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Findings from the NASCIO State IT Project Management Assessment

NASCIO

Representing Chief Information
Officers of the States

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Executive Summary

Billions of dollars are spent on government IT projects every year and state CIOs have the bulk of responsibility for project execution. Surveys by the Standish Group International, Inc. indicate that success rates have increased to 34% of all projects—more than a 100% improvement over their first study in 1994, but that still leaves overall IT project success rates at less than 66%.[1]

States have demonstrated that applying the discipline of project management (PM) can greatly increase project success, but there is still much to be done. This core belief served as the impetus for launching NASCIO's 2005 survey of state information technology (IT) project management practices. Several core themes emerged that may be beneficial to the implementation of state IT initiatives:

- **There is value in adopting an enterprise approach toward IT investments.** In a time when all states are challenged to provide improved services with fewer resources, adopting an enterprise project management approach supports key business goals to leverage economies of scale, eliminate duplication of efforts, and foster the use of common applications that can be used across multiple agencies.

- **Given the complexity of implementing IT projects both within and across state agencies, clarifying the governance structure during the initiation phase of the project is essential.** State IT projects must meet the challenge of balancing an enterprise perspective with the core business needs of individual agencies. Developing written documentation clarifying roles, responsibilities, and the decision-making model for escalating

and resolving issues at the onset of the project helps build consensus across diverse stakeholders and saves valuable time during project execution.

- **Organizational change management must be viewed as an integral component of project management.** A new IT system cannot be successful unless it is embraced by the end users. Organizational change management focuses upon organizational readiness and adopts a structured approach to prepare end users gradually for the cultural change that accompanies the implementation of new technology.

- **Enterprise portfolio management can facilitate the alignment of statewide IT investments with a state's goals and objectives and enterprise architecture approach.** State project management offices (PMOs) can play a critical role in helping states select the "right" projects through realization of enterprise portfolio management. Enterprise portfolio management provides a structured approach for identifiying, prioritizing, selecting, and tracking projects that is aligned with core business and technology drivers.

- **Actively supporting career advancement for project managers within the state through project management training and certification programs enhances continuous improvement**. People are the greatest resource of any organization. Therefore, in order to increase capability to implement IT projects successfully, ongoing training must be provided for project managers within a centralized PMO. Project managers (PMs) within state agencies, as well as other

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[1] SoftwareMAG.com Product Coverage, "Standish: Project Success Rates Improved Over 10 Years," January 15, 2004.

project stakeholders such as project sponsors and vendors, need training as well. Increased opportunities for project management training and mentorship builds a cadre of personnel who not only believe in the value of a disciplined approach to IT project management, but who also possess the competence and skills needed to implement challenging state IT projects successfully.

KEY SURVEY FINDINGS

The National Association of State Chief Information Officers (NASCIO) recently surveyed state IT project managers concerning their approaches to IT project management. The trends discovered in responses from 34 states in August-September of 2005 reveal a baseline regarding perceived success of project management as an overarching discipline in state government. Many of the questions in this self-assessment used a rating system of one-six, in which one equals "no plans for this activity" and six equals "proficient/highly experienced in this activity" (see full rating system in Appendix II). Key findings and recommended action items for NASCIO and state CIO offices are listed below per survey subtopic area.

Project Management Office Structures - States are moving toward having an enterprise/statewide PMO structure in place. All 34 states reported progress in this area with 26 indicating they already have one in some stage of development or operation. Other studies have shown that flawed organizational structures which do not support holistic solutions and poor executive sponsorship are two of the biggest predictors of project failure.
Key findings:
- Project managers and CIOs from across the country cite the need for authority over projects rather than mere responsibility for their success.
- Most (85%) enterprise PMOs are empowered by state CIO directive/administrative policy and have a reporting relationship to that CIO. It appears that states are recognizing a central

need to at least govern portfolios and common project management practices centrally while at the same time distributing some PMO activity and functions to the agencies. There are varying lines of demarcation in scope of influence.
Call to action:
- States should embrace an enterprise focus which will eliminate duplication of expenses through development of common applications servicing multiple agencies.
- NASCIO should continue its focus on IT project management. With most states embarking upon the enterprise approach an opportunity exists for sharing of experiences, learnings, and work accomplished to further leverage the benefits being derived.

Governing Statewide or Multi-Agency Projects - Agencies, much like businesses, are set up in a functional structure based upon a hierarchy. Management of the various components has specializations, such as IT projects, and PM functions should be set up in a way to leverage those strengths.
Key findings:
- Successful project teams are often set up in a matrix structure, leveraging the strengths of individuals from across the breadth of the organization. While this structure is difficult enough in a single agency project, adding multiple agencies that span a state magnifies the complexities exponentially.
- While individual states vary, there is typically either a state chief information officer or some governing council that makes final decisions in regard to priorities for projects (82%), staffing decisions, and "go-live" decisions (79%).
Call to action:
- States should put an agreed-upon governance document in place during the initiation phase of any project.

Organizational Change Management - When implementing new information systems, technology is often the easy part; managing expectations

and preparing people for change becomes the challenge. A primary goal of organizational change management is to provide the structure and guidance necessary to prepare organizations for the acceptance of cultural change and improve focus through communication.

Key findings:

- Seventy-nine percent of respondents noted that the lack of organizational change management has contributed to the failure or delay of an IT project.

Call to action:

- NASCIO should begin to build more awareness of the importance of effective organizational (cultural) change management and its impact on successful project implementations.
- State project managers should put more emphasis on the cultural/people side of project management.

Project Portfolio Management - Central IT portfolio management is a growing trend among all states. A great majority of states are centralizing via the office of the state CIO and enterprise/statewide PMO functions.

Key findings:

- Twenty-seven respondents (80%) had a project inventory and tracking process in place and a similar number were maintaining the inventory on at least an annual basis. These states also reported their project evaluation, selection and prioritization processes as well as their level of monitoring projects with multi-dimensions of performance were in the initial stages (four on a six-point scale with six being highest).

Calls to action:

- States should continue to share best practices through NASCIO's IT Project Management Forum.
- State CIOs should provide consistent, objective information related to the performance of technology projects

against established criteria to agency and enterprise leadership.

Strategic Alignment - The focus of state organizational project management governance structures are echoed in this section of the survey. Strategic alignment centers on key overarching issues such as the role of the state PMO in providing guidance on statewide business investments, managing the state's project portfolio, and ensuring alignment with state enterprise architectures and IT strategic plans.

