

The 2022-23 Budget:

Office of Planning and Research Higher Education Proposals

MAY 2022

Summary. The Governor has three January higher education proposals within the Office of Planning and Research (OPR) budget. We have concerns with all three proposals. The first proposal, which provides the California Education Learning Laboratory (CELL) a \$3 million ongoing General Fund augmentation, would support activities that overlap with higher education campuses’ core activities. The second proposal, which provides \$30 million one-time General Fund for an innovation award program, shares many of the shortcomings of previous higher education innovation programs and lacks focus. We recommend rejecting these two proposals. The third proposal, which provides \$20 million to the Carnegie Institution for Science (Carnegie Science) for a construction project, supports a private entity’s capital project despite many unaddressed state capital issues. We recommend the Legislature weigh this proposal against its other budget priorities. If the Legislature deems this proposal a high priority, we recommend adding budget language both to clarify the state’s role in the project and establish reporting requirements.

INTRODUCTION

OPR is tasked by state law to support statewide planning and research activities. Among its many activities, the office has overseen certain higher education initiatives. This post analyzes three higher education OPR proposals in the Governor’s January budget for 2022-23. The remaining three sections of the post analyze each proposal.

CALIFORNIA EDUCATION LEARNING LABORATORY

This section provides background on CELL, describes the Governor’s proposal to augment CELL’s ongoing funding, assesses the proposal, and offers an associated recommendation.

Background

CELL Supports Development of Online Higher Education Course Content. Created in 2018-19, the purpose of CELL is to identify and extend best practices in lower-division online and hybrid courses in science, technology, engineering, and mathematics (STEM) at the University of California (UC), California State University (CSU), and California Community Colleges (CCC). The program accomplishes this objective primarily by awarding competitive grants to intersegmental faculty teams, which in turn develop the online course content. Beyond awarding grants for new online course content, state law allows CELL to undertake other actions to support instructional best practices, such as supporting faculty professional development and developing a “best of” library of online materials.

State Reduced Funding for CELL During Pandemic. The 2018-19 budget provided \$10 million ongoing General Fund to OPR for CELL. As part of its package of solutions to an anticipated pandemic-related budget problem in 2020-21, the state reduced ongoing support for CELL by \$2 million (to \$8 million). According to the administration, CELL managed this reduction by awarding fewer grants, supporting less professional development, and delaying development of its best of library.

Program Has Supported A Total of 250 Courses. According to CELL, from fall 2019 through spring 2022, a total of 250 STEM courses used CELL-funded content. (A course is counted each time it was provided by a campus. Thus, a course provided once per academic year at three campuses over the three-year period is counted as nine courses.) Of these courses, CELL estimates 38 percent were at CCC, 31 percent were at CSU, 20 percent were at UC, and 11 percent were at high schools. (According to CELL, the 11 percent of courses offered at high schools were part of

intersegmental projects focused on advanced-level math.) CELL estimates about 40,000 students took these courses over the three-year period. For comparison, at CCC (the only segment that publicly reports course-level enrollment data), 334,472 students enrolled in general math courses (one of the STEM areas) in fall 2020 (one of the terms of the period).

Proposal

Governor Proposes \$3 Million Ongoing General Fund for CELL. Of this amount, \$2 million would restore CELL's ongoing base to its pre-pandemic level of \$10 million. According to the administration, this restored base would allow the program to offer more grants, support more professional development, resume efforts to develop its best of library, and host intersegmental convenings on effective pedagogical practices. The remaining \$1 million would support the expansion of a free, online, adaptive learning homework system. The existing system, which was developed by faculty at UC Davis, CSU San Bernardino, and Mendocino College for introductory chemistry, was supported by a one-time CELL grant. According to CELL staff, the ongoing funding would enable faculty to expand the system for more chemistry courses and STEM subjects, as well as improve the system's current functionality.

