

SOUTH DAKOTA BOARD OF REGENTS

Budget and Finance

**REVISED
AGENDA ITEM: 7 – J
DATE: April 2-3, 2025**

SUBJECT

Financial and Programmatic Analysis & Stress Testing for SDBOR Institutions

CONTROLLING STATUTE, RULE, OR POLICY

[SDCL § 5-18A-14](#) – Public Improvement Contracts - Supplies and services contracts -
Advertisement for bids or proposals

BACKGROUND / DISCUSSION

In recent years, states and public postsecondary institutions have faced significant budgetary challenges due to economic trends, changing demographics, declining enrollment, and limited funding. These issues require innovative and complex decisions to maintain financial stability and meet student needs.

South Dakota has not been immune to these challenges. Potential enrollment declines impact revenue generation, as our public institutions rely heavily on tuition revenue. The financial health of these institutions depends on strategic enrollment planning and program viability.

On August 18, 2023, a Request for Proposal (RFP) was issued to identify a qualified and experienced consulting firm to develop and conduct data analytics to assess the current and future financial health of all six institutions within the South Dakota regental system. The National Center for Higher Education Management Systems (NCHEMS) was selected for this project, and a contract was executed on October 16, 2023.

Attached is the report issued by NCHEMS, resulting from multiple visits to South Dakota campuses and an analysis of nearly 10 years of program and financial data.

IMPACT AND RECOMMENDATION

Not applicable.

ATTACHMENTS

Attachment I – NCHEMS Report

INFORMATIONAL ITEM

**Financial and Programmatic Analysis & Stress Testing for SDBOR
Institutions**



Prepared for the South Dakota Board of Regents

March 27, 2025

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Introduction

In recent years, states and public postsecondary institutions have been hit with a variety of challenges that have significant budgetary implications. In addition to larger macroeconomic trends, such as inflation and a constantly evolving labor market, postsecondary institutions also face challenges with changing demographics, declining enrollment, and limited funding. Confronted with these realities, leaders must make innovative and often difficult decisions to ensure their institutions remain in a financial position that allows them to meet student needs and contribute meaningfully to state and regional workforce demands for many years to come.

South Dakota has not been immune to these challenges. As in many states, postsecondary enrollment in South Dakota decreased for a couple of years following the COVID-19 pandemic. Declining enrollment is directly linked to institutions' ability to generate revenue, through both tuition and fee revenue and auxiliary enterprises. Indeed, public institutions in South Dakota rely on tuition revenue (relative to state appropriations) more than their counterparts around the country and in most other states and, therefore, are heavily dependent on state demographics, enrollment trends, and demands for a skilled workforce. System and institutional leaders must be attuned to how demand for academic programs will shape enrollment at postsecondary institutions across the state. Thus, the financial health of the state's institutions will be directly linked to its ability to execute a deliberate strategic enrollment plan that includes attention to the mix of programs being offered and their viability.

To aid in developing responses to these challenges, the South Dakota Board of Regents (SDBOR) issued a Request for Proposals for a contractor to analyze the financial standing of each of the SDBOR institutions, to develop a model to test the financial implications of potential challenges that may face the SDBOR institutions in the future, to review academic programs at SDBOR, and to prepare a report with findings and actionable recommendations. The National Center for Higher Education Management Systems (NCHEMS) submitted a successful proposal for this opportunity.

Approach

NCHEMS employed a variety of methods to better understand the broader context for South Dakota higher education and the role that the SDBOR institutions play in supporting educational opportunity and workforce development.

First, the NCHEMS team visited each of the institutions in the fall of 2023 to introduce the project, share information about our work plan, and learn about efforts underway on each campus related to their financial strength. The team followed up with a second round of campus visits in March of 2024 to share updates with campus leaders, validate initial data analyses, and continue to learn about on-campus efforts to enhance financial health and viability.

NCHEMS also received an extensive amount of quantitative data from the SDBOR staff, which enabled us to analyze enrollment and finance across many of the dimensions explored in the sections to follow in this report. These data were also used to create the financial modeling tool.

Additionally, NCHEMS met periodically with a steering committee comprised of institutional leaders, Regents, and SDBOR staff to ensure that our work was on track and to gather feedback and counsel.

