

Evaluation of the Statewide Project Management Office

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AN LAO REPORT

Executive Summary

Project Management Office (PMO). As part of the 2014-15 Budget Act, the Legislature approved a Governor's proposal to establish a centralized project management office within the California Department of Technology (CDT) to improve the day-to-day management of information technology (IT) projects and, eventually, overall IT project outcomes across the state. The PMO would address critical state deficiencies in project management by consolidating a team of experienced project management professionals within CDT. These project managers would provide their services to state IT projects as needed. With support from the Legislature, CDT envisioned that the PMO would eventually manage some of the state's largest, most complex, and high-costing projects. Given that the PMO has been directly involved with managing state IT projects for two years, we recently evaluated the performance of the PMO to assess whether the office is meeting—or on track to meet—its original objectives.

Analysis of the PMO to Date. Thus far, six state IT projects have sought direct project management services from the PMO. For the first six projects, the PMO selected projects likely to progress smoothly, preferring smaller, less complex projects. This allowed the PMO to test the potential of the centralized project management approach and build the reputation and capacity of the office gradually, with the intention of scaling up to larger, more complex projects once the office was more established. Based on our interviews with the six departments utilizing the direct PMO services, we found that the PMO was a valuable asset to projects in need of project management services.

Significant Recent Developments. Although the PMO has been operating largely as intended with a high level of satisfaction from departments, during our evaluation we learned of two recent developments that significantly impact the operation of the PMO going forward. First, a reorganization of CDT creates a potential conflict of interest as it places CDT oversight and project management responsibilities under the same chief deputy director. Additionally, CDT implemented a policy change that significantly reduces the number and complexity of IT projects eligible for PMO services.

LAO Findings and Recommendations. The Legislature approved the establishment of the PMO with the expectation that the office would meet a critical need in the state for project management expertise and help the state avoid the high-profile IT failures of the past. We found that the PMO was showing success towards meeting the original legislative intent by first establishing the internal processes and capacity to ultimately scale up to larger, more complex projects. However, under the recent policy change, the PMO will now primarily serve smaller, low-complexity projects, which is not in line with the Legislature's intent when it established the office. Given recent developments, we have concerns about the path forward for the PMO and its ability to succeed and meet the Legislature's original expectations.

In light of our positive findings of the PMO's operation under the original eligibility policy, we make the following recommendations:

 Reassert PMO's Mission. We recommend the Legislature reassert its original objectives for the PMO in statute. Codifying the objectives of the office would provide CDT with legislative guidance for the operation of the office and ensure that the goals and functions of the office remain aligned with legislative intent.

- **Establish Firewall.** We recommend the Legislature require in statute that CDT maintain an organizational "firewall" between its project management and oversight responsibilities. Requiring a firewall would help address and mitigate potential conflicts between the two responsibilities.
- Express Intent Regarding PMO's Independence. We recommend that the Legislature express intent in statute that it expects the PMO to operate independently and serve in the best interests of the projects. This would ease sponsoring departments' concerns of inappropriate and unnecessary information sharing between the PMO and CDT oversight and cultivate an open pathway of communication between the PMO and sponsoring departments.

Additionally, we note that even with the continuation of the PMO as originally envisioned, there is still room for departments with the capacity to manage their own projects to do so.

INTRODUCTION

As part of the 2014-15 Budget Act, the Legislature approved a Governor's proposal to establish a centralized project management office within the California Department of Technology (CDT) to improve the day-to-day management of Information technology (IT) projects and, eventually, overall IT project outcomes across the state. The Project Management Office (PMO) would address critical state deficiencies in project management by consolidating a team of experienced project management professionals within CDT. These project managers would provide their services to state IT projects as needed. With support from the Legislature, CDT envisioned that the PMO would eventually manage some of the state's largest, most complex, and high-costing projects. Given that the PMO has been directly involved with managing state IT projects for two years, we recently evaluated the performance of the PMO to assess whether the office is meeting—or on track to meet—its original objectives. In this report, we provide background regarding the objectives and operations of the PMO, detail our findings in evaluating the PMO, introduce two significant recent developments and their impacts on the PMO, and make associated recommendations on how the Legislature should proceed to better align the office with the original legislative intent.

BACKGROUND

What Is IT Project Management? IT project management is the application of skills, tools, and techniques to an IT project so that the project is completed on time, within budget, and fulfilling its objectives. Project managers are the people trained with the skill set to keep projects on track and address issues when problems arise.

State Challenges Implementing IT Projects. Historically, the state has experienced considerable challenges implementing IT projects. Despite some successes, various high-profile state IT project failures, resulting in either project suspension or termination, have received extensive legislative and media attention. In other cases, projects were ultimately completed, but only after significant cost overruns and multiyear delays. Given recent failures, the Legislature and administration have expressed strong interest in reforming existing processes to enhance the likelihood of IT project success. An internal review by CDT-the state's central IT organization-revealed that the challenges commonly experienced by troubled projects largely connect back to deficiencies in the project management process, which often fails to implement best practices to ensure that projects remain on track and are completed successfully. (Please refer to our February 2017 report, The 2017-18 Budget: The New IT Project Approval

and Funding Process, to learn about CDT's efforts to address another major contributor to project challenges—poor project planning—by developing and implementing a new project approval process.)