Key findings:

- The majority of the states indicated that project management is included in the state's IT strategic plan with one state rating their efforts as a six (proficient), eight states rating their efforts as five (ongoing, needs improvement), and only two states rating as one (no plans) with an overall rating of 3.86.

Call to action:

- Although most states are moving in the directions of strategically linking their project management methodologies and enterprise architecture together with the states' lines of business, there are still opportunities for improvement in this area.

Certification and Training - Training and certification programs for states must go beyond the tools and technology of IT project management. Many states have developed or amended programs to deal with challenges that are explicit to state government such as procurement and budget laws and governance structure. Sponsor training is also critical as lack of leadership is often cited as the number one reason for project failure.[2]

Key findings:

- When asked to assess the programs and processes that exist to train and certify state project managers, 40% of the respondents reported a proficiency; and more than 43% of respondents

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[2] Mark A.Taylor, "The Five Reasons Why Most Projects Fail," TAYLOR Systems Engineering Corporation presentation, Plymouth MI, 2003.

recognize certification from the Project Management Institute (PMI).

- The level of training for project sponsors was not rated nearly as high. The average response was only 2.39 (using the one-six scale, where six equals "proficient"). Vendor orientation as a whole was rated just slightly more advanced than project sponsor training.

Call to action:

- Formalized project sponsor training should be adopted by state governments.

Career Path - Some states are making headway in developing project and portfolio management as a career path in civil service. As these disciplines acquire more of a foothold in training and certification programs in state government, the success that has been found in the private sector with management of IT projects and investments can be further emulated.

Key findings:

- Nearly 30% of respondents reported that "project management" is a classified civil service title in their state. Unfortunately, only three of the responding states indicated that they have an established career path for project management.
- Five out of 34 states indicated having their own state PM certification program.

Call to action:

- Continue to build on positive trends toward establishing PM as a career path in state government.

NASCIO STATE IT PROJECT MANAGERS FORUM

To answer state governments' needs to share ideas and best practices regarding project and portfolio management, NASCIO's State IT Project Managers Forum was established in July 2005 as an ad hoc focus group. The group is designed to foster the exchange of information, as well as to promote these disciplines among the states and their partners. The primary audience of the forum includes lead state IT project and portfolio managers, and state

CIOs. Other state staff members interested in IT PM are welcome to participate.

Some forum activities include: development of a State IT PM listserv and contact list; monthly all-state conference calls with topics such as PM methodology, IT and PMO governance, portfolio management, and dashboard reporting; a survey of state IT project and portfolio management practices (which serves as the basis for this document); as well as a forum website and online clearinghouse. Potential future projects for the group may include: development of an IT PM newsletter; addition of a PM category to NASCIO's *Digital Government Compendium*; addition of a NASCIO awards category regarding project management; and potentially, a follow-up "best practices" issue brief in conjunction with NASCIO's corporate membership, which earlier this spring cited "effective project management" as one of the top five competencies needed by government.

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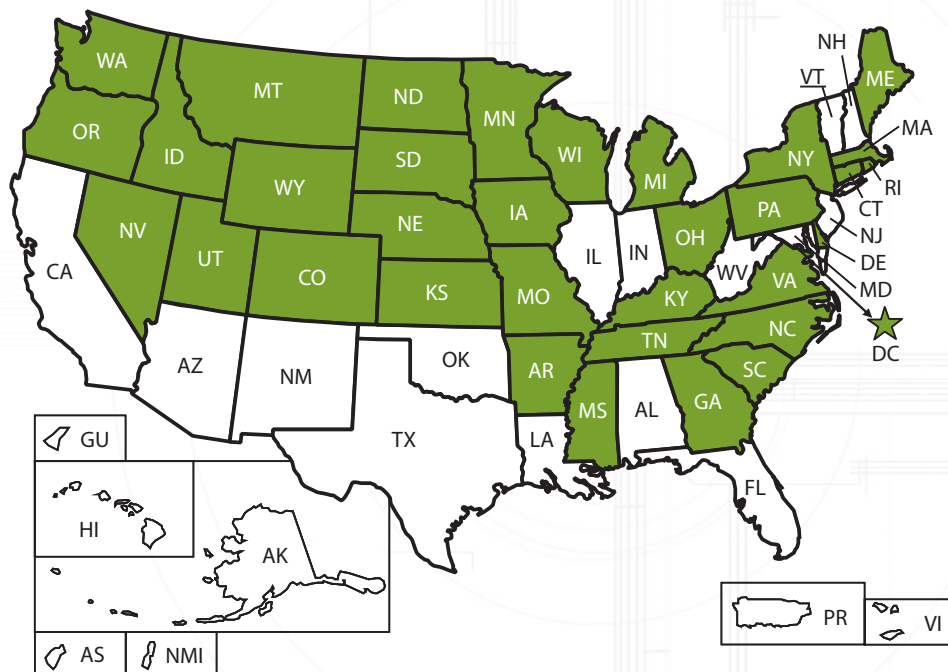NASCIO

Background & Approach

In August-September 2005, NASCIO asked state CIO and project management offices to participate in a web-based survey regarding their IT project management (PM) practices. The initial results of this self-assessment serve as the baseline for the ongoing collection and exchange of information among state IT PMs. The survey instrument, as the basic building block of an online clearinghouse of state PM practices, is designed to be a "living document" with ongoing results posted on NASCIO's State IT PM Forum website. The results are listed in aggregate here. There has been no attempt to validate responses through analysis of state resources. The online survey was completed by the state CIO, lead state IT project manager, or other member of the state IT function.

NASCIO does not rank state progress, but individual responses are available to state members so they may better assess their respective progress. Through this initiative, NASCIO hopes to identify practices of effective project and portfolio management programs in the states.

SURVEY PARTICIPANTS

Thirty-four (34) states including the District of Columbia responded to the survey as of this writing. Participation included a wide distribution in geography, population, and budget.

1. Arkansas
2. Colorado
3. Connecticut
4. Delaware
5. District of Columbia
6. Georgia
7. Idaho
8. Iowa
9. Kansas
10. Kentucky
11. Maine
12. Massachusetts
13. Michigan
14. Minnesota
15. Mississippi
16. Missouri
17. Montana
18. Nebraska
19. Nevada
20. New York
21. North Carolina
22. North Dakota
23. Ohio
24. Oregon
25. Pennsylvania
26. Rhode Island
27. South Carolina
28. South Dakota
29. Tennessee
30. Utah
31. Virginia
32. Washington
33. Wisconsin
34. Wyoming
(listed alphabetically)

Detailed Survey Results

Survey results are presented in the same order as the survey instrument (see Appendix. II). This section highlights particular areas of interest from the survey results, along with selected samples of state or national trends as well as observations on those trends and their implications for NASCIO.