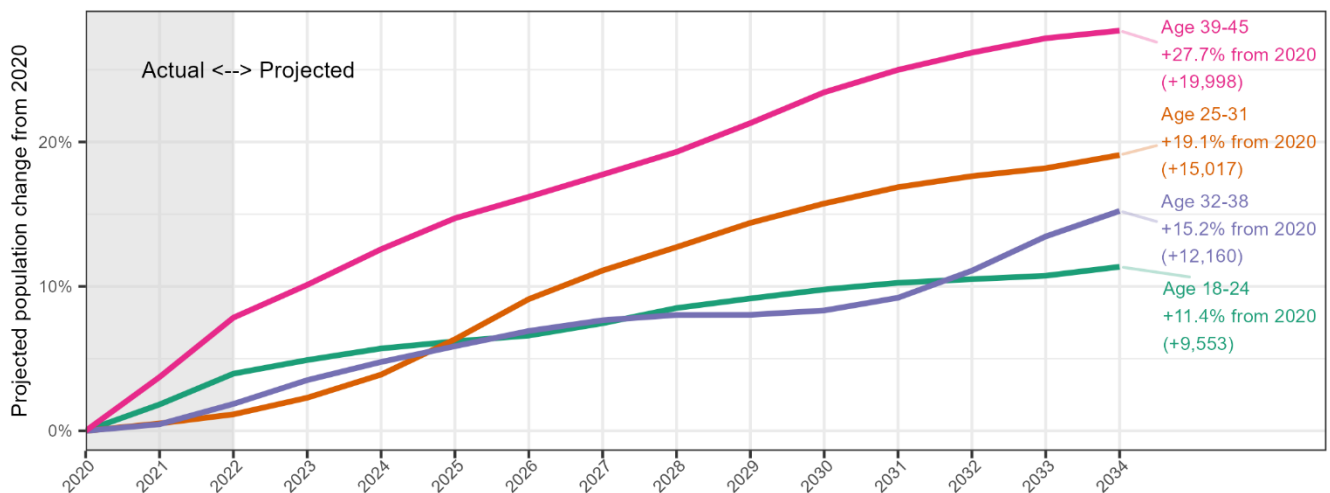
The South Dakota Context

South Dakota is home to six public four-year higher education institutions, two of which have separate branch campuses, all organized under the governance of the South Dakota Board of Regents. It also has a separate state technical college system, which comprises four institutions that are governed by their local school districts and the South Dakota Board of Technical Education in an advisory capacity, as well as several private and tribal institutions.

Population Trends and Projections

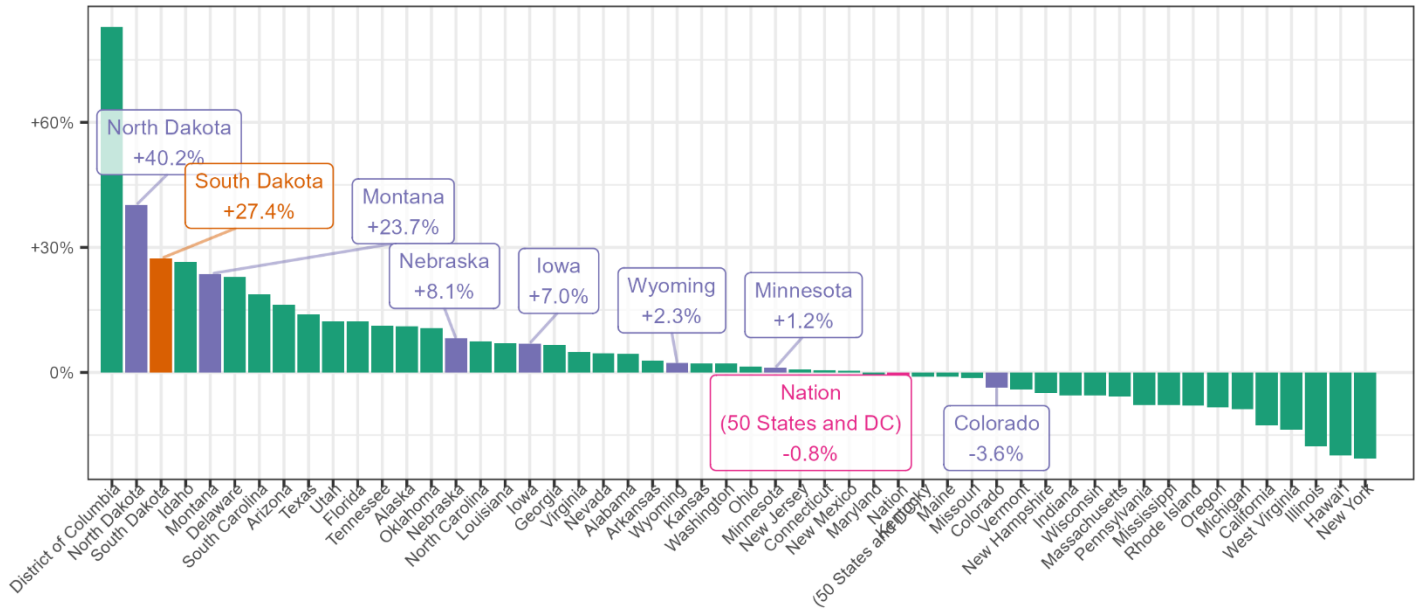
Through 2034, the South Dakota population of all college-going age groups (those between ages 18 and 45) is expected to increase (Figure 1). The specific population of those 18 to 24, the age of “traditional” college students, is expected to increase 11% from 2020 to 2034. This projected increase is an outlier nationally; over a similar timeframe, the overall number of high school graduates in the United States is expected to decrease, and South Dakota is expected to see the third-largest percentage increase of high school graduates in the nation (Figure 2). Additionally, most of the neighboring states that have historically sent students in significant numbers to SDBOR institutions are expected to see increases.

