Imaging	This project was supported entirely by the in-kind contribution of professional services, hardware, software, and communications provided by the NYS Department of Motor Vehicles; University at Albany faculty, staff, and students; and five corporate partners, led by AT&T Global Information Solutions.					
1993	Helping Small Businesses	This project was funded by a portion of CTG's New York State budget allocation plus in-kind contributions of professional services, hardware, and software provided by the NYS Office of Regulatory and Management Affairs, and corporate partner Precision Systems, Inc.					
1994	Groupware Testbed	This project was funded by a portion of CTG's New York State budget allocation.					
1994	Making Psychiatric Assessments in Emergency Rooms	This project was funded by a portion of CTG's New York State budget allocation.					
1994	Balancing Environmental Quality and Economic Vitality in the Adirondack Park	This project was funded by a portion of CTG's New York State budget allocation plus in-kind contributions of professional services, hardware, software, and communications provided by the Adirondack Park Agency, University at Albany faculty members, and corporate partners.					
1994	Creating a Statewide Spatial Data Repository and GIS Data Cooperative	This project was funded by a portion of CTG's New York State budget allocation plus in-kind contributions of professional services, hardware, software, and communications provided by the NYS Department of Environmental Conservation, other state and local government agencies, and ten corporate partners.					
1995	The Internet Technologies Testbed	This project was funded by a portion of CTG's New York State budget allocation plus in-kind contributions of professional services, hardware, software, and communications provided by the State University of New York Central System Administration, other state and local government agencies, and eleven corporate partners.					
1996	The NYS Internet Services Testbed	This project was funded by a portion of CTG's New York State budget allocation plus in-kind contributions of professional services, hardware, software, and communications provided by the participating New York State agencies, University at Albany faculty members, and corporate partners.					
1996	Best Practices in State-Local Information Systems	This project was funded by a portion of CTG's New York State budget allocation plus in-kind contributions of professional expertise provided by more than 150 state and local government participants.					
1997	Using Information in Government Program	This project was funded by a portion of CTG's New York State budget allocation.					
1998	The New York State Homeless Information Management System	This project was funded by a portion of CTG's New York State budget allocation.					
2001	E-Government: Creating Tools of the Trade	This project was funded by a portion of CTG's New York State budget allocation.					
2002	The New York State State-Local Internet Gateway: Prototype Project	This project is funded by a portion of CTG's New York State budget allocation plus in-kind contributions of professional services, hardware, software, and communications provided by the participating New York state and local government agencies and corporate partners and a one-time award from a corporate partner.					

#### Appendix A. Detailed Sponsored Funding Profile by Year Projects Funded by both the NYS Base and External Sources Year **Project Funding Sources** Amount Base plus Governor's Office of Employee Relations. NYS IT Workforce Skills Assessment Project 2005 \$159,766.00 Web Site Management Using XML: A Testbed 2006 Base plus Governor's Office of Employee Relations. \$184,012.00 Proiect **Projects Funded by External Sources** Year **Project Funding Sources** Amount Models for Action: Developing Practical National Historical Publications and Records Commission (NHPRC), the Approaches to Electronic Records 1996 \$140.000.00 funding arm of the National Archives grant (No. 96-023) Management and Preservation Education, Outreach and Training: Partnership 1997 National Science Foundation. for Advanced Computational Infrastructure \$790,000.00 Gateways to the Past, Present, and Future: National Historical Publications and Records Commission under Grant No. Practical Guidelines for Electronic Records 1998 \$381,322.00 98027. Access Programs Funded in part by CTG NY State allocation under the Using Information in Government project and the Insiders' Guide project, and in part CCFS and Kids Wellbeing Indicator Clearing house -KWIC, New York State Child Indicators Anne E Casey Foundation under a subcontract of a US Department of 1998 \$80,000.00 Health and Human Services grant to the Council on Children and Families: Initiative Grant Number 98ASPE319A. This project was supported by Award No. 1999-LD-VX-K004 funded by the Developing a Business Case for the 1999 Bureau of Justice Assistance, Office of Justice Programs, US Department of \$363,743.00 Integration of Justice Information Justice. 1999 Knowledge Networking in the Public Sector National Science Foundation, Grant Number SES-9979839. \$1,014,655.00 United Nations Secretariat – UN Archives and Records Management 1999 United Nations/Models for Action Workshop \$6,100.00 Section Designing the Digital Government of the 21st 2000 National Science Foundation under Grant No. 99-181. \$83.193.00 Century: A Multidisciplinary Workshop Office of State Comptroller Project-Funded in part by CTG NY State allocation under the UIG Project and in 2001 \$77,043.00 Investigating the Redesign of NYS CAS part directly by NYS Office of State Comptroller A Multinational Investigation of New Models of National Science Foundation grant number EIA0092614 2001 Collaboration for Delivering Government \$423.983.00 Services The Granting Agency of the Future - Digital Government: developing an Information Technology Organizational Design Research 2001 National Science Foundation Grant Number EIA-0109049 \$236,792.00 Agenda for the Evaluation and Management of Research Proposal's

	Appendix A. I	Detailed Sponsored Funding Profile by Year	
2001	Increasing Information Sharing Effectiveness: A Capability Assessment Model for the Justice Enterprise	The United States Department of Justice, Office of Justice Programs provided \$503,467 from its Discretionary Grant Program,	\$703,642.00
2002	Turning to Digital Government in a Crisis: Coordinating Government's Response to the World Trade Center Attacks	National Science Foundation under its Small Grants for Exploratory Research Program (SGER).IIS0540069	\$100,931.00
2002	EU Workshop	National Science Foundation, grant number ITR-0205152.	\$90,972.00
2002	Library of Congress Collaboration for Preservation of State Government Digital Information	National Science Foundation, grant number ITR-0205152.	\$861,310.00
2002	ITR_ Modeling Interorganizational Information Integration	National Science Foundation, grant number ITR-0205152.	\$1,235,839.00
2003	Exploring the Feasibility of A Digital Government Journal	The project is funded by a grant from the National Science Foundation, grant number EIA-CISE-RI-MII 0306813.	\$60,000.00
2004	Increasing Quality, Reducing Cost: An Analysis of Functional and Programmatic Business Processes at the Division of Coastal Resources	NYS Coastal Management Program - NYS Department of State	\$103,150.00
2004	Use of Parcel Data in New York State: A Reconnaissance Study	New York State Office of Real Property Services.	\$48,075.00
2005	Public ROI – Advancing Return on Investment Analysis for Government IT	SAP	\$302,484.00
2005	Building and Sustaining an International Digital Government Research Community of Practice	National Science Foundation IIS0540069	\$1,503,00.00
2006	A Cost benefit Analysis of an Electronic Medical Record for NYS DOCS	NYS Department of Correctional Services	\$223,109.00
2006	Leveraging Investments in the Electronic Commons Project	Northern Initiatives on behalf of the United States Department of Agriculture, Forest Service.	\$30,000.00
2006	Enterprise Content Management: Building a Collaborative Framework	UN Secretariat and UN Archives and Records Management Sections	\$13,059.00
2006	Assessing Mobile Technologies in Child Protective Services: A Demonstration Project in 23 Districts	NYS Office of Children and Family Services.	\$150,344.00
2006	Assessing Mobile Technologies in Child Protective Services: Extended Pilot in NYC's Administration for Child Services	NYS Office of Children and Family Services.	\$134,737.00
2006	Assessing Mobile Technologies in Child Protective Services: A Pilot Program	NYS Office of Children and Family Services.	\$261,844.00
2006	Balancing Growth: Building performance measurement capability in the Town of Bethlehem	Town of Bethlehem Police Department and Town Board	\$34,000.00

	Appendix A. Detailed Sponsored Funding Profile by Year								
2007	Exploring Regional Telecommunications Incident Response Coordination	NYS Department of Public Services	\$15,726.00						
2007	Records Management Workshop for Field Staff in Peacekeeping Operations, Brindisi, Italy	UN ARM and DPKO	\$17,471.00						
2007	Digital Preservation: Records management in the Electronic Age Workshop, Shippensburg University, Pennsylvania	Shippensburg University Institute for Public Service and the Pennsylvania Association of Township Supervisors	\$3,500.00						
2007	Managing and Preserving State Government Digital Information Workshop, Pierre, South Dakota	South Dakota State Historical Records Advisory Board	\$2,694.00						
2007	Creating an Action Plan for Preserving the Record of the International Criminal Tribunal for the former Yugoslavia	UN International Criminal Tribunal for the former Yugoslavia	\$18,121.00						
2007	Performance Management in the Public Sector	Turkish Ministry of Finance	\$96,442.00						

Project	Description	Funding Sources	Amount	Begin Date	End Date	CTG Project Director and Team*	External Partners
Modeling Interorganizational Information Integration	A study of the social and technological interactions involved in information integration initiatives in criminal justice and public health. Based on these projects, researchers will develop and test dynamic models that account for effective information integration.	National Science Foundation, grant number ITR- 0205152.	\$1,235,839.00	9/15/02	8/31/08	Theresa Pardo, G. Brian Burke, Ramon Gil-Garcia, Anthony Cresswell, Sharon Dawes, Donna Canestraro, Sara Berg	NYS Department of Health, NYS Police, NYS Div. of Criminal Justice Services, NYS Division Of Probation And Correctional Alternatives, NYS Division of Parole, NYS Crime Victims Board, NY County District Attorney's Office, Colorado Department of Public Health and Environment, Larimer County Department of Health and Environment, Centers for Disease Control and Prevention, Connecticut Department of Public Health, Oregon Department of Human Services, Public Health Division, Multnomah County Health Department, Colorado Integrated Criminal Justice Information System, North Carolina Criminal Justice Information Network
U.S. and EU Workshops	Collaboration with two EU funded information integration projects to develop new research initiatives.	National Science Foundation, grant number ITR- 0205152.	\$90,972.00	9/15/02	8/31/07	Theresa Pardo Anthony Cresswell, Sharon Dawes	University of Salford, UK University of Bozano, Italy
Library of Congress Collaboration for Preservation of State Government Digital Information	Assisting the Library of Congress in working with U.S. states and territories to form collaborative arrangements and develop strategies for preservation of significant state and local government information in digital form.	National Science Foundation, grant number ITR- 0205152.	\$861,310.00	9/15/02	8/31/07	Theresa Pardo, G. Brian Burke, Anthony Cresswell, Sharon Dawes, Donna Canestraro, Hyuckbin Kwon	50 States & US Territories