PMO STRUCTURE

Section one of the survey asked five questions concerning each state's project management offices (enterprise versus agency), reporting relationships, empowerment, performance measures, and provided a section for users to submit comments.

Clearly states are moving toward having an enterprise/statewide PMO structure in place. All 34 states reporting indicated positive responses for such, with 26 indicating they already have one in some stage of development or operation, while the remaining eight states are considering establishing one. No states indicated they do not have any plans for an enterprise PMO. Meanwhile, all but two states overwhelmingly indicated they also have individual agency PMOs.

Most enterprise PMOs are empowered by state CIO directive/administrative policy and have a reporting relationship to that CIO. Empowerment also comes from legislative action and executive orders and, in several states, the PMO reports to an established governing body and/or the CIO.

Implications for government

It appears that states recognize the need to at least govern portfolios and common project management practices centrally while at the same time distributing some PMO activity and functions to the agencies. The line of demarcation appears to be recognition of those enterprise functions, applications and services and separating them from agency-specific functions, applications and services which can and should continue to be managed by the respective agencies. Drawing clear lines for identifying and assigning responsibility and authority while keeping all in sync can be a challenge in such structures.

Adopting an enterprise approach toward IT investments will yield many benefits. States are struggling with tight budgets and reduction in workforce size over time due to retirements.

States Implementing Enterprise/Statewide PMO (34 states reporting)

Early Implementation 18% (6)
Considering 24% (8)
In Plans 21% (7)
No Plans 0% (0)
Doing 37% (13)
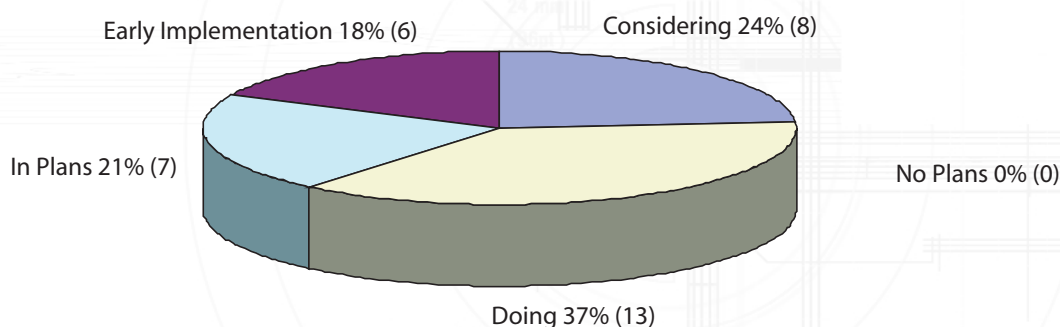
They must find ways to operate and provide improved services with fewer resources.

Call to action
NASCIO should continue its focus on IT project management which provides an excellent opportunity for doing so. An enterprise focus will eliminate duplication of efforts (and expenses) through development of common applications servicing multiple agencies. Further, with most states embarking upon an enterprise approach, the opportunity exists for sharing of experiences, learnings, and work accomplished to further leverage the benefits being derived.

GOVERNING STATEWIDE & MULTI-AGENCY PROJECTS

Section two of the survey focused on the governing of statewide and multi-agency projects. Questions spanned several areas concerning roles, responsibilities and authority when projects go beyond one self-contained agency. Based upon the survey results, states are all across the board when it comes to exactly how each deals with the nuances of these far-reaching projects.

Based upon the survey results, the majority of states have one central project management office. The PMO resides in the executive branch and focuses on projects therein.

While individual states vary, there is usually either a state chief information officer or some governing council that makes final decisions in regard to priorities for projects, staffing decisions and "go-live" decisions. This was reflected overwhelmingly in the survey with 82% of the states responding that the state CIO set priorities and 79% reporting that the CIO office is responsible for the "go-live" decision.

It should come as no surprise, however, that individual agencies want to make decisions in regards to their projects. Seventy-one percent of the respondents stated that specific project decisions needed to be handled within the agency. While agency decisions need to come from agency people, project decisions take a different,

over-arching view of enterprise needs and investments.

Implications for government
Agencies, much like businesses, are set up in a functional structure based upon a hierarchy. Management of the various components has specializations, such as IT projects, and PM functions should be set up in a way to leverage those strengths. Project teams need to be set up in a matrix structure, leveraging the strengths of individuals from across the breadth of the organization. While this structure is difficult enough in a single agency project, adding multiple agencies that span a state magnifies the complexities exponentially.

Call to action
During the initiation phase of any project, an agreed-upon governance document needs to be established and endorsed. This will set forth the parameters for the project in regard to decisions for functional areas and issue resolution and escalation procedures. It is far better to have an agreed upon plan of action before any issue arises. In the "heat of the battle" of a project, if there is no predetermined escalation and resolution method, the strongest personality is prone to win instead of the solution that is best for all involved.

ORGANIZATIONAL OR CULTURAL CHANGE MANAGEMENT

When implementing new information systems, technology is often the easy part; managing expectations and preparing people for change becomes the challenge. A new system can be technically sound and performing all business functions properly; however, if it has not been embraced by those who are most affected by it, it can be a failure!

A primary goal of *organizational change management* is to provide the structure and guidance necessary to effectively prepare organizations for the successful acceptance of cultural change. The concept of routinely incorporating organizational change management activities into projects is sometimes met with resistance

from veteran project managers. This is under-standable because project management is a proven discipline; whereas, change management is a relatively new field of study.

According to the PMBOK (Project Management Body of Knowledge v.2004) Project Communications Management section, "project managers can spend an inordinate amount of time communicating with the project team, stakeholders, customer, and sponsor."[3] Organizational change management can provide a more focused endeavor on overall project communication. For example, executing organizational change management processes can result in a more comprehensive assessment of stakeholders and it can provide leadership and guidance in determining the "readiness" of users who have to adapt to a new system.