Figure 1. Projected 2020-2034 Change in South Dakota Population, Selected Age Groups



Source: JobsEQ.

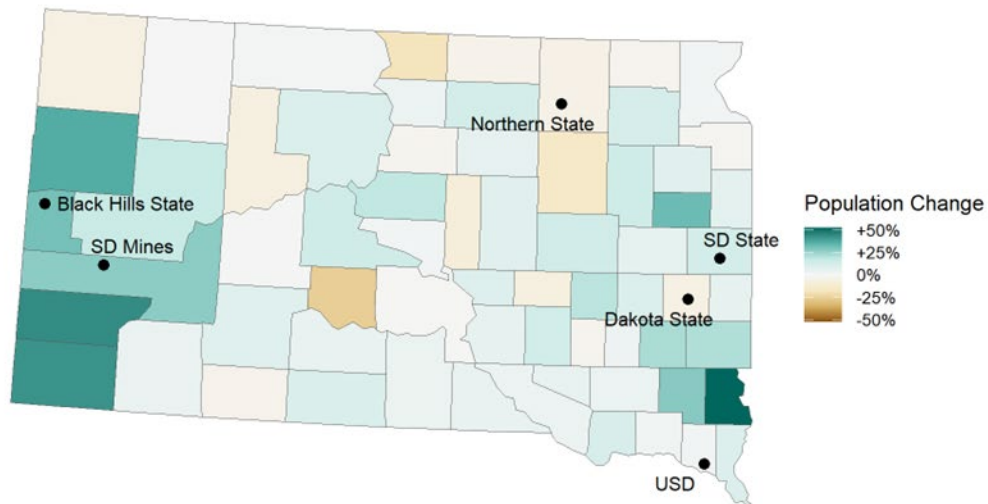
Figure 2. Projected 2019-20 to 2033-34 Percentage Change in High School Graduates, by State



Source: Western Interstate Commission for Higher Education, Knocking at the College Door: Projections of High School Graduates, 2024. <https://www.wiche.edu/knocking>

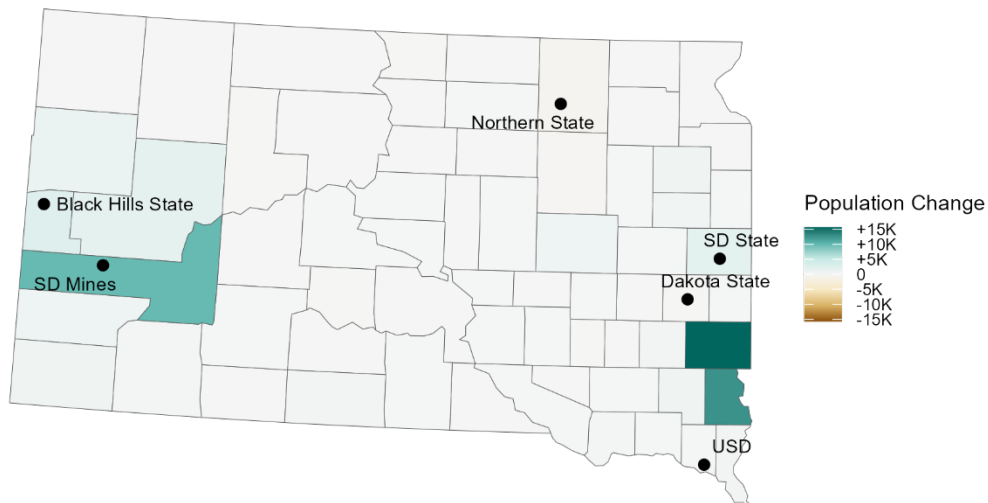
These population increases will not be evenly distributed across the state (Figure 3 and Figure 4). The west side of the state nearest to Black Hills State and SD Mines are expected to see fairly large percentage increases, as is the Sioux Falls area. Yet these percentages belie the reality that only in the state’s two urban areas, Sioux Falls and Rapid City, will there be notable increases in the number of residents. The counties home to DSU and NSU will see slight declines in their college-aged population, and NSU in particular is nearest to counties expected to decline and furthest from counties expected to grow. Importantly, while the overall percentage change of high school graduates is shifting, the number of students that represents may still be insufficient to produce enrollment stability and or increase in any of the BOR institutions. What’s more, as other states confront percentage decreases in high school graduates, competition for South Dakota students will continue.