Historical State Project Management Structure. In the past, the state has primarily relied on the individual departments to manage their own IT projects-using state staff, contractors, or a combination of the two. Under such a decentralized approach, project managers are expected to develop and implement project management processes and practices, and create a team to support the project implementation process. One of the primary challenges of utilizing a decentralized project management approach can be the lack of experienced project management staff at the departmental level. Because smaller departments generally undertake IT projects infrequently, these departments typically acquire staff resources for project management on an as-needed, case-by-case basis. These project managers also may have a limited understanding of project management processes and practices, as they may be unable to draw from lessons learned in previous projects. There are some exceptions to this lack of experienced project management staff at the departmental level. For instance, some larger departments, such as the

Franchise Tax Board, often simultaneously manage multiple IT projects of high complexity and have demonstrated strong project management capacity. Nevertheless, inadequate project management expertise remains a challenge for most other departments.

The Statewide Project Management Office Is Created. To address state deficiencies in project management, in 2014-15 the Governor proposed establishing a centralized PMO within CDT. The PMO would create a team of skilled project management professionals, who would provide project management services to departments that are not equipped to handle this responsibility independently. Specifically, in 2014-15 the Governor requested two positions and \$208,000 (General Fund) to establish the initial elements of the PMO. Subsequently, the Governor's 2015-16 budget requested 11 additional positions (13 positions total) and \$1.5 million (special fund) to continue implementation activities-including establishing standards, tools, and guidelines, and to begin providing project management services to three projects. The Legislature adopted the Governor's proposals and in 2015-16 the PMO began managing state IT projects.

Objectives of the PMO. Specific objectives envisioned for the PMO in the Governor's budget proposal included: (1) successfully managing a wide range of projects, including large, high-complexity projects, for departments lacking capacity and/or expertise; (2) recruiting and retaining a team of gualified, trained project management professionals to allocate to projects as needed; and (3) establishing and sharing best practices and project management standards that better equip departments to manage their own projects successfully. The potential benefits of creating a centralized project management office include: making information sharing among project managers more feasible, allowing IT project-related training to be applied in a more uniform fashion, and allowing the staff resources utilized for project management to become experienced professionals who are capable of managing complex projects-all of which may better position projects to succeed. While the PMO would attempt to address project management deficiencies on projects engaged with the office, IT projects not engaged with the PMO would continue to operate under the decentralized model of project

management, whereby individual departments assume full responsibility of managing their own projects. CDT envisioned that the PMO would eventually manage some of the state's largest, most complex, high-cost projects.

Primary PMO Services. To achieve its objectives, the PMO has two primary functions: (1) to provide direct project management services to departments not capable of managing projects independently (referred to as *direct* services for purposes of this report) and (2) to develop project management tools to indirectly support departments in need of some assistance (referred to as *indirect* services for purposes of this report). Departments may engage the PMO for *direct* services through three pathways: (1) the department undertaking the IT project (known as the sponsoring department) can request PMO services, (2) CDT can require PMO engagement as a condition of project approval, and (3) CDT can intervene to provide PMO services for at-risk projects under development.

Regardless of the pathway for direct services, PMO offers three distinct service models based on the sponsoring department's existing capacity to manage IT projects. These service models, in ascending order of degree of PMO engagement, include: (1) short-term consulting services, whereby the PMO provides assistance on specific issues (such as testing) to support the sponsoring department's existing project manager; (2) providing the department a designated CDT project manager, who would be absorbed into and work alongside the sponsoring department's project team to manage the project; and (3) providing a project manager and a full project management team to assume day-to-day management of the project in lieu of the sponsoring department's staff resources. (Our analysis focuses on the extended support CDT provides in the latter two service models. Consequently, hereafter consulting services are excluded when we refer to direct services.) Project managers from the PMO remain employees of CDT but are loaned to sponsoring departments. Which service model is selected, and the terms of the direct services to be provided by the PMO, are set in a memorandum of understanding between CDT and the sponsoring department. Following completion of their project work, the project manager returns to the PMO to be allocated to another project in need of services.

The PMO also provides *indirect* project management services. The office develops and shares general project management tools—including frameworks, templates, and trainings—that are available to all departments. These resources allow departments to build internal project management expertise and positions them to more effectively manage projects independently.

Organizational Firewall Between CDT's Oversight and Project Management Roles Is Created. CDT has oversight responsibilities over IT projects as part of its control agency functions-chiefly to evaluate the management of IT projects and make associated recommendations. Establishing the PMO created the possibility that CDT could be evaluating the effectiveness of its own project management, thereby creating a potential conflict of interest between CDT's current oversight responsibilities and its proposed project management responsibilities. As shown in Figure 1, the Governor's proposal included a strategy for preventing potential conflicts by creating a "firewall" between CDT's oversight and project management responsibilities. The proposed, and ultimately implemented, solution placed these two functions

under two different branches of the department, each with its own chief deputy director. The idea behind the firewall is that it would separate CDT's oversight and project management responsibilities, allowing it to continue performing its oversight functions even with the PMO responsibilities. As the two functions are still part of the department, this design does not eliminate but rather mitigates—possible conflicts of interest.

Current PMO Project Portfolio. Although originally approved by the Legislature to provide direct project managements services to three projects, CDT determined that the PMO worked well enough to expand direct services to three additional projects in 2016. Four of the six projects range in estimated project cost from \$4 million to \$7 million. The smallest project is estimated to cost \$165,000, while the largest is estimated to cost \$69.1 million. Figure 2 (see next page) identifies key characteristics of the six projects currently receiving direct PMO services.

