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An Assessment of the Governor’s Reorganization Plan to Create a Department of Technology Services

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Mr. Chairman: I am pleased to provide testimony related to the Governor’s Reorganization Plan (GRP) to create a Department of Technology Services and to transfer and consolidate the Teale Data Center and Health and Human Services Agency Data Center (HHSADC) functions plus the General Services Department’s telecommunications and data networking functions to the new Department.

In the testimony that follows, I will first provide a quick overview of RAND’s previous research on California’s information technology (IT) governance. That research led to the publication of a 2003 report, *Effective Use of Information Technology: Lessons about State Governance Structures and Processes*. Following that overview, I will discuss what our research – as spelled out in that report – has to say in addressing three questions raised in the April 6, 2005, letter to me from the Little Hoover Commission:

- Is the reorganization plan consistent with the recommendation that RAND made for the consolidation of data center functions? How could this plan be improved?
- Does the reorganization plan ensure effective enterprise level planning, procurement and project management of state government technology? If not, what additional action is needed?
• Is the proposed Technology Services Board likely to be an adequate substitute for competition between state data centers for customers as a way to drive down costs and improve service?

In addition to these three questions, we ask and answer a more general question first: Is the GRP consistent with RAND’s overall recommendations? At the end of the testimony, I offer a few additional considerations based on our research.

OVERVIEW OF RAND RESEARCH ON CALIFORNIA’S IT GOVERNANCE

In 1995, the California Department of Information Technology (DOIT) was created to provide leadership, guidance, and oversight for IT initiatives and projects throughout the state. By 2002, DOIT would cease operation, but the need for what DOIT was chartered to do would continue and grow.

Based on the responses to a request for proposals, the Bureau of State Audits selected RAND to conduct a study to determine how California could best take advantage of prior experience, both in California and in other states, to inform the next steps to take in IT governance. In particular, RAND was asked to address three objectives:

• Obtain an understanding of how California’s IT governance structure worked to coordinate, evaluate, oversee, and exploit as fully as possible the state’s investment in IT;
• Determine what lessons can be learned from states with exemplary practices in IT governance;
• Make recommendations for future directions in California’s IT program to support the state’s mission in the years ahead.

After studying multiple models of successful state IT governance, the RAND research team concluded that California would be best served by re-establishing a state IT agency to act as the focal point for statewide IT developments. Because of the scope of California's IT initiatives and procurements and because of its poor track record up to then in establishing effective collaboration among the diverse agencies over which IT authority is distributed, we argued in the report that a consolidated control model would be the most appropriate model for any new attempt at effective IT governance in the
state. Case studies in other states indicate it is possible for such governance entities to provide visionary management, oversight, and control of major IT efforts at the state government level.

**IS THE GRP CONSISTENT WITH RAND’S OVERALL RECOMMENDATIONS?**

In its general outlines, the proposed reorganization is consistent with two chief recommendations presented in our 2003 report. Specifically, our report makes the following recommendations:

- A new agency of information technology should be established for California, reporting to the Office of the Governor;
- Existing statewide IT data centers should report directly to this new agency, and the new agency should have operational authority over statewide IT systems and services (e.g., telecommunications, data networking) as well.

However, in one respect, the proposed reorganization is not consistent with those recommendations. As discussed in the GRP and shown in the organization plan included there, the proposed Department of Technology would report to the Governor through an intermediary, in this case, the State and Consumer Services Agency. Our research on the experiences of other states shows the importance of the authority, credibility, and interest of the Office of the Governor in creating momentum for statewide or cross-agency IT initiatives. DOIT lacked such support, which appears to be crucial in getting diverse agencies and departments to work together toward a shared set of IT goals and systems needed statewide.

Thus, in RAND’s view, it is critical to the success of the new department’s missions that it report directly to the Office of the Governor. The CIO could remain as part of the Governor’s office (with the new agency reporting to that office) or could head the new department. In either case, however, the new department should not report to the governor's office through an intermediate agency if it is to be the focal point for state IT leadership.
IS THE GRP CONSISTENT WITH THE RECOMMENDATION THAT RAND MADE FOR THE CONSOLIDATION OF DATA CENTER FUNCTIONS?

As noted in the second bullet above about RAND’s overall recommendations, we urged that data center functions and such services as telecommunications and data networking should be consolidated under one agency. Thus, the proposed GRP’s intention for such consolidation is consistent with our recommendation.

The evidence for that recommendation comes from our examination of the exemplary states we studied. In terms of data center consolidation, at present, a number of states have moved to consolidate their data centers. Among the exemplary cases we studied, for instance, Pennsylvania had reduced its 23 data centers to one; New York, having already reduced its 25 data centers to three, was in the process of consolidating those three into one.

Major advantages reported to come from consolidation of data centers reflect those noted in the proposed GRP:

- Separate data centers result in considerable and costly duplication and redundancy (e.g., one state reported nearly a 50 percent decrease in costs of IT operating personnel from consolidation);
- Economies of scale can be realized by consolidating data centers and realigning their work along lines of service rather than reproducing the work within organizational stovepipes;
- Uniting data operations personnel in a single large center enables the creation of a career path for IT professionals that would not likely exist in individual client agencies;
- Consolidation leads to a critical mass of expertise in IT skills related to data management and promotes uniform training of these staff in advancing techniques and technologies.

In the proposed GRP, the intent is to move the Teale Data Center and Health and Human Services Agency Data Center (HHSADC) into the new department. Given the benefits outlined above, we would further recommend that to the extent that the new department
can demonstrate savings from the proposed consolidation, other agency data centers could, over time, be moved under the Department of Technical Services.