Figure 3. Projected 2020-2034 Percent Change in Population Ages 18-44



Source: Jobs EQ.

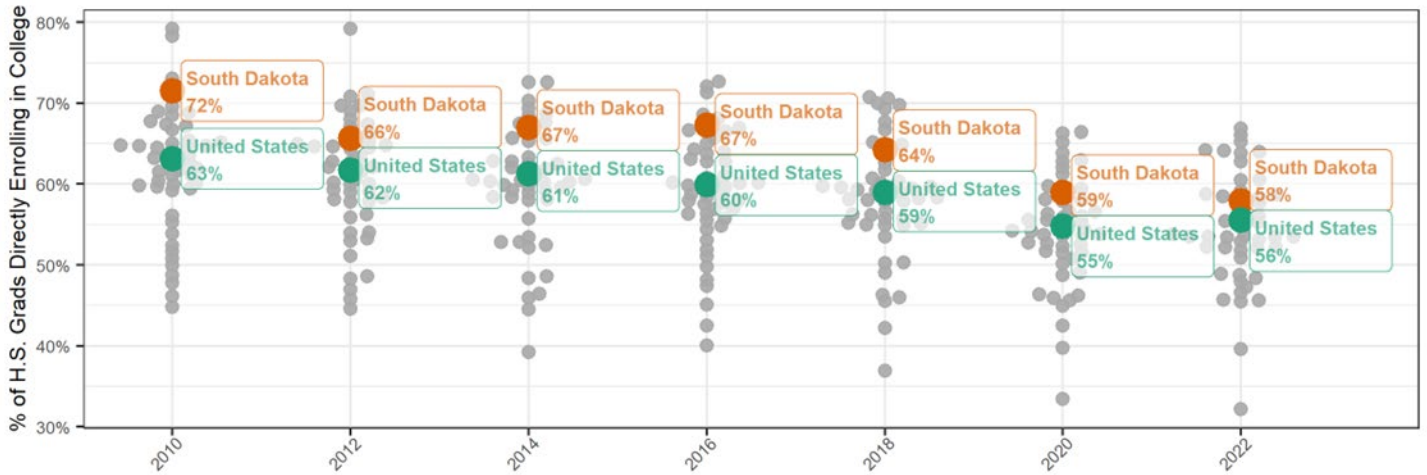
Figure 4. Projected 2020-2034 Numeric Change in Population Ages 18-44



Source: Jobs EQ.

South Dakota's college-going rate has consistently been higher than the national rate. However, mirroring national trends, the number of high school graduates directly enrolling in college has declined over time. In terms of postsecondary enrollment, this decrease in the college-going rate will partially offset any increases in the number of high school graduates. Additionally, this rate includes South Dakota high school graduates who enrolled at any postsecondary institution nationwide, not just SDBOR institutions.

Figure 5. Percent of High School Graduates Enrolling Directly in College

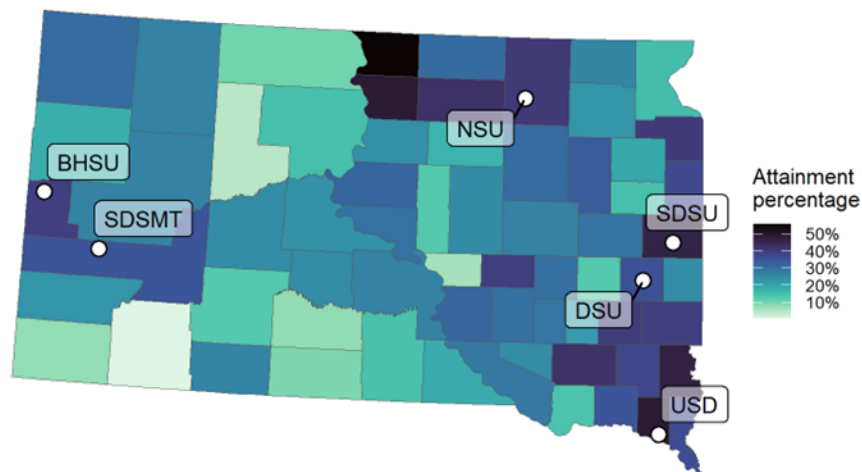


Sources: WICHE Knocking at the College Door: Projections of High School Graduates; NCES IPEDS Fall Residency and Migration Files eYYYYc. Note: Each dot represents one state.

