New York State Assembly Standing Committee on Government Operations

Public Hearing Testimony November 10, 2009

SUBJECT: State Information Technology Governance and Procurement

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Chairwoman Destito and Members of the Committee;

Thank you for the opportunity to offer testimony to the Committee on this important topic. The Center for Technology in Government has been concerned with issues of information technology governance, procurement, and innovation in government over our 17 year history. More recently, we completed an 18 month project in collaboration with the NY State CIO and other government officials to develop recommendations for enhanced enterprise IT governance for our state government. A copy of the project report is attached as an appendix to this testimony. The testimony offered here today is based in large part on the results of that project, but draws as well on our other research and experience gained in previous projects. The testimony is organized around the questions posed by the Committee in the hearing announcement.

IT Governance Through Statute

The first question deals with the advantages and disadvantages of formalizing NY's IT governance through statute, of which there are several. A statute can provide the clarity of roles and responsibilities for such a complicated topic. Governance is ultimately about who's in charge. A properly structured statute can clarify basic authority relationships among the parties, which helps avoid unnecessary effort in resolving conflicts, complications in decision making, confused reporting relationships, and uncertain accountability. In creating such a statute, the legislative process can involve a wide range of relevant stakeholders, beyond the executive branch, in review of governance issues and alternatives. Broader involvement can lead to a better structure for the state as a whole. In addition, a statute can provide stability and continuity in IT governance relationships, avoiding short-term political swings that can interfere with the longer term planning and investment needed for many IT systems and infrastructure.

There are also potential disadvantages of statutory IT governance. The structure can be made too rigid and thus interfere with the flexibility that IT governance mechanisms need to respond to rapid changes in the capabilities of technology and the needs of state agencies. Our project research in other states failed to find a single well tested or widely used statutory governance model for New York to build upon. We did find considerable variety and changes over time in the 7 of the 11 states that used legislation to formalize their IT governance structures¹. A statutory approach for IT governance alone may to too narrow, since in some states we studied, such as Minnesota, the restructuring of IT governance was part of a general government

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¹ Refer to Appendix 1 attached to this testimony.

restructuring. Where IT governance was legislated, we were told it was done to ensure the stability of the system beyond changes in political administrations.

What is important in either case (legislative or Executive Order) is that there are administrative mechanisms in place to help ensure the structures are used appropriately. One key challenge highlighted in our report is the lack of clarity of roles and responsibilities and checks and balances. Participants in our study identified many concerns related to unclear roles and formal authority. Others spoke of a lack of confidence that policies and procedures were followed. The general lack of clarity makes it difficult to resolve issues of enterprise boundaries and responsibility for sorting issues and strategy questions to the appropriate venue. A statute that provides this needed clarity would be an improvement over the current situation.

IT Governance Roles and Responsibilities

The second set of questions deals with the respective roles that policy makers, CIO/OFT, and the individual agencies should play in NY's IT governance structure. This area includes establishing formal and informal mechanisms of approval, oversight, and communications among those entities to improve IT governance. It also includes identifying what aspects of existing IT governance are functioning well.

Participants in our study stressed frustration with the current structure due to inconsistent engagement in policy setting and IT investment decision making. Ideally, the data currently collected through the Annual Technology Plan (ATP) process should support enterprise planning priorities of both CIO/OFT and the individual agencies. However there is at present a lack of clarity and agreement about various meanings of the term *enterprise*. In both the private and public sector, the term *enterprise* is used inconsistently; sometimes referring to all parts of state government, or an individual department, or even a collection of relates agencies. The term *enterprise* can also be an adjective used to characterize policies or investments that apply to or affect the state as a whole.

The governance structure recommended in our report includes several oversight bodies put in place to clarify the locations for decision making and information sharing. We used a structure based on checks and balances to allow all stakeholders to have an appropriate role in the process.² We believe this structure has a workable arrangement of roles and responsibilities to resolve many of the current issues of authority and enterprise identity.

IT Governance and Procurement

The third set of questions deals with what advantages and disadvantages exist in pursuing IT purchasing as enterprise-wide, agency-driven, or through centralized contracts. These concerns include how the state should balance flexibility and independence with economies of scale, need for standardization, and fostering interoperability in purchasing decisions. The question of what types of commodities and services are more or less appropriate for enterprise purchasing falls into this area as well.

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² See Chapter 4 of the "Creating Enhanced Enterprise Information Technology Governance for New York State: A set of Recommendations for Value-Generating Change."

In the most general sense, the advantages and disadvantages are easily stated and obvious. Enterprise-wide purchasing and standards are necessary to achieve certain kinds of efficiency and interoperability goals. Consolidated and contract-based purchasing have the potential to yield substantial cost savings at the point of purchase and improved efficiencies in management and training due to economies of scale. But this most general sense is not particularly helpful. Plus there is no easy answer to the question about what kinds of commodities are more or less appropriate for enterprise-wide purchasing.

The key problem is that good answers to this and the related questions require information on the **full** range of costs and benefits involved in different purchasing models and decisions. At present we have only incomplete and potentially misleading information about costs and benefits. As a result, calculations of efficiency, cost savings, and performance improvements for all purchasing models can be full of error and lead to bad decisions. For example, the savings estimates for a bulk purchase, say of a standard Commercial off the Shelf (COTS) application across many agencies, will typically grossly underestimate the costs to agencies of adapting to a different system and changing business processes, not to mention the unintended costs to those 'down stream' from the intended benefactors of the saving (e.g. municipalities and local government). Current accounting and management information systems are not able to capture or report these kinds of costs. By the same logic, these systems do not provide data about the potential performance gains to be expected from greater standardization or interoperability resulting from centralized, enterprise-wide purchasing and IT development.