	Append	lix B. Description o	of Current Proje	ects, 2006	-2008		
Project	Description	Funding Sources	Amount	Begin Date	End Date	CTG Project Director and Team*	External Partners
Public ROI – Advancing Return on Investment Analysis for Government IT	Development of new methods for defining, measuring, and communicating public returns from information technology (IT) investments in the government sector.	SAP	\$302,484.00	6/10/05	8/31/06	Anthony Cresswell, G. Brian Burke, Theresa Pardo, Sharon Dawes, Lucy Dadayan	State of Pennsylvania Austrian Ministry of Finance Israeli Ministry of Finance Province of New Brunswick State of Washington
Building and Sustaining an International Digital Government Research Community of Practice	Development of a sustainable global community of practice among digital government researchers and research sponsors; includes a reconnaissance study of the status of the international digital government research literature, an annual research institute, a framework for international working groups, and travel support for US participants in international conferences and workshops.	National Science Foundation IIS0540069	\$1,012,624.00	9/1/05	8/31/09	Sharon Dawes, Meghan Cook, Jana Hrdinova, Natalie Helbig Fawzi Mulki	Valerie Gregg, USC Stephen Curwell, Univ. of Salford, UK Alan Borning, Univ. of Washington
NYS IT Workforce Skills Assessment Project	Gathers information about the existing skills and training needs of New York State's IT professionals. The initiative is sponsored by the NYS Chief Information Officer Council's Human Resource Committee in partnership with the Governor's Office of Employee Relations and the Office for Technology.	Governor's Office of Employee Relations (GOER).	\$159,766.00	10/30/0 5	12/31/0 6	Sharon Dawes Natalie Helbig Russell Hassan	NYS CIO Council NYS GOER Employee Unions
A Cost Benefit Analysis of an Electronic Medical Record for NYS DOCS	Examination of the existing medical records systems for inmates and recommendations for enhanced electronic capabilities.	NYS Department of Correctional Services (DOCS)	\$223,109.00	1/1/06	6/31/06	Theresa Pardo Meghan Cook Anthony Cresswell Jana Hrdinova Natalie Helbig Donna Canestraro	DOCS
Leveraging Investments in the Electronic Commons Project	Documents lessons learned in the use of advanced communications technologies in the sharing of information on topics of concern about national forests and their neighboring communities. Results will allow the US Forest Service to leverage their investments in	Northern Initiatives on behalf of the United States Department of Agriculture, Forest Service.	\$30,000.00	3/27/06	2/15/07	Theresa Pardo Donna Canestraro Derek Werthmuller Jim Costello Jana Hrdinova	US Forest Service

Project	Description	Funding Sources	Amount	Begin Date	End Date	CTG Project Director and Team*	External Partners
	advanced communication technologies.						
Web Site Management Using XML: A Testbed Project	Employs a test bed environment to explore how an XML architecture can improve Web site management capabilities in NY State agencies.	Governor's Office of Employee Relations.	\$184,012.00	5/16/06	11/15/0 6	Donna Canestraro Derek Werthmuller Jim Costello Ramon Gil-Garcia Andrea Baker	NYS Office of the Chief Information Officer NYS Office for Technology NYS Department of Civil Service NYS Division of Housing & Community Renewal NYS Higher Education Services Corporation NYS Office for the Prevention of Domestic Violence NYS Office of Cultural Education, State Education Department Hewlett-Packard Iceni Technology Ltd. Logictran MicroKnowledge Sun Microsystems SyncRO Soft Ltd.
Balancing Growth: Building performance measurement capability in the Town of Bethlehem, NY	Development of a preliminary performance measurement framework to support increased access to and use of information in public safety decision making and planning in the Town.	Town of Bethlehem Police Department and the Town Board	\$34,000.00	9/11/06	12/14/0 6	Theresa Pardo Donna Canestraro Jana Hrdinova	Town of Bethlehem
Assessing Mobile Technologies in Child Protective Services: A Pilot Program	Assessing a pilot project of the use of mobile technologies in child protective services (CPS) in three New York State counties.	NYS Office of Children and Family Services.	\$261,844.00	7/1/06	12/31/0 6	Anthony Creswell Meghan Cook Natalie Helbig Jana Hrdinova Bahadir Akcam Fawzi Mulki J. Ramon Gil- Garcia	NY City Administration for Children's Services, Westchester County, Monroe County

Project	Description	Funding Sources	Amount	Begin Date	End Date	CTG Project Director and Team*	External Partners
Assessing Mobile Technologies in Child Protective Services: A Demonstration Project in 23 Districts	Assessment of the expanded mobile technology pilot project in 23 New York State counties.	NYS Office of Children and Family Services.	\$150,344.00	7/1/06	12/31/0 7	Anthony Creswell Meghan Cook Natalie Helbig Jana Hrdinova Bahadir Akcam Fawzi Mulki	same as above with 20 other NY Counties
Assessing Mobile Technologies in Child Protective Services: Extended Pilot in NYC's Administration for Child Services	Assessment of the expanded mobile technology pilot project in 23 New York City.	NYS Office of Children and Family Services.	\$134,737.00	7/1/06	12/31/0 7	Anthony Creswell Meghan Cook Natalie Helbig Jana Hrdinova Bahadir Akcam Fawzi Mulki	NY City Administration for Children's Services
Exploring Regional Telecommunications Incident Response Coordination	Organized and conducted discussions among key actors about regional coordination of telecommunications incident response.	NYS Department of Public Service	\$15,726.00	1/1/07	8/30/07	Theresa Pardo Donna Canestraro Anna Raup- Kounovsky	AT&T Communications AT&T Communications of NY, Inc. ChicagoFIRST CT Department of Public Utility Control NYS Emergency Management Office NYS Office of Cyber Security and Critical Infrastructure Coordination NYS Office of Homeland Security Public Safety and Homeland Security Bureau Federal Communications Commission Sprint Nextel Corporation

	Append	lix B. Description o	of Current Proj	ects, 2006	-2008		
Project	Description	Funding Sources	Amount	Begin Date	End Date	CTG Project Director and Team*	External Partners
Records Management Workshop for Field Staff in Peacekeeping Operations	UN Department of Peace Keeping Operations, Brindisi, Italy	UN ARMS and DPKO Development Program	\$17,471.00	3/12/07	5/15/07	Theresa Pardo Donna Canestraro	
Workshop on Digital Preservation: Records management in the Electronic Age	Half-day workshop developed for local government professionals in Shippensburg area with responsibility for managing and preserving government information.	Shippensburg University Institute for Public Service & the PA Association of Township Supervisors	\$3,500.00	2/22/20 07	5/16/07	G. Brian Burke	
Managing and Preserving State Government Digital Information Workshop, Pierre, South Dakota	Half day workshop developed for the South Dakota State Archives and State Library and presented to managers from South Dakota state agencies with responsibilities for managing and preserving government information.	South Dakota State Historical Records Advisory Board	\$2,694.00	6/5/200 7	7/26/20 07	G. Brian Burke	
Creating an Action Plan for Preserving the Record of the International Criminal Tribunal for the former Yugoslavia, The Hague, Netherlands	UN International Criminal Court Tribunal for the Former Yugoslavia (ICTY) in the Hague	UN International Criminal Tribunal for the former Yugoslavia	\$18,121.00	7/30/07	9/21/07	Theresa Pardo Donna Canestraro	
Performance Management in the Public Sector	Conducted workshops in Albany and Washington to assist Ministry of Finance officials in planning and implementing a performance management system for the Government of Turkey	Turkish Ministry of Finance	\$96,442.00	10/25/0 7	11/2/07	Anthony Cresswell G. Brian Burke Theresa Pardo Donna Canestraro Jana Hrdinova Anna Raup- Kounovsky Bahadir Akcam	
Translation of CTG Materials into Chinese	An agreement between CTG and the State Information Center to translate selected CTG materials into Chinese for use by Chinese government officials.	State Information Center, Peoples Republic of China	ТВА	2007	TBA	Sharon Dawes Anthony Cresswell Theresa Pardo Lei Zheng	

Appendix B. Description of Current Projects, 2006-2008								
Project	Description	Funding Sources	Amount	Begin Date	End Date	CTG Project Director and Team*	External Partners	
Training for Chinese Government Executives	Development and delivery of training programs in IT planning and innovation for the National School of Administration	National School of Administration, Peoples Republic of China	ТВА	2008	ТВА	Sharon Dawes Anthony Cresswell Theresa Pardo Lei Zheng		

For all projects, CTG administrative and outreach staff include Jane Krumm-Schwan, Alison Heaphy, Paula Rickert, Linda Keane, and Gloria Lisowski. For all projects, CTG Technical staff include Derek Werthmuller, Jim Costello, and several graduate students.

Appendix C. Products by Project								
Project	Reports, Guides, Toolkits	Journal Articles	Book Chapters	Conference Papers	Conference Posters, Panels and Presentations	Magazine Articles Written by CTG	Local and National News and Articles	
Assessing Mobile Technologies in Child Protective Services	2							
Balancing Environmental Quality and Economic Vitality in the Adirondack Park	4			1	1		1	
Balancing Growth: Building performance measurement capability in the Town of Bethlehem (NY)	1							
Best Practices in State-Local Information Systems	2				3			
Building a Sustainable International Digital Government Research Community				1	2		3	
Creating a Statewide Spatial Data Repository and GIS Data Cooperative	6	1		1	6		2	
Designing the Digital Government of the 21st Century: A Multidisciplinary Workshop	1							
Developing a Business Case for the Integration of Justice Information	2			3	3	1		
Education, Outreach and Training: Partnership for Advanced Computational Infrastructure	3			3				
EGov Roadmap 2020			1	1				
E-Government: Creating Tools of the Trade	11	2			3		5	
Exploring the Feasibility of A Digital Government Journal	1			1	1		2	
Exploring Regional Telecommunications Incident Response Coordination	1							
Gateways to the Past, Present, and Future: Practical Guidelines for Electronic Records Access Programs	3	1			2			
Groupware Testbed	1							
Helping Small Businesses	2							
Improving Customer Service Through Title Imaging	1							
Increasing Information Sharing Effectiveness: A Capability Assessment Model for the Justice Enterprise	3						1	
International Research Institute, 2008					1			
Kids Well-being Indicators Clearinghouse	2							
Knowledge Networking in the Public Sector		4	1	8	3		1	
Leveraging Investments in the Electronic Commons Project	1						1	
Library of Congress Collaboration for Preservation of State Government Digital Information	3			2	7	1	6	
Making Psychiatric Assessments in Emergency Rooms	2							

