Report: Public research universities in peril

Big cuts in state funding could limit economic and scientific gains

They’re the pride and backbone of American higher education, doing essential research and educating en masse the next generations of scientists and engineers. But a new report argues the mission of the country’s 101 major public research universities is imperiled by budget cuts amounting to one-fifth of their state funding over the past decade.

State support for public research universities fell 20 percent between 2002 and 2010, after accounting for inflation and increased enrollment of about 320,000 students nationally, according to the report published Tuesday by the National Science Board. The organization provides independent advice to the federal government and oversees the National Science Foundation.

Ten states saw support fall 30 percent or more and in two — Colorado and Rhode Island — the drop was nearly 50 percent. Only seven states increased support.

Indiana saw a 12 percent decrease in state funding during that same time. Purdue and Indiana universities are the state’s two major public research institutions.

The study is the latest in a series of alarm bells warning that public research universities — which perform the majority of academic science and engineering research funded by the federal government, and educate a disproportionate share of scientists in training — have been weakened by years of eroding state support. Many are losing their best faculty to private institutions, and tuition increases in response to the budget cuts threaten the historically affordable access students have enjoyed.

Among the report’s findings: While public research universities still managed to increase instructional spending 10 percent between 1999 and 2009, to about $10,000 per student, private universities increased such spending 25 percent over the that period, and now spend more than twice as much per student on teaching as their public counterparts.

Meanwhile, the salary gap between public and private research universities is also widening, raising the specter of a two-tier system in which most of the very best faculty migrate to private institutions and work with a comparatively small number of students.

Public research universities — particularly top-tier flagship institutions such as the universities of Michigan, Virginia, Texas and California — are in some ways stuck between worlds. They compete for students and faculty and conduct research on a national and even global scale. But they remain under substantial political control of the states, and dependent on them for funding.

That funding has fallen precipitously, from 38 percent of their budgets two decades ago to about 23 percent now, with the number now below 10 percent at several top institutions. As those percentages fall further, some experts believe public institutions could begin essentially privatizing themselves, giving up what little state funding remains — and the public obligations it carries — in exchange for autonomy.

Funding for public research universities varies widely among states, from a low of $3,482 in Vermont in 2010 to $16,986 in Wyoming, which had the second-largest increase over the decade, behind only New York. Roughly a dozen states in-
creased funding in absolute terms but in about half those states, including Arkansas, Connecticut and Missouri, enrollment growth meant there was still less money per student.

The public should understand what could be lost if public research universities wither away, said NSB member Ray Bowen, president emeritus of Texas A&M University: not only the prospect of future discoveries in medicine and technology, but key drivers of economic development. The report found the institutions produced 436 new start-ups in 2010 alone.

“You go to Austin, Texas (home of the University of Texas), that city is a vibrant economic environment because of that university, because of the bright people it produces and the faculty research that takes place,” Bowen said. “Same with Texas A&M.”

No state has seen more contentious battles over the place of public research universities than Texas, where a board of regents appointed by Gov. Rick Perry has pushed for a focus on teaching, accountability and lower costs and expressed skepticism over the full value to taxpayers of the kind of research UT does. The university and its alumni have fought back, insisting there’s a place for an elite research university in a state system.

Public universities have acknowledged their obligations to improve efficiency, while emphasizing basic research may not always pay off immediately or in strict economic terms. A recent similar report by the National Research Council said revitalizing public research universities requires action from a range of players — more funding from Washington, more autonomy from states if they won’t maintain funding levels, and more productivity from universities themselves.

“Universities have to adjust,” Bowen said. “Those that have not already started have perhaps made a mistake. There’s no question they have to become more efficient.”