



Center for  
Technology in Government



# 2005 Annual Report



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CTG Staff

**T**he Center for Technology in Government 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.

## A Message from the Center Director Sharon Dawes



CTG Staff

Dear Friends,

It isn't often that you have the chance — and the challenge — to work both locally and globally. This year, CTG had the opportunity and the privilege to do just that. More than a decade ago, we set out to create a new kind of partnership between research and practice here in our own backyard with New York State government. Together with government managers and corporate and academic partners, we explored important public problems, developed well-regarded methodologies, and shared practical results worldwide. At the same time, we created and published new models for thinking about government information strategy and management. Over the years, we have added substantial work at the local and national levels and began to collaborate with international colleagues.

In 2005, our program portfolio reached a new level.

CTG is now recognized as a world leader in digital government research and practice. This year, we received a National Science Foundation grant to lead the creation of an international digital government research community, and we were invited to participate as a full partner in a research collaboration sponsored by the European Commission. At the same time, our work here at home in New York is deeper and richer than ever. We are working closely with the New York State CIO Council on important statewide IT management challenges that are re-shaping the way the state uses information and technology to achieve its goals.

In addition, we continue to work across all levels of government, especially in the areas of cross-boundary collaboration and information sharing and integration, which have become our hallmarks. My thanks and admiration go to the government professionals who face these challenges every day, and who have invited CTG to play a role in addressing them.

I hope you enjoy reading our 2005 Annual Report as much as we've enjoyed the work it describes.

Sincerely,

A handwritten signature in black ink that reads "Sharon S. Dawes". The signature is fluid and cursive, written in a professional style.

Sharon S. Dawes  
Center Director

## Modeling Information Integration Across Government

**I**nformation sharing is key to government's ability to work effectively across organizational boundaries. However, agency heads and program managers are finding that information needed to plan, make decisions, and act is often held outside their own organizations, maintained in disparate formats, and used for widely different purposes. Changing the current situation is crucial for the long-term success of digital government. Technological advances made data integration possible, but research and practical experience tell us that technology alone cannot solve information integration problems.

With a grant from the National Science Foundation (NSF), CTG staff are developing and testing dynamic models of information integration in government settings such as public health, public safety, and human services. The project is examining efforts to improve services through the sharing of information and technology across government organizations. Our research is contributing to NSF's Information Technology Research Program objective to "enable research and education in multidisciplinary areas, focusing on emerging opportunities at the interfaces between information technology and other disciplines."

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**"One of the most powerful lessons learned in this project is that only legislators and government policy-makers have the power to alleviate key constraints on enterprisewide, sustainable information integration strategies. These constraints are of particular concern as integration teams expand their efforts beyond agency-based, single problem-focused initiatives to enterprisewide capacity development efforts."**

— Theresa Pardo, Deputy Director,  
Center for Technology in Government

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CDC/James Gathry

**CTG's research on interorganizational information integration has concentrated on two critical public policy areas. One of these areas is taking a look at public health and how the New York State Department of Health and other NY state and local government health agencies responded to the West Nile Virus outbreak.**

Our research program is currently concentrating on integration activities in two critical policy areas: law enforcement and public health, both areas which depend on coordination among multiple agencies across all three levels of government. This multidisciplinary study is investigating the social and technical processes of integration in an effort to answer two basic questions:

- 1) What are the critical factors and processes involved in integrating information across levels and agencies in government?
- 2) How do IT and social factors interact to influence the effectiveness of interorganizational information integration?

In 2004, we completed research involving two intensive integration projects. The first project involved working directly with the New York State Criminal Justice Information Technology Group on their e-JusticeNY initiative. In the second one, we



“Think about all the things we want to achieve with e-government: for citizens, high-quality services that are customer-centric, flexible and convenient; for our society, a government that works intelligently and efficiently in all its functions from environmental protection to social welfare to homeland security. Success in all of these depends on our ability to share information and processes across boundaries.”

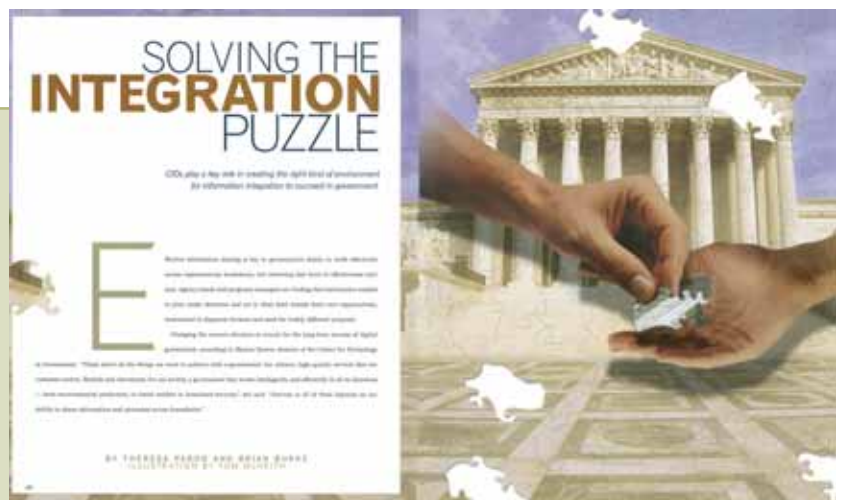
— Sharon Dawes, Director, Center for Technology in Government

studied how the New York State Department of Health and other New York state and local government health agencies responded to the West Nile Virus outbreak. In addition, we conducted field visits to other states to observe ongoing integration initiatives and to interview key participants.

This year, we developed dynamic models from the project and field research and began work to design a national survey that will test these models of integration. The survey addresses social and technical factors that influence the effectiveness of public sector information integration efforts involving multiple and diverse organizations and government agencies.

Based on the analysis of survey results, we will identify the specific policy, management, and technology capabilities that are key to building successful cross-boundary collaborations for information integration. Using these capabilities, we will then draw on the practical experiences of the public health and criminal justice professionals from the case studies to help other government managers understand how best to develop these capabilities for current and future cross-boundary efforts.

The Center’s deputy director Theresa Pardo and program associate Brian Burke collaborated on *Solving the Integration Puzzle*, which was published in Government Technology’s *Public CIO* magazine in the summer 2005 issue. The article brought together diverse insights from MIII case study participants from the fields of criminal justice and public health and highlighted the challenges and success stories of interorganizational information integration.



# CAPABILITY ASSESSMENT

## Increasing Information Sharing Effectiveness: A Capability Assessment Model for the Justice Enterprise

**A**chieving the benefits of integrated justice information can be a complex and challenging task. As many in government know, planning an integration initiative requires a solid understanding of capabilities — not just technical ones, but also organizational and political capabilities. This year, we completed a two-year project, sponsored by the U.S. Department of Justice, Office of Justice Programs, aimed at improving information sharing in the justice enterprise. The multi-year project reflects a broad consensus that integrating justice information has the potential to save lives, time, and dollars.

