Best Practices in State-Local Information Systems:
Tying a Sensible Knot

State-local information systems operate in an environment of almost stunning complexity. They embody enormous diversity of community settings, organizational cultures, structures, and staff. To be successful, they must deal with mismatched fiscal years; hierarchical, team, and matrix management styles; and program-, process-, and customer-driven work environments. They need to be meshed into the fabric of ongoing business processes and working relationships and relate to other information systems at both the state and local levels. They are clearly not “business as usual.”

To be successful, state and local governments must work together to integrate data, provide needed services, and, ensure confidentiality of sensitive records. It’s not easy. State agencies often rely on complex technologies while some small towns feel lucky if they can afford a desktop PC. Hardware differences are just one of many considerations that create barriers for sharing information to streamline government business.

In conjunction with the Governor’s Task Force on IRM’s Special Work Group on Intergovernmental Information Systems, chaired by Stan France of Schoharie County and Tom Griffen of the Office of Real Property Services, CTG conducted research involving eleven existing state-local system initiatives that resulted in principles and best practices in state-local information systems. The research methods consisted of surveys, focus group interviews, literature reviews, phone interviews, and on site visits to state agencies, counties, and local municipalities.

Project participants identified dozens of characteristics that they would expect to find in the “ideal” state-local information system project. These characteristics fell into four categories: objectives,
(continued from page 1)

project management methods, design features, and user support features. They also identified important barriers including a lack of education and infrastructure and the problems of sheer complexity.

Despite the barriers, problems, and diversity in municipalities and state agencies in New York State, we found many exemplary practices that show how service integration can be supported by use of effective information technology.

Through the surveys, interviews, and project documents we identified nineteen best practices that should go into the design, development, and operation of any state-local information system.

- Define purpose and scope
- Choose a well-skilled and respected project leader
- Recruit the right project team
- Sell the project to decision makers
- Communicate often and clearly with stakeholders
- Finance creatively

- Adopt tools and techniques that can manage complexity
- Look for existing models
- Understand & improve processes before you apply technology
- Match the technology to the job
- Use industry standard technology
- Adopt and abide by data standards
- Integrate with related processes and practices
- Use prototypes to ensure understanding and agreement about design
- Choose a capable pilot site
- Make the best use of vendors
- Train thoroughly
- Support users
- Review and evaluate performance

Not surprising, effective communication and leadership played a big role in successfully developing and implementing these systems. Data and technical standards are critical, the research showed, and integration of the new system with existing processes and systems was also found to be crucial. Complete results of the project are being published in a handbook, Tying a sensible knot: Best practices in state-local information systems, that will be distributed widely, following a special briefing for the Members of the Governor's Task Force on IRM in August.

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**Participating Projects**

- Electronic Voter Registration Information Sharing
- Immunization Reporting and Tracking System
- Aging Network Client Based Service Management Project
- Real Property System Project
- SALESNET
- Probation Automation Project
- Department of Social Services Local District Imaging Project
- NYS Department of Environmental Conservation’s Automated Licensing Project
- Electronic Transfer of Dog Licenses
- Electronic Death Certificates
State-Local Information System Web Sites

The sites we suggest here range from the generic intergovernmental relations material through the very information technology (IT) specific.

National Conference of State Legislatures (NCSL), Intergovernmental Health Policy Project
http://www.ncsl.org/ihpp

A project designed to explore the future role of intergovernmental collaboration in health care issues and the role IT can play in that future.

Intergovernmental Information Systems Advisory Council (IISAC)
http://www.admin.state.mn.us/iisac

An advisory group in Minnesota dedicated to covering IT issues in an intergovernmental arena.

Government Technology, May 1996
http://www.govtech.net/1996/gt/may/cover1/cover1.shtm

An article exploring intergovernmental information technology initiatives and some of the things to keep in mind when engaging in such a process.

Government Technology, September 1995
http://www.govtech.net/1995/gt/sep/cooperat.shtm

An article describing some of the initiatives of the National Performance Review and its goals of getting government to work together.

NT Town
http://www.sas.ab.ca/nttown/inter.html

A document describing seven themes of networked government and some of the things that must be considered when establishing such links.

International City/County Management Association (ICMA)
http://www.icma.org/

The ICMA homepage which links to several valuable sites and documents associated with local government concerns.

