

WRITTEN TESTIMONY OF
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BEFORE THE SENATE COMMITTEE ON HOMELAND SECURITY AND
GOVERNMENTAL AFFAIRS
SUBCOMMITTEE ON DISASTER RECOVERY AND
INTERGOVERNMENTAL AFFAIRS
20 OCTOBER 2011

Chairman Pryor and members of the Subcommittee, my name is Craig Killough and I am the Vice President of Organization Markets for Project Management Institute (PMI). I sincerely appreciate the opportunity to participate in this important hearing and speak to the benefits organizations can derive from implementing effective project management and disaster recovery.

Project Management Institute (PMI) is the world's largest project management membership association, with more than 600,000 active members and credential holders in 187 countries. We were founded in 1969 as a not-for-profit organization and our headquarters is in Newtown Square, Pennsylvania. PMI seeks to advance the project management profession through globally recognized standards and certifications, collaborative communities, an extensive research program, and professional development opportunities. PMI also supports 259 local chapters with large chapters in both Arkansas and Kentucky. We have approximately 700 members in Arkansas and nearly 1,400 in Kentucky. In Washington, DC, PMI's chapter is one of the largest and fastest growing in the world, encompassing approximately 10,000 members from the government and private sectors.

PMI believes that the project management profession delivers a competitive advantage to organizations by producing positive outcomes, including increased efficiencies, organizational alignment, stakeholder satisfaction and improved decision making – all critical factors in disaster response and recovery. We believe project management is more than tactical, it is a strategic competency that enables organizations to deliver expected benefits and value through effective planning, organization and risk mitigation. These benefits are derived through the organizational adoption of project management standards and strong support of the practitioners managing projects for those organizations.

In this testimony I will outline the value that standards bring to the US government generally, how project management as a profession has proven valuable to the US government, and present the importance of a clearly defined project and program manager job classification, role and career path. I will also discuss what PMI knows about the unique area of managing projects in a disaster, and actions this subcommittee could consider to improve the use of standards in project management utilized by the US government.

The Project Management Professional (PMP)[®] credential program is accredited by the American National Standards Institute (ANSI) against the International Organization for Standardization (ISO) 17024. The 17024 standard includes rigorous requirements for examination development and maintenance and for the quality management systems for continuing quality assurance.

In addition, the PMP credential is also registered against the ISO 9001:2008 standard for quality management systems. This accreditation provides a third-party affirmation of quality in the development, management and governance of the PMP[®]. It also gives credential holders and organizations that employ them additional confidence in the PMP.

The Importance of Standards

Global standards are crucial to the project management profession because they ensure that a basic project management framework, lexicon and process are applied consistently worldwide.

PMI's 13 standards for project, program and portfolio management are the most widely recognized standards in the profession – and increasingly the model for project management in business and government. They are developed and updated by thousands of PMI volunteers with experience in every type of project and provide a common language for project management around the world. PMI standards, such as the *PMBOK[®] Guide*, with more than 3 million copies in circulation, have been successfully used in a number of program-oriented and project-driven agencies, such as a remediation project by the US Department of Energy at Rocky Flats nuclear reactor site, which finished ahead of schedule and 6 % under budget. The National Nuclear Security Administration was awarded the PMI Distinguished Project Award for 2010 for the Global Threat Reduction Initiative Project. In 2010, The National Ignition Facility (NIF) Project, run by Lawrence Livermore National Laboratory, was the PMI Project of the Year Winner. In 1998, NASA received a PMI Project of the Year Award for the Mars Pathfinder. Finally, the Federal Aviation Administration developed a project management plan which was central to key portions of the agency being removed from GAO's High Risk List in 2008.

PMI's Pulse of the Profession research study found that organizations using standard practices, along with formal training programs for project managers, perform the best and see the greatest value from project management. In fact, the research showed high-performing organizations that use standards and support certification and training use up to 90% of their project budgets efficiently, whereas low performers put at risk nearly 70% of their budgets.

