## State IT Management Initiatives
Information Systems Planning Process—Strong, Dynamic, and Inclusive

Executive Summary

Tennessee's information technology (IT) planning is strong, dynamic, and yields results. It is built on a foundation of over 20 years of continuous improvement. Stakeholders are representatives from all three branches of government and include senior agency leaders, elected officials, and IT leaders. The process, which is tied to strategic and budget planning efforts, is both cyclical and continual, thereby enabling the State to utilize planning as a process for action as opposed to a project that ends with a document to be placed on a shelf.

Office for Information Resources

Planning, Review, and Approval Process
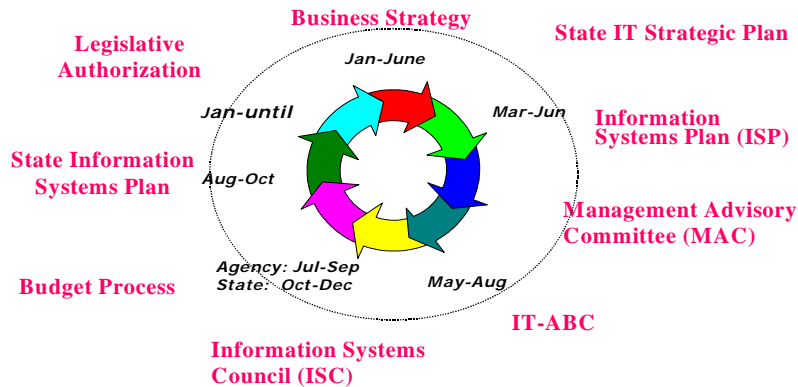
The State's Technical Architecture is a key ingredient in the planning process. Based on NASCIO's **Enterprise Architecture Development Tool-Kit**, each domain is reviewed thoroughly, at least on a bi-annual basis. A team of subject matter experts from agency IT shops and OIR determine gaps in the architecture as well as identify products and technologies that should be tagged for phase-out or obsolescence.

Tennessee continues to reap the benefits of its strong planning process. Improvements within agencies include development of projects with a strong emphasis on a positive return on investment through improved service delivery and/or reduced costs or increased revenues. The statewide review of projects enhances the ability of the administration to prioritize projects and direct IT resources in order to achieve stated objectives.

IT planning in Tennessee—Committed to excellence in service delivery to the citizens of Tennessee.

State IT Management Initiatives
Information Systems Planning Process—Strong, Dynamic, and Inclusive

A. Description of project, including length of time in operation.

Tennessee's strong, dynamic planning process yields results ranging from a well-defined technical architecture to state-of-the-art multi-agency applications. The State recognizes that the need for government services continues to grow; yet available resources continue to decrease. In response to this, State agencies have turned more aggressively to information technology (IT) as a major enabler that assists government in managing change. It is also understood that a well-defined information technology planning process is a critical success factor. The State of Tennessee has developed a comprehensive technology planning process to enhance project initiation, review, approval, procurement, and successful implementation.
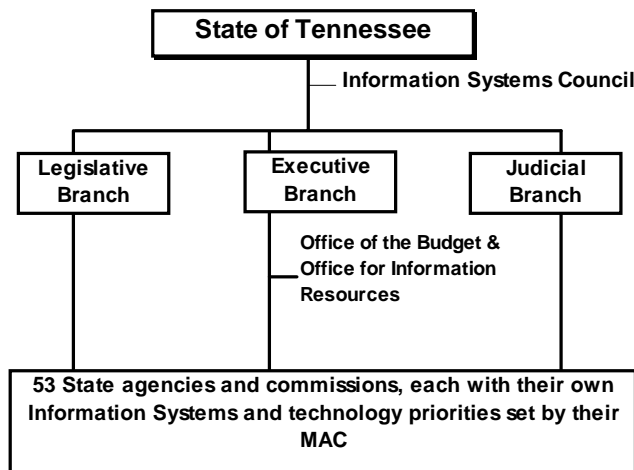
The Stakeholders:

Information Systems Council (ISC) is the governing oversight authority for State technology and consists of eleven representatives from the legislative, executive, judicial branches and two private sector representatives.

Office of the Budget, Department of Finance and Administration (F&A), is the central budget authority for State government.

Office for Information Resources (OIR), F&A, is the central technology authority for State government and the IT service provider to State agencies.

Management Advisory Committee (MAC) is established within each agency as part of the planning process. Its purpose is to enable executive management to more effectively utilize IT projects to solve agency business problems. The typical MAC is chaired by the Deputy Commissioner of the agency with three or four program/functional executives as MAC members. Agency Information Systems (IS) Directors are staff to the MAC.