Information Infrastructure Task Force (IITF)
http://www.iitf.nist.gov/committee.html

A site with several links to various documents associated with federal, state, and local information technology areas.
Working with the Governor's Task Force

Best Practices
One of our strengths at CTG is the way we collaborate with partners in New York State government. In the past year we have formed a close working relationship with our partner the NYS Governor's Task Force on Information Resource Management. The Center has been the research arm, a consultant, and an active participant in the Task Force’s work. Producing the handbook Developing & Delivering Government Services on the World Wide Web: Recommended Practices for New York State was our first joint endeavor, and since its publication, we’ve engaged in several other cooperative efforts.

Recently, we completed the research and report on the Best Practices in State-Local Information Systems project (see p. 1). The resulting handbook was written to help state and local governments work more effectively in the complex public management environment of integrated service delivery, devolution, and rapid technological change. It contains guiding principles for designing and implementing high quality state-local information systems as well as exemplary practices used in eleven New York information systems.

New Web Sites
Ann DiCaterino, CTG Project Support Manager, has been advising Task Force staff on two Web-based applications. One will be devoted to helping agencies configure and buy desktop computers. Ann is also advising the Task Force on a Web application that will help agencies make connections with state contracts, which eventually will link them to suppliers. In addition Ann is helping with a Web site that will show the grants available to government and non-profit corporations from New York State agencies.

Work Groups
Other staff are involved with various Task Force working groups. Winsome Foderingham is a member of the Education and Training work group, and Peter Bloniarz is part of the Technology Standards and Data Standards groups. Peter is concentrating on networking standards. Sharon Dawes is working with the new group on Human Services, which is beginning to define issues and projects in Medicaid managed care.

The NYS Geographic Information System (GIS) Coordinating Body is a standing committee under the Task Force. Theresa Pardo, CTG Project Manager; is a member of the GIS Clearinghouse working group, and Sharon Dawes is chairing the GIS Education working group.

We expect our relationship with the Task Force will continue to be a productive and satisfying collaboration that will benefit state government as well as the citizens of New York.

Information about Task Force policies and projects can be found on the Task Force Web site at

http://www.irm.state.ny.us/
The Voice of CTG

When you call CTG, the first voice you’re likely to hear belongs to Linda Keane, our new secretary and a long time University at Albany employee. During her 28+ years at the University, Linda has handled many challenges from processing freshman applications to working with minority, disabled, and international students. In 1982 she won the Excellence in Support Services Award for her work in student services. Most recently she provided customer service for the Telecommunications Office. She has been a big help to our staff as we have worked the bugs out of the phone system in the new building. Linda also staffed the Finance and Business Help Desk, providing support for new users as well as troubleshooting and routing problems.

Linda enjoys working at the University because she likes the student environment, and there’s always something new to learn. She says that “when you have been employed by the same institution as I have all these years, it’s really great that you can still learn new things and meet new people.”

Information, Technology & Government — Seminar for the Private Sector

Do you understand the “ins and outs” of how NYS operates? Would you like to improve the way you do business with the State? If you are affiliated with a corporation doing business with New York State, and you answered ‘yes’ to either of these questions, you may want to attend a CTG seminar, “Information, Technology & Government” (ITG). The seminar addresses the distinctive characteristics of the government marketplace and the elements of information management decisions in the public sector. This unique professional education program covers the demands, opportunities, limitations, and processes which characterize public management.

Our ITG July 1997 seminar is filled, but if you or your team would be interested in registering for a future ITG seminar, please let us know of your interest and your specific needs. Send a message to CTG’s Education Coordinator Winsome Foderingham at info@ctg.albany.edu or call us at (518) 442-3892.
April 1997

Sharon Dawes spoke at the Illinois North Suburban Library System conference held at Northwestern University: “The Power of Community Networks.” NSLS offers library services to the northern third of the state of Illinois. Public and university libraries are becoming the main home of community networks, and the conference highlighted some of the success stories and the how tos and problems of operating community networks in these settings. She presented the results of the Internet Services Testbed Project, addressing the fact that most community nets are Web-based, and one of their key concerns is how to manage many content providers in that environment.