The Importance of Certified Professionals

PMI offers six certifications that recognize project management knowledge and competency, including the benchmark Project Management Professional (PMP)[®] credential. PMI has bestowed over 580,000 PMP[®] credentials worldwide. The PMP[®] is a role- and experience-based certification that recognizes the competence of an individual to lead and direct projects and project teams to achieve successful project results. PMI's Program Management Professional (PgMP)[®] credential recognizes the advanced experience and skill of program managers. Globally recognized and demanded, the PgMP[®] demonstrates proven competency to oversee multiple, related projects and their resources to achieve strategic business goals. PgMP[®] credential holders oversee the success of a program, grouping related projects together to realize organizational benefits not available if they were managed separately. PMI's newest certification is the PMI Agile Certified Practitioner (PMI-ACPSM).

PricewaterhouseCoopers, in its most recent study, "Insights and Trends: Current Program and Project Management Practices," reports that "higher-performing projects are significantly more likely to be staffed with certified project managers. In fact, 80% of projects classified as high performing use a certified project manager."

PMI certifications reflect best practices in project management, not any one standard or industry. This provides transferability between agencies and industries, and mobility across agencies. Practitioners earn a PMI certification and have confidence that it provides a baseline recognized in a variety of organizations, industries, and by many methodological approaches. Furthermore, because PMI maintains such rigorous practices to keep its certification program relevant and validated, PMI's certifications never become obsolete.

The Value of Project Management

Project management by its nature enables transparency and accountability. PMI's Pulse of the Profession study found that around the world, only one-third of projects deliver the expected results at the outset. PMI has found that dramatic improvements are possible. The most successful organizations have learned that employing project management techniques and creating a culture focused on project management is vital to achieving business success. An example of some of the organizations who are leaders in project management, and active members of the PMI Global Executive Council, include BAE Systems, Booz Allen Hamilton, Ericsson, Hewlett Packard, General Electric, IBM, Verizon Wireless, The Mayo Clinic and Microsoft. These organizations have embraced project management, utilize it as a strategic competitive advantage, and attribute their organizations' success to it. They are some of the most successful organizations in the world. Government projects and programs have the opportunity to take advantage of what these companies have already learned – using global standards in project management is indispensable for business results.

PMI has conducted extensive research into how organizations can utilize the *PMBOK*[®] *Guide* and project management to become more effective. PMI is the only professional association that invests heavily in academic research, spending over \$16 million since 1997 analyzing the effective use of project and program management. We conducted a three year

study entitled *Researching the Value of Project Management*. The study was released in 2008, but the results are still relevant and compelling. The study found three primary benefits from the effective implementation of standardized project management that fits an organization's culture: improved business results, increased organizational learning, and improved communication. Successful organizations told us that these benefits drive competitive advantage and deliver value for organizations. These results are also directly relevant to the US government.

When talking about the topic of program and project management, Congress typically focuses on acquisitions and IT. Certainly these are significant areas for project management, but the need for project management skills goes much further. Project managers play an integral role in all agencies at all levels. Project managers are asked to manage considerable efforts – often with little training and undefined authority. Project managers play an integral role in all agencies at all levels, and their role is especially critical in disaster recovery.

In 2010, PMI conducted an analysis of successful government programs: “Program Management 2010: A Study of Program Management in the U.S. Federal Government.” Program managers from a wide variety of government sectors shared their insights on “success factors” and best practices for this study. The study examined programs ranging from information technology (software design and systems implementations), to construction and engineering (from a single facility build out to large infrastructure projects), to the creation of new public policies and departmental procedures. While some programs had a timeline of less than a year and a budget of approximately US \$1 million, others spanned five years or more and had budgets in the billions of dollars.