Implications for government
The lack of an approach to effectively prepare state organizations for both technological and business process changes can cause significant project delays or even failures. The end users of new or enhanced systems must be fully prepared for potential shifts in roles and responsibilities or a significant loss of productivity will be experienced.

Call to action
NASCIO should begin to build more awareness of the importance of effective organizational (cultural) change management and its impact on successful project implementations. State project managers should put more emphasis on the cultural/people side of project management.

PROJECT PORTFOLIO CHANGE MANAGEMENT

Whether formally empowered to do so or not, the state CIO's office often serves as a state's IT portfolio manager, in charge of making or contributing to the business case for IT projects. They must effectively communicate what a project will do, how it can improve a business process, how its success will be measured, and how much it is worth to the state enterprise as

Has the Lack of Organizational Change Management (OCM) Ever Contributed to the Failure or Delay of an IT Project?

In section three of the survey, when states were asked to rate their organization's change management methodology on a scale of one to six, the average rating was 2.88. When asked how successfully change management is included in their project plans, the average state rating was 3.

3%
No Difference

18%
Uncertain

79%
Yes

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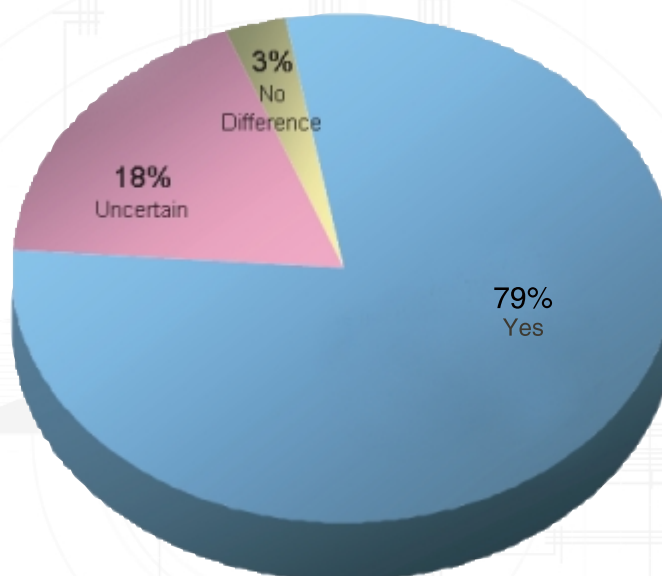
[3] A Guide to the Project Management Body of Knowledge, Third Edition, published by PMI, Inc. Newton Square, PA, 2004.

a whole. Their goals in this role are to ensure communication of accurate, complete, and timely information to support effective decision making, while maximizing the value of the state's IT project portfolio against state business objectives.

This section of the survey asked four questions about the state's IT project portfolio management process. The questions focused on identifying those states which have processes, how frequently the inventory is maintained and self-rating of these processes for accomplishing project evaluation, selection and prioritization as well as the monitoring of project performance.

Twenty-seven respondents (80%) had a project inventory and tracking process in place and a

How Organizational Change Management "Changed" the State of Delaware

The State of Delaware has accepted the importance of Organizational Change Management (OCM) as an integral part of project management. As a result, the state has an experienced OCM team that has developed standards that include a proven methodology used with all major system implementations. In general, the state has learned the following key points:

- Successful project buy-in is a direct result of **early employee involvement** in the change process. "Key End User" groups are formed with regular focus meetings early on in the project lifecycle. Communication focuses on building awareness of the business reasons for the change and move toward focusing on the "how" to change.
- The OCM team includes a **communications specialist** who formats various media to send messages early and often. As part of their methodology, the state uses *coordinators* from each state organization as points of contact for distribution of messages.
- **Functional impacts** (differences between the "as is" state and the "to be" state) are identified, documented, and effectively communicated to end users. These communications subsequently become key components for developing training materials.
- OCM **reinforces and capitalizes on strong executive sponsorship** by encouraging members to actively and *visibly* participate throughout the project. These groups are responsible for

building a coalition among peers and managers in addition to responding to the normal project management requirements of timely decisions regarding resources, funding, issues, system modifications, etc.

Several examples where OCM helped to salvage major IT investments are as follows:

- OCM was instrumental during the implementation of Enterprise Resource Planning projects. As a result of these projects, end users had to accept changing roles and responsibilities due to more integrated business functionality.
- Assessing and guiding an organization's readiness for the impending changes resulted in timely implementations with valuable user buy-in.
- Alternatively, the lack of OCM helped cause a statewide implementation to enter into an official "pause" by the executive sponsor. The six-month "pause" was used to garner more user support and reorganize the project team to formally adopt a more structured OCM approach.

The State of Delaware has been able to successfully identify and mitigate resistance, obtain buy-in, and educate stakeholders about the business changes brought about by new system implementations. Through the use of consistent and effective OCM processes, change becomes the "norm" and employees see part of their normal job duties as adapting to new changes.

States with Enterprise/Statewide IT Project Inventory & Tracking Process (34 states reporting)
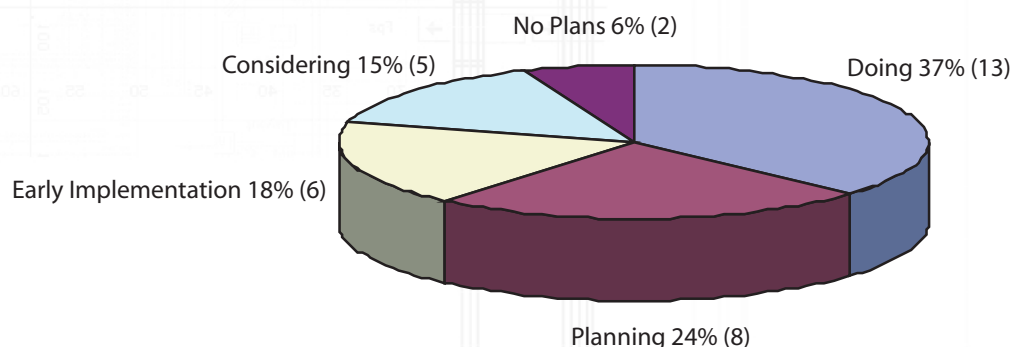
No Plans 6% (2)

Considering 15% (5)

Doing 37% (13)

Early Implementation 18% (6)

Planning 24% (8)

similar number were maintaining the inventory on at least an annual basis. These states also reported their project evaluation, selection and prioritization processes as well as their level of monitoring projects with multi-dimensions of performance were in the initial stages (four on a six-point scale with six being the highest).