The primary product from this project is a new resource for justice professionals, *Sharing Justice Information: A Capability Assessment Toolkit*. This toolkit provides justice agencies with a self-contained package of techniques and materials to

### Online Interactive Toolkit

CTG created an online version of the *Capability Assessment Toolkit* that takes the publication one step further in regard to project management, collaboration, and reporting. Designed to enhance the features of the printed toolkit, it allows individual dimension assessment forms to be assigned and completed more efficiently through a Web-based interface, which eliminates the need for distribution and tracking of paper forms. It also produces multiple reporting formats, such as Word and Excel, bringing the Web application to the desktop. These can then aid in the creation of business cases and other reports that evolve from the capability assessment process and data.

The online version is hosted on the U.S. Justice Department, Office of Justice Program's Web site at <http://catoolkit.ojp.gov/introduction> and is available for use by justice agencies of all kinds.

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**“Information sharing initiatives are extremely complex, so agencies must constantly assess their organizational and technical capabilities. The toolkit can save time and money while providing a necessary and user-friendly guide for justice information sharing among agencies. In some cases, an agency could complete a mini-assessment of certain system components in as little as an afternoon.”**

— Regina B. Schofield, Assistant Attorney General for the Office of Justice Programs

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conduct a self-assessment of their capabilities to share information more effectively within and across agency boundaries. The assessment toolkit helps those responsible for planning and implementing information sharing and integration initiatives to answer two key questions:

- 1) What is the current capability for sharing and integrating information among the organizations involved?
- 2) How can these organizations build higher levels of capability?

The toolkit was developed through extensive collaboration with justice professionals and leadership organizations. These included the National Governor's Association, National Association of State Chief Information Officers, and the Justice Information Sharing Practitioners. From the results of three multi-day workshops, we designed the assessment methods in the toolkit and defined sixteen basic capability dimensions. Based on these dimensions, the toolkit provides a detailed





ThinkStock LLC

Integrating justice information has the potential to save lives, time, and dollars.

survey for those involved in an information sharing initiative to assess organizational, technical, and policy-related aspects of capability. In addition, the toolkit provides methods and support for aggregating and analyzing the data from the assessment and applying the results to action planning.

One of the key design goals for the toolkit was to make it useful in a wide range of justice arenas. Therefore the materials and instructions can be used in various settings, ranging from small sharing initiatives that might involve only a single agency, up to multi-state initiatives involving many separate state and local agencies. The toolkit can be readily employed by a few participants in a small, one-agency initiative, and also includes methods to combine and summarize results for a complex, multi-agency assessment.

The usability of the toolkit was tested in the field in a large city, as well as separate statewide and county-level information integration initiatives. It was also examined by justice professionals from several smaller jurisdictions for usability and validity in those settings. These field tests resulted in meaningful modifications, as well as confirmation of its overall value to practitioners.

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“Many times, organizations jump into implementing a technology solution without doing the up front assessment to really understand and quantify the underlying business needs. It is like shooting in the dark. With the assessment, we were able to review a comprehensive metric that reflects the ‘overall health’ of our integrated justice initiative. It provided a retrospective and strategic focus to the work to be performed.”

— Brian Richards, IJIS Program Manager and CLETS Project Manager for the County of Sacramento, California

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## Dimensions of Information Sharing Capability

The dimensions of information sharing capability used in the toolkit come from an extensive field analysis that identified 16 major dimensions, each with several subdimensions. Taken together, these dimensions identify the influence of organization, policy, and technology factors on an information sharing initiative.

1. Business Model & Architecture Readiness
2. Collaboration Readiness
3. Data Assets & Requirements
4. Governance
5. Information Policies
6. Leaders & Champions
7. Organizational Compatibility
8. Performance Evaluation
9. Project Management
10. Resource Management
11. Secure Environment
12. Stakeholder Identification & Engagement
13. Strategic Planning
14. Technology Acceptance
15. Technology Compatibility
16. Technology Knowledge

## Collaboration for Preservation of State Government Digital Information

State and local governments are creating vast amounts of information solely in digital form, including land data, school records, official publications, and court records. Much of this material is of permanent legal, historical, or cultural value, yet is at risk because of a number of technological as well as policy and management issues. State libraries, archives, and other state and local institutions face complex barriers in developing an effective strategy to meet this challenge.

CTG is assisting the Library of Congress in its efforts to help U.S. states and territories develop strategies for the preservation of significant government information in digital form and to build the collaborative arrangements necessary to implement these strategies. In the spring of 2005, CTG and the Library held a unique national forum for states and territories to discuss their digital preservation needs and to identify a set of priorities for launching these collaborative efforts. The national forum, held in the Washington, D.C. area, included three one-day workshops with participants from all 50 states, the District of Columbia, and three territories. The participants included state librarians, archivists, records managers, representatives of state Chief Information Officers, and other professionals.

CTG facilitated a series of large and small group discussions and exercises designed to obtain targeted information from the states. The participants were asked to provide their top digital preservation concerns and most at-risk digital information; to discuss potential networking topics and how to build partnership networks; to share success stories; and to consider the optimum preservation-related roles the states and the Library should fill.



CTG Staff

William G. LeFurgy, Digital Initiatives Project Manager of the Library's Office of Strategic Initiatives, welcomed participants to a unique national forum for states and territories to discuss their digital preservation needs. The forum, held in the Washington, D.C. area last spring, included three one-day workshops with participants from all 50 states, the District of Columbia, and three territories.

In conjunction with planning the workshops, CTG expanded its capability assessment and planning model to develop a toolkit to assist state government practitioners in planning and implementing digital preservation projects. In order to effectively address the unique aspects of preserving state government digital information, CTG sought and received expert advice from a select group of digital preservation experts from the Cornell University Library, Online Computer Library Center (OCLC), and state librarians and archivists. The toolkit is now in use in a number of states as part of their state government digital preservation planning activities.

From the workshops, the Library and CTG learned that state librarians, archivists, and records

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“The Library of Congress, through its National Digital Information Infrastructure and Preservation Program (NDIIPP), is implementing a national strategy to protect significant digital content that is at risk of loss. State and local governments have an important stake in this effort. They generate and hold vast amounts of digital publications, records, and other content that must be preserved for current use as well as for future generations.”

— William G. LeFurgy, Digital Initiatives Project Manager,  
Office of Strategic Initiatives, U.S. Library of Congress

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managers are most interested in access to information about the digital preservation activities in each state and territory. Workshop participants agreed that acquiring this knowledge is now the first and most important step in developing partnership efforts. In response, the Library asked CTG to collect information about these activities from the states and territories and to share that information with the community. As a result, CTG is working

with the related associations and the Library to identify key information to collect and to explore options for ensuring the information is collected, maintained and made accessible to those interested in exploring opportunities for digital preservation partnerships.

## Using the Capability Assessment Toolkit in Kansas

Kansas is implementing a central repository for all state publications called KSPACE to ensure their preservation and accessibility over time. The project team involves all three branches of government under the auspices of the Kansas State Historical Society (State Archivist) and the State Library of Kansas. A pilot project was implemented first targeting 25 publications as identified in statute. The next step called for expanding the project to all publications currently on agency Web sites, with the final goal of including all state publications.