Assessment

Campuses Already Have Been Expanding Online Course Development. As we noted in past years, (for example, in our brief [The 2018-19 Budget: The California Education Learning Lab](#)), CELL's core mission overlaps with activities campuses already are undertaking. As part of the base ongoing support they receive from the state, campuses already are expected to develop online content, provide faculty professional development, and improve student outcomes. Moreover, beyond base support, the state provides each segment with targeted ongoing funding specifically for online course development and related faculty professional development. The state also provides funding to CSU and CCC for activities intended to boost student outcomes and close achievements gaps between certain student groups. Given the numerous existing activities that already are occurring across the three public

segments (happening on a much larger and broader scale), the advantage of augmenting a small, separate program is unclear.

Pandemic Is Accelerating Campus Efforts to Increase and Improve Online Course Content.

When the state first provided CELL \$10 million in the 2018-19 budget, campuses had not yet experienced the rapid transition to remote instruction brought on by the COVID-19 pandemic. Since the start of the pandemic in early 2020, campuses and faculty have devoted more resources and attention to online education. Over the past two years, campuses also have allocated a portion of their COVID-19-related federal relief funds to improve their online courses and support associated faculty professional development. Moreover, campuses indicate that they have been more closely examining their online courses and seeking to sustain lessons learned over the past couple of years. Given the enhanced level of campus engagement with online education since the onset of the pandemic, the administration has not made a strong case to restore CELL's budget to its pre-pandemic level.

CELL Has Flexibility to Scale Promising Initiatives From Its Base Funding.

To the extent CELL identifies promising new course content or other effective interventions, it has discretion to prioritize its \$8 million in base support to further scale those efforts. Given this flexibility, the administration has not made a strong case to provide CELL augmentations for specific initiatives.

Recommendation

Reject Proposal. Given the issues we discuss above, we recommend rejecting the proposed \$3 million augmentation for CELL. In lieu of augmenting CELL's budget, the Legislature could redirect the funds toward its other ongoing higher education budget priorities, including those aimed at expanding access to higher education or improving student outcomes.

GOLDEN STATE AWARDS

This section provides background on past higher education innovation awards, describes the Governor's proposed Golden State Awards initiative, assesses the proposal, and offers an associated recommendation.

Background

State Has Provided Higher Education Innovation Awards. In every budget cycle from 2014-15 to 2021-22, Governors have proposed one-time initiatives to support innovative practices at the state’s public higher education institutions intended to improve student outcomes. The Legislature approved these initiatives in some years and rejected them in other years. As **Figure 1** shows, the initiatives that were approved by the Legislature have varied in numerous ways. Some grant initiatives rewarded higher education institutions for existing programs, while in other years the grants supported new approaches. Some initiatives supported programs at all of the segments, while others were targeted at specific segments (such as the community colleges) or specific regions (such as the San Joaquin Valley and Inland Empire). Some grants were allocated through a special committee, whereas others were allocated by state agencies.

Proposal

Proposes \$30 Million One-Time General Fund for New Round of Innovation Awards.

The Golden State Awards initiative would support at least 20 awards to individuals or teams at or associated with the public higher education segments who have developed or are developing innovative practices. Compared to past innovation award programs, this initiative has a broader set of objectives. Grant awards could cover any activity deemed innovative and high impact, including but not limited to programs that improve student outcomes, research on climate change, and research on low-carbon industries. CELL would administer the grant program, with oversight from a 12-member grant selection committee, with 10 members appointed by the Governor, 1 member by the President pro Tempore of the Senate, and 1 member by the Speaker of the Assembly. CELL would have three years to award the funds. It would be required to report by January 1, 2026 on how it allocated the awards.

Figure 1

Governor’s Higher Education Innovation Proposals Have Varied Over the Years

One-Time General Fund (In Millions)