Implications for government
Central IT portfolio management is a growing trend among all states as exemplified by this survey. Clearly, a growing number of states are centralizing via the office of the state CIO and enterprise/ statewide PMO functions.

Portfolio management entails understanding how proposed initiatives relate to the overall business strategy and evaluating how they fit the business requirements. The process will match the best fit and identify needs where gaps exist. Then it is a matter of evaluation and prioritization based upon criteria important to the organization (e.g., return on investment, strategic fit, overall value, etc). Doing this on a central- or enterprise-basis recognizes the needs of each agency while coordinating across the enterprise the efforts of the individual agencies thus eliminating duplication of efforts.

Call to action
There is opportunity for the sharing of experiences and best practices across all states as this move toward an enterprise focus continues to evolve. State CIOs should provide consistent, objective information related to the performance

of technology projects against established criteria to agency and enterprise leadership.

STRATEGIC ALIGNMENT
In section five of the survey, states were requested to rate the role of their project management office in providing guidance on statewide business investments, managing the state's project portfolio, and ensuring alignment with their enterprise architecture. Thirty-four states responded to the questions in this section on a scale from one to six (one being "no plans" and a six being "proficient"). The results are summarized below:
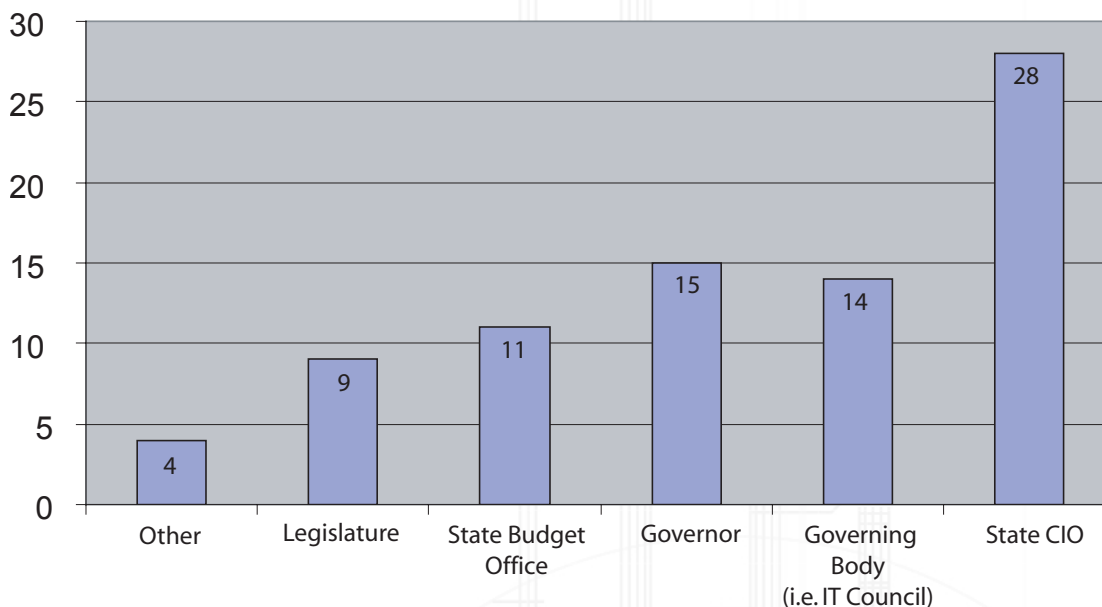
Thirty percent of the states indicated that their project management office plays a significant role in guiding business investments, selecting projects and complying with the enterprise architecture with the average for all states being 3.44. The majority of the states indicated that project management is included in the state's IT strategic plan with one state rating as a six (proficient) and eight states rating as five with an overall rating of 3.86.

The rating of formal enterprise portfolio management was not as high with only eight states rating as a five and six states as a one with an average of 3.06. The overall rating for traceability from portfolio management to capability management (i.e. identifying, stratifying, valuing and prioritizing necessary capability prior to project framing) was rated at a very low 2.18 average. States were also asked if they periodically re-evaluate

for relevance and performance their ongoing/ iterative project or capability management processes. Twenty-six states responded "no," while only seven states responded "yes."

In response to the question "who holds agencies accountable for compliance with enterprise portfolio management," states indicated the following:

Accountability for Compliance with Enterprise Portfolio Management

The chart shows the following values:

Category	Value
Other	4
Legislature	9
State Budget Office	11
Governor	15
Governing Body (i.e. IT Council)	14
State CIO	28

Call to action

The results of the survey show that although most states are moving in the direction of strategically linking their project management methodologies and enterprise architecture together with the state's lines of business, there are still opportunities for improvement in this area.

PM CERTIFICATION OR TRAINING PROGRAM

In August of 2003, the United States Office of Personnel Management issued its first edition of the "Interpretive Guidance for Project Management Positions." In doing so, it not only recognized project management as a unique profession, it defined its common set of duties to span specialties such as IT, engineering, and architecture. Further, it set a tone that government could and should reap the benefits provided

Michigan has initiated a high-level "call for projects" initiative as a basis for the development of its IT strategic plan. The strategic plan is a business-based document, starting with mapping high-level business priorities of the governor (better government, healthcare, economy, environment, hometown security, and education), while determining how information technology resources can be leveraged to meet these high-level priorities. The Michigan Department of Information Technology (MDIT) has gone beyond the normal IT role, taking an enterprise (business) perspective, linking technology to business drivers.

by professional project managers. Two years later, this NASCIO survey asked which states had established certification or training programs and which had established career paths for project management.

In section six of the survey, when asked to assess the programs and processes that exist to train and certify state project managers, 40% of the respondents reported proficiency. More than 43% of respondents recognized certification from the Project Management Institute.[4] States that have developed their own training curriculums have likely done so as not only a cost-saving measure, but as a way to ensure that challenges explicit to state governments such as procurement regulations and budget laws, governance structures, and executive or agency sponsor training are fully addressed.

Only two respondents recognized other certification aside from their state programs or those of PMI. Additionally, 59% of those responding to questions on a multi-tiered approach to training and certification (i.e., overview, intermediate, advanced) reported using such an approach.

Another predictor of project and program success or failure is having a senior executive sponsor who effectively "owns" the program and whose business unit or agency will receive the majority of the program's benefits.