These six projects share common characteristics, particularly related to the circumstances of PMO engagement. Thus far, all projects have independently requested direct services (with the exception of one

Figure 1 California Department of Technology's Organizational Firewall Between Project Management and Oversight Roles^a **Director of Technology** Operations Policv Other Offices Chief Deputy Director Chief Deputy Director (Legal Services, External Affairs, IT Services) Statewide Technology Administration Office of Technology **Enterprise Solutions** Division Services Procurement Office of Information State Geographic Broadband/Digital Project Oversight Security Information Literacy Office of Professional **Customer Delivery** Development **Project Management Office** ^a The organization chart has been simplified to highlight only the aspects relevant for this report. IT = information technology.

Figure 2

Current Project Portfolio for Statewide Project Management Office

(In Millions)

Sponsor Department	Project	Project Description	Estimated Completion Date ^a	Estimated Project Cost
Department of Conservation	Well Statewide Tracking and Reporting (WellSTAR)	Well management system to meet state and federal requirements	June 2020	\$69.1
Department of Fair Employment and Housing	California Civil Rights System (CCRS)	Case management system for discrimination complaints	October 2017	6.5
Commission on Teacher Credentialing (CTC)	Streamline and Strengthen the Accreditation Process (SSAP)	Data collection system for CTC accreditation process	June 2017 ^b	6.5
California Workforce Development Board	Cross-System Analytics and Assessment for Learning and Skills Attainment (CAAL-Skills)	Data repository and analytics platform for workforce development activities	December 2018	4.2
Department of Insurance	Fraud Data Analytics System (FDAS)	Analytics tools to identify fraud	May 2018	4.1
Office of Traffic Safety	Grant Electronic Management System (GEMS)	Automating paper-based grants application process	January 2018	0.2
 ^a Estimated completion date as of summer ^b Actual project completion date. 	2017.			

project that was encouraged by CDT to use PMO services). CDT has not required direct PMO services as a strict condition of project approval or intervened to provide services due to project underperformance, although CDT originally envisioned both of these scenarios for engaging the PMO. Additionally, the office has yet to exercise the highest level of engagement, whereby the PMO provides a full project management team to assume day-to-day management of the project in lieu of the sponsoring department's staff. All six projects currently receive a designated PMO project manager, who is expected to integrate into the department's project team for the duration of the project. For the first six projects, the PMO selected projects likely to progress smoothly, preferring smaller, less complex projects. This allowed the PMO to test the potential of the centralized project management

approach and build the reputation and capacity of the office gradually, with the intention of scaling up to larger, more complex projects once the office was more established.

PMO Funding Structure. Most of CDT is funded through the Technology Services Revolving Fund (TSRF), which collects fees paid by departments for services provided by CDT, including those charged for PMO services. The PMO service rate charged to a sponsoring department is largely set based on the salary and benefits of the designated project manager, while other PMO responsibilities are excluded from the service rates, including indirect PMO services (such as the development of frameworks, methodologies, and other tools) and various administrative responsibilities. The 2017-18 budget provides the PMO with 14 positions and \$2.5 million (special fund).

ANALYSIS OF THE PMO TO DATE

We recently evaluated the performance of the PMO to date to assess whether the office is meeting-or on track to meet-its original objectives and to better understand the strengths and limitations of the PMO, as implemented. Specifically, our evaluation focuses on the direct, rather than consulting and indirect, services offered by the PMO. For this work, we interviewed key staff members of the six sponsoring departments receiving direct PMO services, as well as executive staff at CDT. Given that the PMO has only been directly involved with managing state IT projects for two years, we acknowledge that the PMO is in the early stages of establishing its capacity and processes as an office, especially as the PMO is intended to scale up to eventually manage larger, more complex projects. As a result, this analysis has limitations that we acknowledge more fully later. Below, we discuss our findings from the evaluation of the PMO as the office is operating to date.

Departments Had Several Motivations for Engaging PMO

Departments Sought PMO Services Due to Lack of Internal Expertise and/or Capacity. According to the departments we interviewed, the needs that motivated department requests for PMO services depended on the expertise and capacity of the department's internal IT operation and the complexity of the project. We found that departments with less established IT operations requested PMO services to address gaps in both expertise and capacity. Because they take on projects so infrequently, most small departments, and some larger departments, have limited opportunity and need to develop the internal operations necessary to effectively complete complex IT projects. For instance, a smaller department may be capable of managing small scale IT projects, such as hardware replacements or application updates, but may lack expertise beyond these routine projects. Hence, on the rare occasion when the department pursues a more significant IT project, they require additional project management services to successfully complete the project. Many of the departments that engaged the PMO because of expertise and capacity issues anticipate returning to the PMO for direct project management services in the future for similar reasons.

In contrast, other departments requesting PMO services claimed to have the expertise to manage projects independently but temporarily lacked available staff. These larger departments had established IT project management operations, including their own departmental PMO, and were simultaneously managing several projects of varying complexity. These departments turned to CDT's PMO to provide project management services on a new project when internal IT staff were already fully dedicated to ongoing projects. Without adequate project management, the new project may have experienced delays until resources were secured, or the department would need to reassign resources from other projects, potentially jeopardizing other project work, or contract for services. Under such circumstances, departments found the PMO helpful in addressing internal capacity deficiencies. These departments aim to have sufficient internal capacity in the future to manage their projects independently, but would leverage the PMO should capacity constraints arise again. (We discuss later why this may change moving forward.)

