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Innovate to Innovation (i2i) California's Innovation Initiative Interim Report to Legislature January 2011 January 22, 2011

Legislative Request:

In 2010, a bi-partisan group of California Legislators asked the California Council on Science and Technology (CCST) to assess California's Science and Technology (S&T) Innovation Ecosystem. CCST designed a two-phase approach, with this preliminary report to coincide with the opening of the 2011 legislature and the gubernatorial transition, followed by submission of a detailed set of recommendations in May 2011.

In the face of a statewide fiscal crisis and a rapidly changing global landscape, California needs once again to do what it does best: "innovate its way to innovation." This report offers a specific list of actions that Legislators can take to catalyze California's innovation ecosystem. The initial steps to explore these actions can be accomplished without a commitment of state funding through reallocation of existing resources, philanthropic funding, and contributions of time. Establishing California's priority to "innovate its way to innovation" is timely in light of recent passage of the federal America COMPETES Authorization Act of 2010, which is designed to increase federal support for research, science and innovation.

Recommendations:

Innovation Action Team: The primary recommendation is to bring together public and private leaders charged to focus on California's innovation and competitiveness infrastructure. An **Innovation Action Team** (IAT), comprised of leaders from universities, industry, and government, should be charged to develop an **Innovation Roadmap** that will include specific recommendations for **Improving Critical Innovation Infrastructure** in California. This Innovation Action Team would be convened for this specific purpose over a defined period of 12 months. Facilitated and staffed by CCST, this team would provide their recommendations to the Legislature. The focus of the Innovation Action Team would be to develop the following:

1. Innovation Roadmap

- a. **California Innovation Initiative:** Identify and build support for specific actions to promote the effective and timely translation of research into use (design to delivery). These actions could include institutional and policy innovations, multi-sectoral financing, legislation, and public and stakeholder communication. The Initiative will begin with extensive collaboration among the Legislature, administration, and networks of industry, entrepreneurs, universities, federal research laboratories and nonprofits.
- b. **Communities of Innovation:** Through strategic planning and investment, support the development of communities of innovation through the co-location of federal, state and private science and technology assets (e.g., Federal Research Laboratories and Public and Private Universities) to address state challenges and to promote innovation, entrepreneurship, knowledge transfer, and job creation.

2. Improve Critical Innovation Infrastructure

- a. **California Education Innovation Consortium:** An educator-driven alliance to fund, develop and deploy effective practices for K-16 digitally enhanced education. This would engage the broader use of technology to support the learning of students of varying levels and backgrounds, and to train the workforce needed to surpass global competition.
- b. **Science and Technology-Based Water Road Map:** Engagement of a broad segment of California's S&T community to innovate across the water system end-to-end, linking water and energy technology, agriculture and biotechnology, and climate and conservation strategies. This would entail using best practices and new approaches to using information systems, biotechnology, and advanced water technologies.

Next Steps:

- CCST convenes meetings with Legislative and Administration leaders to refine these recommendations and to identify participants for the Innovation Action Team.
- Legislative Leaders invited to the CCST February 15th/16th meetings on Innovation (Sacramento Sheraton) for further discussion about implementation steps.
- Legislators charge CCST to convene the Innovation Action Team to prioritize and develop action plans for each of the innovation keystone initiatives.
- Legislators and CCST identify Champions for each of the five keystone actions.
- CCST and Innovation Action Team develop implementation strategies for each of the innovation keystones actions.
- CCST presents final report to Legislators, May 2011.

Background:

California's innovation ecosystem achieved world leadership in the last century because of its system of higher education, high-talent workforce, advanced technical infrastructure, and enlightened policies. These perishable assets must always be renewed. Today this renewal is more critical than ever because of the unprecedented international competition for both California's markets and its innovation workforce, as well as its increasing capacity to be world-class innovators.

Noting the changing global landscape, in 2010, a bi-partisan group of California Legislators asked the California Council on Science and Technology (CCST) to assess *California's Science and Technology (S&T) Innovation Ecosystem*. CCST designed a two-phase approach, with this preliminary report to coincide with the opening of the 2011 legislature and the gubernatorial transition, and a detailed set of recommendations to follow in May 2011.

In late 2010, CCST convened a series of regional roundtables with industry and research leaders across the state to seek their input on the challenges faced by California and possible solutions that could be achieved building from California's S&T capacity. From these meetings, CCST identified two key strategies essential to achieve this task:

- **Developing and leveraging public-private partnerships linking California's assets** in education, research, technology, finance, and philanthropy to create social and technical innovations that competitors with less complete infrastructure cannot match.
- **Enlisting California's S&T community in finding solutions** to two of the State's major challenges, education and water, and, in so doing, enhancing California's international competitiveness.

Building on these two key strategies, the recommendations above emerged from the regional roundtable meetings. Each of the three recommendations, creating an **Innovation Action Team**, producing an **Innovation Roadmap** and **Improving Critical Innovation Infrastructure**, won broad support in these discussions and the participants felt they merited further development, in support of CCST's goal for the final report to Legislators in May 2011.