Educational Attainment and Income

South Dakota’s educational attainment goal focuses on those aged 25 to 34. The areas around each SDBOR institution and South Dakota’s population centers generally have higher educational attainment for this age group than do South Dakota’s more sparsely populated counties. South Dakota’s overall percentage of 25-to-34 year olds with at least a Bachelor’s degree was approximately 34% in 2022, which ranked the state 33rd in the nation. The national rate was 38%.

Figure 6. Percent of 25-34 Year Olds with a Bachelor’s Degree or Higher by County, 2022

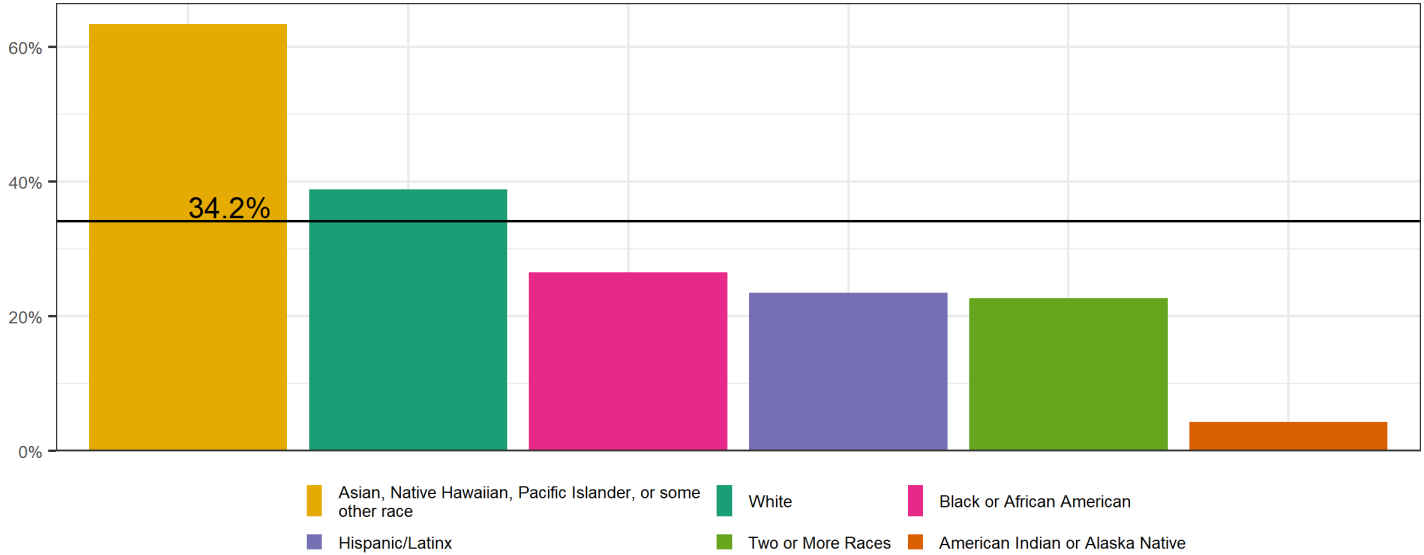


Source: U.S. Census Bureau, 2022 American Community Survey Five-Year Estimates; Table B15001. Note: Represents the estimated percentage of the population age 25-34 with a Bachelor’s degree or higher. South Dakota’s attainment goal is for 65% of residents ages 25-34 to earn a postsecondary certificate, license, associates, or bachelor’s degree by 2025.

The geographical variation in attainment rates across South Dakota is mirrored by variation between racial/ethnic groups. While White and Asian young adults have completed bachelor’s degrees at higher rates than the state average, individuals of other races/ethnicities have lower

attainment rates (Figure 7). Of particular note is the very low attainment rate among American Indian residents, which represent an opportunity for SDBOR institutions to grow or otherwise improve their service to South Dakota’s American Indian communities.