We learned that there are most certainly pockets of excellence in program management in the US federal government and that where these exist programs are meeting today's challenges. We discovered how government program leaders are able to achieve results. The most successful government programs studied begin with a firm grounding in the fundamentals: experienced and well-trained program management practitioners (people), standardized program management practices (processes), and the tools to support both. They then learn to be better communicators, more agile, more collaborative, and more engaging. It is the combination of all these elements that has led to their success.

We found that those responsible for successful programs have built upon a foundation of technical expertise, adding more intangible success factors, such as a culture of communication, agility, superior stakeholder engagement, and active executive support. A ripple effect of increased team morale and better inter-departmental collaboration then creates a self-perpetuating cycle of success. One individual from the State Department said, “Senior management is now bearing the fruits of the project management labor. Projects are now back on track, which is resulting in significant cost savings.”

Across the programs we studied, reaction to increasingly complex programs has been an increased focus on the development of competency in the areas of project and program management. The development in competency took on many forms but often revolved around staff training, increased use of formalized project risk management, and increased use of earned value management techniques. We were pleased to hear that many of the agencies we spoke to

were using PMI Standards as the basis for their practice and tailoring them to the needs of their programs. However, we were even more pleased to hear how the role of project and program management has come to the forefront for many agencies.

Several respondents discussed how the use of program performance metrics has been introduced over the past few years. Using these metrics, they are able to demonstrate real returns on their investments in project and program management. One agency explained how the formal training of 24 project managers had quickly resulted in better stakeholder management and forecasting. Another agency explained how program performance evaluations have trended higher since the introduction of (formalized) program management.

The results of the government research are not isolated or unusual. PMI conducts an annual study, which examines project management trends in the profession in both the public and private sectors. This Pulse of the Profession study, which I mentioned earlier, shows definite value for high-performing organizations versus their low-performing counterparts. This research tells us that using standardized practices yields, on average, 74 % of projects meeting their goals and intent. When not using standardized practices, only 58 % of projects meet their goals. Additionally, there is a significant difference in the amount of money put at risk.

High-performing organizations deliver 92% of their projects, having met original goals and business intent. In addition, high-performing organizations put, on average up to \$80,000 at risk for every \$1 million spent on projects. This is due primarily to their adoption of effective project management practices and standards. This contrasts considerably to low-performing organizations that consistently miss project deadlines, run over budget and have misaligned project and business goals. For low performers, only 36% of projects meet their original goals and business intent. Low performers also put more money at risk, an average of up to \$700,000 for every \$1 million spent on projects. By not recognizing—and implementing—project management as a strategic competency, organizations put themselves at unnecessary risk.

PMI's expertise has many practical applications for government. One area that is particularly pertinent to this committee is disaster relief.

Project Management in a Disaster

Disaster relief projects present unique challenges because of their extreme urgency. Project management practices are critical to helping a disaster recovery team stay organized and focused and to implement the solutions a community needs after being struck by a disaster. When you have strong project management practices in place being driven by well-trained people, managing these disaster relief efforts becomes much simpler, since what needs to be executed is already second nature.

In 2006, PMI published a "Project Management Methodology for Post Disaster Reconstruction" in response to two disasters, the Asian tsunami and Hurricane Katrina. Project management practices are critical to helping disaster recovery teams stay organized and focused and to accomplish the solutions a community needs after being struck by a disaster. PMI developed this methodology for those in the disaster recovery field who are providing the