The arguments for transferring telecommunications and data networking functions out of the Department of General Services and uniting them under the proposed new Department of Technology Services are essentially similar to those made for the consolidation of data centers under that department.

Specifically, such a transfer will further boost economies of scale in procurement of equipment and infrastructure services while promoting efficiencies associated with improved interoperability and greater standardization. And contributing to a critical mass of skilled IT professionals with defined career paths will help the state compete with industry to recruit and retain these types of personnel.

Perhaps most important, the RAND report singles out the need to manage the security and safety of data, networks and nodes professionally and centrally. Issues of information security and safety in networked digital environments are complex and managing them effectively requires both a high degree of technical competence and statewide coordination, since a single “weakest link” in state IT systems may allow access to many other agencies’ data and systems. Thus, not surprisingly, three of the four exemplary states we studied (Virginia, New York, Pennsylvania) had subsumed telecommunications and data networking functions under their state-level IT departments.

**WILL THE GRP ENSURE EFFECTIVE ENTERPRISE-LEVEL PLANNING, PROCUREMENT, AND PROJECT MANAGEMENT?**

Besides the two types of operational functions discussed above – that is, data center management and telecommunications and data networking functions – the Department of Technology Services should take on a number of other responsibilities in the interest of ensuring effective IT enterprise-level planning, procurement, and project management. These responsibilities involve advocacy of statewide IT initiatives, coordination of IT activities, and technical approval of major IT projects and procurements. Specific examples include the following:
• The new IT department should be the single voice for advocating and developing statewide initiatives;
• The department should develop and promulgate a statewide IT strategy and priorities for improving the performance of state missions;
• The department should provide technology scanning and forecasting functions for the state and its agencies and other departments;
• The department should be provided a special fund to stimulate new crosscutting IT initiatives; the fund should be replenished yearly and should not require normal budget review, allocation, and control procedures for its expenditures;
• The department should establish criteria by which new IT initiatives are to be judged and approved for funding. Such criteria should include whether proposed initiatives are consistent with the state IT strategic plan, priorities, and metrics the department develops for establishing the importance or effectiveness of an IT initiative. Technical approval on any new initiative per se should rest exclusively with the new department and be a precondition of funding;
• The department should lead in developing a statewide inventory of IT equipment and systems; the inventory would serve as a baseline for understanding yearly costs for installed IT-related systems and services and for establishing normal “refresh” cycles and associated costs and savings for replacing outdated equipment.

WILL THE PROPOSED BOARD BE AN ADEQUATE SUBSTITUTE FOR COMPETITION BETWEEN STATE DATA CENTERS?

We believe that the use of a Technology Services Board as proposed by the GRP should contribute to continuous performance improvement on the part of the new department from the perspective of its customers – data center users and users of its telecommunications and data networking services. This belief is based on the fact that RAND found a variety of useful IT oversight/advisory mechanisms and partnerships in use in other states. Boards comprising representatives of client agencies can play a strong role in guiding policies so that their mission-based IT needs can be well served. In some states, their role is advisory only, while in others they have voting rights and, thus, jointly determine outcomes.
However, given the focus in the GRP of creating a “consumer-dominated board,” it is not clear that the state CIO, rather than a client agency representative, is the best choice for heading such a Board (although the state CIO would appropriately be an ex officio member of the Board).

OTHER CONSIDERATIONS

The former California DOIT was not sufficiently effective for several specific reasons. It is thus imperative that the lessons from the establishment of DOIT be learned and mistakes not be repeated.

In that vein, we argue that to establish effective leadership, the new Department of Technology Services must not only have an appropriate hierarchical position (i.e., directly connected to the Governor, as argued above) but that it must also must establish collegial, consultative, and trusted informal relationships with client agencies. Such a management style, absent in the former DOIT, is a vital complement to formal relationships such as those envisioned through the proposed Technology Services Board. It appears to be especially significant for successful cross-agency IT initiatives in large state governments with competing interests, varied control and client agencies (some with large constituencies and revenue sources), and differing branches of government.

Moreover, in the past, DOIT was not given the skilled, experienced personnel or the clear authority – especially relative to the roles of the Department of Finance – to accomplish its missions. Thus, for the new Department of Technology, it is important that authority be commensurate with responsibility. For this reason, we recommend that technical functions and staffs of the existing Technology Investment and Review Unit and the Technology Oversight Review Unit be transferred to the new department along with technical personnel from the data centers and the DGS telecommunications and data networking units.

The technical expertise concentrated within the new department should then have the authority and ability to review major IT initiatives for consistency with the state IT strategy and priorities, with statewide applications (existing or planned), with technology standards, and with emerging trends. With these skilled personnel, the new department will be properly staffed for successful IT governance. Further, the proposed restructuring
will yield a clean division of responsibilities between the Department of Finance and the Department of Technology Services that will minimize overlap and competition among them and role confusion among client agencies. The Department of Finance would retain overall budgetary control, as is appropriate.

Finally, we should underscore that operational responsibility and the experience gained from such responsibility are central to successful enterprise governance processes, as evidenced by our research findings. They provide the governance processes with two things. The first is credibility with agencies that are responsible for developing and operating IT systems – the governing entity speaks from experience and becomes a peer with other agencies with responsibility for delivering IT applications and services. The second is that experience tempers the IT strategy, recommendations, and review procedures – thus governance is not seen as being theoretical and formulaic, but rather as informed by practice in its findings and directions. Thus, in the reorganization effort it is important to unite IT policy authority with operational responsibility in the interest of effective enterprise IT governance.

With that, I conclude my testimony.