Appendix C. Products by Project								
Project	Reports, Guides, Toolkits	Journal Articles	Book Chapters	Conference Papers	Conference Posters, Panels and Presentations	Magazine Articles Written by CTG	Local and National News and Articles	
Modeling Interorganizational Information Integration		6	4	23	8	1	1	
Models for Action: Developing Practical Approaches to Electronic Records Management and Preservation	8	1			6	1		
New Models of Collaboration for Delivering Government Services	3	2	1	5	1		2	
NYS IT Workforce Skills Assessment Project	1				2			
NYS State-Local Internet Gateway: Prototype Project	4		1	2	9		2	
Public ROI – Advancing Return on Investment Analysis for Government IT	6			2	11		26	
The Granting Agency of the Future	1			1				
The Internet Technologies Testbed	1				8			
The NYS Homeless Information Management System	2			2	3			
The NYS Internet Services Testbed	6	1		1	1			
Turning to Digital Government in a Crisis: Coordinating Government's Response to the World Trade Center Attacks	2	2		5	3			
Use of Parcel Data in New York State: A Reconnaissance Study	1			3	2		1	
Using Information in Government Program	10		5	4	3	1	7	
Web Site Management Using XML: A Testbed Project	4	1		4	1		5	
Non-project cross cutting outcomes		12	5	10	77	1		
TOTAL (474)	101	33	18	83	167	6	66	

Appendix D. CTG Scholarly Publications and Project Reports and Articles	Appendix D. CTG Scholarly Publications and Project Reports and Articles							
Publication Citation or CTC Project Papert Title (UPL Provided if Available)	Year Published	Publication Type						
Publication Citation or CTG Project Report Title (URL Provided if Available)  Baker, A., Gil-Garcia, J.R., Canestraro, D., Costello, J., & Werthmuller, D. (Forthcoming). Public Sector Participation in Open	Published	Publication Type						
Communities. In Garson, D. (ed.), Encyclopedia of Public Information Technology, IGI Global.	forthooming	Book Chapter						
Luna-Reyes, L., Pardo, T.A., Ochoátegui, F.B. & Sanabria, R.M. (forthcoming). Bureau of Shelter Services. In B.A. Rocheleau (Ed.),	forthcoming	Book Chapter						
Case Studies on Digital Government. Hershey, PA: Idea Group Publishing.	forthcoming	Book Chapter						
Pardo, T.A. & Gil-García, J. R. (Forthcoming). Understanding the Complexity of E-Government: Multi-method Approaches to Social	Tortricorning	Book Chapter						
Phenomena. International Journal on Computers, Systems and Signals.	forthcoming	Journal Article						
Pardo, T.A., Gil-Garcia, J.R., & Burke, G.B. (2008). Governance Structures in Cross-Boundary Information Sharing: Lessons from	Tortificorning	Journal Article						
State and Local Criminal Justice Initiatives. Paper presented at the 41 <sup>st</sup> Hawaiian International Conference on System Sciences								
(HICSS), Hawaii.	2008	Conference Paper						
Assessing Mobile Technologies in Child Protective Services: An Extended Pilot in New York City's Administration for Children's	2000	Contenence i aper						
Services								
http://www.ctg.albany.edu/publications/reports/assessing_mobile_2008	2008	CTG Project Report						
Using XML for Web Site Management: Lessons Learned Report		0.0						
http://www.ctg.albany.edu/publications/reports/xml lessons learned	2008	CTG Project Report						
Chen, H., Brandt, L., Gregg, V., Traunmueller, R., Dawes, S., Hovy, E., Macintosh, A., & Larson, C., eds. (2007). Digital								
Government: E-Government Research, Case Studies, and Implementation. Springer.	2007	Book						
Dawes, S.S. (2007). Putting the Results in Broader Perspective, in Wimmer, M. and Codanogne, C., eds. Roadmapping								
eGovernment Research: Visions and Measures towards Innovative Governments in 2020. eGovRTD2020, European Commission								
Project IST-2004-027139.	2007	Book Chapter						
Dawes, S.S. (2007). Introduction to Digital Government Research in Public Policy and Management, in Chen, H., et al (eds.) Digital								
Government: E-Government Research, Case Studies, and Implementation. Springer.	2007	Book Chapter						
Dawes, S.S. & Eglene, O. (2007). New Models of Collaboration for Delivering Government Services: A Dynamic Model Drawn from								
Multi-National Research, in Bhattacharya, M., (ed.), E-Collaboration: An Introduction. Hyderabad, India: Icfai University Press.	2007	Book Chapter						
Pardo, T., Gil-García, J.R., & and Burke, G.B. (2007). Sustainable Cross-Boundary Information Sharing. In Chen, H., Brandt, L.,								
Gregg, V., Traunmueller, R., Dawes, S., Hovy, E., Macintosh, A., & Larson, C., eds. Digital Government: E-Government Research,								
Case Studies, and Implementation. Springer.	2007	Book Chapter						
Gil-Garcia, J. R. & Dawes, S.S. (2007). The New York State Website: Accommodating Diversity through a Distributed Management								
Structure in Rocheleau, Bruce, ed. Case Studies on Digital Government. Idea Group.	2007	Book Chapter						
Pardo, Theresa, J. Ramon Gil-Garcia and G. Brian Burke. (2007). Informal Leadership and Networks: Lessons from the Response to								
the West Nile Virus Outbreak in North America. In Paul Cunningham and Miriam Cunningham (Eds). Expanding the Knowledge								
Economy: Issues, Applications, Case Studies. Amsterdam: IOS Press.	2007	Book Chapter						
Janssen, M., van der Duin, P., Wagenaar, R.W., Bicking, M., Wimmer, M., Dawes, S.S., & Petrauskas, R. (2007). Scenario building								
for E-Government in 2020: Consolidating the results from regional workshops. Paper presented at the 40 <sup>th</sup> Hawaii International	2007	Canfaran D						
Conference on System Sciences (HICSS), Hawaii.	2007	Conference Paper						
Gil-Garcia, J.R., Pardo, T. A., & Baker, A. (2007). Understanding Context through a Comprehensive Prototyping Experience: A								
Testbed Research Strategy for Emerging Technologies. Paper presented at the 40th Hawaiian International Conference on System								
Sciences (HICSS), Hawaii. http://www.ctg.albany.edu/publications/journals/hicss_2007_testbed	2007	Conference Paper						
http://www.ctg.aibany.edu/publications/journals/filess_2007_testbeg	2001	Contretence Faper						

Appendix D. CTG Scholarly Publications and Project Reports and Articles		
Publication Citation or CTG Project Report Title (URL Provided if Available)	Year Published	Publication Type
Luna-Reyes, L.F., Andersen, D.F., Richardson, G.P., Pardo, T.A., & Cresswell, A.M. (2007). Emergence of the Governance		71
Structure for Information Integration Across Governmental Agencies: A System Dynamics Approach. Paper presented at the 8th		
International Digital Government Research Conference (dg.o 2007), Philadelphia, PA.	2007	Conference Paper
Dawes, S. S. & Helbig, N. (2007). Building a Research-Practice Partnership: Lessons from a Government IT Workforce Study. Paper		
presented at the 40th Hawaiian International Conference on System Sciences (HICSS), Hawaii. (Best paper nominee for e-		
government track.)	2007	Conference Paper
Cresswell, A.M., Pardo, T.A., & Hassan, S. (2007). Assessing Capability for Justice Information Sharing. Paper presented at the 8th		
International Digital Government Research Conference (dg.o 2007), Philadelphia, PA.	2007	Conference Paper
Gil-Garcia, J.R. & Baker, A. (2007). Structuration Theory and the Use of XML for Web Site Content Management in Government:		
Comprehensive Prototyping as an Induced Change Episode. Paper presented at the DEXA EGOV Conference, Regenburg,		
Germany.	2007	Conference Paper
Gil-Garcia, J. Ramon, Theresa Pardo, and Brian Burke. (2007). Government Leadership in Multi-Sector IT-Enabled Networks:		
Lessons from the Response to the West Nile Virus Outbreak. Paper presented at "Leading the Future of the Public Sector"—The		
Third Transatlantic Dialogue, organized by the American Society for Public Administration and the European Group of Public	0007	Ozafanana Danan
Administration, Newark, Delaware.  Pardo, Theresa, J. Ramon Gil-Garcia and G. Brian Burke. (2007). Informal Leadership and Networks: Lessons from the Response to	2007	Conference Paper
the West Nile Virus Outbreak in North America. Paper presented at the eChallenges 2007 Conference, supported by the European Commission, The Hague, The Netherlands.	2007	Conference Paper
Theresa A. Pardo, J. Ramon Gil-Garcia, and G. Brian Burke. (2007). Leadership and Cross-Boundary Information Sharing: Insights	2007	Conference Paper
from the U.S. West Nile Virus Outbreak. Paper presented at 7th United Nations Global Forum on Reinventing Government, Vienna,		
Austria.	2007	Conference Paper
Pardo, Theresa, J. Ramon Gil-Garcia and Brian Burke. (2007). IT-Enabled Collaboration in Intergovernmental Settings: Lessons	2007	Conterence r aper
from the Response to the West Nile Virus Outbreak. Paper presented at the 68th ASPA National Conference, organized by the		
American Society for Public Administration, Washington, DC.	2007	Conference Paper
Cresswell, A.M., Pardo. T.A., Burke, G.B., & Dadayan, L. (2007). Advancing Return on Investment Analysis for Government	2001	
Information Technology. Poster presented at the 8th International Digital Government Research Conference (dg.o 2007),		
Philadelphia, PA.	2007	Conference Poster
Gil-Garcia, J.R., Helbig, N., Pardo, T.A., Luna Reyes, L.F., & Navarrete, C. (2007). Working Group on Comparative and		
Transnational Digital Government in North America. Poster presented at the 8th International Digital Government Research		
Conference (dg.o 2007), Philadelphia, PA.	2007	Conference Poster
Dawes, S.S. & Helbig, N. (2007). Building government IT workforce capacity: a competency framework. Poster presented at the 8 <sup>th</sup>		
International Digital Government Research Conference (dg.o 2007), Philadelphia, PA.	2007	Conference Poster
Gil-Garcia, J.R., Pardo, T.A., & Burke, G.B. (2007). Understanding Inter-Organizational Information Integration in Government: An		
Interdisciplinary Study of Politics, Technology, and Bureaucratic Decision-Making. Poster presented at the Annual Meeting of the		
American Political Science Association (APSA), Chicago, IL.	2007	Conference Poster
Assessing Mobile Technologies in Child Protective Services		
http://www.ctg.albany.edu/publications/reports/assessing_mobile	2007	CTG Project Report
Knowledge Sharing Innovations in the Natural Resources Community: A toolkit for community-based project teams		
http://www.ctg.albany.edu/publications/reports/knowledge_sharing	2007	CTG Project Report
Exploring Regional Telecommunications Incident Response Coordination		070 5 4 4 5
http://www.ctg.albany.edu/publications/reports/exploring_regional	2007	CTG Project Report
Pardo, T.A. & Tayi, G.K. (2007). Interorganizational information integration: A key enabler		
for digital government. Government Information Quarterly 24 (2007) 691–715.	2007	Journal Article
Gil-Garcia, J.R., Costello, J., Pardo, T.A., and Werthmuller, D. (2007). Invigorating website management through XML: an e-		
government case from New York State. International Journal of Electronic Governance 1(1), 52-78.	2007	Journal Article