The level of training for project sponsors was not rated nearly as high. On a scale of one to six, the average response was only 2.39. Clearly this is an area where great improvements need to be made.

Vendor orientation as a whole was rated just slightly better than project sponsor training. Some handle vendor orientation on an individual basis, while others provide orientation only for independent verification & validation (IV & V) vendors. Overall, most states do not appear

The Commonwealth of **Virginia's** PM Selection and Training Standard (http://www.vita.virginia.gov/projects/cpm/cpmDocs/pmdpStandard.cfm) defines an extensive program for training and qualifying project managers in three project categories and further requires appropriate experience necessary for the specific project.

Missouri maintains its own certification program within IT. According to their *Project Management Certification Handbook*, (http://oit.mo.gov/business%20solutions/project%20management.html) Missouri's Information Technology Advisory Board (ITAB) sponsors a project management certification program, the purpose and goal of which is the development and maintenance of proficient project managers within state government. The State of Missouri Project Management Certification program supports the information technology and business community, and is designed to provide training, professional development, and to assess the knowledge of state project managers.

In **North Dakota**, the Enterprise Project Management Advisory Group has endorsed the National Information Technology Apprenticeship System (NITAS) that will provide a scalable, yet comprehensive PM training program for any state employee involved in IT project management. The program will include training, on-the-job learning, skills validation, and certification via a mentoring/apprenticeship model. (http://www.state.nd.us/epm/training/index.html)

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[4] The Project Management Institute (PMI®) is a professional association for project management and administers a globally-accepted, examination-based, professional certification program. (www.pmi.org)

to have a defined, consistent approach to vendor orientation.

Call to action
Formalized project sponsor training should be adopted by state governments.

ESTABLISHED CAREER PATH

The final section of the survey requested information on the existence of an established career path for project managers. Nearly 30% of respondents reported that "project management" is a classified civil service title in their state.   Unfortunately, only three of the responding states indicated that they have an established career path for project management. Interestingly, 43% report having documented project management job descriptions.

When asked if their state requires professional certification for project managers, five states indicated having their own state certification program. Several states indicated that certification was preferred but not required and three states reported that certification via PMI is required. In addition to existing requirements, several states commented that certification programs were under review and development as were job descriptions and plans for career paths.

In summary, it seems individual states are beginning to recognize and formalize the project management career within their governments. Project management has a foothold in training programs and formal recognition of professional certification from the Project Management Institute, in particular, seem to be growing.

Call to action
States should continue to build on positive trends toward establishing PM as a career path in their governments.

The Project Management Mentoring Program (PMMP) in **New York** couples classroom instruction with a mentoring component. The PMMP is designed to increase the cadre of expert project managers within New York government who are available to manage the increasingly complex and expensive projects necessary to support their business. Experienced project managers, with the prerequisite skills, who are selected to participate in the program are assigned as interns to a more experienced project manager who serves as their mentor. (http://www.oft.state.ny.us/pmmp/pmmp.htm) While participation in this program is competitive and limited, it is one example of how states are trying to meet the demand for qualified project managers.

South Carolina offers a multi-tiered project management training and certification program through the state CIO's office. The goal of the program is to make cost-effective training available to each agency which is sufficient to prepare selected staff to effectively manage all IT projects, without regard to size or complexity. (http://www.cio.sc.gov/cioContent.asp?pageID=281&menuID=369#tandc)

Appendix I - Additional Resources

STATE IT PROJECT MANAGEMENT REFERENCE SITES

State IT project managers were asked to list the premier sources of useful information on project and portfolio management used in their states in a June 2005 survey. The following, along with state peer groups and local PMI chapters, networks and consultant services were listed most prevalently.

Note: the following list of links only includes referred products and information sources cited by state respondents to the survey and in no way should be construed as comprehensive or an endorsement from NASCIO.

State Project Management Office Websites

AR	http://pmstat.state.ar.us/Meth/Meth_index.htm
AZ	http://azgita.gov/project_pij_monitoring/
CO	http://www.oit.state.co.us/
DE	http://dti.delaware.gov/majorproj/majorproj.shtml
FL	http://sto.myflorida.com/epmo/
GA	http://gta.georgia.gov/00/channel_title/0,2094,1070969_40397818,00.html
KS	http://www.da.state.ks.us/kito
MI	http://www.michigan.gov/projectmanagement
MN	http://www.pmo.state.mn.us
MO	http://oit.mo.gov/business%20solutions/project%20management.html
MT	http://cope.mt.gov (currently internal only)
NV	http://nitoc.nv.gov/
NY	http://www.oft.state.ny.us/pmmp/pmo.htm
ND	http://www.state.nd.us/epm/
OH	http://www.oit.ohio.gov/igd/epmo/epmo.aspx
PA	http://www.oit.state.pa.us/oaoit/cwp/view.asp?a=671&q=189122&oaoitNav=|1910|
SC	http://www.cio.sc.gov/cioContent.asp?pageID=281&menuID=369
RI	http://www.doit.ri.gov/projects
VA	http://www.vita.virginia.gov/projects/pmd.cfm
VT	http://www.dii.state.vt.us/pmo/index.html

GENERAL NON-PROFIT AND GOVERNMENT TRAINING SITES

Agile Alliance -http://www.agilealliance.org/home
The Agile Alliance is a non-profit organization that supports individuals and organizations that use agile approaches to develop software. Driven by the simple priorities articulated in the Manifesto for Agile Software Development, the goal of agile development is delivering value to organizations and end users faster and with higher quality.

The American Management Association (AMA) - http://www.amanet.org/seminars/category.cfm?cat=209&org=Sem
AMA is a global not-for-profit, membership-based association that provides a full range of management development and educational services to individuals, companies and government agencies worldwide, including 486 of the Fortune 500 companies.

American Society for Quality (ASQ) - http://www.asq.org/government/why-quality/overview.html
ASQ is a professional association which "advances learning, quality improvement, and knowledge exchange to improve business results, and to create better workplaces and communities worldwide" through more than 100,000 individual and organizational members. They have administered the Malcolm Baldrige National Quality Award since 1991, which annually recognizes companies and organizations that have achieved performance excellence.

Carnegie Mellon Software Engineering Institute (SEI) - http://www.sei.cmu.edu/
A division of Carnegie Mellon University, SEI's goal is to create usable technologies, apply them to real problems, and amplify their impact by accelerating broad adoption.