Information Systems Management (ISM) Group is an organization of senior IT leaders in State government. Their mission is to provide an information-sharing forum. The group's objectives are to identify common concerns, arrive at consensus, and work toward resolution of issues. This group is instrumental in promoting communication and buy-in between State agencies and OIR.

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  │ 53 State agencies and commissions, each with their │
  │  own Information Systems and technology priorities  │
  │           set by their MAC                          │
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The Planning Process:

Tennessee began the planning process in 1981, and for over 20-plus years it has served as the catalyst for major efforts. Its success stems from tremendous buy-in from the ISC, program leaders from all three branches of government, and ISM directors. The State uses a yearly cycle, which begins with an executive management kick-off meeting in March and ends in December when the Governor's budget document is completed. A comprehensive and dynamic intranet website provides guidance to all users with links to guidelines and methodology.

An Enterprise Information Technology Strategic Plan Drives Agencies' Technology Strategies. A designated team of upper management from OIR is tasked with developing the strategic IT plan for the State. The chair of the statewide ISM group serves as a full member of that team. This plan is developed beginning in the fall of each year and is published prior to the Executive Management Meeting (referenced below) that is held each March. ISM participation helps ensure that specific agency needs are reflected in the enterprise plan.

Executive Management Meeting on Information Systems Planning. An Executive Management Meeting is held to initiate the planning season. The Commissioner of Finance and Administration (the State's Chief Financial and Executive Officer), State Budget Director, and the Deputy Commissioner & CIO discuss administration priorities, as well as budgetary and technology direction. Attendance at this session is a full house of Commissioners, deputies, budget officers, and the ISM directors from each State agency.

Preparation and authorization of individual Information Systems Plans (ISPs) by 53 separate government agencies of the executive, legislative, and judicial branches of State government.

Each agency develops an ISP annually.   It covers a three-year planning horizon. Agency executive management and business staff, with agency ISM staff assistance, perform the following activities:

➢ Review of the agency strategic business plan, including statement of mission, goals, objectives, and business strategies.
➢ Assessment of the agency's current technology environment, including evaluation of its primary hardware/application software.
➢ Development of an IT strategy based upon the analysis of the current environment and the business goals that need to be achieved. It also addresses agency technology weaknesses and needs.
➢ Large and small technology projects are identified and documented in the ISP, and may include traditional application development or acquisition projects. Each large project is described in a Project Proposal, which addresses the business process, strategy, and objectives. A rigorous Cost Benefit Analysis (CBA) detailing the costs, benefits, risks, and funding sources is included. The proposal and CBA provide a framework for an agency's management to evaluate and prioritize proposed projects. The documents provide a concise mechanism to monitor costs and benefits during implementation, and are reviewed and authorized by agency MACs. A streamlined description is provided for each small project.
➢ Year One contains projects for the current fiscal year for which funding is already in place. Year Two includes proposed projects planned for the following fiscal year. Funding for these initiatives will be requested in the agency's budget submitted in October of the current fiscal year. Year Three covers anticipated projects for years outside the budgeting cycles.

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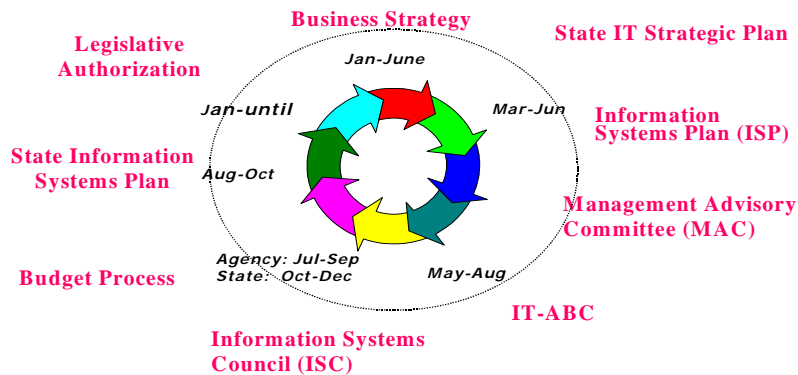
Review of each plan by Budget and OIR - a meeting with each agency to better understand their goals and refine their plans.   A review committee comprised of both offices, known as the IT Assessment and Budget Committee (IT-ABC), has the responsibility to address IT issues from a statewide view and provide a process for monitoring technology projects. There are multiple purposes for plan review, including:

➢ Approval or disapproval of current projects based on funding availability; adherence to State IT architecture, policies and procedures; and value to citizens.
➢ Recommendation of projects for inclusion or exclusion in funding formulas for the next fiscal year.
➢ Review of projects in an attempt to identify long-term needs for information technology resources.
➢ Identification of issues affecting the effective and efficient use of IT in both the agency and the State as a whole.
➢ Overall view of projects across agencies, which may perform similar functions, generate redundant data, or demonstrate a need for sharing data or resources. There is a growing need for sharing data among agencies in order to facilitate service to the citizens of the State.