Appendix D. CTG Scholarly Publications and Project Reports and Articles		
Dublication Citation or CTC Project Depart Title (UDI Provided if Available)	Year	Dublication Type
Publication Citation or CTG Project Report Title (URL Provided if Available)	Published	Publication Type
Harrison, T., Gil-García, J. R., Pardo, T. A.,& Thompson, F. (2007). Geographic Information Technologies, Structuration Theory, and	0007	11 A
the World Trade Center Attack. Journal of the American Society for Information Science and Technology 58(14), 2240-2254.	2007	Journal Article
Eglene, O., Dawes, S.S., & Schneider, C.A. (2007). Authority and Leadership Patterns in Public Sector Knowledge Networks. <i>The</i>		
American Review of Public Administration 37(1) March 2007, 91-113.	0007	11 A
http://www.ctg.albany.edu/publications/journals/authority	2007	Journal Article
Dawes, Sharon S. (2007). Breaching the Wall. <i>Public CIO</i> .	2007	Magazine Article
http://www.govtech.com/pcio/103763?id=103763&story_pg=2		
Gil-Garcia, J.R. & Helbig, N. (2006). Exploring e-government benefits and success factors. In Ari-Veikko Anttiroiko and Matti Malkia	0000	D 1 01 1
(Eds), Encyclopedia of Digital Government, Hershey, PA: Idea Group Inc.	2006	Book Chapter
Dawes, S.S. & Cook, M.E. (2006). Intergovernmental Digital Government: Principles and Strategies for G2G Relationships and	0000	D I - Ol t
Applications. In Ari-Veikko Anttiroiko and Matti Malkia (Eds), <i>Encyclopedia of Digital Government</i> , Hershey, PA: Idea Group Inc.	2006	Book Chapter
Gil-Garcia, J.R. & Luna-Reyes, L. (2006). Integrating conceptual approaches to e-government. In Mehdi Khosrow-Pour (Ed),	0000	Darah Ol
Encyclopedia of E-Commerce, E-Government and Mobile Commerce, Hershey, PA: Idea Group Inc.	2006	Book Chapter
Cresswell, A. M., Pardo, T. A., Thompson, F., & Zhang, J. 2006. Trust and Collaboration: Knowledge Sharing in Public IT		
Innovations. In R. Traunmuller (Ed.), Knowledge Transfer for eGovernment: Seeking Better Government Solutions. Linz, Austria:	0000	D 1 01 1
Trauner Verlag.	2006	Book Chapter
Gil-Garcia, J.R., Canestraro, D., Costello, J., Baker, A., & Werthmuller, D. (2006). Fostering innovation in electronic government:		
Benefits and challenges of XML for Web site management. Paper presented at the 67th ASPA National Conference, organized by	0000	0 ( 0
the American Society for Public Administration, Denver, CO.	2006	Conference Paper
Gil-Garcia, J.R., Canestraro, D., Costello, J., Baker, A., & Werthmuller, D. (2006). Structuration Theory and the Use of XML for Web		
Site Content Management in Government: Comprehensive Prototyping as an Induced Change Episode. ASIS&T 2006 annual	0000	o , b
meeting.	2006	Conference Paper
Harrison, T.M., Gil-Garcia, J.R., Pardo, T.A., & Thompson, F. (2006). Learning about interoperability for emergency response:		
Geographic information technologies and the World Trade Center crisis. Paper presented at the 39 <sup>th</sup> Hawaii International		
Conference on System Sciences (HICSS), Hawaii.	0000	0 ( 5
http://www.ctg.albany.edu/publications/journals/hicss_2006_wtc	2006	Conference Paper
Dadayan, L. (2006). Measuring return on government IT investments. Proceedings of the 13th European Conference on Information		
Technology Evaluation - 2006, pp. 175-185, UK: Academic Conferences Limited Reading.	0000	0 ( 0
http://www.ctg.albany.edu/publications/journals/ecite_2006_roi	2006	Conference Paper
Carratta, T., Dadayan, L., & Ferro, E. (2006). ROI analysis in e-government assessment trials: The case of Sistema Piemonte.		
Electronic Government, 5th International Conference, EGOV 2006. Proceedings. Lecture Notes in Computer Science, Volume	0000	0 ( 0
4084/2006, pp. 329-340, Berlin/Heidelberg: Springer.	2006	Conference Paper
Dawes, S. S., Helbig, N. & Cook, M. (2006). Challenges of Treating Information as a Public Resource: The Case of Parcel Data.		
Paper presented at the 39 <sup>th</sup> Hawaii International Conference on System Sciences (HICSS), Hawaii. (Best paper nominee for e-		
government track.)	0000	0 ( 0
http://www.ctg.albany.edu/publications/journals/hicss_2006_parcel	2006	Conference Paper
Ferro, E. & Dadayan, L. (2006). Can government be a good eBayer? The use of online auctions in the sale of surplus property.		
Paper presented at the 39 <sup>th</sup> Hawaii International Conference on System Sciences (HICSS), Hawaii.	0000	0
http://www.ctg.albany.edu/publications/journals/hicss_2006_ebay	2006	Conference Paper
Fountain, J.E. & Gil-Garcia, J.R. (2006). Comparing integrative models of technology and structure in government. Paper presented	0000	0
at the 2006 APPAM Fall Conference, Madison, WI.	2006	Conference Paper
Gil-Garcia, J.R. (2006). Enacting state websites: A mixed method study exploring e-government success in multi-organizational		
settings. Paper presented at the 39 <sup>th</sup> Hawaii International Conference on System Sciences (HICSS), Hawaii.	0000	o ,
http://www.ctg.albany.edu/publications/journals/hicss_2006_enacting	2006	Conference Paper

Appendix D. CTG Scholarly Publications and Project Reports and Articles Year		
Publication Citation or CTG Project Report Title (URL Provided if Available)	Published	Publication Type
Dawes, S.S. & Pardo, T.A. (2005). Maximizing knowledge for program evaluation: Critical issues and practical challenges of ICT	rubiisiieu	Publication Type
strategies. In Maria Wimmer et.al, eds., Lecture Notes in Computer Science, Volume 4084/2006: pp. 58-69, Berlin/Heidelberg:		
Springer.	2006	Conference Paper
Gil-Garcia, J.R. & Pardo, T.A. (2006). Multi-method approaches to digital government research: Value lessons and implementation	2000	Comoronico i apoi
challenges. Paper presented at the 39 <sup>th</sup> Hawaii International Conference on System Sciences (HICSS), Hawaii.		
http://www.ctg.albany.edu/publications/journals/hicss_2006_multi-method	2006	Conference Paper
Pardo, T.A., Gil-Garcia, J.R., & Burke, G.B. (2006). Building response capacity through cross-boundary information sharing: The		
critical role of trust. Paper presented at the eChallenges 2006 Conference, supported by the European Commission, Barcelona,		
Spain.	2006	Conference Paper
Kwon, H., Pardo, T.A., & Burke, G.B. (2006). Building a state government digital preservation community: Lessons on		
interorganizational collaboration. Paper presented at the 7th International Conference on Digital Government Research (dg.o 2006),		
San Diego, CA.	0000	0 ( 0
http://www.ctg.albany.edu/publications/journals/dgo_2006_digital_preservation	2006	Conference Paper
Zhang, J., Faerman, S.R., & Cresswell, A.M. (2006). <i>The effect of organizational/technological factors and the nature of knowledge on knowledge sharing</i> . Paper presented at the 39 <sup>th</sup> Hawaii International Conference on System Sciences (HICSS), Hawaii.		
http://www.ctg.albany.edu/publications/journals/hicss_2006_knowledge	2006	Conference Paper
Cresswell, A.M., Pardo, T.A., & Canestraro, D. (2006). Digital capability assessment for e-government: A multi-dimensional	2000	Contelence Paper
approach. Electronic Government, 5th International Conference, EGOV 2006, Proceedings, Lecture Notes in Computer Science,		
Volume 4084/2006, pp. 293-304, Berlin/Heidelberg: Springer.	2006	Conference Paper
Gil-Garcia, J.R., Canestraro, D., Baker, A. & Werthmuller, D. (2006). <i>Using XML for Web Site Content Management in Government</i>	2000	
Agencies. Poster presented at the 7th International Digital Government Research Conference, (dg.o 2006), San Diego, CA.	2006	Conference Poster
Baker, A., Gil-Garcia, J.R., Canestraro, D., Werthmuller, D., & Costello, J. Structuration Theory and the Use of XML for Web Site		
Content Management in Government: Comprehensive Prototyping as an Induced Change Episode. Poster presented at the Annual		
ASIST Conference, Austin, TX.	2006	Conference Poster
A Performance Measurement Framework for Balancing Growth and Public Safety: Town of Bethlehem	2006	CTG Project Report
Building a Collaborative Framework for Enterprise Content Management at the United Nations	2006	CTG Project Report
Setting the Stage for an Electronic Health Record: A Business Analysis for the New York State Department of Correctional Services	2006	CTG Project Report
State Government Digital Preservation Profiles		
http://www.ctg.albany.edu/publications/reports/digital_preservation_profiles	2006	CTG Project Report
Preserving State Government Digital Information: A Baseline Report		0-0-1
http://www.ctg.albany.edu/publications/reports/digital_preservation_baseline	2006	CTG Project Report
New York State Information Technology Workforce Skills Assessment Statewide Survey Results	0000	OTO Desired Descent
http://www.ctg.albany.edu/publications/reports/nysit_statewidesurvey	2006	CTG Project Report
The Washington State Digital Archives (Case Study) http://www.ctg.albany.edu/publications/reports/proi_case_washington	2006	CTC Project Panert
<u>nttp://www.ctg.albany.edu/publications/reports/proi_case_wasnington</u> Service New Brunswick (Case Study)	2006	CTG Project Report
http://www.ctg.albany.edu/publications/reports/proi_case_service	2006	CTG Project Report
The Government of Israel's Merkava Project (Case Study)	2000	CTG FTOJECT REPORT
http://www.ctg.albany.edu/publications/reports/proi_case_merkava	2006	CTG Project Report
The Commonwealth of Pennsylvania's Integrated Enterprise System (Case Study)	2000	3.3 majour report
http://www.ctg.albany.edu/publications/reports/proi_case_integrated	2006	CTG Project Report
The Austrian Federal Budgeting and Bookkeeping System (Case Study)		3.25,000 100010
http://www.ctg.albany.edu/publications/reports/proi_case_austrian	2006	CTG Project Report
Advancing Return on Investment Analysis for Government IT: A Public Value Framework		1
http://www.ctg.albany.edu/publications/reports/advancing_roi	2006	CTG Project Report