Departments Identified Several Benefits of PMO Over Other Alternatives. Departments largely prioritized successful project implementation when considering their options for project management, and viewed PMO services as one option among several including using state resources or contracting—to achieve project success. However, sponsoring departments provided several reasons for preferring PMO services:

• *Perceived Advantage Navigating CDT.* Since PMO project managers are CDT employees, departments believed that using direct services from the PMO facilitates smoother navigation of CDT processes, including initial project approval, procurement, approval of revised project plans, and project oversight. The project managers would be more familiar with CDT's processes and help departments manage these processes successfully. If challenges were to arise, departments believed the PMO project managers could leverage their direct access to CDT colleagues, as appropriate, to remedy issues more expeditiously. Those CDT employees may be more understanding when interacting with a CDT colleague (the project manager assigned to the project) than with a non-CDT project manager.

- Administrative Ease. According to departments, requesting PMO services is less administratively burdensome than the other available options. For example, contracting for project management services requires completing the state procurement process, which may be lengthy and result in project delays. Hiring for a new temporary or permanent position may require formal budget approval. Alternatively, reassigning internal resources is only a viable solution if adequate expertise already exists internally and the reassignment does not result in delays on other work.
- **Cost-Effectiveness.** For the projects currently using direct PMO services, PMO rates generally have ranged from \$15,000 to \$18,000 per month, depending on the complexity of the project. Departments considered these rates more cost-effective than contracting for project management services, indicating that PMO service rates were either competitive or lower than contractors' rates. As we discuss below, because these rates do not fully reflect CDT's cost for operating the PMO, other fees paid to CDT subsidize the operation of the office.
- *Cultivate In-State Expertise.* Some departments' interest in the PMO was partially driven by an interest in building and retaining project management expertise for the benefit of the state. They viewed engaging PMO services as a means to contribute to the state's long-term project management capacity, as the expertise and experience that the PMO project manager developed through the project would remain in-state. These departments noted that, in contrast, outside contractors would leave the state after completing their contractual project management responsibilities and take with them any added expertise.
- Sharing Responsibility With CDT. One department noted that its interest in PMO services was partially motivated by an interest to share responsibility for any project with CDT. As the state's central IT organization, this department believed CDT should be accountable for the

success or failure of state IT projects. Ultimately, projects managed by the PMO are still the responsibility of the sponsoring departments. Nevertheless, departments may perceive it valuable to engage CDT, particularly when they can shift responsibility for project challenges to CDT.

PMO Was Positioned to Hire High Quality Project Managers

The project managers hired by the PMO came from a range of backgrounds, including within CDT, from other departments, and from the private sector. In recruiting, the PMO looked for candidates who were certified as project managers, had experience on projects of different sizes, and maintained knowledge in a variety of project management-related disciplines, including organizational change and various software development models. Below, we outline the tools in place that have positioned the PMO to recruit high quality project managers and discuss sponsoring departments' experiences with the project managers to date.

Several Factors Positioned PMO to Recruit Qualified Project Managers. When the PMO was initially proposed, we noted that recruiting and retaining qualified project managers would be critical to the success of the PMO. We stated at the time that while the state would likely continue to have problems competing with the private sector for qualified IT staff, CDT may be better positioned than departments to recruit and retain staff resources through the PMO because of the career pathway the office could offer. We found that several factors enabled the PMO to attract, and ultimately hire, experienced project managers:

• Career Advancement. According to the PMO, many project manager candidates viewed the PMO as an opportunity for career advancement by working on high-visibility, complex, and challenging projects which were not available at their previous position. For candidates from the private sector, the PMO offered an opportunity to manage projects that could affect the entire state of California, a scale and impact level incomparable to most projects seen in the private sector. Depending on the department, candidates within state government may have reached the top of their professional development, with limited opportunities to work on more complex IT projects. For these candidates, the PMO provided the possibility of more challenging and engaging project work that would better leverage their skill set and expertise. Although the PMO intended to start with smaller projects, the appeal of working in the future on state projects that were large in scale and intellectually challenging positioned the PMO to attract strong candidates.

- Pay Differential for Complex Projects. Through an arrangement between CDT and the California Department of Human Resources, CDT secured a 7.5 percent to 15 percent pay increase, or differential, for project managers working on the most complex projects. While none of the projects currently receiving PMO services qualifies for the pay differential, the possibility of the pay differential in the future allowed the PMO to be a competitive employer. (We note that one project manager initially qualified for the pay differential. However, a reassessment of the project's complexity resulted in an adjustment down and a removal of the pay differential.)
- Job Security. For project managers already in state government, the PMO was better positioned to provide job security than other departments. Typically, IT projects are short-term endeavors, whereby project managers would find themselves in need of employment after a project is completed. However, under the PMO model, project managers are hired into permanent positions and are assured to receive a new project assignment after the previous one concludes, allowing for continuous work and employment without having to apply for jobs in other departments.

Departments Highly Satisfied With Project Managers. All of the sponsoring departments that we interviewed were highly satisfied with the qualifications and performance of their project manager. Project managers integrated with department project staff and managed daily operations of the project. According to departments, project managers were able to develop a working understanding of programmatic needs and departmental culture. Several departments considered their project manager a strong asset, as they helped mitigate project delays and were able to act as a neutral mediator when issues arose. For instance, when projects involved collaboration across entities—such as data sharing across departments or convening teams within the department—and disagreements arose over project changes or next steps, project managers attempted to resolve the conflict as a neutral party. One department noted that when an unforeseen issue arose, the project manager leveraged his/her knowledge of the state procurement process to contract with the necessary technical specialists in a short time frame. Thus far, there has been no turnover of project managers on any of the six projects receiving PMO services.