Budget	Funding	Affected Segments	Focus	Administering Entity
2014-15	\$50 ^a	CCC, CSU, and UC	Bachelor’s degree production, four-year completion, and transfer from community colleges	Award committee with appointed members
2015-16 ^b	25	CSU	Four-year completion	Award committee with appointed members
2016-17	25 ^c	CCC	Curriculum redesign, competency-based education, and financial aid access	Award committee with appointed members
2017-18	20 ^c	CCC	Instructional technology and outcomes for specified student groups	CCC Chancellor’s Office
2018-19 ^b	20 ^c	CCC	Achievement gaps, excess units, and employment outcomes for career-technical education students	CCC Chancellor’s Office
2019-20	10	K-12, CCC, CSU, and UC campuses in San Joaquin Valley and Inland Empire	K-12 and higher education alignment, college participation, and college completion	Office of Planning and Research
2020-21 ^b	17	Education institutions in the greater Fresno region	Intersegmental academic pathways	Office of Planning and Research
2021-22	250	K-12, CCC, CSU, and UC campuses	Intersegmental academic pathways in health care, education, business management, and engineering	Department of General Services

^a Of this amount, \$23 million was Proposition 98 General Fund.

^b Proposal ultimately was not adopted in final budget.

^c All Proposition 98 General Fund.

Assessment

Innovation Awards Have Unclear Statewide Benefit. Past innovation award initiatives have had a few basic shortcomings—all of which also apply to the Governor’s new award initiative. One shortcoming is the initiative would provide relatively large sums to a small number of recipients without any clear mechanism for disseminating best practices. A related shortcoming is that the initiative is unclear in how selected activities would be sustained and scaled, in turn potentially creating considerable future cost pressure for the state. A third shortcoming is that the added value of rewarding existing activities potentially begun without state direction, funding, or reporting is questionable.

Proposed Award Initiative Lacks Focus. Though innovation award initiatives by design are problematic, the Governor’s proposal is especially concerning given its broad scope ranging from higher education to climate change to any other area of interest to the administration. This lack of focus almost certainly would undermine the initiative’s ability to meaningfully impact any one area. The broad scope also means the program likely overlaps with other existing state efforts. For example, the state has funded research on climate-related issues through other programs and departments.

Recommendation

Reject Golden State Awards. Given its fundamentally poor design, we recommend the Legislature reject the proposed \$30 million General Fund and redirect the funds toward other high one-time priorities.

CARNEGIE INSTITUTION FOR SCIENCE

This section provides background on Carnegie Science, describes the Governor’s proposal to support construction of a new Carnegie Science facility, assesses the proposal, and offers an associated recommendation.

Background

Carnegie Science Conducts Research. Founded in 1902, Carnegie Science is a nonprofit organization that conducts research on astronomy, life sciences, and earth sciences, among other subjects. It is headquartered in Washington D.C. and conducts research at several sites nationally and abroad. In California, it has sites in Stanford and Pasadena. According to Carnegie Science, in 2019-20 (the most recent year of data available), it supported a total of 67 researchers across its sites.

Carnegie Science Is Primarily Supported From an Endowment. As a private entity, Carnegie Science does not receive direct appropriations from the state to support its operations or facilities. For its operating costs, it relies on investment income from its endowment. Similar to other endowed institutions, a portion of the endowment income Carnegie Science earns must be spent on donor-specific activities (such as supporting specific research topics), with the remaining funds unrestricted. Carnegie Science also relies on government and private research grants and contracts (primarily from the federal government) to support specific research projects and activities. Comprehensive information is not readily available on how Carnegie Science has funded previous facility construction projects.

Certain Capital Projects Are Excluded From State Appropriations Limit (SAL). As we noted in our recent report [The State Appropriations Limit](#), the California Constitution limits the amount of revenue the state can appropriate each year. The state, however, can exclude appropriations for certain capital outlay projects from the SAL calculation. For this purpose, state law defines a capital project to be an appropriation supporting a fixed asset with a useful life of ten or more years and a value of at least \$100,000.

Proposal

Governor Proposes \$20 Million One-Time General Fund for New Carnegie Science Facility in Pasadena. Budget bill language indicates these funds are to “support a grant to Carnegie Science for a research hub facility.” No other detail is provided for this proposal in budget or trailer bill language. According to information

released by Carnegie Science, the proposal would support the construction of a 135,000 square foot facility in Pasadena. The building would colocate the institution's global ecology, plant biology, and embryology departments. (The first two departments currently are located in Stanford and the third department currently is located in Maryland.) The administration states that the total cost of the project is expected to be \$120 million and that the institution currently is raising private funding to cover the remaining \$100 million in project costs. No information was provided on the project's time line.