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Publication Citation or CTG Project Report Title (URL Provided if Available)	Published	Publication Type
Using XML for Web Site Management: Getting Started Guide		7.
http://www.ctg.albany.edu/publications/guides/xml_getting_started	2006	CTG Project Report
Using XML for Web Site Management: An Executive Briefing on streamlining workflow, reducing costs, and enhancing		
organizational value		
http://www.ctg.albany.edu/publications/reports/xml_exec_brief	2006	CTG Project Report
The XML Toolkit		0T0 D : 1 D
http://www.thexmltoolkit.org/	2006	CTG Project Report
Pardo, T. A., Cresswell, A.M., Thompson, F., & Zhang, J. (2006). Knowledge sharing in cross-boundary information system	0000	1 1 1 4 4 1
development in the public sector, Information Technology and Management 7(4): 293-313.	2006	Journal Article
Zhang, J. & Dawes, S.S. (2006). Expectations and perceptions of benefits, barriers, and success in public sector knowledge	2006	lournal Articla
networks, <i>Public Performance and Management Review</i> , 29(4):433-466.  Cooren, F., Thompson, F., Canestraro, D., & Bodor, T. (2006). From agency to structure: Analysis of an episode in a facilitation	2006	Journal Article
process. Human Relations, 59(4): 533-565.		
http://www.ctg.albany.edu/publications/journals/from_agency	2006	Journal Article
Pardo, T. A., Cresswell, A. M., Zhang, J., & Thompson, F. (2006). The Role of Knowledge Sharing in Cross-Boundary Information	2000	Journal Article
Sharing. Journal of Special Topics in Information Technology and Management 7:4 (Special Issue on Information Sharing Across		
Multiple Organizations) 293-313.	2006	Journal Article
Eglene, O. & Dawes, S.S. (2006). Challenges and Strategies for Conducting International Public Management Research,		
Administration and Society, 1 (38): pp. 596 - 622.	2006	Journal Article
Luna-Reyes, L.F., Martinez-Moyano, I.J., Pardo, T.A., Cresswell, A.M., Andersen, D.F., & Richardson, G.P. (2006). Anatomy of a		
Group Model-Building Intervention: Building Dynamic Theory from Case Study Research. System Dynamics Review, 22(4).	2006	Journal Article
Pardo, T.A. & Burke, G.B. (2006). Partnering for Preservation: Preserving the Public Record through Enterprise Partnerships. <i>Public</i>		
CIO.		
http://www.govtech.com/pcio/99093	2006	Magazine Article
Zhang, J., Pardo, T. A., & Sarkis, J. (2005). MACROS: A Case Study of Knowledge Sharing System Development Within New York		
State Government Agencies. In M. Khosrow-Pour (Ed.), Annals of Cases on Information Technology, Vol 7. Hershey, PA: Idea		
Publishing Group.	2005	Book Chapter
Janssen, M. & Cresswell, A.M. (2005). Enterprise architecture integration in e-government. Paper presented at the 38th Hawaiian	0005	0 / 0
International Conference on System Sciences (HICSS), Hawaii.	2005	Conference Paper
Janssen, M. & Cresswell, A.M. (2005). Paper presented at the 38th Hawaiian International Conference on System Sciences	0005	O
(HICSS), Hawaii. Pardo, T.A., & Gil-García, J.R. (2005). Understanding the complexity of e-government: Multi-method approaches to social	2005	Conference Paper
phenomena. Paper presented at the American Society for Public Administration Conference, Milwaukee, WI.	2005	Conference Paper
Dawes, S.S., Cresswell, A.M., Pardo, T.A., & Thompson, F. (2005). <i>Modeling the social and technical processes of</i>	2005	Conterence Paper
interorganizational information integration. Paper presented at the 6th National Digital Government Research Conference (dg.o		
2005), Atlanta, GA.	2005	Conference Paper
Gil-García, J.R., Schneider, C., Pardo, T., & Cresswell, A.M. (2005). Interorganizational information integration in the criminal justice	2003	Contended aper
community: Preliminary lessons from state and county initiatives. Paper presented at the 38th Hawaiian International Conference on		
System Sciences (HICSS), Hawaii.	2005	Conference Paper
Janssen, M., Luna Reyes, L., & Cresswell, A.M. (2005). <i>Modeling methods for information integration: Comparative cases in</i>		222.2
eGovernment. In P. Cunningham & M. Cunningham (Eds.), Innovation and the Knowledge Economy: Issues, Applications, Case		
Studies. Amsterdam: IOS Press.	2005	Conference Paper
LeFurgy, W., Pardo, T., Hedstrom, M., & Walters, Tyler O. (2005). Preserving information long-term: Digital archiving. Paper		•
presented at the 6 <sup>th</sup> National Digital Government Research Conference (dg.o 2005), Atlanta, GA.	2005	Conference Paper

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Publication Citation or CTG Project Report Title (URL Provided if Available)	Year Published	Publication Type
Cresswell, A.M., Canestraro, D., & Pardo, T.A. (November, 2005). A multi-dimensional approach to digital government capability		
assessment. Paper presented at the Association for Public Policy Analysis and Management (APPAM) Conference, Washington,		
DC.	2005	Conference Paper
Pardo, T. A. & Gil-García, J. R. (2005). Understanding the Complexity of E-Government: Multi-method Approaches to Social	200=	
Phenomena. Paper presented at the American Society for Public Administration Conference, Milwaukee, WI.	2005	Conference Paper
Pardo, T. & Gil-Garcia, J.R. (2005). Understanding Context through a Comprehensive Prototyping Experience: A Testbed Research	0005	O
Strategy for Emerging Technologies. Paper presented Pre-ICIS Workshop, Las Vegas, NV.	2005	Conference Paper
Gil-García, J. R., Harrison, T., Pardo, T., & Thompson, F. (2005). The Structuring of GIS Technologies: The World Trade Center	2005	Canfarana Bastar
Crisis as a Change Episode. Poster presented at the GIS and World Town Planning Day Conference, University at Albany.  Dawes, S.S., Cresswell, A. M., Pardo, T. A., & Thompson, F. (2005). Modeling the Social and Technical Processes of	2005	Conference Poster
Interorganizational Information Integration. Poster presented at the 6th National Digital Government Research Conference (dg.o		
2005). Atlanta. GA.	2005	Conference Poster
Why Assess Information Sharing Capability?	2003	Contended Foster
http://www.ctg.albany.edu/publications/guides/why_assess	2005	CTG Project Report
Sharing Justice Information: A Capability Assessment Toolkit	2003	CTGT Toject Neport
http://www.ctg.albany.edu/publications/guides/sharing_justice_info	2005	CTG Project Report
Building State Government Digital Preservation Partnerships: A Capability Assessment and Planning Toolkit, Version 1.0	2003	CTOTTOJECT REPORT
http://www.ctg.albany.edu/publications/guides/digital_preservation_partnerships	2005	CTG Project Report
Constructing the New York State-Local Internet Gateway Prototype: A Technical View	2003	CTOTTOJECT REPORT
http://www.ctg.albany.edu/publications/reports/state_local_gateway_techreport	2005	CTG Project Report
Use of Parcel Data in New York State: A Reconnaissance Study	2000	O TO T TOJECT REPORT
http://www.ctg.albany.edu/publications/reports/use_of_parcel_data	2005	CTG Project Report
Gil-García, J.R. & Pardo, T.A. (2005). E-government success factors: Mapping practical tools to		C.C. reject report
theoretical foundations. <i>Government Information Quarterly</i> , 22, 4, 187-216.	2005	Journal Article
Janssen, M. & Cresswell, A.M. (2005). An enterprise application integration methodology for		
e-government. Journal of Enterprise Information Management, vol. 18, pp. 531-547.	2005	Journal Article
Luna-Reyes, L.F., Zhang, J., Gil-García, J.R., & Cresswell, A.M. (2005). Information systems development as emergent socio-		
technical change: A practice approach. European Journal of Information Systems, 14, 1, 93-105.	2005	Journal Article
Zhang, J., Dawes, S.S., & Sarkis, J. (2005). Exploring Stakeholders' expectations of the benefits and barriers of e-government		
knowledge sharing, Journal of Enterprise Information Management 18 (5), 548-567.	2005	Journal Article
Zhang, J., Pardo, T.A., & Sarkis, J. (2005). MACROS: A case study of knowledge sharing system development within New York		
State government agencies. Journal of Cases on Information Technology, 7, 4, 106–127.	2005	Journal Article
Cushing, J., & Pardo, T.A. (2005). Research in the Digital Government Realm. IEEE Computer, Special Issue on Digital		
Government, December 2005, 26-35.	2005	Journal Article
Pardo, T.A. & Burke, G.B. (2005). Solving the Integration Puzzle. <i>Public CIO</i> .		
http://www.govtech.com/pcio/93830	2005	Magazine Article
Creating Growth Capacity: A New Information Management Framework	2005	CTG Project Report
Pardo, T.A. (2004). Building a Business Case for E-Government. In P.D. Fletcher (Ed.), Egovernment Transformation Best		<u> </u>
Practices. Macromedia.	2004	Book Chapter
Zhang, J., Cresswell, A. M., & Thompson, F. (2004). Participants' expectations and the success of knowledge networking in the		<u> </u>
public sector. In W. Huang, K. Siau & K. K. Wei (Eds.), Electronic Government Strategies and Implementations. Hershey PA: Idea		
Publishing Group.	2004	Book Chapter
Costello, J., Adhya, S., Gil-Garcia, J.R., Pardo, T.A. & Werthmuller, D. (2004). Beyond Data Exchange: XML as a Website Workflow		
and Content Management Technology. Research in progress paper presented at the Annual Meeting of the Academy of		
Management, New Orleans.	2004	Conference Paper