We note that the project manager selection process may have played a role in the high department satisfaction with PMO services. Because these were the first projects the PMO undertook, after initially screening candidates, the PMO worked collaboratively with most sponsoring departments to hire candidates considered a good match for the project needs and department culture. Departments had the opportunity to review candidate resumes, interview candidates, and select their preferred candidate—who would then be hired by the PMO. Through this process, departments were able to provide the PMO substantial input on project manager selection, which was likely critical in high department satisfaction with their PMO resource.

Progress of PMO Projects

Projects Largely Progressing as Expected. As of June 2017, of the six projects receiving PMO services, three projects are under development, and the other three projects are in the planning phase. Two of the three projects under development are generally progressing as expected based on the approved project plans. The third project noted project delays largely due to external vendor challenges. Despite the delays, the department noted that they were pleased with the project manager's proactive approach to mitigating any further delays. One department acknowledged their project manager as the main reason for the project staying on schedule. There is not as much information available to fully assess the three projects still in the planning phase. However, projects engaged with the PMO during the planning phase may find their project manager provides critical support that

positions it for success. For example, one department attributed being farther along in the planning phase than otherwise expected due to the work of the project manager.

Perceived Conflict Between CDT's Oversight and Project Management Roles Remained

Some Departments Concerned About Adequacy of CDT Firewall. Despite CDT's organizational firewall, some sponsoring departments expressed some concern that a conflict of interest still existed. For example, there was concern that the PMO project manager would expose the department's internal deliberative process to other CDT staff. Departments had concerns that such exposure would result in stricter or more involved oversight than was warranted. These departments asked their CDT project manager to refrain from sharing any project information, beyond what was necessary, with other units within CDT, including oversight. In effect, these departments attempted to strengthen the firewall between the project managers and the rest of CDT to maintain control over the information given to CDT.

Additionally, when CDT suggests that a project seek project management services, sponsoring departments may perceive some pressure to use PMO services over other options, such as contracting from a third party. Given the authority of CDT over project approval and oversight, departments may have concerns that not accepting PMO services, even when not required, would invite a different level of CDT oversight.

PMO Capacity Limitations

Unable to Fully Meet Demand for Services. The PMO was unable to fulfill requests for direct services from at least seven departments, largely because PMO staff was already engaged on other IT projects. Although it is unclear whether these departments would have pursued direct PMO services should project managers have been available, it is an indicator of interest in direct project management services through the PMO. We also note there is a tension between serving all interested departments and developing excess capacity. The PMO needs to continuously balance the trade-offs between permanently expanding the office to address requests for project management services without growing the office too large and leaving PMO staff underutilized during times of lesser demand for their services.

Alignment With Legislative Intent

PMO Operated Largely as Legislature Intended. When the PMO was first proposed, CDT asserted that statutory authority for a PMO already existed, citing statute that broadly laid out the Director of Technology's authority to perform project management activities, but the statute was never modified to explicitly lay out the role and objectives for a statewide PMO. Despite the fact that the PMO was not explicitly established in statute, we generally found the PMO to be operating in line with legislative intent, based on the budget proposal approved by the Legislature. The PMO had already expanded direct services from three projects to six projects, and was positioned to potentially expand services to larger, more complex projects. The office was meeting, if not surpassing, sponsoring departments' expectations, both in regards to project manager qualifications and project progress under the CDT project manager. With the exception of one project delayed due to external vendor challenges, the remaining five projects are progressing as expected. Although the PMO encountered some initial challenges-including limited PMO capacity and departments' internal concerns about CDT oversightwe found the PMO to be largely meeting or working to meet its original objectives.

PMO May Encounter Future Limitations

Although our analysis thus far indicates a high level of satisfaction with the PMO to date, there are some significant limitations to these findings, which we highlight below.

High Department Satisfaction May Be Difficult to Maintain. Because a department's ability to interview and select its project manager was a critical factor in high department satisfaction, department satisfaction with PMO services may differ moving forward. In the future, because the PMO will be fully staffed (barring any intermittent vacancies), new projects requesting PMO services will have limited options based on the project managers available at the time of request. Additionally, as previously mentioned, the PMO intentionally started with smaller projects that requested PMO services and were likely to progress smoothly. Hence, the projects currently receiving PMO services are not fully representative of the projects the PMO will likely engage in the future. If the office continues to operate as today, we would anticipate that the PMO will engage a broader range of projects under varied circumstances, including engagement as a *requirement* of project approval and on projects already underway considered at-risk. While we found that departments that invited PMO involvement through request were satisfied with CDT's service, it is unclear whether department satisfaction would remain high when CDT *requires* a department to use direct project management services from the PMO.

Future PMO Service Rates May Be Less Competitive. Although the PMO was expected to fully recover the cost of its operation through the collection of fees for PMO services paid by departments, CDT indicated to us that the PMO has not been able to fully recover costs since the office was established. The PMO service rates are largely calculated to recover

the costs associated with the salary and benefits for project managers. However, to keep rates competitive with contractor rates and to increase initial take-up for services, CDT was incentivized to keep rates below what was necessary for full cost recovery of the PMO. For instance, the service rates exclude key aspects of the PMO's responsibilities, including indirect PMO services (such as the frameworks and methodologies made available to all departments) and various administrative responsibilities. As a result, CDT relies on surplus balances in the TSRF, which, as previously discussed, collects fees paid by departments for CDT services, to fully cover the cost of operating the PMO. In the future, CDT may need to increase service rates to factor in the cost of indirect PMO services and office administration to work towards full cost recovery, as was originally envisioned. If direct service rates were to increase, the PMO might be a less attractive project management option for departments moving forward, especially if the PMO were no longer able to compete with contractor rates.

