UNIVERSITY OF CALIFORNIA, BERKELEY

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May 12, 2011

Shelton Waggener
Associate Vice Chancellor and Chief Information Officer
Information Services and Technology

Associate Vice Chancellor and CIO Waggener:

We have completed our preliminary survey of campus information technology (IT) architecture as per our annual audit plan in accordance with the Institute of Internal Auditors' *Standards for the Professional Practice of Internal Auditing* and the University of California Internal Audit Charter. Based on our audit planning risk assessment and discussions with you, we noted the amount of change with regard to IT governance and architecture that is now occurring. As a result, we concluded that further detailed testing or fieldwork would not appear to be warranted at this time. Accordingly, and with due consideration of audit risk, we are concluding this project and will reconsider this topic for inclusion in future annual audit plans.

Audit Objective, Scope, and Procedures

The audit objective was to evaluate the campus IT architecture for adequacy of internal controls, compliance with University and external policies and procedures, prudent business practices, and economy and efficiency of operations. The audit scope included campus information systems including application, data, and delivery system architectures.

Audit procedures were limited to a preliminary survey and risk assessment as our conclusion upon completing these procedures was that further audit work was not warranted at this time given the current state of IT architecture management on campus.

During the preliminary survey, we examined the campus' organization charts for information related to information technology architecture, examined pertinent campus web sites, and studied background information from external standards-oriented organizations (the National Institute of Standards and Technology, The Open Group, the Information Systems Audit and Control Association). We also examined information from another UC campus (UC Riverside) that has audited this topic. We also interviewed UCB campus IT management and other Information Services & Technology (IST) and campus individuals with knowledge related to enterprise and IT architecture.

Summary Conclusion

Based upon information gathered during our preliminary survey, we observed that at an enterprise level, the campus information technology functions provide a set of services that support diverse teaching, research, and administrative activities.

We understand that there was a campus Chief Technology Architect from March 2007 to the end of December 2008, but the position became vacant and was not subsequently filled due to budget reductions.

Despite the current lack of a dedicated IT architect position, we observed that the campus does currently have a campus-wide IT architecture committee. The committee's web site explains that it develops and maintains enterprise architecture roadmaps related to information, business processes, applications, and technology infrastructure. It also reviews specific information technology design and funding proposals against these roadmaps to assure alignment with the campus enterprise architecture. The committee met monthly through November 2010, and has recently resumed to consider proposals coming from the Operational Excellence initiative.

We observed that there is also an informal architecture group within IST, and that decisions of an architectural nature have assertedly been made with regard to standardization of the campus' IT network, reducing the number of different kinds of server models in the data center, reducing the number of enterprise-level application development platforms, moving forward with development of an enterprise-wide data warehouse, and restructuring governance mechanisms with regard to institutional data.

We also observed that work currently underway in the context of the Operational Excellence initiative includes attempting to identify enterprise-wide common IT-related services and develop a sustainable funding model for them. That work is also expected to result in re-design of campus IT governance, including governance related to IT architecture.

Given the amount of change with regard to IT governance and service-oriented architecture that is now occurring and after discussions with you, we concluded that further detailed testing or fieldwork would not appear to be warranted. Accordingly, with due consideration of audit risk, we are concluding this project and will reconsider this topic for inclusion in future annual audit plans.

Please destroy all copies of draft reports and related documents. Thank you to IST management and staff for their cooperative efforts throughout the audit process. Please do not hesitate to call on Audit and Advisory Services if we can be of further assistance in this or other matters.

Respectfully reported,

Wanda Lynn Riley   Jaime Jue
Chief Audit Executive   Associate Director

cc: Executive Vice Chancellor and Provost George Breslauer
       Senior Vice President Sheryl Vacca
       Associate Chancellor Linda Morris Williams
       Interim Acting Associate Vice Chancellor and Controller Delphine Regalia