The plan review begins as soon as the plans are submitted on July 1st. Approximately 50 staff members from divisions within OIR and Budget read and comment about the plans and specific projects. IT-ABC members complete their review of both the staff comments and the ISPs. The action by the agency's MAC in setting project priorities helps the IT-ABC understand the relative importance of the project in the prioritization and ranking of all project requests throughout State government. After IT-ABC review, an agenda detailing issues of concern is prepared and distributed to the agency. A formal meeting is held with each agency's MAC and ISM director to address identified issues. After the formal meeting, a disposition memo is developed by IT-ABC that details the status (approval, deferral or disapproval) of the planned projects.

One of the strengths of the planning process is that the IT-ABC remains active throughout the year, reviewing new projects as needed, providing flexibility and responsiveness to agency needs. This keeps the planning process dynamic, and prevents it from being just an exercise that produces a static result once a year.

Review and approval of a consolidated statewide plan is an annual objective of the Information Systems Council (ISC). After IT-ABC review and disposition, a Statewide Information Systems Plan is developed based upon individual agency plans. The Council makes the final disposition on major projects and initiatives for State government. The Statewide Information Systems Plan consists of the following sections:

➢ Description of the Information Technology Environment on an enterprise basis including details about planning initiatives and the technical environment.
➢ Overview of specific agency technology projects
➢ List of agency existing applications
➢ Funding considerations based on the IT-ABC disposition of projects are finalized and the statewide agency initiatives are presented to the Information Systems Council.

Establishment and maintenance of a dynamic Technical Architecture is a key ingredient to success. The State of Tennessee maintains a technical architecture. Based on NASCIO's **Enterprise Architecture Development Took-Kit,** our existing list of over 200 different standards are divided into eight domains or architectures: application and web; collaboration; data; information; network; platform; security; and systems management. A systematic review process has been implemented to ensure that each of these architectures is reviewed in detail bi-annually.

Within the past year Tennessee has instituted a review process that has been instrumental in ensuring that the State maintains a viable technical architecture, with contributions from the State's systems community at-large. The State convenes an ad-hoc team to review each of the domains at a given point in time. Each of those teams includes three members from different State agencies. These representatives are full members of the group and participate actively in the formulation of recommendations. The agency representatives are selected by the chair of the ISM group and report regularly to its Steering Committee concerning the progress and recommendations from each architecture review. These agency leaders can testify that they have a voice in the selection process, and can share with the ISM community that the process is appropriate – and that their input was welcome. OIR and others review selected architectures quarterly, identifying strategic or tactical elements or areas that may require specific, definable action. Standard products, tools, or protocols may be determined to be waning (twilight), obsolete (to be removed from the architecture), emerging, or current.   Agency input results in buy-in and fewer complaints about "centralized control."

Strategic items may require that a project team be formed to study the technology and formulate recommendations to be presented in the next quarterly review cycle. For these strategic items, OIR and the

ISM representatives identify appropriate staff to participate in the study. A Project Manager from OIR is assigned and the resources for the technology review are a multi-disciplined team with members from both OIR and the agencies.   The project team's work begins when the project is approved and resources are available.   These approvals and endorsements foster cooperation and buy-in, as well as agreement to provide needed human resources for the effort. This further ensures that standards selected meet the needs of the State as a whole.

Both tactical and strategic items proposed define the technology to be studied, the rationale for the study, and the potential impact of change to the architecture.

Time Commitment for the Information Technology Architecture and Standards Committee. The committee plans for up to three meetings during Month 1 of the review cycle. Work outside these meetings consists primarily of an initial in-depth review of the designated architecture by all members and, as needed, any follow-up meetings to determine further actions. Time commitments of the project teams are defined in the Project Work Plan prepared by the OIR Project Manager and submitted to the Committee for review and approval. Month 2 and 3 may require one or two formal meetings of the Committee.

A New Link Between Web and eGovernment Planning, and Overall IT-ABC Planning. In the past year, the State demonstrated continuous improvement by adding a new, mandatory dialogue between an equally sophisticated process for web project planning, and the IT-ABC, which was also reviewed by the ISC. Realizing that it was possible to create a new web application without full knowledge of other system impacts that only the IT-ABC would know, a quick linkage was developed without any impact on approval speed.