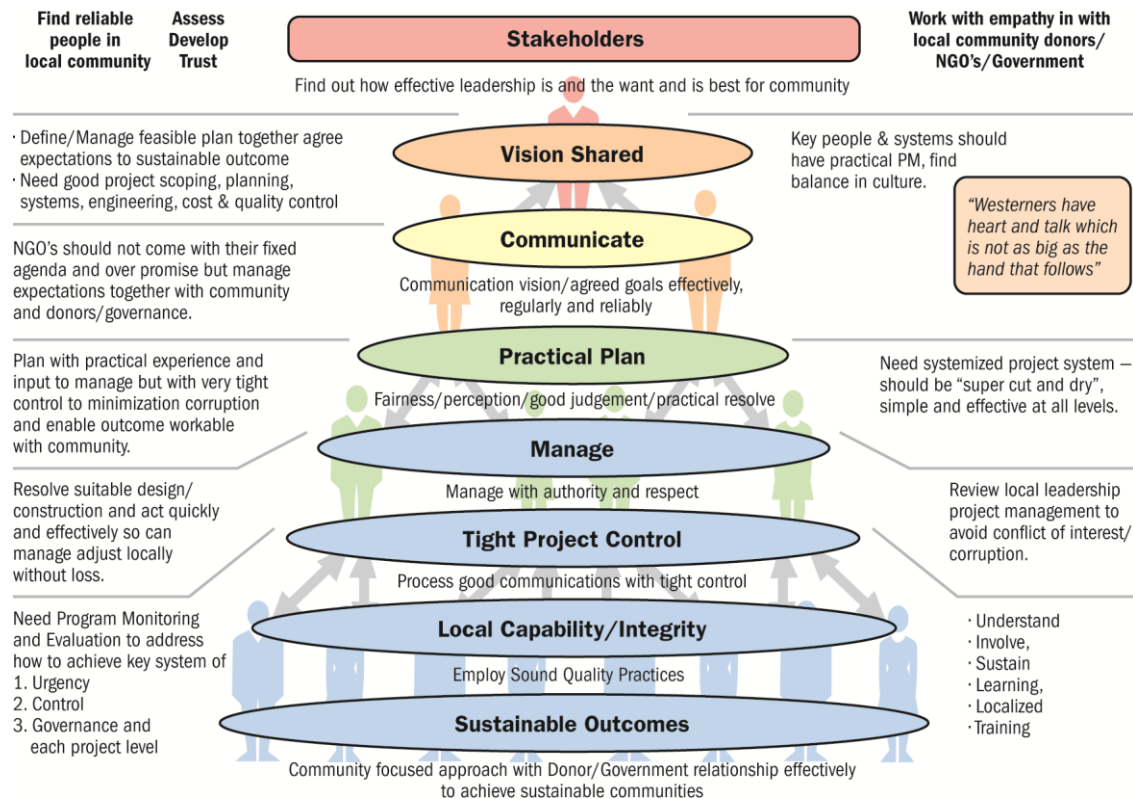
kind of leadership and clarity of thought needed to help in the reconstruction effort. Reconstruction project management is about solving problems and delivering intended results through an organized, structured methodology.

The post disaster methodology is based on the principles and processes outlined in *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*–Third Edition, and is meant to enhance collaboration and consistency, as well as quality and accountability, of projects undertaken in a crisis/disaster rebuild environment.

This methodology was developed by more than 80 volunteers from 20 countries, continuing PMI's tradition of gathering input and gaining consensus from diverse groups that represent the world's best thinking. I ask that this methodology be printed in full as part of the record.

The disaster recovery project management methodology does not address the issue of allocating resources for effectiveness. Rather, it assumes resources will be provided to implement recovery projects. After resources have been allocated there are five basic steps to responding to a disaster: initiating the project, planning, executing, monitoring and controlling and closing. The PMI methodology includes templates to assist in executing each step of managing a disaster recovery project.

In addition, a PMI-sponsored research project entitled, *What Enables Project Success: Lessons From Aid Relief Projects* (PMI 2011) assessed aid relief projects between 2007 and 2009. The result of this research showed that there are several common traits in successful relief projects, including effective stakeholder engagement. This engagement enabled stakeholders to share a common vision of the project as the team was working toward successful outcomes. The figure below provides an overview of the research:



PMI's Recommendations for Project Management Standards in the US Government

PMI advocates for the profession of project management and improved program management within organizations and has found there are several areas where government agencies could broadly improve their organizational maturity, become high performing, and spend funds more efficiently. Implementation of PMI's recommendations to Congress would make great strides toward establishing the framework needed to manage projects effectively. It is vital that Congress direct agencies to embrace project management standards that can be utilized by any agency on any program across the federal government. Because PMI has expertise in developing broad-based standards applicable for managing projects across industries and geographies, they are especially appropriate for use by the federal government.