Defense Acquisition University (DAU) - http://www.dau.mil/index.aspx
The DAU is a corporate university which serves nearly every member of the Department of Defense Acquisition, Technology and Logistics (AT&L) workforce and has been a model for other programs as an early leader in project management and procurement standards. It provides a full range of basic, intermediate, and advanced certification training, assignment-specific training, performance support, job-relevant applied research and continuous learning opportunities.

Government Accountability Office (GAO) - http://www.gao.gov/
The GAO is an independent, nonpartisan agency that works for Congress. GAO is often called the "congressional watchdog" because it investigates how the federal government spends taxpayer dollars and how well executive branch agencies are doing their jobs. GAO's work routinely answers such basic questions as whether government programs are meeting their objectives or providing good service to the public.

National Defense University - http://www.ndu.edu/info/catalog/catalog2.htm
The Information Resources Management (IRM) College prepares leaders to direct the information component of national power by leveraging information and information technology for strategic advantage. Primary areas of concentration taught in the college include policy, strategic planning, leadership/management, process improvement, capital planning and investment, performance and results-based management, technology assessment, architectures, security, acquisition, and information operations.

Project Management Institute (PMI) - http://www.pmi.org/info/default.asp
PMI is an international membership organization focused on the needs of project managers from virtually every major industry including, aerospace, automotive, business management, construction, engineering, financial services, information technology, pharmaceuticals, healthcare, and telecommunications. Members may share ideas and experiences, access industry information, and attend seminars and workshops which provide credits toward PMI professional certification.

PMI Publications - http://www.pmi.org/info/PIR_Publications Overview.asp?nav=0602
PMI members are entitled to receive various periodicals including PM Network and Project Management Journal which contain news of techniques and best practices in the industry.

CORPORATE BEST PRACTICES SITES AND WHITE PAPERS

International Institute for Learning (IIL) - http://www.iil.com/
IIL is a global provider of training in project management, Microsoft Project, and Six Sigma Corporate Learning Solutions in both business functional areas and vertical markets. Founded as a newsletter company in 1973, IIL now focuses on conferences, seminars, exhibitions, publications, performance improvement and e-learning. They are the parent company for allpm.com and ESI.

ALLPM.com - http://www.allpm.com/ - IIL's project management website.

ESI International (ESI) - http://www.esi-intl.com/public/index.asp
ESI International provides project and contract management training and consulting to private and public sector entities worldwide.

www.gantthead.com - An online community for IT project managers which contains discussion groups, training offerings, templates, tips and vendor information.

Gartner Group - http://www.gartner.com/Init
The Gartner Group offers research and analysis about the global information technology industry to chief information officers and other senior IT executives in corporations and government agencies, as well as technology companies and the investment community worldwide.

www.pmboulevard.com - PM Boulevard is an online program, portfolio, and project management resource product compiled by Robbins-Gioia. It contains a searchable PM knowledge center and hosts an interactive community of PM from all sectors.

Performance Management Institute - http://www.performanceweb.org/
The Performance Institute is a private, nonpartisan think tank focused on improving government results through the principles of performance, competition, transparency, and accountability.

Project Solutions Group - http://www.projectsolutionsgroup.com/
Project Solutions Group provides custom-tailored project management and training services to a diverse client base in enterprise project management, PMI training, and general consulting.

Appendix II – Survey Instrument

STATE IT PMO PRACTICES ASSESSMENT

Dear State CIOs or Lead IT Project Managers -
As you may know, NASCIO recently established an information exchange forum for lead state IT project management professionals. Our purpose is to build and share a body of knowledge and best practices concerning this discipline. Toward that end, we are conducting a national survey regarding the status of state IT project and portfolio management activities.

Please complete ONE SURVEY PER STATE by COB Friday, August 26. The response format is primarily multiple choice and the survey will take approximately 20 minutes to complete. This exercise is intended to assess overall statewide performance and identify trends among the states. Some brief instructions/guidelines for completing the assessment:

- Remember that the goal is to assess your ***overall state practices*** as objectively as possible. NASCIO will not rank state performance.
- You may wish to print out a copy and review the survey instrument in advance. A copy in MS Word format may be printed by clicking *here*.
- The survey may be completed in multiple sessions if necessary.
- Your most recent response will be saved.

If you have any questions about the survey or the forum, please contact NASCIO's Program Manager, Elizabeth VanMeter, at 859/514-9176 or evanmeter@AMRms.com. Thank you in advance for your participation.

Note: Survey responses and individual state data will be available to NASCIO state members only via a password-protected website. Individual survey responses or data will not be circulated outside of NASCIO and are intended only for NASCIO's internal purposes. However, aggregate information may be circulated publicly in order to provide information about general trends within the states.

Legend:
1 = No plans for this activity
2 = Not currently doing activity, but under consideration
3 = Planning activity/under development
4 = This activity is in initial stage
5 = Performing activity on an ongoing basis, but need improvement
6 = Proficient/highly experienced in this activity

PROJECT MANAGEMENT OFFICE (PMO) STRUCTURE

	No plans	Proficient
1. How would you rate your *enterprise/statewide* IT PMO?		1 2 3 4 5 6
2. How would you rate your state's *agency* IT PMOs overall?		1 2 3 4 5 6

3. What serves as the empowering authority for the enterprise/statewide PMO?
   Check all that apply:
   - ❑ legislation
   - ❑ CIO directive/administrative policy
   - ❑ executive order
   - ❑ charming charisma or other
4. What is the reporting line for the enterprise/statewide PMO?
   - ❑ governor
   - ❑ state CIO
   - ❑ state budget office

     ❑   governing body (i.e. IT council)
     ❑   other _____

5. Do you have prescribed performance measures for your PMO?   1 2 3 4 5 6

Comments: _____

GOVERNING STATEWIDE OR MULTI-AGENCY PROJECTS

                                                    No plans   Proficient

6. Rate your state PMO policy   1 2 3 4 5 6
7. Rate your state PMO framework/process methodology   1 2 3 4 5 6
8. Rate your state PMO website   1 2 3 4 5 6
9. Please provide a link to your documented methodology: _____
    If the information is not available online, please upload a document in Word or .pdf format:
    Note: You may submit multiple documents, even though it appears that only the last document uploaded has been saved.
10. Rate the structure that separates statewide projects from agency projects   1 2 3 4 5 6
11. What is the primary basis for your framework?
     ❑   Project Management Book of Knowledge (PMBOK)
     ❑   other: _____