Sharon also presented at the NASIRE Mid-Year Conference, Colorado Springs, this year titled “Better Business Partnerships: State Leaders Working Together with Chief Information Officers.” She gave the interim results of our project on Best Practices in State-Local Information Systems. It was an interesting parallel with the issues discussed in another session on the relationship between the federal government and the states in the context of the information systems implications of welfare reform. Participants discussed all the same problems that New York struggles with: lack of appreciation for diversity among local governments, operational impact of new systems, and unrealistic expectations about time lines and funding.

Sharon presented the results of the Internet Services Testbed Project at the NYS Affirmative Action Council meeting in Albany. She spoke in conjunction with a presentation by Tom Duffy & Kevin Nephew on the goals and work of the Governor’s Task Force in a professional development session on emerging technologies.

Thanks to a grant from the UAlbany Graduate Student Association, Kristine Kelly attended the Mini-Euro Conference of the Association of European Operations Research Societies held in Brugge, Belgium. She gave two presentations at the conference, “A Systems Approach to Identifying Decisive Information in the Context of Sustainable Development,” and “A Multi-Stage Approach to Planning and Evaluating Internet-Based Service in the Public Sector.” Kristine also chaired a session on “Electronic Documents” that included other researchers from Belgium, France, and Denmark.

Dr. Herbert Kubicek of the University of Bremen in Germany visited CTG and shared his perspectives on “Germany’s Road to the Information Society,” a commission established by the German Parliament.

May 1997

Twenty-two researchers from the Istituto RSO, the Institute for Action Research on Organization Systems in Italy met with CTG
Making Connections (cont'd.)

staff to discuss our methods and projects. Betty VanHeusen, Director of Systems Planning, NYS DMV and Jim Tansey and Laura Perry, from NYS Office of Alcoholism and Substance Abuse Services also spoke to the visitors about the partnership model.

Professor Stephen Pink, leader of the Computer Communication Research Group/The Centre for Distance-Spanning Technology in Lulea, Sweden, visited Peter Bloniarz to exchange information about our respective research centers.

Peter Bloniarz visited the National Center for Supercomputer Applications in Champaign/Urbana, Illinois. He was there to discuss an upcoming possible partnership between CTG and NCSA.

Brian Fry and Sam Griswold of South Carolina visited CTG to get advice on establishing an organization similar to CTG in their state.

Bob Greeves with the Council for Excellence in Government met with staff to discuss our mutual interest in state and local information systems.

June 1997

Darryl Green, Kai Larsen, and Claire McInerney presented information about the Internet Testbed Project at the annual NYS ICEDP conference held at the Empire State Plaza.

New Publications

A Cost/Performance Model For Assessing WWW Service Investments: To help decision makers better understand the economics of Internet use, CTG has created a new tool for estimating the expected costs and benefits of developing a WWW-based service. It can help government agencies accurately predict their costs, and weigh them against the likely benefits of improved performance and cost savings. The guide is available on the CTG Web site at http://www.ctg.albany.edu/resources/rptwplst.html#cost

The guide includes the Cost Estimation Spreadsheet for Web-Based Services, an interactive tool designed to help estimate installation and annual costs, available on the CTG Web site in both HTML and Excel formats at http://www.ctg.albany.edu/projects/inettb/SpreadSheets.html#excel

Internet Services Testbed Report: The Internet Testbed project produced several publications, Web sites, tools, and audio presentations. Now an overview of the entire project, listing the project outcomes, partners, related products, and lessons learned is available. If you didn’t receive a copy, we’ll be happy to send you Delivering on the Web: The NYS Internet Services Testbed. The report is available on the CTG Web site at http://www.ctg.albany.edu/resources/pdfwpwp/istfnlrp.pdf
We are updating our mailing database and would appreciate being advised of any changes. Please fill in the form below noting changes from the mailing label used and fax to (518) 442-3886 or e-mail to info@ctg.albany.edu

Name ______________________________________________________
Title _____________________________________________________
Company __________________________________________________
Street Address ______________________________________________
City _______________________________________________________
State ______________________________________________________
Zip _________________________________________________________
Phone _____________________________________________________
Fax _________________________________________________________
E-mail address _______________________________________________

New CTG Brochure: Anyone interested in a quick look at the Center and its program can order our new brochure. Courtesy of funding provided by the Ford Foundation, the brochure documents our work in pictures and text. Contact us for copies by e-mail or by phone.