SIGNIFICANT RECENT DEVELOPMENTS

Although the PMO has been operating largely as intended with a high level of satisfaction from departments, during our evaluation we learned of two recent developments that significantly impact the operation of the PMO: (1) a reorganization of CDT that eliminates the firewall between CDT's oversight and project management roles and (2) a policy change that narrows the number of IT projects eligible for PMO services. Below, we describe the recent developments and discuss the relevant potential implications they may have on the PMO going forward.

REORGANIZATION OF CDT

CDT Reorganized. In spring 2016, a new director assumed leadership of CDT and, shortly thereafter, proposed an organizational realignment of the department. The reorganization sought to achieve organizational efficiencies across a variety of CDT's functions, not specific to the PMO. Formerly, the functions of CDT were divided between two chief deputy directors, one that focused on

policy and the other focused on operations. The reorganization collapsed the department's functions and responsibilities under one chief deputy director. **Figure 3** (see next page) illustrates the new organizational structure of CDT.

Potential Conflict of Interest Between CDT's **Oversight and Project Management Roles** Resurfaces. To address the potential conflict of interest between the project management and oversight functions of CDT, the two responsibilities were previously placed under separate branches. However, the reorganization under new CDT leadership consolidated the project management and oversight functions under the same office-the Office of Statewide Project Delivery-with both functions reporting to the same chief deputy director. This effectively eliminated the firewall, making it so that the two responsibilities are in potential conflict. Consequently, the current departmental structure may be thought to compromise CDT's ability to maintain independent and objective oversight for projects managed by the PMO.



CDT NARROWED ELIGIBILITY FOR DIRECT PMO SERVICES

Change in Project Eligibility for Direct PMO Services. State IT projects are either "reportable" or "non-reportable." Reportable projects are generally more complex and costly, and as such, they require approval and oversight from CDT. Non-reportable projects, on the other hand, can be independently managed by sponsoring departments without CDT approval or oversight. (Please refer to the nearby box for a detailed definition of reportable IT projects.) In summer 2016, CDT instituted a new policy that makes most reportable projects under the oversight of CDT that is, generally the larger, more complex projects *ineligible* for PMO direct services. Accordingly, combined with other aspects of the policy discussed below, the new eligibility policy significantly limits the types of projects directly served by the PMO. In fact, under the narrowed eligibility policy, a majority of the

Reportable State Information Technology Projects

Reportable projects generally face a higher level of scrutiny, as they are approved by and under the oversight of the California Department of Technology (CDT), whereas non-reportable projects are completely within the authority of sponsoring departments to manage. Projects that meet one or more of the following characteristics are considered reportable:

- Estimated project cost exceeds departmental delegated cost threshold authority assigned by CDT. The delegated cost thresholds generally range from \$200,000 to \$2 million.
- Projects for which the costs are not absorbable by the sponsoring department and therefore require an appropriation.
- Projects that are specifically mandated by the Legislature.
- Projects that meet previously imposed conditions for reportability set by CDT.

Non-reportable projects either do not meet these criteria or are sponsored by state entities outside of CDT's jurisdiction, such as Covered California.

previously eligible projects could no longer use direct project management services. This group of projects collectively represent about \$3 billion, or the vast majority of the state's IT project costs. (We note that, despite the narrowed eligibility criteria for direct PMO services, all departments and projects remain eligible for PMO consulting services, which provides short-term project assistance.)

Specifically, CDT's new eligibility policy narrows direct PMO services to (1) all non-reportable projects, (2) reportable projects only during the project approval process (known as the Project Approval Lifecycle [PAL]), and (3) reportable projects that have completed the PAL process but are determined by CDT to be "low-complexity," and therefore receive very limited oversight from CDT. Figure 4 shows whether or not the six projects currently engaged with the PMO would still qualify under the new eligibility requirements. Even among these smaller projects, only three of them would meet the narrowed eligibility requirement for direct PMO services. The other three projects, despite finding PMO services valuable, would be ineligible under the narrowed eligibility policy. (We note that the current projects receiving direct PMO services will continue to do so despite the policy change.)

Finally, because PMO staff were already fully dedicated to projects when the policy change went into effect, the PMO has not yet engaged any new projects under the narrowed eligibility policy. (The first project

Figure 4

managed by the PMO was completed in summer 2017. However, the project manager has not been assigned to a new project for direct services; instead, the project manager is being used for another internal effort.)

Administration's Reasons for Narrowing Eligibility. In

our discussions with CDT, the administration expressed an interest in continuing to build project management capacity within individual departments as opposed to maintaining a centralized PMO as original envisioned. The administration thereby expressed its preference for a decentralized approach to project management, whereby CDT provides departments support—such as consulting and indirect services—that may position departments to successfully manage their own projects independently. CDT noted that departments primarily view its role as a control agency, and that departments with adequate resources would prefer to keep project management internal, limiting their interactions with a control agency and building their own long-term project management capacity. According to CDT, the narrowed eligibility policy addresses these concerns by allowing centralized project management services, through the PMO, for smaller projects that are likely to lack internal capacity or expertise but otherwise relying on a decentralized approach for project management for most large, complex projects.

CDT's decision to strictly limit direct PMO services in cases where projects are under the oversight of CDT has the practical effect of reducing the potential for a conflict of interest. CDT reported that departments repeatedly raised concerns about CDT's ability to maintain independent oversight while providing project management services on a project. As discussed previously, we heard similar concerns from departments.

In the following sections, we discuss the practical implications of the narrowed eligibility policy, the office's ability to continue meeting its original objectives, and the relevant legislative considerations under the new policy.