At this point in the process, the Kansas team applied CTG’s *Digital Preservation Capability Assessment and Planning Toolkit* to evaluate both the effectiveness of the pilot project and their capability to implement a full production system. According to Kansas officials, the assessment process fostered open discussion among the various stakeholders and provided solid data about the initiative’s likelihood of success if undertaken with the state’s current capability. The assessment team was able to use the data to identify the strengths of the pilot project, and also the gaps in the system that needed to be addressed as they proceeded with the enterprisewide system. The finished system, targeted for 2007, will allow legislators, state agency staff, and the public to find, view, and download all state reports in KSPACE via the World Wide Web.

## Advancing Return on Investment Analysis for Government IT

For years, assessing public return on investment (ROI) for IT initiatives has been a complex and difficult problem. Today more than ever, government decision makers must make the most of scarce resources and at the same time respond to ever-increasing demands for improved performance and new technology. In 2004, we published *Return on Investment in Information Technology: A Guide for Managers*, to present a practical approach to understanding what ROI analysis can and cannot do.

ROI has also been a struggle for corporations seeking to bring state-of-the-art technology and services together with government agencies. The ability of corporate partners to offer a broader context for problem solving, led to a partnership between CTG and SAP, a leader in the global business software solutions industry. With funding from SAP, we are researching further ways to improve the ability of government managers to analyze expected returns on IT-related investments.

The project was launched in July when CTG, in collaboration with SAP, hosted a consultative workshop on assessing public return on government investments in IT. A select international group of 22 experts from government, university, and the private sector were invited to meet with researchers from CTG to discuss the core issues and themes of public ROI for IT investments. Representatives from government agencies, academic institutions, and private sector companies had the opportunity to work

together to define and clarify issues, and to share knowledge about public ROI practices and experiences in North America, Europe, and elsewhere. The findings from the workshop made it clear that government leaders need improved methods for defining, measuring, and communicating the value of IT investments to citizens and other key stakeholders. At the same time, they need practical recommendations for using these methods in planning and decision making.

Nearly 70 percent of public sector executives worldwide said in a recent *Economist* study that they aim to measure social returns on IT initiatives and make these transparent to citizens and stakeholders in the next five years.

— *Business 2010: Embracing the Culture of Change*,  
Economist Intelligence Unit

In the fall, we began to develop a comprehensive, non-proprietary public ROI methodology that we will test and develop further based on case studies to be conducted in the first half of 2006. The case studies will look at both U.S. and international cases where government organizations have conducted some substantial ROI analysis for a specific IT investment. By working with governments from the U.S., Canada, Europe, and other areas, we expect to produce results that are useful across geographic, cultural, and political

boundaries. CTG's analysis of the case studies and related research findings will help refine our Public ROI methodology, the results of which will be made publicly available in a white paper on the CTG Web site.

We expect this research to produce results that will make a major contribution to the ability of governments of all types to enhance the political, social, and economic value they obtain from IT investments.

“The Center for Technology in Government’s expertise working with government executives at the state, local, and federal levels, made them an ideal partner for SAP in our Public ROI effort to help public sector organizations around the world better define the operational, social, and political value of their IT investments.”

— Tom Shirk, President, SAP Global Public Services

### CTG Workshop on Public Return on Investment (ROI)

A select international group of 22 experts from government, academia, and the private sector were invited to meet with researchers from CTG at a consultative workshop in July 2005 to discuss the core issues and themes of public ROI for IT investments.



#### Government representatives:

- Austrian Ministry of Finance
- Canada Revenue Agency
- U.S. General Services Administration
- U.S. Government Accountability Office

#### Private sector representatives:

- Accenture
- Cisco Systems
- Gartner
- IDC
- McKinsey & Company
- SAP

#### Academia representatives:

- Harvard University
- Indiana University
- University of North Carolina at Chapel Hill
- Technical University Delft, The Netherlands



## Thinking Beyond Your Web Site: The XML Testbed

**T**he Center's innovative projects, partnerships, and prototypes address cutting-edge issues and provide practical tools for government managers. The XML Testbed is our latest innovation project; an investigation into the benefits and challenges of using the emerging technology of XML for Web site management.

As Web sites have grown in size, complexity, and prominence, Web site management, content management, cost, and accessibility have become growing concerns for government organizations at all levels. Despite the Web's promise for ease of use and access, creativity, and efficiency, government managers and leaders are finding that their Web sites are increasingly presenting problems of inflexibility, inconsistency, bottlenecks, and new costs. Consequently, they are losing the ability to be responsive and flexible in providing new content or structure.

CTG has experienced tremendous benefits from using XML to manage content on our own Web site. However, there are relatively few examples of similar use on government Web sites. Accordingly, we designed the XML Testbed to create the context for five New York State agencies to learn and experiment with XML in a uniquely structured, collaborative environment.

A key component of the Testbed was the development of a prototype to test assumptions,

### Why Use XML for Managing Web Sites?

XML is an emerging technology that is generally understood as one which supports effective data exchange between computer applications. However, XML has another value that is much less exploited or understood — it offers a viable long-term solution to many of the shortcomings of traditional Web tools that often result in inflexibility, inconsistency, bottlenecks, and new costs. As a technical strategy for managing Web sites, XML structures and describes Web content in a meaningful way. When coupled with associated organizational strategies, it offers management and productivity benefits, content consistency, and accessibility enhancements.

experiment with implementation issues, and provide a “proof of concept” product that would give each team realistic expectations of what they could successfully accomplish with XML. In the Testbed environment, we worked with the agencies on technical training and infrastructure readiness. But more importantly, we focused on the need for solid business case justifications, organizational change, and leadership buy-in.

The structured two-phased investigation, which began over the summer of 2005, included a study of best practices, work toward agency-defined practical goals, and organizational capacity building.

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**“Once fully implemented, customers will find OCE’s Web sites more usable, because of more consistent presentation of information, with built-in accessibility, and the ease of adding links to related information as it becomes available. The improved workflow will allow each institution to make more publications available faster, with better management of the maintenance and revision process.”**

— Diane Madrigal, Associate Computer Programmer/Analyst,  
New York State Office of Cultural Education, State Education Department

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The Testbed situated the participants' learning within the context of their work environments, using their own specific business problems and objectives. During the first phase, the five agencies participated in hands-on workshops, discussions with industry experts, organizational analysis, and business case development activities. In addition, this phase involved the collection of baseline data by CTG through semi-structured interviews, surveys, and analysis of relevant documents.

Phase one culminated in each agency producing a working XML-based Web site prototype and business case analysis for the organizational and policy changes that would be needed to fully develop and implement this new Web site management approach. The agency teams detailed their strategies and presented their prototypes at a formal public presentation in January 2006.

In the second phase, to occur in 2006, we will draw on the Testbed activities and the agency results to produce a set of recommended practices to guide others working to improve the management, performance, and value of their Web sites.



CTG Staff

Tim Bray, co-inventor of XML and director of Web technologies at Sun Microsystems, was the featured speaker at CTG's XML Testbed presentation, where five state agencies presented lessons learned and benefits gained from their participation in the Testbed.

In addition, we will produce a sharable library of XML technical resources that will become a valuable tool for any agency considering XML for Web site management.