The key is what happens with any technology is in practice. Consider an aggregate buy of PCs that saves a \$1 million at the point of purchase. It can end up costing the agencies that receive them \$2 million to install and use. That is not much of a bargain. On the plus side, added productivity resulting from this new equipment will not be demonstrable, if at all, until long after the purchase decision. The \$1 million saving, however, is easy to document and politically desirable. The \$2 million cost and possible productivity gains are hidden and with current information systems virtually impossible to document.

Governance arrangements for procurement should be agnostic with respect to central versus agency or cluster-based purchasing models. The structure should scrupulously avoid any built-in presumption in favor of aggregate or centralized purchasing. It should instead require a more detailed and comprehensive business case framework for all purchasing over a certain cost threshold. This new framework would require attention to these wider questions of cost and benefit. The business case requirement should apply to aggregate and enterprise-wide purchases as well as to agency-based investment.

IT Governance as an Evolving Issue

Our analysis of these issues leads to the conclusion that NY State government needs a new structure for IT governance and that one like that recommended in our report will improve the current situation. We also believe that these issues and needs will continue to evolve and require regular revisiting and revision. We hope that these remarks are helpful for the present and provide some guidance for developments in the future.

Thank you for your attention and for this opportunity to address the Committee. We will be happy to answer any questions.

Appendix 1 – State Structure

State	Department Name	IT Authority Established By ³	Legislative committee oversight of IT	Appointment Process	Dept in which this is located in	IT governing board that oversees this entity	Statewide IT Budgeting responsibility
California	Department of Information Technology (DIT)	Legislation 1995	Yes	Governor appoints, Legislature reviews and approves	IT office is a Department unto itself. DIT Reports directly to the Governor's office	DOIT is the state's highest-level IT organization that oversees strategic IT policy and planning	Review agency budget request; make recommendations for governor/state budget office, participate in legislative deliberations; conduct performance/accountability/ROI assessments; Reconcile budgets with strategic –plan goals
Kansas	Information Technology Office	Legislation 1998	Yes	Governor appoints Cabinet Reviews	Administrativ e Department Note: Executive Branch CITO is budgeted from within the Dept of Administratio n and by law has cabinet presence	IT Executive Council (ITEC)	Develop and issue IT-budgeting policies and guidelines; review agency budget requests, make recommendations for governor/state budget officer; participate in legislative deliberations; conduct performance/accountability/ROI assessment; reconcile budgets with strategic plan goals.
Kentucky	Governor's Office for Technology	Legislation 2005	Yes	Governor appoints/reviews/appr oves	Governor's Office	CIO Governance Team	Develop and issue IT-budgeting policies and guidelines; review agency budget requests; make recommendations for governor/state budget office; participate in legislative deliberations

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 $^{^{3}}$ Source - NASCIO Compendium of States 2002

State	Department Name	IT Authority Established By ³	Legislative committee oversight of IT	Appointment Process	Dept in which this is located in	IT governing board that oversees this entity	Statewide IT Budgeting responsibility
Maine	Office of the CIO	Legislation	No	Governor reviews and approves Cabinet Officer(s) appoint/review/approv es Others (panel made up of HR and other Senior IT managers) reviews and approves	Department of Administratio n and Finance	Information Systems Policy Board	Conduct performance/accountability/ROI assessments. Note: the CIO and / or the Director of BIS may assist agencies looking for additional monies in the justification of their need.
Michigan	Department of Information Technology	Executive Directive /Order 2001	Yes	Governor appoints/reviews/appr oves Legislature Reviews/approves	IT office s a department unto itself. DIT is a cabinet level department.	N/A	Develop and issue IT-budgeting policies and guidelines; review agency budget requests; make recommendations for governor/state budget office, participate in legislative deliberations; conduct performance/accountability/ROI assessments; reconcile budgets with strategic plan goals
Minnesota	Office of Technology	Legislation	N	Governor appoints legislature approves	Administrativ e Department	Technology Enterprise Board	Develop and issue IT-budgeting policies and guidelines review agency budget requests; make recommendations for governor/state budget office; participate in legislative deliberations; reconcile budgets with strategic plan goals.
New York	Office for Technology	Executive Law Article 10-A June 2000	N	Governor Appoints	IT office is a Department unto itself	Advisory Council for Technology	Review agency budget request. NYSOFT reviews individual purchases by agencies against a strategic plan. It does not set statewide IT budgets
North Carolina	Office of Information Technology	Legislation	Yes	Governor appoints	Governor's Office	Information Resource Management	Review agency budget requests, make recommendations for governor/state budget office

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State	Department Name	IT Authority Established By ³	Legislative committee oversight of IT	Appointment Process	Dept in which this is located in	IT governing board that oversees this entity	Statewide IT Budgeting responsibility
	Services					Commission	
Pennsylvania	Office for Information Technology	Executive Directive/Or der	Yes	Governor appoints reviews approves Cabinet officer(s) reviews, approves Legislature reviews	Administrativ e Department	CIO is responsible for all enterprise policy and planning	Develop and issue IT-budgeting policies and guidelines; review agency budget requests make recommendations for governor/sate budget office; participate in legislative deliberations; conduct performance/accountability/ROI assessments; reconcile budgets with strategic plan goals
Virginia	Secretariat of Technology	Legislation	Yes	Governor appoints Legislature approves	IT office is a Department unto itself, Secretary of Technology reports to Governor	Council on Technology Services (COTS)	Develop and issue IT-budgeting policies and guidelines; review agency budget requests make recommendations for governor/state budget office participate in legislative deliberations