Former U.S. Chief Information Officer Vivek Kundra identified improving program management as a centerpiece of his “25 Point Implementation Plan to Reform Federal Information Technology Management,” which he released on 9 December of last year. After 10 months, a number of key provisions have been initiated. Complete enactment of the reform plan is essential if the government is to be successful in recruiting and retaining the senior-level, highly skilled IT program managers vital to making the government more effective. Congress should seek to utilize these reforms as part of the fundamental shift to implementing standard project management practices across the government.

Returning to the general subject of project management in the federal government, a 2008 report by the Council on Excellence in Government found that the federal government's project and program management community consists of people who oversee budget authorities of approximately \$2.55 trillion dollars. A large portion of those people do not have any certification in project or program management, while about half said they never received any training in project or program management at all. This problem can be solved.

The Department of Homeland Security Authorization Bill, recently marked-up by the full Senate Homeland Security and Government Affairs Committee had several important provisions to improve the program and project management workforce across the Department of Homeland Security. PMI provided guidance to the committee in the drafting of these provisions. Title I of S.1546 incorporates a significant number of the recommendations made by the Under Secretary of Management in a 2010 memo on acquisitions project management. This is an important step and should help significantly improve DHS acquisitions.

The legislation requires the Under Secretary of Management to report to Congress how many of the departments' acquisitions programs have a dedicated program manager. Second, the workforce plan requires the development of a job classification for program managers. Third, the Under Secretary will study how to increase management efficiency across the department's components and report those findings back to Congress. We believe that looking at how project and programs are managed across the Department, including FEMA, will provide useful insights and best practices that can be implemented.

Mr. Chairman, I would like to commend you on being proactive in this area by advocating for language to improve program management in the DHS authorization bill approved by the full committee in September.

1) Utilize project management standards

Organizations that value project management understand that the contributions of professional project managers using standardized practices increases project success rates, creates efficiencies, and improves alignment with organizational strategies. Organizations that recognize the importance of project management are driven by expected and tangible results: on time, on budget, within scope, and in accordance with project requirements.

PMI standards are the guidelines against which individuals and organizations can assess their existing project management capabilities and provide the benchmark for them to build and mature their existing proficiency. They provide the foundation both practitioners and organizations can use as a consistent yet up to date guide for developing and implementing the superior practice of project management

PMI has used an accredited global consensus process for many years to manage the development of its own standards. This collaborative environment ensures that PMI's standards are developed in a way that benefits all project management practitioners around the world and the organizations that employ them.

A Guide to the Project Management Body of Knowledge (PMBOK® Guide), PMI's enduring gold standard for project management is one of the best-selling project management business titles in history.

2) Create a job classification for project and program managers.

A key factor of failure is the lack of an identified, trained and supported project or program managers. The phenomenon of the “accidental” project manager is far too common across government agencies. PMI would strongly encourage a government-wide availability to hire project and program managers similar to what exists in OPM's 2210 Job Series for IT, which PMI assisted in developing. Identifying this individual is also critical. The IT Reform plan specified that each IT program have a dedicated program manager. This requirement creates transparency and provides additional accountability and should be the focus of every government program with acknowledgment from agency executives.

The Senate Homeland Security Authorization bill requires the department to develop a workforce plan. We hope the department will create a job classification and career path for its project and program managers as part of its workforce plan. The Department of Homeland Security shouldn't be alone, nor should IT acquisitions be uniquely organized for managing projects and programs. Congress should enact legislation that will require OMB and OPM to ensure each of these areas is adopting common standards and aligning to industry best practices.

3) Scale project and program management career paths government-wide.