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Publication Citation or CTG Project Report Title (URL Provided if Available)	Year Published	Publication Type
Gil-García, J. R., Harrison, T., Juraga, D., Pardo, T., & Thompson, F. (2004). The structuring of GIS technologies: The World Trade		7.
Center crisis as a change episode. Proceedings of the American Society for Information Science & Technology. Medford NJ:		
Information Today.	2004	Conference Paper
Cresswell, A.M. & Dawes, S.S. (2004). The information dimension of education financing decisions: Data needs, users, strategies,		
and systems. Proceedings from the Symposium on Education Finance and Organizational Structure in NYS Schools. Albany NY:	0004	O
Center for Policy Research, University at Albany.  Ho, J. & Pardo, T.A. (2004). Toward the success of egovernment initiatives: Mapping known success factors to the design of	2004	Conference Paper
practical tools. Paper presented at the 37th Hawaiian International Conference on System Sciences (HICSS), Hawaii.	2004	Conference Paper
Dawes, S.S. & Eglene, O. (2004). New models of collaboration for delivering government services: A dynamic model drawn from	2004	Contenence Paper
multi-national research. Paper presented at the 5 <sup>th</sup> National Digital Government Research Conference (dg.o 2004), Seattle, WA.	2004	Conference Paper
Luna-Reyes, L. F., Mojtahedzadeh, M., Andersen, D.F., Richardson, G.P., Pardo, T.A., Burke, B., Wu, Y., Cresswell, A.M., Bodor,	2004	Contended aper
T., Canestraro, D., Dawes, S., Demircivi, F., Schneider, C., & Thompson, F. (2004). <i>Emergence of the governance structure for</i>		
information integration across governmental agencies: A system dynamics approach. Proceedings of the 22nd International System		
Dynamics Conference, Oxford, England. Albany NY: System Dynamics Society.	2004	Conference Paper
Luna-Reyes, L. F., Mojtahedzadeh, M., Andersen, D.F., Richardson, G.P., Bodor, T., Burke, B., Canestraro, D., Cresswell, A.M.,		
Dawes, S., Demircivi, F., Pardo, T.A., Schneider, C., Thompson, F., & Wu, Y. (2004). Scripts for interrupted group model building:		
Modeling the emergence of governance structure for information integration across governmental agencies. Proceedings of the 22nd		
International System Dynamics Conference, Oxford, England. Albany NY: System Dynamics Society.	2004	Conference Paper
Pardo, T. A., Cresswell, A. M., Dawes, S. S. & Burke, G. B. (2004). Modeling the social & technical processes of interorganizational		•
information integration. Paper presented at the 37th Hawaiian International Conference on System Sciences (HICSS), Hawaii.	2004	Conference Paper
Cooren, F., Thompson, F., Canestraro, D.S. & Bodor, T. (2004). The World as a Plenum of Dancing Agencies: Analysis of an		
Episode in a Facilitation Process. National Communications Associations 2004 Conference.	2004	Conference Paper
Luna-Reyes, L. F., Cresswell, A. M., & Richardson, G. (2004). Knowledge and the development of interpersonal trust: A dynamic		
model. Paper presented at the 37th Hawaiian International Conference on System Sciences (HICSS), Hawaii.	2004	Conference Paper
Dawes, S. S., & Pardo, T. (2004). Critical Issues and Practical Challenges in Building and Sustaining Information Technology Tools		
for Policy Analysis and Program Evaluation. Paper presented at the Annual Meeting of the Association for Public Policy Analysis	0004	0 ( 0
and Management, Atlanta.	2004	Conference Paper
Bodor, T., Thompson, F., & Demirçivi, F. (2004). Criminal Justice Cultures in the United States: A Context for Understanding		
Aspects of Organizational Change. Paper presented to the Biannual Conference of the Hungarian Psychological Association,	2004	Conforman Danor
Debrecen, Hungary.  Cresswell, A.M., Canestraro, D.S., Gil-García, J.R., Pardo, T.A., & Schneider, C. (2004). Interorganizational Information Integration:	2004	Conference Paper
Lessons from the Field. Paper presented at the 65th American Society for Public Administration Annual Conference, Portland, OR.	2004	Conference Paper
Canestraro, D.S., Thompson, F., & Bodor, T. (2004). From Turf to Trust: Learning to Collaborate across Government Agencies.	2004	Contenence i aper
Paper presented at the 16th Annual Conference on Ethnographic and Qualitative Research in Education, Albany.	2004	Conference Paper
Gil-García, J. R., Harrison, T., Juraga, D., Pardo, T., & Thompson, F. (2004). <i>The Structuring of GIS Technologies: The World Trade</i>	2004	Conference i aper
Center Crisis as a Change Episode. Poster presented at the Annual Meeting of the American Society for Information Science &		
Technology. Providence RI.	2004	Conference Poster
Dawes, S.S., Cresswell, A.M., Pardo, T.A., & Thompson, F. (2004). Modeling the social and technical processes of		322.2
interorganizational information integration. Poster presented at the 5 <sup>th</sup> National Conference on Digital Government Research (dg.o		
2004), Seattle, WA.	2004	Conference Poster
Dawes, S.S., Gil-García, J. R., & Helbig, N. Exploring the Feasibility of a Digital Government Journal. Poster presented at the 5 <sup>th</sup>		
National Conference on Digital Government Research (dg.o 2004), Seattle, WA.	2004	Conference Poster
Effective Strategies in Justice Information Integration: A Brief Current Practices Review		
http://www.ctg.albany.edu/publications/reports/effective_strategies	2004	CTG Project Report

	Year	
Publication Citation or CTG Project Report Title (URL Provided if Available)	Published	Publication Type
Return on Investment In Information Technology: A Guide for Managers		0-0-
http://www.ctg.albany.edu/publications/guides/roi	2004	CTG Project Report
Making Smart IT Choices: Understanding Value and Risk in Government IT Investments	0004	0T0 D : D
http://www.ctg.albany.edu/publications/guides/smartit2	2004	CTG Project Report
Exemplary Practices in Electronic Records and Information Access Programs	2004	0T0 D : D
http://www.ctg.albany.edu/publications/reports/exemplary_practices	2004	CTG Project Report
Highlights: Exploring the Feasibility of A Digital Government Journal	0004	OTO Desired Desired
http://www.ctg.albany.edu/publications/reports/digital_journal	2004	CTG Project Report
The New York State-Local Internet Gateway Prototype Project: Current Practice Research	0004	OTO Desired Desired
http://www.ctg.albany.edu/publications/reports/current_practice	2004	CTG Project Report
New York State-Local Internet Gateway Prototype Demonstration http://www.ctg.albany.edu/publications/reports/state_local_gateway_demo	2004	CTC Drainet Depart
Bridging the Enterprise: Lessons from the New York State-Local Internet Gateway Prototype	2004	CTG Project Report
http://www.ctg.albany.edu/publications/reports/bridging_the_enterprise	2004	CTG Project Report
New Models of Collaboration: An Overview	2004	CTG Project Report
http://www.ctg.albany.edu/publications/reports/new_models_exec	2004	CTG Project Report
New Models of Collaboration for Delivering Government Services: A Guide for Managers	2004	CTG FTOJECT REPORT
http://www.ctg.albany.edu/publications/online/new_models/	2004	CTG Project Report
Learning from Crisis: Lessons from the World Trade Center Response. A Research Symposium Panel Transcript Summary	2004	CTG FTOJECT REPORT
http://www.ctg.albany.edu/publications/reports/wtc_symposium	2004	CTG Project Report
Information, Technology, and Coordination: Lessons from the World Trade Center Response	2004	CTG PTOJECT Nepolt
http://www.ctg.albany.edu/publications/reports/wtc_lessons	2004	CTG Project Report
Dawes, S.S., Cresswell, A. M., & Cahan, B.B. (2004) Learning from crisis: Lessons in human and information infrastructure from the	2004	O TO T TOJCCE TROPORE
World Trade Center response. Social Science Computer Review, 22, 1, 52-66.	2004	Journal Article
Dawes, S. S. (2004). Training the IT-savvy public manager: Priorities and strategies for public management education. <i>Journal of</i>	2001	Godinar / India
Public Affairs Education, 10, 1, 5-17.	2004	Journal Article
Dawes, S. S., Gregg, V., & Agouris, P. (2004). Digital government research: Investigations at the crossroads of social and		Courties 7 is tioned
information science. Social Science Computer Review, 22, 1, 5-10.	2004	Journal Article
Dawes, S.S., Pardo, T.A., & Cresswell, A. M. (2004). Designing electronic government information access programs: A holistic		
approach. Government Information Quarterly, 21, 1, 3-23.	2004	Journal Article
O'Connell, P.J. & Pardo, T.A. (2004). Cautious Optimism: Reflections Upon Compstat's True Ability to Transform Law Enforcement		
Organizations. Law Enforcement Executive Forum, 4(2).	2004	Journal Article
Dawes, S.S., Cahan, B. B., & Cresswell, A.M. (2003). Turning to digital government in a crisis. dg.o 2003 Proceedings. Washington		
DC: National Science Foundation.	2003	Conference Paper
Dawes, S.S. (2003). Digital Government and Crisis: Lessons from the World Trade Center Attack. Paper presented at the American		•
Political Science Association Conference, Philadelphia, PA.	2003	Conference Paper
Eglene, O. & Dawes, S.S. (2003). Challenges and strategies for conducting international public management research. Paper		
presented at the 4 <sup>th</sup> National Digital Government Research Conference (dg.o 2003), Boston, MA.	2003	Conference Paper
Luna-Reyes, L.F. & Gil-García, J.R. (2003). <i>E-government and internet security: Some technical and policy considerations</i> . Paper		•
presented at the 4 <sup>th</sup> National Digital Government Research Conference (dg.o 2003), Boston, MA.	2003	Conference Paper
Dawes, S.S., Eglene, O., & Prefontaine, L. (2003). New models of collaboration for the delivering of government services:		•
Preliminary results of a multinational investigation. Paper presented at the American Political Science Association Conference,		
Philadelphia, PA.	2003	Conference Paper
Dawes, S.S. (2003). The Power of Partnerships: New Models of Collaboration. Paper presented at the American Society for Public		•
Administration Annual Conference, Washington, DC.	2003	Conference Paper