## Testbed Participants

In partnership with the Governor's Office of Employee Relations (GOER), the Office of the Chief Information Officer (OCIO), and the Office for Technology (OFT), CTG offered New York state and local government agencies an opportunity to participate in a unique Testbed project. Five agencies became involved:

- NYS Department of Civil Service
- NYS Division of Housing and Community Renewal
- NYS Higher Education Services Corporation
- NYS Office of Cultural Education,  
State Education Department
- NYS Office for Prevention of Domestic Violence

# PARTNERING WITH STATE GOVERNMENT

**A**t CTG, our partnerships with New York State serve as laboratories for learning, experimentation, and problem solving. We have worked with numerous government officials to find original solutions to the challenges they face with e-government and to develop and promote best practices. Each project has been built on the active involvement of experienced CTG researchers and project managers working cooperatively with government practitioners on projects of concern to state and local government.

We have a deep and growing commitment to working with all levels of government in New York State. This year, the Center worked with the New York State Department of State's Division of Coastal Resources, the New York State Office of Real Property Services, the New York State CIO Council, and the New York State Department of Correctional Services.

## New York State CIO Council

### *Intergovernmental Communications*

The New York State CIO Council's Intergovernmental Communications Committee (ICC) partnered with CTG to conduct a survey to understand existing patterns of communication between state and local governments. The Web-based survey investigated existing communication practices in the context of five specific New York State IT initiatives and focused on each phase of a system life cycle.

The survey gathered data about individual project experiences as well as general knowledge and opinions about intergovernmental communications in New York State. This information has since helped shape the action agenda for the ICC.

The survey underscored the importance of a formal intergovernmental communications program that can benefit all stakeholders in a project, and has led the ICC to take on initiatives that work to eliminate process and project barriers in intergovernmental service delivery. These initiatives focus on the key results from the survey:

- improving communications among state and local governments during the design and development phase of projects;
- focusing on key characteristics of communication such as accuracy, detail, and consistency across time and sources; and
- pointing out the benefits of assessing and addressing the different information needs of program and IT staff at different stages of the life cycle.

We continue to work with the ICC in carrying out the objectives set forth in the state's strategic IT plan to promote intergovernmental communication.

### *Project Peer Review*

The New York State CIO Council, in collaboration with the New York State Forum for Information Resource Management, developed a peer review process for IT investments proposed by state agencies, as called for in the statewide strategic plan for IT. The Peer Review Process is an effort to mitigate risks and increase the likelihood of project success in state-initiated IT projects by bringing together state CIOs to review and make recommendations on a project's business case and proposed solution, before investments are made.

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**“With long-standing experience in digital government, CTG has proven to be a valuable resource for New York State’s information technology community. The CIO Council benefits from CTG’s knowledge, expertise, and unbiased approach to help us manage important IT challenges.”**

— Michael Mittleman, New York State Chief Information Officer

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CTG was asked to refine the first version of the peer review process through a formative evaluation. The purpose of this evaluation was to provide feedback and recommendations to the NYS CIO on how the tools, techniques, and the entire Peer Review Process could be enhanced. We conducted the evaluation by assessing the implementation of the first Peer Review on an immunization registry project sponsored by the NYS Department of Health as a test pilot. After reviewing Peer Review Process documents, observing the process, and interviewing participants about their involvement in the process, we presented findings and recommendations for enhancing the efficiency and improving documentation and management of the Peer Review Process.

CTG's findings were adopted into the final Peer Review Process, a valuable and successful evaluation tool that has since been used by the NYS CIO in four projects.



New York State Department of State

The New York State Department of State's Division of Coastal Resources (DCR) manages a complex grant review and funding process and is responsible for oversight on approximately 450 contracts annually, which directly impact the quality of life in New York State's coastal communities.

## New York State CIO Council

The New York State CIO Council addresses issues related to statewide information technology concerns. The Council comprises senior IT leaders from state agencies, authorities, public benefit corporations, and local governments. Its standing committees include: Leadership, Fiscal/Procurement, Human Resources, Intergovernmental Communications, Security, Strategic Planning, and Technology.

## New York State Department of State

### *Business Process Analysis*

The New York State Department of State's Division of Coastal Resources (DCR) is known for high quality programs. The Division manages a complex grant review and funding process and is responsible for oversight on approximately 450 contracts annually, which directly impact the quality of life in New York State's coastal communities. As a result of past successes, Division staff is being tasked with an increasing number of new initiatives. For that growth to be manageable, they needed to better understand their business processes.

The Division partnered with CTG to conduct a series of process modeling and analysis activities. We used a combination of individual and group interviews, as well as workshops to develop and analyze models of the selected functional and programmatic processes.

The analysis resulted in 14 recommendations for streamlining and consolidating processes. These recommendations will allow DCR to put standardized systems and practices in place that are scaleable, sustainable, and enterprise-oriented. By taking the time to first understand the underlying business processes of their organization, DCR staff now have the capability to rapidly respond to new initiatives and to add new processes.

# PARTNERING WITH STATE GOVERNMENT

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“CTG was instrumental in helping the Division of Coastal Resources to better manage growth and achieve our program goals. CTG established a strong working relationship with us to understand our needs. Their pragmatic recommendations on business processes, data management, and work flow systems are laying the foundation for greater efficiencies, so we can focus less on paper and more on our clients. In 2006, with CTG’s expert advice, the Division will bring a new information management system online to strengthen and streamline our program operations.”

— George Stafford, Director, New York State Department of State, Division of Coastal Resources

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The lessons and experiences of working with DCR will continue to help CTG to refine its process analysis methodology, so that other public sector organizations can benefit.

## Office of Real Property Services

### *Parcel Data Reconnaissance Study*

The New York State Office of Real Property Services (ORPS) assists local governments to improve the administration of their property assessment and tax systems. These systems rely on the collection of information about land parcels and real property by local tax officials. While the fundamental use of this data is property tax administration, it is also used for a very wide range of other purposes by many different individuals and public and private sector organizations. To help ORPS shape strategies for broader understanding and more effective use of parcel data, CTG conducted a reconnaissance study on the collection, distribution, use, and value of parcel data throughout New York State.

We worked collaboratively with ORPS staff to develop the research questions and then conducted 35 interviews with organizations in NYS that collect, use, or distribute parcel data. Interviewees represented county and municipal governments, state agencies, private companies, and nonprofit organizations.

In addition, we completed a current practice review of Web sites and documents associated with parcel data use elsewhere in the United States.

The study found many definitions and uses for parcel data, documented how this data flows from one organization or user to another, and explored a variety of opinions about data access and sharing beyond property tax administration. The study concluded with a set of principles to enhance the value of parcel data as a statewide resource. These included encouraging more awareness of current uses and providing opportunities for collaboration and joint investment; a single parcel identification scheme; online access to authoritative data in a variety of formats; a mechanism to communicate data errors and enhancements back to the data sources; and discussions and experiments with policies and practices that balance costs and benefits for all stakeholders.

## New York State Department of Correctional Services

### *Business Analysis of an Electronic Health Record for the Corrections Community*

CTG is engaged in a unique collaboration with UAlbany’s Rockefeller College of Public Affairs and Policy and the New York State Department of Correctional Services (DOCS) to develop a cost benefit analysis for an Electronic Health Record (EHR) for the corrections community. This collaboration brings together students from the 4th ranked Information Strategy and Management concentration in the country, with staff from DOCS and CTG in the practical exploration of a critical contemporary issue.