Proposal Is Part of Governor's Climate Package. In the *Governor's Budget Summary*, the Governor includes this facility project in his package of climate change budget proposals. (We describe the other higher education climate change proposals in [The 2022-23 Budget: UC Climate-Related Proposals](#) and [The 2022-23 Budget: California State University](#).) In its brief description of the project, Carnegie Science also characterizes the overall focus of the new building to be on climate change mitigation and adaptation research. In correspondence with our office, the Department of Finance cited the following potential research areas: "climate impacts on ecosystems and human communities to clarify ongoing changes; plant biology, crop productivity, and biofuel efficiency to combat global hunger; and materials science to improve water quality and solar panel efficiency."

Proposal Excluded From SAL. As the proposal supports construction of a new building, the administration excludes the proposed \$20 million from the SAL.

Assessment

No Guarantee Carnegie Science's Research Would Align With State Efforts. As we noted in our recent post [The 2022-23 Budget: UC Climate-Related Proposals](#), the state in recent years has sought to coordinate various climate change activities, including research, among its various environmental protection and natural resource agencies. This is because of the multifaceted nature of climate change, which touches on many areas of state government. The Legislature, however, has no guarantee that the

research at the proposed Carnegie Science facility would align with state research priorities or be coordinated with other state efforts. As a private entity, Carnegie Science would have flexibility to set its own research agenda based on its priorities, as well as the priorities specified from private donors and government grants and contracts. Moreover, the Legislature would have no recourse to hold the private entity accountable were the research not to meet state objectives.

State Has Many Higher Capital Priorities. For example, UC estimates having a facility maintenance backlog of \$7.3 billion, as well as an approximately \$15.5 billion cost to bring all of its academic facilities up to seismic standards. Some of these renovations and seismic upgrades involve UC's research facilities. The state's total deferred maintenance and seismic renovation need across all agencies is far greater than just the UC amounts, though an exact estimate statewide is not available. Addressing critical maintenance and seismic renovation projects across state agencies are important budget issues as they involve mitigating life-safety hazards, avoiding disruptions to state programs, and minimizing future escalation in repair costs. These projects also qualify as SAL-excludable. In light of these critical state facility issues, funding the construction of a private facility that houses nonstate activities is particularly questionable.

Recommendation

Weigh Proposal Against Other Climate Change and Capital Priorities. Given the issues raised above, we recommend the Legislature weigh this proposal against its other climate change and capital priorities and consider alternatives to funding a portion of Carnegie Science's new facility. For example, were the Legislature interested in funding more climate change research, it could redirect the funds to other existing state climate change research initiatives. Alternatively, if the Legislature wants to support more SAL-excludable capital projects, it could redirect the funds to high-priority state capital projects. (Were the Legislature to redirect the funds to an activity that is not SAL-excludable, it likely would want to identify a like amount of funding for other excludable capital projects to meet the SAL expectation.)

Ensure Any State Funding in This Area Is Connected to State Objectives. After weighing these alternatives, if the Legislature still deems the Carnegie Science project to be a high priority, we recommend adopting three modifications. First, we recommend adopting intent language clarifying that the research at the facility is to assist the state in attaining its greenhouse gas reduction goals and support its climate change adaptation efforts. Second, we recommend adopting intent language specifying that Carnegie Science, rather than the state, will be responsible for covering any unanticipated project costs or shortfalls in private

donations. Third, we recommend requiring OPR (as the agency administering the funds) to report on the Carnegie Science facility upon its completion. At a minimum, this report should include (1) a summary of the construction project's scope, time line, and costs; and (2) a description of the specific research activities at the facility and how these activities will support state climate change mitigation and adaptation efforts. These modifications would offer the Legislature better information as to the statewide benefit of supporting the construction of the new facility.

LAO PUBLICATIONS

This post was prepared by Jason Constantouros, and reviewed by Jennifer Pacella and Anthony Simbol. The Legislative Analyst's Office (LAO) is a nonpartisan office that provides fiscal and policy information and advice to the Legislature.