B. Relative significance to the improvement of the operation of government.

The operation of State government has improved in three general areas as a direct result of the Information Systems Planning process: improvements in the way that agencies determine and direct information technology projects; improvements in the statewide technology and fiscal review of projects; and significant improvements in overall information technology planning.

Improvements Within Agencies. Individual projects are now more clearly defined due to the standardization of a comprehensive format as required by the Project Proposal and Cost Benefit Analysis (CBA). Anticipated review of these deliverables within the agency and outside the agency increases the accuracy of the descriptions and estimates. Project sponsors, as well as MAC members, are closely involved with the CBA.

Individual projects are part of an overall technology strategy that moves the agency toward a clearly defined goal. The goal to be supported is part of the agency's business strategy. The closer link between technology and the business, as well as the clear tie between the two, enhances the visibility of information technology initiatives that are usually costly in dollars and manpower resources.

Management overview and direction of the information technology strategy and supporting projects are emphasized. And, because management played a key role in the development of the information technology strategy, the projects are more likely to be supported with resources.

Statewide Technology and Fiscal Review. The explicit statement of the driving business need as well as the definition of the project and associated costs and benefits improves the understanding of the need for the project outside of the agency. A more objective review of all information technology projects can be undertaken. Approvals and prioritization are based on more complete data and less on subjective issues.

Improvements in Overall Technology Planning. An enterprise-wide view is obtained so that initiatives are seen as State initiatives rather than individual agency initiatives. Resource maximization can take place through this view of similar, cooperative projects. Efforts can be more coordinated across agencies. Conformance of information technology initiatives to statewide architectural standards and direction is more readily encouraged and achieved.

This enterprise view results in the ability to leverage technology solutions across agencies. An example is the Regulatory Board System. Three separate departments of State government (Department of Health, Department of Commerce and Insurance, and Financial Institutions) all identified a need for a new system that issues, tracks and maintains various licenses. The review of these separate project proposals resulted in a recommendation by the IT-ABC to proceed with one system that will meet the needs of the three departments. The result will be a cost savings to the State and easier access by citizens who must obtain different types of licenses.

C. Benefits realized by service recipients, taxpayers, agency or state

Against the backdrop of our planning process, projects are initiated, approved, and monitored to ensure they meet the business needs of the State. An atmosphere has been fostered to encourage cost effective technology solutions to service delivery challenges for State government.   Representatives from the IT-ABC are invited to provide input at the Governor's Budget Hearings when those hearings address specific systems and systems development issues. Information provided serves as input to the Administration as annual initiatives and priorities are developed.

The effective and efficient use of resources expended on technologies, close management control over projects, and benefits in citizen service have encouraged expanded use of information technology. Information technology in all of State government is driven by business goals in support of the citizens of the State. Executive management is accountable for technology initiatives. More realistic technology projects are defined and evaluated on a more objective basis.

D. Return on investment

There is no doubt that information technology planning has enabled significant progress in improving the operation of State government. One indicator of that progress and effectiveness is national recognition. In this area, the State of Tennessee has been well honored over the last several years. The **Governing** magazine rating from 2001 is a good illustration of the spirit of the awards. Tennessee ranked in the top six states in the country in Information Technology in a time of substantive budgetary stress. The former CIO was quoted in the publication: "The biggest mistake [IT can make] is to chase a bad project down a hole." The planning process is not a popularity contest. Projects with a poor return on investment, or with spiraling costs may be terminated. The State has also won the "Best of the Web" finalist in 2001 and 2002, ranked first in the nation in the Brown University 2002 survey of eGovernment, and first in NASCIO's 2003 award for our statewide network.

As an outgrowth of its planning process, the State of Tennessee created innovative funding mechanisms to assist in the affordable adoption of technology to enhance service to citizens, as recently highlighted in a NASCIO special publication "Pay It Forward." The State established the Systems Development Fund as a mechanism for funding large application development projects. OIR will provide a loan for certain approved projects. The agency must repay those funds over a five-year period. Projects approved for expenditure from this fund are determined by the ISC based on the recommendation of the Commissioner of Finance and Administration. This enables agencies to procure technology needed to improve their efficiency and then repay the cost from realized savings.

The Architecture and Standards Review Approach has resulted in a systematic approach to ensuring that the State's architecture is dynamic. It enables the State to leverage its investment by ensuring a support structure for a defined set of products, platforms, and protocols. The process is recognized and endorsed by both the State's purchasing department and the Comptroller of the Treasury. This facilitates the procurement and approval effort for information technology projects.