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	Year	
Publication Citation or CTG Project Report Title (URL Provided if Available)	Published	Publication Type
Eglene, O., Dawes, S. S., & Schneider, C. (2003). Authority and leadership in public sector knowledge networks. Paper presented at		
the American Political Science Association Conference, Philadelphia, PA.	2003	Conference Paper
Dawes, S.S. (2003). Case study: Knowledge networking in the public sector. Paper presented at the 4 <sup>th</sup> National Digital Government		
Research Conference (dg.o 2003), Boston, MA.	2003	Conference Paper
Dawes, S.S., Pardo, T.A., & Cresswell, A.M. (2003). Designing government information access programs: A holistic approach. Paper		
presented at the 36th Hawaiian International Conference on System Sciences (HICSS), Hawaii.	2003	Conference Paper
Black, L, Cresswell, A.M., Pardo, T.A., Thompson, F., Canestraro, D.S., Cook, M., Luna, L.F., Martinez, I.J., Andersen, D., &		
Richardson, G. (2003). A dynamic theory of collaboration: A structural approach to facilitating intergovernmental use of information		
technology. Paper presented at the 36th Hawaiian International Conference on System Sciences (HICSS), Hawaii.	2003	Conference Paper
Pardo, T.A., Dawes, S.S., Cresswell, A.M., Thompson, F., & Tayi, G.K. (2003). Finding our future: A research agenda for the		
research enterprise. Paper presented at the 4 <sup>th</sup> National Digital Government Research Conference (dg.o 2003), Boston, MA.	2003	Conference Paper
Dawes, S.S. (2003). Preparing for E-engagement. Paper presented at the American Society for Public Administration Annual		
Conference, Washington.	2003	Conference Paper
Opening Gateways: Online Workbench	0000	070 5 5
http://www.ctg.albany.edu/publications/online/gateways/portal	2003	CTG Project Report
Dawes, S. S. & Prefontaine, L. (2003). Understanding new models of collaboration for delivering government services.		
Communications of the ACM, 46, 1, 40-42	0000	
http://www.ctg.albany.edu/publications/journals/understanding	2003	Journal Article
Dawes, S. S., & Pardo, T. A. (2002). Building collaborative digital government systems: Systemic constraints and effective practices.		
In W. McIver and A. K. Elmagarmid (Eds.), Advances in Digital Government: Technology, Human Factors, and Policy (pp. 259-273).	0000	Daala Obaataa
New York: Kluwer.	2002	Book Chapter
Dawes, S. S., Bloniarz, P.A., Kelly, K. L., & Fletcher, P.D. (2002). Some assembly required: Building a digital government for the 21st century. Paper presented at the 3 <sup>rd</sup> National Digital Government Research Conference (dg.o 2002), Los Angeles, CA.	2002	Cantarana Danar
Cresswell, A., Black, L. Canestraro, D., Cook, M., Pardo, T., Thompson, F., Luna, L., Martinez, I. Andersen, D. and Richardson, G.	2002	Conference Paper
(2002). Evolution of a dynamic theory of collaboration: Modeling intergovernmental use of information technology. Proceedings of	2002	Conference Paper
the System Dynamics Research Conference, Palermo, Italy. Albany NY: System Dynamics Society.  Cresswell, A.M., Pardo, T.A., Thompson, F., Canestraro, D., Cook, M., Black, L., Luna, L.F., Martinez, I.J., Andersen, D. &	2002	Conference Paper
Richardson, G. (2002). <i>Modeling intergovernmental collaboration: A system dynamics approach</i> . Paper presented at the 35th		
Hawaiian International Conference on System Sciences (HICSS), Hawaii.	2002	Conference Paper
Dawes, S.S. (2002). <i>Engaging government in DG research</i> . Paper presented at the 3 <sup>rd</sup> National Digital Government Research	2002	Conterence Paper
Conference (dg.o 2002), Los Angeles, CA.	2002	Conference Paper
Pardo, T.A. & Scholl, H.J. (2002). Walking atop the cliffs: Avoiding failure and reducing risk in large-scale e-government projects.	2002	Contended Faper
Paper presented at the 35th Hawaiian International Conference on System Sciences (HICSS), Hawaii.	2002	Conference Paper
Zhang, J., Cresswell, A.M., & Thompson, F. (2002). <i>Participants' expectations and the success of knowledge networking in the</i>	2002	Contenence r aper
public sector. Proceedings of the 8th Americas Conference on Information Systems, Dallas TX: AMCIS 2002.	2002	Conference Paper
Cresswell, A.M., Pardo, T.A., Thompson, F., & Zhang, J. (2002). <i>Trust and networking: Knowledge sharing in the public sector.</i>	2002	Contenence r aper
Paper presented at the annual Academy of Management Conference, Denver.	2002	Conference Paper
The Future of E-Government	2002	Contenence r aper
http://www.ctg.albany.edu/publications/reports/future_of_egov	2002	CTG Project Report
Creating and Maintaining Proper Systems for Electronic Record Keeping	2002	C TO T TO COLL TROPORT
http://www.ctg.albany.edu/publications/reports/proper_systems	2002	CTG Project Report
Untangle the Web: Delivering Municipal Services Through the Internet	2002	313 i iojout Ropolt
http://www.ctg.albany.edu/publications/guides/untangle_the_web	2002	CTG Project Report
Information Access in an Electronic World: A policy panel summary transcript	2002	S. S. rojour report
http://www.ctg.albany.edu/publications/reports/info_access	2002	CTG Project Report
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e-Gov FirstStop		070 5 1 . 5
http://www.ctg.albany.edu/publications/online/egovfirststop?sub=online	2002	CTG Project Report
XML: A New Web Site Architecture	2000	OTO D : ( D )
http://www.ctg.albany.edu/publications/reports/xml	2002	CTG Project Report
Making a Case for Local E-Government http://www.ctg.albany.edu/publications/guides/making_a_case	2002	CTG Project Report
Finding Our Future: A Research Agenda for the Research Enterprise		0.0
http://www.ctg.albany.edu/publications/reports/finding_our_future	2002	CTG Project Report
Opening Gateways: A Practical Guide for Designing Electronic Records Access Programs		•
http://www.ctg.albany.edu/publications/guides/gateways	2002	CTG Project Report
Pardo, T.A. & Canestraro, D.S. (2002). The Challenge of Integrating Data for E-Government. Global ICT Agenda 2002, 1, 40-41.		
London: Quasar International Communications.	2002	Journal Article
LaVigne, M. (2002). Electronic Government: A Vision of the Future that is Already Here, Syracuse Law Review, Volume 52, Number		
4, 2002, 1243-1251. http://www.ctg.albany.edu/publications/journals/electronic_government	2002	Journal Article
Dawes, S.S., Bloniarz, P.A., & Kelly, K.L. (2001). Some assembly required: Building a digital government for the 21st century. Paper	2002	Journal Afficie
presented at the 2 <sup>nd</sup> National Digital Government Research Conference (dg.o 2001), Los Angeles, CA.	2001	Conference Paper
Pardo, T. A., Cresswell, A. M., Zhang, J., & Thompson, F. (2001). Interorganizational knowledge sharing in public sector innovations.	2001	Outricition raper
Best Paper Proceedings of the Academy of Management Conference. Briarcliff Manor NY: Academy of Management/Pace		
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Cresswell, A.M., Canestraro, D., Cook, M., Pardo, T.A., Thompson, F., Black, L., Luna, L.F., Martinez, I.J., Anderson, D., &		
Richardson, G. (2001). A preliminary system dynamics model of intergovernmental collaboration. Proceedings of the 2001 System		
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Luna-Reyes, L. F., Martinez, I., Pardo, T. A., Cresswell, A. M., Andersen, D. & Richardson, G. (2001). Group modeling of IT-based		
innovations in the public sector. Proceedings of the 2001 System Dynamics Research Conference, Atlanta GA Albany NY: System		
Dynamics Society.	2001	Conference Paper
Le, C.N., Thompson, F., Cresswell, A.M., & Dawes, S. (2001). Walking the walk: The effectiveness of knowledge sharing in public		
sector organizational networks. Paper presented at the Annual Eastern Sociological Society meeting, Philadelphia.	2001	Conference Paper
A Pre-Study of Revenue Processing and Management in Selected New York State Agencies	2001	CTG Project Report
Insider's Guide to Using Information in Government: Executive Briefing	2224	0T0 D : . D
http://www.ctg.albany.edu/publications/reports/insider_exec	2001	CTG Project Report
Cresswell, A.M. (2001). Thoughts on relevance of IS research. Communications of the Association for Information Systems, 6,	0004	In command Anti-da
article 9.	2001	Journal Article
Cresswell, A.M. & Pardo, T. A. (2001). Implications of legal and organizational issues for urban digital government development.  Government Information Quarterly, 18, 4, 269-278.		
nttp://www.ctg.albany.edu/publications/journals/implications_for_urban	2001	Journal Article
Cresswell, A.M., & Zhang, J. (2000). Effectiveness of knowledge sharing in public sector interorganizational networks. Paper	2001	Journal Afficie
presented at the Korean Association of Public Administration International Forum on Strategy Development for Knowledge-		
Empowered Government, Chosun University, Kwangjoo.	2000	Conference Paper
Cresswell, A.M., Pardo, T. A., Dawes, S.S., Kelly, K. (2000). Partnership Effectiveness in Public Sector Information Technology	2000	Comoronoo i apoi
Innovation. Paper presented at the Annual Meeting of the Academy of Management, Toronto.	2000	Conference Paper
Thompson, F., Connelly, D.R., & Cresswell, A.M. (2000). Structuring the story to restructure work and interorganizational relations in		
the public sector. Paper presented at the Annual American Anthropology Association meeting, San Francisco.	2000	Conference Paper

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Thompson, F., Cresswell, A.M., & Connelly, D.R. (2000). Getting the story right: Talk and text in the restructuring of public sector		
interorganizational relations. Paper presented at the conference on Text and Talk at Work: Discourse Practices in, around and about		
the Workplace, University of Ghent, Belgium.	2000	Conference Paper
Miller, J., & Thompson, F. (2000). Developing collaboration between nonprofits and government: A case study of knowledge sharing		
to improve services for the homeless. Paper presented at the Annual Association for Research on Nonprofit Organizations and		
Voluntary Action conference, New Orleans.	2000	Conference Paper
And Justice for All: Designing Your Business Case for Integrating Justice Information		
http://www.ctg.albany.edu/publications/guides/and_justice_for_all	2000	CTG Project Report
What Citizens Want from E-Government		
http://www.ctg.albany.edu/publications/reports/what_citizens_want	2000	CTG Project Report
Insider's Guide to Using Information in Government		
http://www.ctg.albany.edu/publications/online/insider_guide?sub=online	2000	CTG Project Report
Putting Information Together	0000	0T0 D 1 1 5
http://www.ctg.albany.edu/publications/reports/putting_info	2000	CTG Project Report
New Models of Collaboration for Public Service delivery		
http://www.ctg.albany.edu/publications/reports/new_models_wp	2000	CTG Project Report
Reassessing New York: A Collaborative Process	0000	0T0 D : . D
http://www.ctg.albany.edu/publications/reports/reassessing_ny	2000	CTG Project Report
New York State Central Accounting System Stakeholder Needs Analysis	0000	OTO D : ( D )
http://www.ctg.albany.edu/publications/reports/nys_central_acctng	2000	CTG Project Report
Conducting Best and Current Practices Research: A Starter Kit	0000	OTO Duning to Day 2014
http://www.ctg.albany.edu/publications/guides/conducting_best	2000	CTG Project Report
Kids Well-being Indicator Clearinghouse: Technical Documentation.	2000	CTG Project Report
Pardo, T.A. (2000). Realizing the Promise of Digital Government: It's More than Building a Web Site. <i>IMP Magazine</i> , SAIC		
Strategies Group.	2000	Magazina Autiala
http://www.ctg.albany.edu/publications/journals/realizing_the_promise  Cresswell, A.M., Pardo T.A., & Dawes, S.S. (1999). Partnership Effectiveness in Public Sector Information Technology Innovation.	2000	Magazine Article
Academy of Management Annual Conference, Toronto.	1999	Conformed Donor
Dawes, S.S. (1999). Partnerships in IT Innovation in the Public Sector. Paper presented at Penn State University, Conference on the	1999	Conference Paper
Scholarship of Engagement, College Station, PA.	1999	Conformed Boner
Some Assembly Required: Building a Digital Government for the 21st Century	1999	Conference Paper
http://www.ctg.albany.edu/publications/reports/some assembly	1999	CTG Project Report
Reconnaissance Study: Developing a Business Case for the Integration of Criminal Justice Information	1999	CTG FTOJECT REPORT
http://www.ctg.albany.edu/publications/reports/reconnaissance	1999	CTG Project Report
Some Assembly Required: Building a Digital Government for the 21st Century	1999	CTG FTOJECT REPORT
http://www.ctg.albany.edu/publications/reports/some_assembly	1999	CTG Project Report
Practical Tools for Electronic Records Management and Preservation	1999	O 1 O 1 TOJECT NEPOT
http://www.ctg.albany.edu/publications/guides/practical_tools_for_ermp	1999	CTG Project Report
What Rules Govern the Use of Information?	1999	OTO FTOJECT NEPOR
http://www.ctg.albany.edu/publications/reports/what_rules_govern	1999	CTG Project Report
Web-based Applications and/or Networked Legacy Systems	1999	OTO FTOJECT NEPOR
http://www.ctg.albany.edu/publications/reports/web_based_apps	1999	CTG Project Report
Research and Practical Experiences in the Use of Multiple Data Sources for Enterprise Level Planning and Decision Making: A	1999	OTO FTOJECT NEPOIL
Literature Review		
http://www.ctg.albanv.edu/publications/reports/multiple_data_sources	1999	CTG Project Report