The role of a project or program manager should not just come about by accident. The importance of recognizing the role of a strong project or program manager and building the necessary skill sets is critical. This is something successful organizations have recognized. PWC's research cited earlier in this testimony shows that “80% of higher-performing projects use a certified project manager.” In addition, 50% of project failure is traceable to poor or no project management, including things we know are frequently cited by GAO and others as major problems. They are: bad estimates and deadlines, inadequate communications, poor risk management, scope changes and poor resource planning.

It is essential to retain and support project management talent by providing defined career ladders and options. Recruiting and retaining high-performing personnel is a particular challenge in the federal government. Scaling reform plans across agencies is logical and makes good sense. PMI would encourage the job classification and career path to be expanded beyond IT to all projects and programs. We believe adopting this model will improve efficiency, improve the expenditure of taxpayer funds and improve morale at agencies.

4) Require integrated program teams.

Project management improves processes and ensures that government agencies are not executing projects randomly. It ties projects to business strategy and needs, ensuring those projects are delivering results that support organizational goals. The importance of integrating program teams so they are cohesive is vital to having a strong organization and foundation.

Among the success factors that set the stage for effective project management is a culture of communication. Bringing together team leaders to share and discuss program management strengthens the ability of teams to work in an integrated fashion and collaborate on a regular basis. Utilizing new organizational teams and making these collaboration activities a part of the program and project schedule keep all team members up-to-date with the progress of the program.

5) Launch a best practices collaboration platform.

PMI values knowledge and invests extensively in project and program management research. Our members are the greatest resources on the profession of project management and their experiences drive successful organizations. We support the establishment of a best practices collaboration forum. PMI has established a library of information within our “Knowledge Shelf.” The Knowledge Shelf is a component of the PMI Virtual Library. PMI is hosting a growing online resource for project management knowledge. It is a great place for practitioners to expand their understanding of different aspects of project management. Many of the articles and papers in the Knowledge Shelf help the project and program management professional more effectively practice program and project management.

Within the Knowledge Shelf are peer-submitted articles on a variety of subjects. A panel of volunteers reviews each article for value and readability prior to its posting. Additionally, a selection of white papers, most originating from organizations, can be accessed by all visitors to PMI’s website at PMI.org at no charge. Articles already exist in the knowledge shelf on agile practices in project management, IT project management and program management.

PMI also has a Government Community of Practice, which is a virtual community where project and program managers from government agencies who are PMI members can discuss best practices and share the successes in project management in their respective agencies.

6) Strengthen project and program management skills and capabilities.

PMI has developed Knowledge Assessments to help assess any project manager’s skills that utilize PMI standards and find potential for improvement. These knowledge assessments provide baselines that can be modified for each unique environment, such as the government, and tailored to each agency’s demands for things like knowledge of the Federal Acquisition Regulation, technical competency, and knowledge of security policies. The knowledge assessment products help organizations deliver a career path for project professionals that evaluates current and relevant knowledge of project management standards and establishes a baseline. These baselines provide a path for identifying individual and organization-wide training needs. With this information, agencies can access appropriate guidance in building focused training curricula for employees. These assessments can be used as part of the hiring process and as part of an integrated performance evaluation system.

Conclusion

PMI will continue to work with the Congress and the Administration to improve efficiency in the federal government. We believe increasing government efficiency through improving the use of project and program management standards will save taxpayer funds and improve delivery of services. PMI's 300,000 American members and credential holders will continue to provide value to organizations, including the US government.

The American people expect results from their government particularly in these fiscally challenging times. Having the right tools and processes alone will not ensure success. But bringing together tangible best practices with the more intangible success factors through standardized project management practices is what has set successful organizations apart from the rest. We believe effective use of project and program management will make those results possible across the US government.

Again, thank you Chairman Pryor, Ranking Member Paul and the Subcommittee on Disaster Recovery and Intergovernmental Affairs for the opportunity to be here and submit this testimony for the full record of the hearing. I will be pleased to answer any questions you or members of the Subcommittee may have.