Inmates in the custody of DOCS have a constitutional right to medical care and a core component of providing quality medical care is the health record. Limited or delayed access to health data is often a barrier to quality care due to a lack of current knowledge about the health history and requirements of an inmate. A major factor influencing access is the format of the record — namely paper.

In addition to concerns about quality of care, DOCS is interested in process and program efficiencies. EHR systems have been credited with providing organizations with notable process and program efficiencies such as eliminating inmate processing delays related to physical transfer of records, reducing expensive redundant medical testing, and increasing accuracy and completeness of medical information. These efficiencies are widely recognized as major contributors to increased quality of care.

However, the extent to which these efficiencies are relevant to New York State and the cost necessary to gain them is unclear.

The project is being carried out in three overlapping phases. Phases one and two involved students as part of a graduate course on IT investment analysis. The students, under the direction of the course instructor, developed models of the current environment as a first step in understanding the potential impact of an EHR. In phase three, CTG will work more intensively with DOCS and with four student interns selected from the class to produce a detailed analysis of ongoing efforts in EHR generally, EHR within the corrections arena, and specifically EHR within the DOCS environment. The report will be used by DOCS in the development of the agency's annual technology plan.



Rockefeller College of Public Affairs and Policy

CTG brought together students from the 4th ranked Information Strategy and Management concentration in the country at UAlbany's Rockefeller College of Public Affairs and Policy, with staff from the New York State Department of Correctional Services (DOCS) for the practical exploration of Electronic Health Records. The student project was supervised by CTG's deputy director, Theresa Pardo.

## European Union Collaboration

**T**he Center's research into modeling information integration processes has provided a valuable opportunity for international collaborative research. CTG received funding from the National Science Foundation (NSF) ITR program to supplement research on information integration by collaborating with European colleagues. To do so, we identified two European Commission (EC) research projects that were also exploring how IT innovation occurs in complex, multi-organizational settings. This is a central focus for research on the social and technical processes of IT development in both the public and private sectors and is also critical to improving government through IT innovation.

The European partners in this collaboration are IntelCities and the Consortium for Open Source in Public Administration (COSPA). Along with CTG, both European projects are using various forms of modeling to better understand IT innovation and implementation, including some form of system dynamics modeling as part of their research design. The three project teams worked together in three research-focused workshops to explore methods for modeling and ways to support complex government IT innovation processes. The workshops gave us the opportunity to explore these topics more fully and to compare modeling approaches developed in culturally and technically diverse settings and issue contexts.

The first workshop took place in Albany in March and focused on the information integration models under development by each of the participants, revealing that CTG and IntelCities are using soft systems methods, while COSPA's methods are more quantitative. The second workshop took place in Manchester, England in June and continued with research agenda planning and the development of common themes. This workshop also focused on the IntelCities models of IT support for urban regeneration developed in Manchester and overall issues of model use in support of e-government



CTG Deputy Director, Tony Cresswell (middle), working with Professor Andy Hamilton (left) from the University of Salford, UK, and Professor Alberto Sillitti (right) from the Free University of Bozen-Bolzano, COSPA Project during the third US-EU Collaboration workshop in Italy.

projects. The three teams then collaborated on a work-in-progress discussion panel at the DEXA eGov conference in Copenhagen in August. The final workshop took place in Bolzano, Italy in October, following a presentation at the e-Challenges conference in Ljubljana, Slovenia, where the results of the project to date were presented.

This international collaboration has provided a valuable opportunity to experiment with, examine, and extend methods for the design and management of geographically dispersed cross-culture research. In addition, we have been able to share knowledge and further develop modeling and innovation support methods; test existing models in new settings; initiate collaborative writing and publication efforts; and contribute to new research management methods. We expect the final results will include new empirical findings about IT innovation in government, new theory about the core processes involved, and enhanced modeling methods for understanding these and similar processes.



## New York State

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### IT Workforce Skills Assessment

CTG is working with the state of New York to implement the New York State IT Workforce Skills Assessment Project. The project is sponsored by the New York State Chief Information Officer (CIO) Council's Human Resource Committee, the Governor's Office of Employee Relations (GOER), and the Office for Technology (OFT). It is designed to gather information about the existing skills and training needs of the state's IT professionals, as well as to estimate the state's future IT workforce needs.

CTG will develop, administer, and analyze two surveys. The results of an employee survey will be used by New York State to assess the existing competencies and training needs of the statewide IT workforce. A second survey of NYS agency CIOs will project future skills needs. A gap analysis will compare the results of the two surveys for both statewide and agency-level assessments.

## Federal

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### Leveraging Investments in the Electronic Commons Project

The Center will be working with the USDA Forest Service to capture lessons learned by the grantees of the Electronic Commons grant program in their efforts to utilize advanced communications technologies to share information and solutions on topics of concern to national forests and their neighboring communities.

CTG staff will begin by preparing the Electronic Commons (EC) grantees to capture information throughout their EC grant activities on lessons learned and to provide up-front feedback to project teams on project designs and workplans. Next we will bring together representatives from each of the

EC teams for a workshop in which they will share their lessons learned and through the use of facilitated exercises, engage in comparative analysis of those lessons for use in the report. Lastly, we will focus on the development of project deliverables — namely a summary of the workshop to participants and a lessons learned document for public distribution through CTG's Web site and other venues as designated by the USDA Forest Service.

## International

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### Building a Global Research Community

CTG has received a \$1 million grant from the National Science Foundation's (NSF) Digital Research Program (DG) to build and sustain an international digital government research community. Over four years, we will create opportunities and venues for international research discussions and enable U.S. researchers and educators to advance their work through international collaboration.

This project will support a long-term strategic approach to digital government research that will make possible a stable infrastructure for future generations of researchers. The work will include a six-month reconnaissance study to identify and summarize the state of international digital government research; support for three to five topical working groups, each of which will produce a research agenda and a white paper discussing research challenges, recommended strategies for undertaking this research, and the accomplishments within its sub-domain; the creation of an annual international institute on digital government research; and the support of U.S. participation in international digital government research conferences.

The project is being undertaken in partnership with the Digital Government Research Center, Information Sciences Institute at the University of Southern California.

# UPCOMING PROJECTS IN 2006

## International (cont.)

### **EGovernment 2020 Roadmap Project**

CTG has been chosen to be a partner in a project sponsored by the European Commission, and led by the University of Koblenz in Germany, involving nine international partners from European regions, the U.S., and Australia. The project aims to identify and characterize the key research challenges and possible implementation models for holistic and dynamic governments in 2020 and beyond. The project is global in nature and includes a review of the current status of e-government research, followed by a series of regional scenario-building workshops in which government, academic, and other participants will collaborate to describe possible futures.

A gap analysis assessing the differences between today and possible future outlooks for e-government will address such topics as governance and public management; accountability, responsibility, and transparency; security, safety, and risk; identity and privacy; democracy and political participation; information access, information rights, and intellectual property; and the roles of government, civil society, and the market. The project will run for 15 months beginning in January 2006.