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Building Integrated Data Repositories		
http://www.ctg.albany.edu/publications/reports/building	1999	CTG Project Report
Dealing with Data		
http://www.ctg.albany.edu/publications/reports/dealing_with_data	1999	CTG Project Report
Dawes, S.S. & Oskam, S. (1999). The Internet, the state library, and the implementation of statewide information policy: The case of		
the New York State GIS Clearinghouse. Journal of Global Information Management, 7(4): 27-33.	4000	
http://www.ctg.albany.edu/publications/journals/inetgis	1999	Journal Article
Dawes, S.S., Bloniarz, P., Kelly, K., Connelly, D., & Pardo, T.A. (1999). Four realities of IT innovation in the government. <i>Public</i>		
Manager, 28, 1, 27-32.	4000	La como al Antiala
http://www.ctg.albany.edu/publications/journals/four_realities	1999	Journal Article
Dawes, S.S., Pardo, T.A., & DiCaterino, A. (1999). Crossing the threshold: Practical foundations for government services on the	4000	la compal Antiala
World Wide Web. Journal of the American Society for Information Science (JASIS), 50, 4, 346-353.	1999	Journal Article
Dawes, S.S. (1998). Applied Research as a Means of Policy Implementation: Intergovernmental Information Systems in New York State. Paper presented at the Association of Policy Analysis and Management Annual Research Conference, Washington, DC.	1998	Conference Paper
Dawes, S.S. (1998). Maximizing Value, Minimizing Risk: IT Innovation in the Public Sector. Poster presented at Links '98: Annual	1996	Conference Paper
Meeting on Public Universities Serving State Governments, Boston, MA.	1998	Conference Poster
New Models of Collaboration: GIS Coordination in New York State	1990	Contended Poster
http://www.ctg.albany.edu/publications/reports/new_models	1998	CTG Project Report
A Survey of System Development Process Models	1990	CTG FTOJECT REPORT
http://www.ctg.albany.edu/publications/reports/survey_of_sysdev	1998	CTG Project Report
The Records Requirements Analysis and Implementation Tool	1990	C 1 G 1 Toject Report
http://www.ctg.albany.edu/publications/guides/rrait	1998	CTG Project Report
Models for Action: Practical Approaches to Electronic Records Management & Preservation	1330	e re riojeet Report
http://www.ctg.albany.edu/publications/reports/models_for_action	1998	CTG Project Report
Functional Requirements to Ensure the Creation, Maintenance, and Preservation of Electronic Records	1000	o ro r roject report
http://www.ctg.albany.edu/publications/reports/functional	1998	CTG Project Report
Data Quality Tools for Data Warehousing - A Small Sample Survey	1000	010110,000110,0001
http://www.ctg.albany.edu/publications/reports/data_quality_tools	1998	CTG Project Report
Pardo, T.A. (1998). Managing Electronic Records. Capital District Business Review.	1998	Magazine Article
Dawes, S.S., Pardo, T.A., Green, D., & Connelly, D. (1997). Discovering Best Practices in State Local Information Systems. Paper		agazo / ii iio.o
presented at the Society for Information Management Applied Research Symposium, ICIS, Atlanta.	1997	Conference Paper
A Cost Performance Model for Assessing WWW Service Investments		
http://www.ctg.albany.edu/publications/guides/costperfmodel	1997	CTG Project Report
Tying a Sensible Knot: A Practical Guide to State-Local Information Systems		,
http://www.ctg.albany.edu/publications/guides/tying	1997	CTG Project Report
Partners in State-Local Information Systems: Lessons from the Field		, , , , , ,
http://www.ctg.albany.edu/publications/reports/partners_in_sli	1997	CTG Project Report
An Introduction to Workflow Management Systems		, ,
http://www.ctg.albany.edu/publications/reports/workflow_mgmt	1997	CTG Project Report
A Survey of Key Concepts and Issues for Electronic Recordkeeping		, ,
http://www.ctg.albany.edu/publications/reports/key_concepts	1997	CTG Project Report
A Step Beyond Research: Fostering IT Innovations in Government		•
http://www.ctg.albany.edu/publications/reports/a_step_beyond	1997	CTG Project Report
T Innovation in Government: Toward an Applied Research Agenda, Part One: The practitioner perspective		•
http://www.ctg.albany.edu/publications/reports/it_innovation1	1997	CTG Project Report

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IT Innovation in Government: Toward an Applied Research Agenda, Part Two: The researcher perspective		,,
http://www.ctg.albany.edu/publications/reports/it_innovation2	1997	CTG Project Report
Kowlowitz, A. & and Kelly, K. (1997). Models for Action: Developing Practical Approaches to Electronic Records Management and		
Preservation. Bulletin of the American Society for Information Science and Technology, Volume 23, Number 5, June/July.		
http://www.ctg.albany.edu/publications/journals/models_for_action	1997	Magazine Article
A Brief Survey of Internet Policies	4000	0T0 D : . D
http://www.ctg.albany.edu/publications/reports/brief_survey  A WWW Starter Kit	1996	CTG Project Report
http://www.ctg.albanv.edu/publications/guides/www_starter_kit	1006	CTC Drainet Depart
Developing & Delivering Government Services on the World Wide Web: Recommended Practices for New York State	1996	CTG Project Report
http://www.ctg.albany.edu/publications/guides/developing_on_the_web	1996	CTG Project Report
Delivering on the Web: The NYS Internet Services Testbed	1990	CTG FTOJECT REPORT
http://www.ctg.albany.edu/publications/reports/delivering_on_the_web	1996	CTG Project Report
The World Wide Web as a Universal Interface to Government Services	1000	O TO T TOJCOL TROPORT
http://www.ctg.albany.edu/publications/reports/world_wide_web	1996	CTG Project Report
Internet Security Seminar		o . o
http://www.ctg.albany.edu/publications/reports/inet_security_seminar	1996	CTG Project Report
Dawes, S.S. (1996). Interagency information sharing: Expected benefits, manageable risks. <i>Journal of Policy Analysis and</i>		
Management, 15(3): 377-394.	1996	Journal Article
Dawes, S.S., & Nelson, M.R. (1995). Pool the risks, share the benefits: Partnerships in IT innovation. In J. Keyes, (ed.), Technology		
Trendlines. New York: VanNostrand Reinhold.	1995	Book Chapter
Dawes, S.S. (1995). Public Access to Government Information. Poster presented at the Annual Meeting of the National Association		
of State Information Resource Executives, San Antonio, TX.	1995	Conference Poster
Using Technology to Change Work: Technical Results from the APA Prototype		
http://www.ctg.albany.edu/publications/reports/using_technology	1995	CTG Project Report
Balancing Environmental Quality and Economic Vitality in the Adirondack Park	1005	070 5
http://www.ctg.albany.edu/publications/reports/balancing	1995	CTG Project Report
Evaluating the APA Prototype: Prospects for Providing Cheaper, Faster, and Better Services to the APA's Customers http://www.ctg.albany.edu/publications/reports/evaluating_apa	100E	CTC Drainat Danart
Sharing the Costs, Sharing the Benefits: The NYS GIS Cooperative	1995	CTG Project Report
http://www.ctg.albany.edu/publications/reports/sharing_the_costs	1995	CTG Project Report
The New York State Spatial Data Clearinghouse Technical Report	1995	CTG FTOJECT REPORT
http://www.ctg.albany.edu/publications/reports/nys_spatial_data	1995	CTG Project Report
Compelling Reasons for GIS Coordination in New York State	1000	O 1 O 1 Tojoot Roport
http://www.ctg.albany.edu/publications/reports/compelling_gis_	1995	CTG Project Report
A Framework for Evaluating Public Sector Geographic Information Systems		
http://www.ctg.albany.edu/publications/reports/framework	1995	CTG Project Report
Supporting Psychiatric Assessments in Emergency Rooms		, ,
http://www.ctg.albany.edu/publications/reports/supp_psych_assess	1995	CTG Project Report
Report of the Field Test to Evaluate a Decision Support Tool for Psychiatric Assessments in Emergency Rooms		
http://www.ctg.albany.edu/publications/reports/field_test	1995	CTG Project Report
Voice Information Response System		
http://www.ctg.albany.edu/publications/reports/voice_information	1995	CTG Project Report

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Publication Citation or CTG Project Report Title (URL Provided if Available)	Year Published	Publication Type			
Reviewing the Performance of ORMA's Voice Response System for Automated Business Permit Information: Integrating Technical, Cost-Based, and Customer-Oriented Evaluations of System Performance					
http://www.ctg.albany.edu/publications/reports/voice_response	1995	CTG Project Report			
Title Imaging Project with NYS Department of Motor Vehicles					
http://www.ctg.albany.edu/publications/reports/title_imaging	1994	CTG Project Report			
Groupware Technology Testbed					
http://www.ctg.albany.edu/publications/reports/groupware	1994	CTG Project Report			
Andersen, D., Belardo, S., & Dawes, S. (1994). Conceptual frameworks for strategic information management in the public sector.		· ·			
Public Productivity and Management Review, XVII(4): 335-353.	1994	Journal Article			
Dawes, S.S. (1994). "The Human Resource Implications of Information Technology in State Government." The Journal of Public					
Personnel Management, 23(1), Spring.	1994	Journal Article			

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