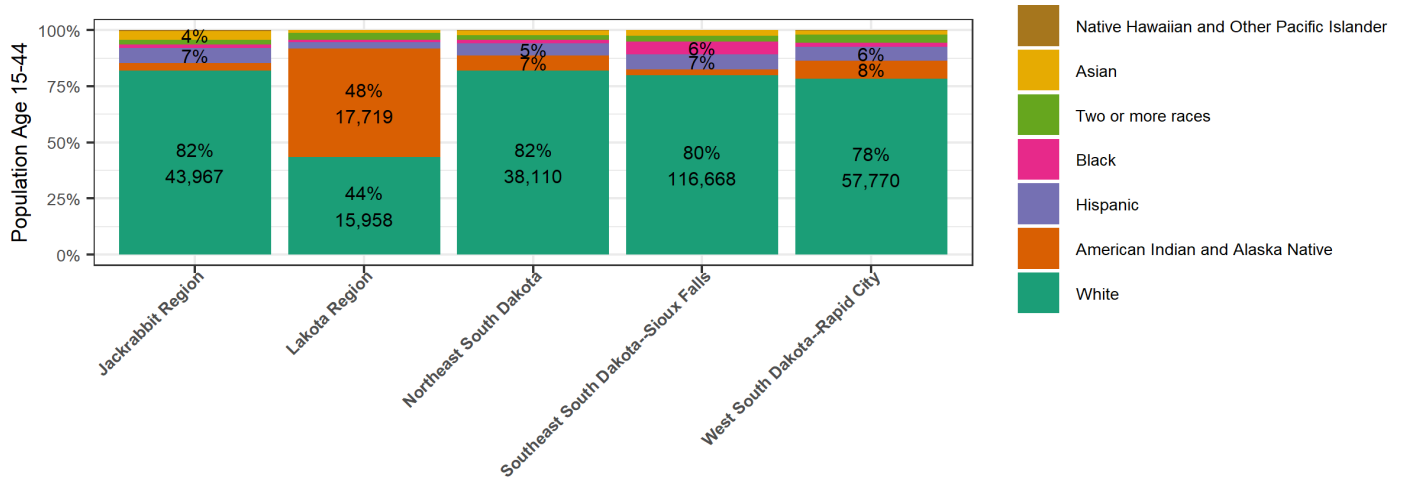
Figure 7. Percent of Population Age 25-34 With a Bachelor’s Degree or Higher, by Race/Ethnicity



Source: U.S. Census Bureau; American Community Survey (ACS), 2018-2022 5-year ACS Public Use Microdata Sample (PUMS)

The geographic and racial disparities in attainment rates are linked; the Lakota region of the state, which is essentially the western half of the state outside of the greater Rapid City area, has both the lowest attainment rates, as shown above and the highest percentage of college-aged American Indian residents (Figure 8).

Figure 8. South Dakota Population Age 15-44, by Area and Race/Ethnicity¹



Source: U.S. Census Bureau Population Estimates Program (PEP), vintage 2023.

Educational attainment and income are also often correlated; in South Dakota, we see generally higher educational attainment and income on the eastern side of the state. Overall, South Dakota’s per capita income (\$68.2K) was higher than the national average of \$65.5K in 2022.

¹ Geographic areas referenced here and elsewhere in this report are “Public Use Microdata Areas,” (aka PUMAs) which are the regions available in American Community Survey Public Use Microdata, a product of the U.S. Census Bureau. PUMAs are specific geographic non-overlapping areas that contain at least 100k people. They are used to provide detailed data while protecting the privacy of individuals. The geographic names contained herein are a creation of the U.S. Census Bureau for this purpose. Below is a map of these areas:

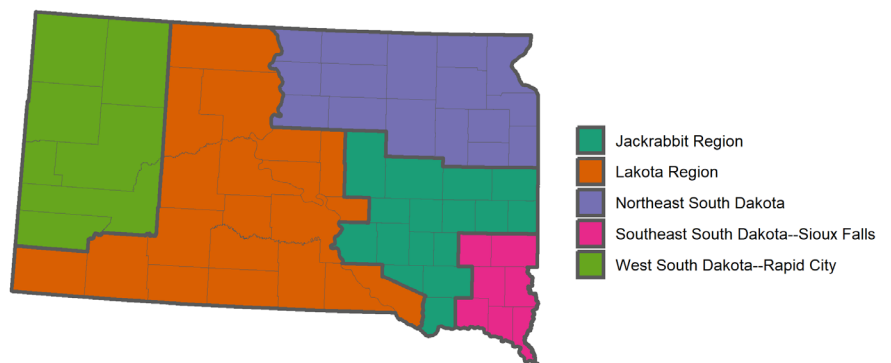
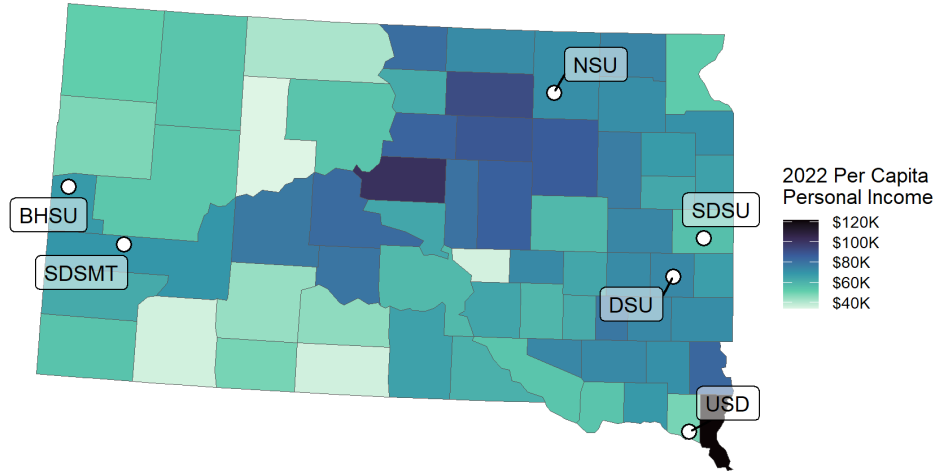