12. Which branches of government does your scope include? (check all the apply)
     ❑   executive branch
     ❑   legislative branch
     ❑   judicial branch
     ❑   constitutional offices

Regarding Enterprise/Statewide Projects: *(check all that apply for Q. 13-15)*
13. Who examines and establishes priorities?
     ❑   state CIO
     ❑   chief financial or administrative officer
     ❑   governing body (i.e. IT council)
     ❑   individual state agency
     ❑   enterprise architect
     ❑   other
14. Who has final authority on project decisions? (i.e. "go" or "no-go," staffing, outsourcing)
     ❑   state CIO
     ❑   chief financial or administrative officer
     ❑   governing body (i.e. IT council)
     ❑   individual state agency
     ❑   enterprise architect
     ❑   other
15. Who manages project oversight?
     ❑   state CIO
     ❑   chief financial or administrative officer
     ❑   governing body (i.e. IT council)
     ❑   individual state agency
     ❑   enterprise architect
     ❑   other
16. How would you assess your System Development Life Cycle/Methodology
    (i.e. RADD, waterfall)?

                                                  1 2 3 4 5 6

Regarding Agency Projects: *(choose all that apply for Q. 17-19)*
17. Who examines and establishes priorities?
- ❏ state CIO
- ❏ chief financial or administrative officer
- ❏ governing body (i.e. IT council)
- ❏ individual state agency
- ❏ enterprise architect
- ❏ other
18. Who has final authority on project decisions? (i.e. "go" or "no-go," staffing, outsourcing, etc)
- ❏ state CIO
- ❏ chief financial or administrative officer
- ❏ governing body (i.e. IT council)
- ❏ individual state agency
- ❏ enterprise architect
- ❏ other
19. Who is responsible for project oversight?
- ❏ state CIO
- ❏ chief financial or administrative officer
- ❏ governing body (i.e. IT council)
- ❏ individual state agency
- ❏ enterprise architect
- ❏ other

Comments: _____

ORGANIZATIONAL (OR CULTURAL) CHANGE MANAGEMENT

Organizational (or Cultural) Change Management is the organized, systematic application of knowledge, tools, and resources of change that provide organizations with a key process to achieve their business strategy.   It helps ensure that the initiative is understood and accepted by effectively preparing the organization's people for the acceptance of cultural change brought about by major system implementations.

	No plans	Proficient
20. Rate your Organizational Change Management methodology	1 2 3 4 5 6	
21. Assess how successfully Organizational Change Management is included in your project plans?	1 2 3 4 5 6	

22. Has the lack of Organizational Change Management ever contributed to the failure or delay of an IT project?
- ❏ yes
- ❏ no
- ❏ don't know

Comments: _____

PROJECT PORTFOLIO MANAGEMENT

	No plans	Proficient
23. Assess your enterprise/statewide inventory process for IT projects and how you track them	1 2 3 4 5 6	

24. How often is the inventory maintained?
- ❏ annually
- ❏ biennially
- ❏ more often
- ❏ less often
- ❏ N/A

25. Rate your project evaluation, selection and prioritization process   1 2 3 4 5 6
26. Assess the level of monitoring of IT projects with multiple
     dimensions of performance (i.e. cost, schedule, resources, benefits, risks)   1 2 3 4 5 6
Comments: _____

STRATEGIC ALIGNMENT

                                          No plans   Proficient

27. Assess your state PMO's role in providing guidance or contributing to enterprise/statewide
     business investments and/or IT integration?   1 2 3 4 5 6
28. Rate your formal enterprise/statewide portfolio management office/staff   1 2 3 4 5 6
29. Who holds agencies accountable for compliance? (check all that apply)
     ❑ governor
     ❑ state CIO
     ❑ legislature
     ❑ state budget office
     ❑ governing body (i.e. IT council)
     ❑ other _____
30. Please provide a link to your state's portfolio management governance document: _____
31. Rate how effectively program/project management is included as a discipline or
     standard in your state's enterprise architecture methodology   1 2 3 4 5 6
32. Please provide a link to your state's enterprise architecture: _____
33. Assess the traceability from your state's portfolio management to program management   1 2 3 4 5 6

34. Assess the traceability from your state's portfolio management to capability management (i.e. identifying,
     stratifying, valuing, and prioritizing necessary capabilities prior to project framing)   1 2 3 4 5 6
35. Assess the traceability from your state's portfolio management to strategic business intent   1 2 3 4 5 6
36. Are projects periodically re-evaluated for relevance and performance as part of your ongoing/iterative project
     or capability management process?
     ❑ yes
     ❑ no
37. If yes, how are these linkages maintained?
     ❑ purchased visual modeling: (please list type) _____
     ❑ homegrown database
     ❑ purchased database: (please list type) _____
38. Assess project management (PM) functions as part of your state's IT strategic plan   1 2 3 4 5 6
Comments: _____

PM CERTIFICATION OR TRAINING PROGRAM

                                          No plans   Proficient
39. Assess the program and process that exists to train and certify state project managers
                                           1 2 3 4 5 6

If you answered "no plans," skip to Q 42

40. Who provides the certification?
     ❑ state
     ❑ PMI
     ❑ university
     ❑ other _____
     ❑ N/A

41. Is it a multi-tiered training and certification program (i.e. overview, intermediate, advanced)?
- ❑ yes
- ❑ no

Comments: _____

Other training

42. Rate your project sponsor training   1 2 3 4 5 6
43. Rate your vendor orientation   1 2 3 4 5 6

Comments: _____

ESTABLISHED CAREER PATH

44. Is "project management" a classified civil service job title?
- ❑ yes
- ❑ no

45. Is there a defined project management (PM) career path in your state?
- ❑ yes
- ❑ no

46. Does your state have documented PM job descriptions?
- ❑ yes
- ❑ no

47. Does your state require professional for certification for PMs? (check all that apply)
- ❑ state certification program
- ❑ Project Management Institute (PMI)
- ❑ other _____
- ❑ not required

48. Please provide a link to your PM job description(s): _____

If the information is not available online, please upload a document in Word or .pdf format:

Note: You may submit multiple documents, even though it appears that only the last document uploaded has been saved.

Comments: _____

CONTACT INFORMATION

Respondent's Name:
Email:
Phone:
State:

Web Links

State IT Strategic Plan Address:
PMO Website Address:
Link to Empowering Legislation:
Link to PMO Governance Structure:

Date last updated: