

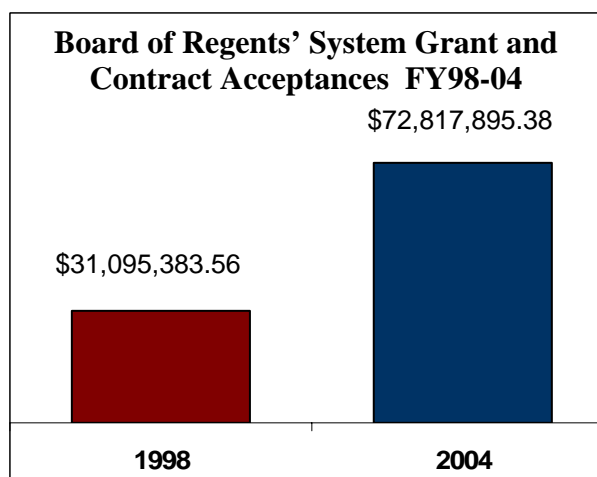
Synopsis: The Governor’s 2010 Initiative includes a substantial investment in personnel who conduct scientific research at South Dakota’s public universities. The goal is to increase the role of university research in South Dakota’s economic development—expand academic research and exploit new development opportunities arising from it. This requests \$1 million to provide new grant opportunities for individual researchers. These “seed grants” will help university researchers become more competitive for external grants and contracts, and open up other avenues for those researchers to develop new ideas with commercial potential.

Why is a “seed grant” program for individual university researchers so important to higher education and the state of South Dakota?

On public university campuses across this state, there are individual faculty members positioned to contribute to the development of South Dakota’s research industry, but who are not part of large research centers or research teams. The work of these individual research entrepreneurs would be greatly assisted if a limited research grant was available to provide release time from teaching.

Faculty carrying a full teaching load are not able to pursue quality research. Release time is an important component in utilizing research capabilities across all universities. Some of the most talented teaching faculty could also play a key role in developing research that impacts the economy or advances technologies for commercialization. This approach would dramatically increase research activity across South Dakota and increase the state’s receipt of grants and contracts.

The “*Opportunities for South Dakota*” report (South Dakota Board of Regents, June 2003) states, “There may be an opportunity to contribute to state economic development by mobilizing



existing and new resources to increase research activity through grants and contracts.” This work has been under way for several years, with the regents’ goal of increasing non-public financial support. Governor Rounds’ 2010 Initiative has given the goal a renewed focus. Over the past seven years, South Dakota’s public higher education system has been on the right track. Public universities increased their grant and contract acceptances between FY98-FY04 by more than \$41.7 million as shown in the table above.

In striving to meet Goal 3 of Governor Rounds' 2010 Initiative—to become a recognized leader in research and technology development by 2010—a “seed grant” program is vital. South Dakota's public university system must increase its research capacity. Recruiting researchers to staff the new 2010 research centers and to work in new Ph.D. programs will be a tremendous boost to the Governor's effort, but increasing research expectations and opportunities for existing faculty is also very important.

Universities receive state, federal, and private grants to conduct research and to carry out activities that improve the education delivered to students. Researchers also enter into contracts to provide services. The benefits of bringing additional research funding to South Dakota often are understated:

1. Research and contract equipment benefits students with millions of dollars of new equipment that ultimately finds its way into instruction;
2. Students are often engaged in the research activities and, in doing so, our future research workforce is mentored;
3. Faculty and university reputations are enhanced as others recognize their advancements and successes in garnering competitive research awards;
4. There are few better ways to develop faculty than to have them engaged in research with their peers;
5. Partnerships with private companies can directly impact the economy and open up new job markets for students; and
6. Graduate programs become higher quality as they are linked to research. Faculty members with interests in research who pursue significant grants and contracts typically want to work at institutions with a graduate program in their discipline. Graduate students are interested in studying with active researchers and are an important part of the research workforce.

What is the financial structure of this request?

Funding of \$1 million, with an equal amount of time reallocation for university faculty, would permit about 40 grant awards to be made across the public university system. This would provide about 50 percent release time to individual faculty members for one year to do research.

Each grantee would be expected to show results by:

- submitting grants to external agencies for funding so that their research can be perpetuated,
- submitting patent, copyright, or other intellectual property disclosure agreements,
- working closely with federal agencies and the private sector to develop linkages required to ensure that research is driven by a federal agency and/or company's needs, and
- using the time to refine and further develop prototypes for commercial development.

These grants would be competitively awarded to ensure that the research focus is in areas that advance South Dakota's research development agenda. The state's 2010 Research and Commercialization Council would be responsible for awarding the grants.