Eligibility of Six Currently Engaged Projects for PMO Services if Under New Eligibility Policy ^a					
		Reportable IT Projects			
	Non-Reportable IT Projects	Low Complexity	Higher Complexity		
Eligible	GEMS CAAL-Skills	SSAP			
Ineligible			WellSTAR CCRS FDAS		
^a Although the six projects managed by the PMO were engaged under the original eligibility policy, this figure shows that three projects would be ineligible for PMO services beyond the planning stage because they are reportable and higher complexity.					
PMO = Project Management Office; IT = information technology; GEMS = Grant Electronic Management System; CAAL-Skills = Cross-System Analytics and Assessment for Learning					

Management System; CAAL-Skills = Cross-System Analytics and Assessment for Learning and Skills Attainment; SSAP = Streamline and Strengthen the Accreditation Process; WellSTAR = Well Statewide Tracking and Reporting; CCRS = California Civil Rights System; and FDAS = Fraud Data Analytics System.

Practical Implications of Narrowed Eligibility Policy

Reportable, Higher-Complexity Projects Unlikely to Engage PMO Services if Solely for Project Planning. As discussed above, reportable, higher-complexity projects can only use direct PMO services during the planning phase. Generally, departments have a sense of whether their projects are likely to be reportable prior to initiating project planning. Whether a project is actually reportable and its complexity level is determined by CDT through the planning process. (Refer to the nearby box for a detailed definition of "complexity" for state IT projects.) Although reportable, higher-complexity projects are eligible for project management services during the planning phase, the challenges associated with finding new project management services once planning is complete may discourage these projects from seeking PMO services solely for the planning phase. Even though the PMO may help reportable. higher-complexity projects more efficiently navigate the project approval process, losing a project manager after receiving project approval also means losing the valuable insight and knowledge gained during planning-such as a better understanding of programmatic needs or anticipated risks and mitigation strategies. One department currently receiving PMO services originally intended to use PMO services solely for project planning, but then extended the duration

of services to include project implementation after anticipating that the change would be disruptive. This suggests that mainly departments with projects likely to be non-reportable would engage PMO services during the planning phase, because only these projects have the certainty of retaining the same project manager through project completion under the narrowed eligibility policy.

Pathways for Engaging PMO Limited. As discussed previously, the new eligibility policy significantly limits the projects eligible for PMO services. The new policy also limits the pathways CDT can utilize to support projects in need of project management services. CDT originally envisioned three pathways for engaging PMO services: (1) by department request; (2) as a CDT requirement for project approval; and (3) through CDT intervention on at-risk projects, likely at the recommendation of CDT oversight. We note that the latter two pathways could be used by CDT as tools to intervene and ensure projects are managed appropriately. (Thus far, only the first pathway has been used.) The projects that would be eligible for direct PMO services under the new policy have little or no approval and oversight requirements from CDT. In effect, this means CDT would seldom be in a position to require PMO services as a condition of project approval or intervene based on issues identified through its oversight. Without these tools, CDT is unable to intervene with direct PMO services on the largest, most complex projects that are potentially troubled or proven to be troubled. As a result, we anticipate most, if

Complexity of State Information Technology (IT) Projects

The California Department of Technology (CDT) determines the level of complexity for each state IT project after assessing both the programmatic and technical components of the project. The programmatic complexity takes into consideration factors such as the stability of the program needs, the clarity of project objectives, the political sensitivities, and the financial risk to the state. The technical complexity incorporates factors such as whether the software or hardware has proven effective through its use, the level of system integration, and the security requirements associated with the project.

The complexity level enables CDT to determine the appropriate level of oversight to provide on the project. For instance, a project of the lowest complexity—which may rely on established technology solutions, have a clear business objectives and requirements, pose little financial risk to the state, and be routine in nature—would receive very limited oversight from CDT. In contrast, a higher-complexity project may be larger in scale, have higher visibility, face multiple contentious issues, and employ new technological solutions that must be integrated with multiple existing systems. These projects require much closer oversight from CDT. Generally, a CDT employee is embedded full time on a project and routinely reports on the project's status.

not all, future projects to engage PMO services through a request to CDT by the sponsoring department. This pathway depends on departments accurately assessing the adequacy of their internal IT project management capacity, which is something departments have struggled with historically.

Issues With the Narrowed Eligibility Policy

Unclear Whether Smaller Projects Stand to Benefit Most From PMO Services. Given that non-reportable projects tend to be less costly, smaller in scope, and lack the need for direct CDT oversight, we can infer that these projects are considered to be less risky and therefore less likely to need project management services. Of the six projects the PMO currently engages, three projects would remain eligible for PMO services under the new eligibility policy, suggesting some need for services among small projects. However, the need for PMO services on non-reportable or low-complexity projects may be limited, suggesting that dedicating state resources and funding to provide direct PMO services to these types of projects is likely not the best use of these resources. Further, the potential cost savings to the state from more effective project management on these smaller, low-costing projects is limited. The state stands to realize more benefits by focusing on complex reportable projects that risk significant cost increases without proper project management. These are the projects which the state has historically struggled with and which the PMO was originally established to support.

Departments Have Lost a Project Management **Option.** In our analysis, we found an interest in receiving direct project management services from the PMO among departments that are no longer eligible. For instance, three projects currently receiving PMO services are under CDT oversight and would not be eligible for services under the new policy. Additionally, several of the unfulfilled requests noted previously would not be eligible for direct PMO services under the new policy. Finally, the PMO already declined a request for services from a project that is no longer eligible under the narrowed criteria. This indicates that some departments prefer direct PMO services over other project management options-such as consultantsbut have lost the PMO as an option for direct project management under this new policy. Newly ineligible

projects in need of project management services would have to find support elsewhere. These projects would likely revert to the same project management options available prior to the establishment of the PMO—such as contracting or reassigning staff internally—which were inadequate in some cases and originally prompted the need for a statewide PMO.