Figure 9. Per Capita Income by County, 2022

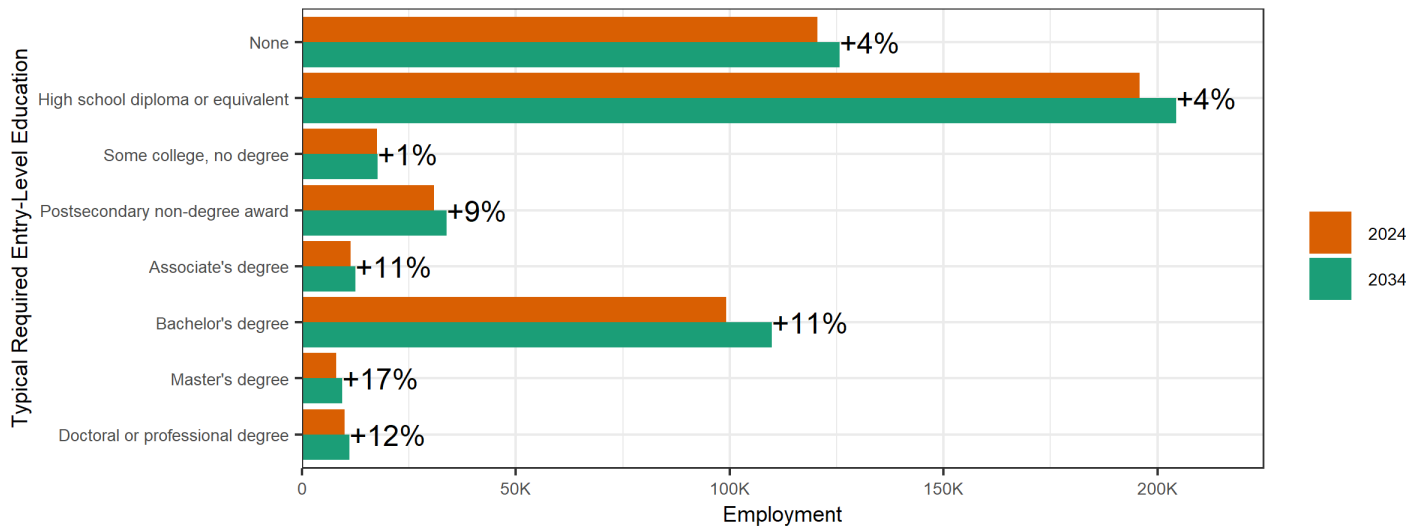


Source: US Department of Commerce, Bureau of Economic Analysis, Tables SAINC4 and CAINC1.

Workforce Trends and Needs

Overall, the number of jobs in South Dakota is projected to grow over the next 10 years. As Figure 10 shows, those jobs will not be evenly distributed across levels of education. Jobs that typically require college degrees are expected to grow faster than those that do not. In 2034, there are projected to be over 10,000 more jobs that require Bachelor’s degrees in South Dakota compared to 2024, which represents the largest numeric growth of all education levels.

Figure 10. Number of Jobs in South Dakota, by typical entry-level education



Source: JobsEQ. Note: 2034 jobs are projections.

