University of California Information Technology Update and Direction

Presentation to the Committee on Compliance and Audit, Board of Regents, University of California

Tom Andriola

Vice President and Chief Information Officer

Information Technology Services

March 19, 2014

Thank you, Chair Zettel and the committee members

It has been 5 months since I joined the University of California as the systemwide Chief Information Officer. I would like to provide the committee my observations on both the challenges that information technology faces, as well as its opportunity to better support and shape the University's mission and future.

Digital technology has become an increasing part of our daily lives. This is even more profoundly true for our students, for whom mobile computing and social media are second nature. This reality creates an imperative for us to review the current state of IT and establish a thoughtful, measured dialog about its role for the future.

I have spent my initial months traveling to our campuses, medical centers, and the labs. Typically I have met with a mix of faculty, researchers and administrative personnel and focused on gaining a broad understanding of the University's capabilities, assets and location-specific goals and challenges.

I find that we have good IT teams in place, people who care about serving the University's mission, and a culture of local technology innovation. For example, at Merced I saw an e-Pay solution that acts as a virtual cashier and has scaled with the growth of that campus. In San Diego, I experienced an innovative teaching technology called the Learning Glass. Imagine watching a video where the lecturer uses a clear glass chalkboard while facing students and writing notes and formulas on the glass. At Berkeley Lab earlier this week, we spoke of their expertise in data center energy efficiency – something that surely can be leveraged in our long term aspirations for carbon neutrality.

Our challenges are very similar to those of peer universities, which I learned from the CIOs I have spoken to. But because of the UC system's size, the complexity we have created proves costly for us to maintain. All locations speak of their struggle with workload demands, talent management and aging infrastructure. Our CIOs tell me that, in the absence of effective governance, systemwide initiatives are

overburdening already heavy workloads. These claims are not unique to our University or any large enterprise that is trying to maintain its competitiveness and mission.

Locally, in most cases, we are meeting basic needs. But my broader observation is that we are falling short of achieving IT's potential to help reform the University's cost structure and support the value-added activities of the mission. Local innovations are rarely leveraged outside of a single situation. This is best exemplified through a story of a campus where one school adopted the use of the Google suite to significantly reduce bureaucracy and streamline internal processes. When I asked how this best practice was leveraged to other parts of the campus, I learned it was not. We had missed a golden opportunity to build on that success and leverage our investment further. This is the story I heard over and over in my travels throughout the University. Given our challenges, I would ask, "can we afford to miss such opportunities in the future?"

Certainly others have recognized this opportunity, and just last year the system's IT Leadership Council came together to create a framework for collaborating with each other. But as of today, in spite of the best of intentions, the collaboration model fundamentally has not changed behavior or built momentum toward achieving strategic value from our investments. Too often, locations continue to solve the same problem - multiple times, in different ways, and using different technologies. Is this approach sustainable?

So, where we can go from here?

First, we should take steps to build upon the IT Leadership Council's good work and increase our commitment toward collaboration. It is easy to speak of collaboration, but collaboration that leads to meaningful results is all that really matters. Collaboration should be articulated through a strong set of principles that guide decision making while considering local and systemwide criteria.

Second, we should develop mechanisms that create a sense of IT community and encourage a culture of sharing and adopting best practice. Our total IT capability as a system exceeds 6500 professionals; with 10 campuses, we have seen every challenge faced by a Higher Ed institution; we are a leader in many emerging areas of technology – just look at CALIT2; and our medical centers are among the most recognized for the use of IT in the health care industry. Individually we are strong, but collectively we are complex. For the future, we need to institutionalize governance, a reward system and a culture for sharing, risk taking, and raising the tide for all.

Third, working with Procurement, our IT community has completed a spend analysis for IT products and services, which reveals significant opportunity to leverage the University's size, scale and buying power. The current governance and operating model has resulted in our use of innumerable technologies across the system for the same purposes. We have started a systemwide working group to review areas of top spend and already achieved more than \$5M of savings from just leveraging the procurement practices that any large organization would follow.

Fourth, while some locations demonstrate cost effectiveness, from a systemwide perspective we can see significant duplication of investment leading to complexity, the inability to share information, and

overall costs above peer benchmarks. Future efforts to better categorize costs and evolve in the directive toward greater efficiency should be explored through the use of IT industry best practices and available blueprints. It will be critical that IT partner closely with the University's academic and administrative leadership to create a dialog that outlines how we make investments and the role they play in advancing the mission. Such a portfolio approach can create an environment that allows for greater transparency, accountability, and results from our IT investments – as I have seen in my broader experiences and at peer institutions.

Finally, the IT community should adopt an orientation toward systemwide talent management of our systemwide IT employee base. At every location I hear about the challenge of recruitment and retention. Certainly a competitive IT market contributes to this, but these challenges are worse if each location fights the marketplace battle alone. Working together in a systemwide fashion, we can do much more to retain and develop our people for the future.

In closing, I would like to say again how excited I am to be a part of this University system. For the last 13 years I have been a part of the mission in healthcare. I now get to add to that higher education, hunger, sustainability & other noble quests. I get to see for myself every day the very real impact UC has to ensure a vibrant economy for the state and a bright future for our young people.

It is because of our mission and— to quote President Napolitano— our aspiration to "teach for California and research for the world," that I believe our IT leaders need to step up their game and contribute more to this University. We must challenge ourselves to lead teams that not only provide effective utility IT, but also engage our partners in transforming the role of technology to streamline for affordability, collaborate for shared success, and innovate for competitiveness.

One of my former managers and mentors used to say about healthcare "the more we do, the more good we do." More than ever, I realize that to be true; and I realize what a unique opportunity we have here at the University of California. I look forward to working together with the board and University leadership to make IT a strong partner in our future.

Thank you