Potential Challenges Recruiting and Retaining Project Managers. According to the departments receiving PMO services, the current PMO project managers are highly gualified, experienced, and knowledgeable. However, it seems likely that the narrowed eligibility policy will create significant recruitment and retention challenges. The narrowed eligibility policy eliminates two key factors that attracted project managers to the PMO: (1) the possibility of working on complex, high-visibility, and professionally challenging projects that could advance their careers and (2) a favorable pay differential for working on projects that are more complex. The loss of these incentives may make it difficult to retain the current project managers. Further, the less complex projects still eligible for direct PMO services may require less experienced and skilled project managers than the current PMO team, given that the qualification requirements for working on smaller, less complex projects will likely be lower. As a result, the state stands to lose valuable project management expertise and capabilities formerly centralized at the PMO, especially as current project managers consider opportunities at other departments or outside of state government.

Misalignment With Legislative Intent. Given the new eligibility policy, the PMO is no longer operating as originally envisioned. The PMO will continue to provide consulting and indirect services (such as project management frameworks) for all projects while bolstering the successful management and implementation of smaller projects through direct PMO services. However, the original motivation behind the PMO focused on serving a wide range of projects, including those most challenging to the state historically. Now, the state's highest-visibility, largest, most complex projects may continue to face the same project management challenges that first motivated the creation of the PMO. By only supporting smaller projects that lack expertise or capacity, the initial problems that prompted the creation of the PMO may go unaddressed.

LAO FINDINGS AND RECOMMENDATIONS

Prior to the recent developments, we found the PMO to be operating as originally envisioned by the Legislature, with the office providing critical services to departments and in a position to potentially expand to larger, more complex projects. Departments receiving direct PMO services were largely satisfied and noted the significant contributions of their CDT project manager in managing their projects efficiently and effectively. On balance, we found that the PMO was a valuable asset to departments in need of project management services. However, under the recent policy change, the PMO will now primarily serve smaller, low-complexity projects, which is not in line with the Legislature's intent when it established the office. In light of our positive findings of the PMO's operation under the original eligibility policy, we make several findings and recommendations that assert the original intent of the PMO and position the office to help state IT projects succeed.

There Is a Role for Both Centralized and Decentralized Approaches to Project Management.

As we have pointed out, CDT sees a continued role for the decentralized approach to project management, and has used this to partially explain the recent change in the eligibility criteria for direct PMO services. We agree that for some departments this approach makes sense. However, we find that there can be a role for both a centralized and decentralized approach to project management, and that there is no need to only have one or the other model available for state departments.

Reassert Original Objectives of PMO. The recent changes to the PMO have caused the office to diverge from its original intent to provide direct project management services to the most complex IT projects and to engage projects that may be or already are challenged due to project management deficiencies. We recommend the Legislature reassert its original objectives for the PMO in statute. The Legislature could establish the types of projects under the purview of the office and the pathways through which projects engage the PMO. A potential objective of the PMO is to manage IT projects for departments that lack capacity and/or expertise, irrespective of a project's oversight status. In other words, all IT projects would be eligible to receive direct PMO services, including the largest and most complex projects. Codifying the objectives of the office would provide CDT with legislative guidance for the operation of the office and ensure that the goals and functions of the office remain aligned with legislative intent.

Establish Strong Firewall Between CDT's Oversight and Project Management Responsibilities. We recommend the Legislature require in statute that CDT maintain an organizational firewall between its project management and oversight responsibilities—similar to the firewall that existed prior to the most recent reorganization. Requiring a firewall would help address and mitigate potential conflicts between the two responsibilities.

Clarify Intent That PMO Act Independently. Concerns raised by CDT and departments signal that the firewall between CDT's oversight and project management responsibilities, even prior to the recent reorganization, could be further strengthened to allow the PMO to function in a way that relieves departments' concerns about a potential conflict of interest between CDT's project management and oversight functions. To address this concern, we recommend that the Legislature express intent in statute that it expects the PMO to operate independently and serve in the best interests of the projects. This would ease sponsoring departments' concerns of inappropriate and unnecessary information sharing between the PMO and CDT oversight and cultivate an open pathway of communication between the PMO and sponsoring departments. This recommendation also would allow the department to continue to provide project managers with the necessary information to successfully manage a project.

CONCLUSION

The Legislature approved the establishment of the PMO with expectations that the office would meet a critical need in the state for project management expertise and help the state avoid the high-profile IT failures of the past. We found that the PMO was showing success towards meeting the original legislative intent by first establishing the internal processes and capacity to ultimately scale up to larger, more complex projects. However, given recent developments, we have concerns about the path forward for the PMO and its ability to succeed and meet the Legislature's original expectations. Our recommendations enable the Legislature to reassert the original intent of the PMO to centralize project management services and improve the state's success in implementing IT projects by equipping departments with the necessary expertise and capacity. Additionally, we note that even with the continuation of the PMO as originally envisioned, there is still room to continue the decentralized approach to project management for departments with the capacity to do so. AN LAO REPORT

LAO PUBLICATIONS

This report was prepared by Lourdes Morales and Amy Li, and reviewed by Ginni Bella Navarre. The Legislative Analyst's Office (LAO) is a nonpartisan office that provides fiscal and policy information and advice to the Legislature.

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