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**CTG has been chosen as a partner in the European based eGovRTD2020 project, one of only two non-European members invited to participate at this level.**

**A** core aspect of CTG's mission is to take an active role in the community of researchers studying and adding to the growing body of knowledge about IT in government. We accomplish this, in part, through our participation in national and international academic conferences. In addition, staff are involved in workshops, panels, and advisory boards at all levels of government, and internationally, to explore and advise on key issues such as intergovernmental relations, electronic records management, project management, and technology and public policy.

Below is a list of the conferences and workshops at which CTG staff presented research papers in 2005. In addition, CTG staff served on many advisory boards and study panels.

## Conferences

### National

Association for Public Policy Analysis and Management (APPAM) Fall Research Conference

American Political Science Association (APSA) Annual Meeting

66<sup>th</sup> American Society for Public Administration (ASPA) National Conference

Americas Conference on Information Systems (AMCIS)

National Digital Government Research Conference, dg.o2005

Governing's Managing Technology Conference

Governing's Managing Performance Conference

Government Technology Conference (GTC East)

Mid-Atlantic Regional Archives Conference Fall Meeting

U.S. Department of Justice Technical Assistance Providers Conference

### International

CEFRIO Electronic Government Conference

DEXA eGovernment Conference

e-Challenges e-2005 Conference

e-Portugal, Second Congress

## International Public Management Education

In October 2005, CTG experts offered an executive education program at Portugal's National Institute of Public Administration (INA). "Smart IT for Government: Making the Case for IT-Enabled Innovation" was a three-day program that used our suite of Smart IT analysis tools to introduce senior managers to the assessment of an IT-enabled business innovation.

38th Hawaii International Conference on System Sciences (HICSS)

ICIS International Symposium on Research Methods

Information Resources Management Association (IRMA) International Conference

SAP Public Service Summit

## Research Seminars and Workshops

*Gateways Research on Creating Information Access Programs*  
National Infrastructure for Community Statistics (NICS) Community of Practice (CoP) Brookings Institution

CEFRIO-CTG Annual Research Exchange

## Bringing e-Government to the Hawaii International Conference on System Sciences

The HICSS conference is a unique and respected forum in computer and information systems and technology for the exchange of ideas among research and development communities around the world. As HICSS approaches its 40<sup>th</sup> year, e-government has grown in both size and stature. At HICSS39, the Electronic Government Track included thirty-five papers presented over three days in seven minitracks (e-Democracy, e-Gov Emerging Topics, e-Gov Infrastructure and Interoperability, e-Gov Organization and Management, e-Gov Security, e-Gov Services and Information, e-Policy, Law, and Governance). HICSS40 will add a mini-track on e-Gov Knowledge Management.

The e-government track reflects the efforts of an international team led by Jochen Scholl, of the Information School at the University of Washington, whose leadership at HICSS began when he was a graduate assistant at CTG. CTG leaders Sharon Dawes, Tony Cresswell, and Theresa Pardo all co-chair e-Gov minitracks and numerous papers based on CTG research have been presented at the conference.

# DISSEMINATING KNOWLEDGE

## dg.o

This year, CTG continued its important role in the evolution of dg.o, the International Digital Government Research Conference. In 1999, dg.o was created as the first formal meeting for principal investigators (PI) of National Science Foundation (NSF) funded digital government research projects. Since that time, the conference has evolved into a more broadly based research conference and now includes research from both NSF and non-NSF funded digital government research.

The renaming of the conference this year from the *National* to the *International* Digital Government Research Conference reflects growing international participation, as well as recognizes the global interconnectedness of digital government. The conference draws international participation in all aspects including the conference and program committees, presenters, and attendees. In 2004, Sharon Dawes co-chaired the conference and this year Theresa Pardo was co-chair of the program committee and will continue in that role for 2006. Proceedings from the dg.o conferences can be found at [www.dgrc.org](http://www.dgrc.org).

*Planning and Managing IT Investments:  
Determining IT Value*  
Digital Government Institute

*Strategic Sourcing: From Buying the  
Concept to Buying the Goods*  
National Electronic Commerce Coordinating  
Committee (NECCC) Annual Symposium

*Cyberinfrastructure for the Social Sciences*  
National Science Foundation Workshop

*Emergency Communication*  
National Research Council/  
National Science Foundation Workshop

Third New York-Quebec Economic Summit

*Reauthorizing the Paperwork Reduction Act*  
National Research Council (NRC)/U.S.  
Government Accountability Office Workshop

*IT Investment Management Workshop*  
U.S. Government Accountability Office

## Study Panels and Advisory Committees

*Managing and Preserving Geospatial  
Electronic Records Advisory Board*  
Center for International Earth Science  
Information Network, Columbia University

*Study Panel on USDA Forest Service Most  
Efficient Organization Assessment*  
National Academy of Public Administration

*Business and Operations Advisory  
Committee*  
National Science Foundation

*Electronic Records Advisory Committee*  
National Archives & Records Administration

*New York State Telecommunications  
Reliability Advisory Council*  
New York State  
Department of Public  
Service

*Executive Committee  
Managing Information  
Technology (ECMIT)*  
U.S. Government  
Accountability Office

## Research Discussion Breakfast Series @ CTG

The Research Discussions take an informal look at research-in-progress on a variety of government IT topics.

*Challenges and Opportunities of Cross-  
Agency Information Integration*  
Theresa Pardo, Deputy Director, Center  
for Technology in Government

*Exploring State-Local Networks and  
Relationships*  
Meghan Cook, Program Manager,  
Center for Technology in Government

*Finding the Performance Dividend:  
Developing IT Capabilities for  
E-Government*  
Jon Gant, Assistant Professor of Public  
Administration, Maxwell School of Public  
Affairs at Syracuse University

*Federal CIOs Roles and Responsibilities:  
A Comparison with Private-Sector CIOs*  
Lester Diamond, Assistant Director of IT,  
U.S. Government Accountability Office

*Electronic Health Records: How Process-  
Centric Management is Transforming  
Healthcare*  
Thomas Silvius, Partner, Program  
Architect, CSC Consulting



Jon Gant, Assistant Professor of Public Administration at the Maxwell School of Public Affairs at Syracuse University, spoke at CTG's Research Discussion Breakfast on October 4, 2005 on the topic of *Finding the Performance Dividend: Developing IT Capabilities for E-Government*.

CTG Staff

## Fifth Annual Rudolph W. Giuliani Leadership Award

The Rudolph W. Giuliani Leadership Award was established by Government Technology Conference (GTC East) in 2001 to recognize outstanding public sector executives in the state of New York who have demonstrated exemplary leadership in building strong alliances, fostering the development of new leaders within government, and effectively managing crises. The first award was presented to then mayor, Rudolph Giuliani, following his outstanding leadership during and after the September 11th attacks. This year's award was presented to Sharon Dawes by former New York State CIO Jim Dillon at the Executive Leadership Institute at the 17th annual GTC East held in Albany, New York in September.



CTG Staff

Jim Dillon, former New York State Chief Information Officer, presented Sharon Dawes with the Fifth Annual Rudolph W. Giuliani Leadership Award at the Executive Leadership Institute at the 17th annual GTC East held in Albany, New York in September.



Government Technology

## Government Technology's Top 25 Doers, Dreamers and Drivers

Sharon Dawes was named one of *Government Technology's* Top 25 Doers, Dreamers and Drivers, an annual list representing the best in government IT. The individuals named to the list are a cross section of public officials, ranging from state and local CIOs, to city managers, mayors, and governors. This year was the first time *Government Technology* named non-government members to the list.

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“The individuals named to Government Technology’s fourth annual Top 25 are changing how public agencies use technology — and in the process, they’re reshaping government itself. Our Top 25 is an eclectic group of individuals with at least one thing in common: They used innovative technologies and policies to deliver real, meaningful results.”

— Steve Towns, Editor, Government Technology

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## Journal Articles

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- Gil-García, J.R., & Pardo, T.A. (2005). E-government success factors: Mapping practical tools to theoretical foundations. *Government Information Quarterly*, 22, 4, 187-216.
- Janssen, M. and Cresswell, A.M. (2005). An enterprise application integration methodology for e-government. *Journal of Enterprise Information Management*, vol. 18, pp. 531-547.
- 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, 93-105.
- 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.

## Conference Proceedings

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- Cresswell, A.M., Pardo, T.A., & Dawes, S.S. (2005). US-European Union collaboration on digital government research: Developing new models [project highlight] *dg.o 2005 Proceedings*: 131-132. Washington DC: National Science Foundation.
- Dawes, S.S. (2005). Measures and conditions of success in public sector knowledge networks. In K.Viborg- Andersen, Å. Grönlund, R. Traunmüller, & M. Wimmer (Eds.): *Electronic Government - Workshop and Poster Proceedings of the Fourth International EGOV Conference 2005*. pp. 275-282. Linz, Austria: Schriftenreihe Informatik.
- Dawes, S.S., Cresswell, A.M., Pardo, T.A., & Thompson, F. (2005). Modeling the social and technical processes of interorganizational information integration. *dg.o 2005 Proceedings*: 289-290. Washington DC: National Science Foundation.

- Gil-García, J.R., Schneider, C., Pardo, T., & Cresswell, A.M. (2005). Interorganizational information integration in the criminal justice community: Preliminary lessons from state and county initiatives. *Proceedings of the 38th Hawaiian International Conference on System Sciences*. Los Alamitos CA: IEEE Computer Society Press.
- Janssen, M. & Cresswell, A.M. (2005). Enterprise architecture integration in e-government. *Proceedings of the 38th Hawaiian International Conference on System Sciences*. Los Alamitos CA: IEEE Computer Society Press.
- Janssen, M. & Cresswell, A.M. (2005). The development of a reference architecture for local government. *Proceedings of the 38th Hawaiian International Conference on System Sciences*. Los Alamitos CA: IEEE Computer Society Press.
- \*Janssen, M., Luna Reyes, L., & Cresswell, A.M. (2005) Modelling methods for information integration: Comparative cases in eGovernment. In P. Cummingham & M. Cunningham (Eds.), *Innovation and the Knowledge Economy: Issues, Applications, Case Studies*. Amsterdam: IOS Press.

- LeFurgy, W., Pardo, T., Hedstrom, M., & Walters, Tyler O. (2005). Preserving information long-term: Digital archiving. *dg.o 2005 Proceedings*: 15. Washington DC: National Science Foundation.

## Research Papers Presented

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- 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.
- Pardo, T.A., & Gil-García, J.R. (April, 2005). Understanding the complexity of e-government: Multi-method approaches to social phenomena. Paper prepared for the *American Society for Public Administration Conference*, Milwaukee, WI.

\*Selected as best paper at the eChallenges e-2005 Conference, Ljubljana, Slovenia.



## Practical Guides

### New in 2005

#### Why Assess Information Sharing Capability?

*December 2005*

Government faces many challenges that can be addressed more successfully when information is shared across organizational boundaries. Initiatives that depend on these kinds of information sharing are typically complex, difficult, and prone to failure. They are more likely to succeed when they include a comprehensive and systematic assessment of both organizational and technical information sharing capabilities.

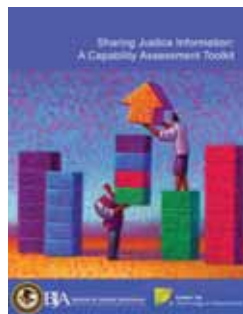


#### Building State Government Digital Preservation Partnerships: A Capability Assessment and Planning Toolkit

*August 2005*

Decisions to invest in digital preservation projects must be grounded in a full understanding of the ability of those involved

to identify and fill the gaps between current and required capability. This toolkit is designed for library, archives, records management, and information technology professionals to assess where capability for digital preservation exists and where it must be developed in order to achieve the goal of preserving significant at-risk government information.



#### Sharing Justice Information: A Capability Assessment Toolkit

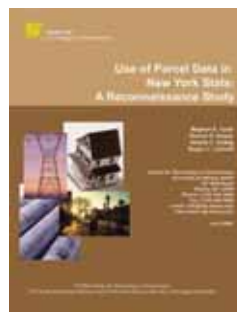
*May 2005*

The justice enterprise faces many performance challenges that can be addressed more successfully through better information-sharing initiatives. This toolkit is designed for

justice professionals to use when considering or planning for a justice information-sharing initiative.

## Reports

### New in 2005



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

*June 2005*

This report presents the findings of a reconnaissance study on the use of parcel data in New York State. It documents the current and potential uses of parcel data, its value to many

different kinds of organizations, and the typical flow of data across government and non-governmental boundaries.

#### Constructing the New York State-Local Internet Gateway Prototype: A Technical View

*April 2005*

This report describes the technical development of the New York State-Local Internet Gateway Prototype. Each phase is highlighted including prototype design, development, testing, and support. It concludes with lessons learned and considerations for future development.

### The CTG Web Site

In addition to our 2005 publications, all of our practical guides, reports, working papers, and online tools are available to download or view from the CTG Web site at [www.ctg.albany.edu](http://www.ctg.albany.edu). Many of these publications are the direct result of completed or ongoing CTG projects. Detailed descriptions of these projects can also be found online, along with many additional related resources. To keep up to date on our projects, reports, events, and announcements, please sign up for our Web News email at our Web site.

# 2005 FINANCIAL PORTFOLIO

## A Diversified Portfolio of Program Funding

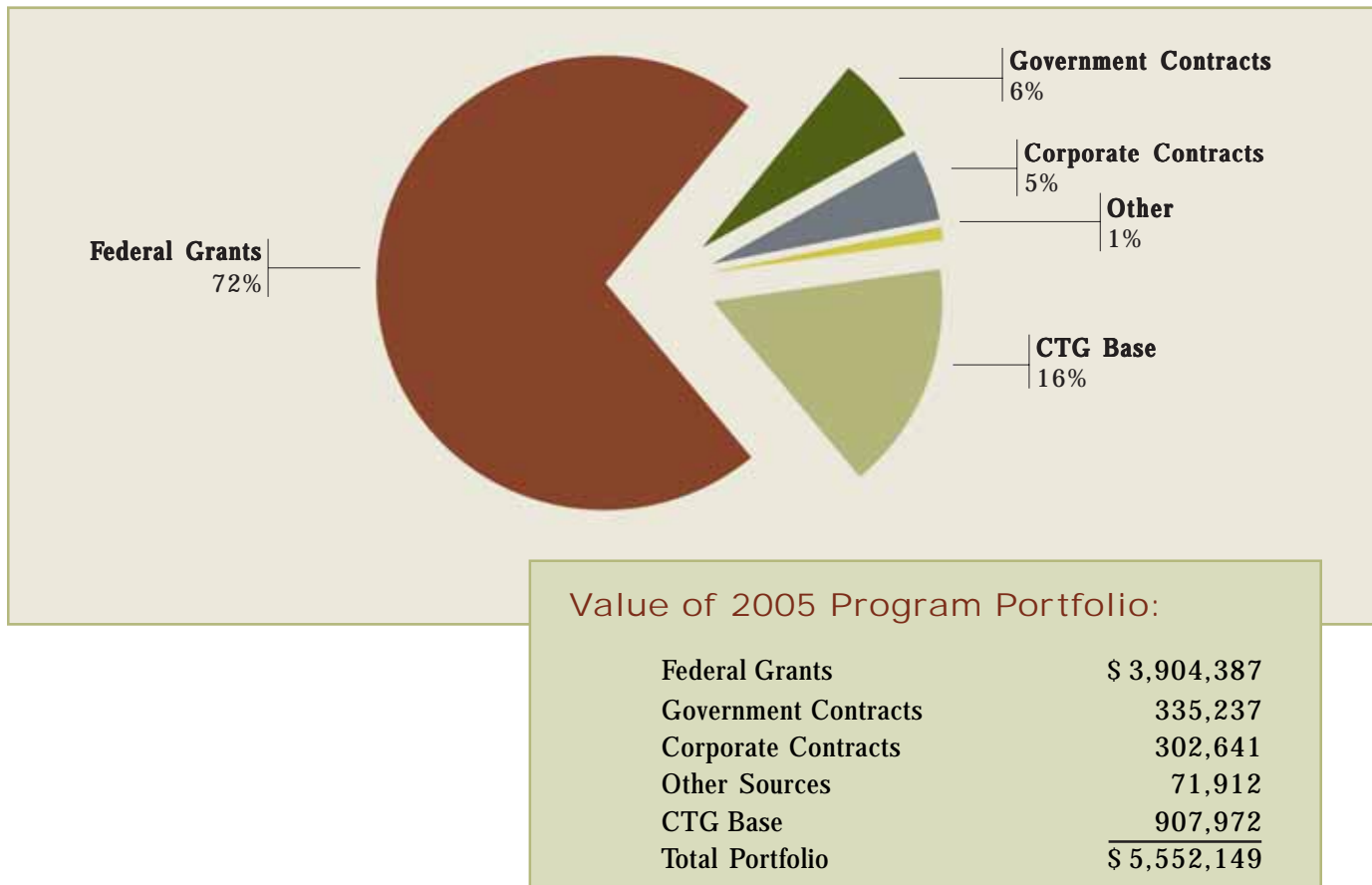
Since its creation in 1993, the Center has engaged in 29 partnership projects, which have helped to improve the services and operations of state, local, and federal government agencies. These projects covered a wide range of government topics including environmental management, human services, finance and administration, intergovernmental relations, and law enforcement and criminal justice.

Over the course of these projects, CTG has:

- collaborated with nearly 100 government agencies, 42 private companies, and 14 academic institutions and research organizations;

- developed and evaluated 12 prototype systems that answered critical policy, management, organizational, and technology questions;
- obtained 16 research grants and fee-for-service contracts totalling over \$7 million; and
- created more than 60 publications designed to support the work of government professionals and contribute to the research literature on IT innovation in government.

In 2005, CTG work was funded by a diversified portfolio of resources including several multi-year projects. Our complete portfolio is valued at \$5.5 million, nearly three-quarters of it supported by federal grants.



## Building on Strong Foundations and the Generosity of our Partners

**C**TG projects depend on active and ongoing partnerships with government agencies, technology companies, and academic scholars. From in-kind donations of equipment, expertise, and time to grants for applied research, these partnerships account for more than half our total resources.

We are grateful to the following organizations who supported our work in 2005:

### Government

Instituto Nacional de Administração, Portugal  
The Manchester Digital Development Authority, UK  
National Science Foundation  
NYS Criminal Justice Information Technology Group  
NYS Department of Civil Service  
NYS Department of Correctional Services  
NYS Department of Criminal Justice Services  
NYS Department of State, Division of Coastal Resources  
NYS Division of Housing and Community Renewal  
NYS Governor's Office of Employee Relations  
NYS Higher Education Services Corporation  
NYS Office of the Chief Information Officer  
NYS Office of Cultural Education, State Education Department  
NYS Office for the Prevention of Domestic Violence  
NYS Office of Real Property Services  
NYS Office for Technology  
US Department of Justice, Office of Justice Programs, Bureau of Justice Assistance  
US Library of Congress

### Nonprofit

National Association of State Chief Information Officers  
National Governors Association  
NYS Forum for Information Resource Managers  
NYS Local Government IT Directors



CTG Staff

William Nimz, Senior Performance Consultant at Hewlett-Packard (HP) Managed Services, gave a demonstration to the XML Testbed participants on how HP used XML to streamline one of their business processes.

### Academic

CEFRIO  
Cornell University  
Digital Government Research Center, Information Sciences Institute, University of Southern California  
Free University of Bozen-Bolzano, Italy  
University of Manchester, United Kingdom  
University of Salford, United Kingdom

### Corporate

Hewlett-Packard  
Iceni Technology Ltd.  
Logitran  
MicroKnowledge  
SAP  
Sun Microsystems  
SyncROSoft Ltd.

## Director

Sharon Dawes

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Soumava Adhya, Program Associate  
G. Brian Burke, Program Associate  
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Rachel Gaul, Administrative Manager  
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Natalie Helbig, Program Assistant  
Linda Keane, Administrative Assistant  
Jane Krumm-Schwan, Director of Administration and Outreach  
Joann Orologio, Administrative Assistant  
Theresa Pardo, Deputy Director  
Fiona Thompson, Senior Program Associate  
Derek Werthmuller, Director of Technology Services

## Faculty Fellows

David Andersen, Public Administration and Policy and Information Science, UAlbany  
François Cooren, University of Montreal  
Ophelia Eglene, Middlebury College  
Teresa Harrison, Communication, UAlbany  
Jing Zhang, Clark University  
George Richardson, Public Administration and Policy and Information Science, UAlbany  
Tomek Strzalkowski, Computer Science, UAlbany  
Giri Tayi, Management Science and Information Systems, UAlbany

## Graduate Assistants

Andrea Baker, Information Policy and Management  
Minal Brahmhatt, Computer Science  
Lucy Dadayan, Information Science  
Fikret Demircivi, Criminal Justice  
Sudarshan Embar, Business  
Russell S. Hassan, Public Administration and Policy  
Hyuckbin Kwon, Public Administration and Policy  
Roger Lishnoff, Public Administration and Policy  
Christopher Maitland, Public Administration and Policy  
Ahmed Syed, Computer Science  
Yi-jung Wu, Educational Administration