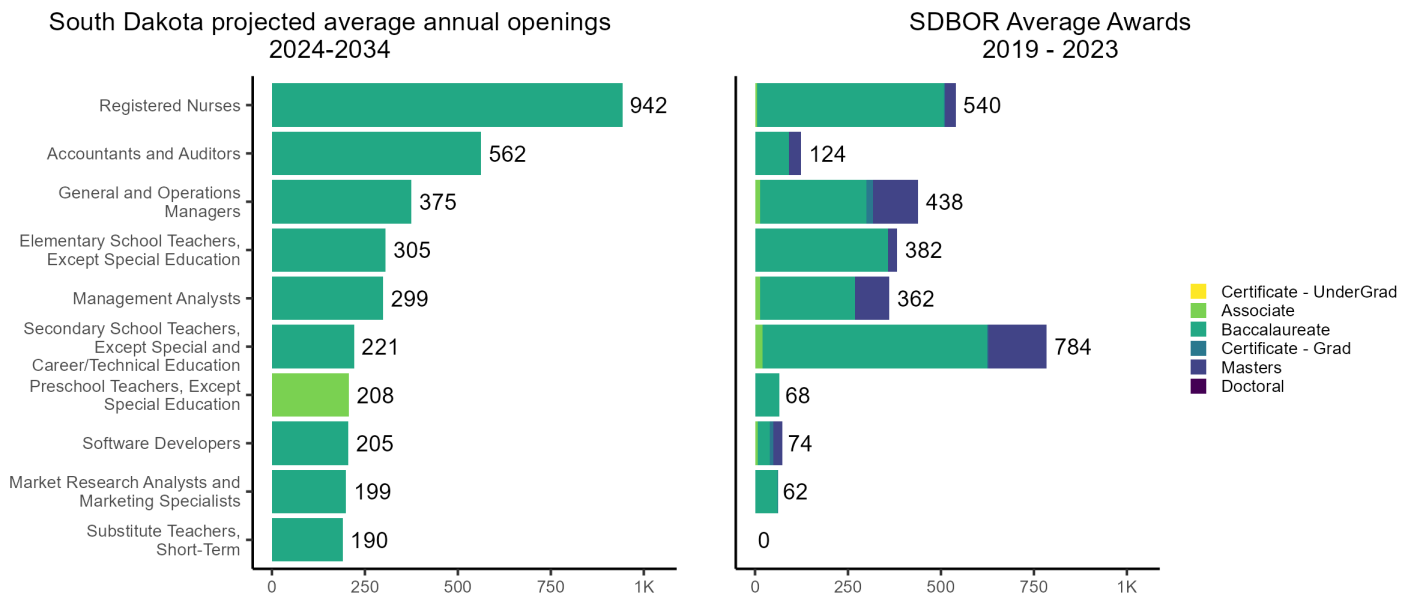
Data on industry and occupational projections should be considered in the process of program review and approval. These data are also especially critical to support proactive planning of academic programs that should be offered to meet workforce needs for each institution’s

primary service area and for the state as a whole. NCHEMS' analysis of occupation and industry projections by South Dakota planning district found that there is considerable overlap among the state's six planning districts in industries with the largest number of projected jobs in 2034, necessitating a statewide approach to workforce development. Health Care and Social Assistance, Retail Trade, Accommodation and Food Services, and Educational Services are among the seven largest industries for all six planning districts. Manufacturing, Public Administration, Construction, and Agriculture, Forestry, Fishing, and Hunting are among the top six industries in four planning districts.

There is also a lot of overlap in the occupations projected to have the most annual openings through 2034. Registered Nurses, Accountants and Auditors, and Elementary School Teachers will be among the top seven Associate-degree-or-higher occupations, in terms of average annual openings, in all six planning districts. General and Operations Managers, Management Analysts, Secondary School Teachers, and Substitute Teachers will also be in frequent demand across most of the state. It is important to recognize that these occupation and industry projections rely on past trends; they do not fully reflect changes that are expected to take place based on local economic development efforts or changes in technology. For example, no authoritative sources of occupational projections exist for rapidly evolving careers in emerging technologies such as AI, cybersecurity, or quantum computing.

In addition to industry and occupational projections, we looked at data on the number of active job ads in the past year by planning district. Where the occupational projections cited above are based on historic trends, data on active job postings over the past 12 months help us get a sense of the more immediate workforce needs in South Dakota. Together these two sources suggest that there is widespread demand for nurses, managers in health-related fields, educators, and accountants. There are more localized needs for social and health services managers, and information technology managers and software developers.

Additionally, we compared awards granted by SDBOR institutions to state workforce needs to illustrate, at a high level, the match (or mismatch) between SDBOR programs and job demand. Figure 11 shows the top 10 occupations that require at least a bachelor's degree, based on projected average annual openings over the next 10 years, side-by-side with relevant awards conferred by SDBOR institutions. These data should be interpreted with caution; many graduates go on to work in fields that are not directly tied to their college major, some college majors (in the liberal arts, for example) are relevant to a wide variety of jobs, and some jobs (in business fields and secondary school teaching, for example) can be filled by graduates of many different academic programs. Moreover, many SDBOR graduates work out-of-state after graduation, and there are other sources of talent to fill job openings in South Dakota besides SDBOR graduates. It is also worth noting that some of these occupations usually require relevant work experience in addition to education; General and Operations Managers jobs generally require at least five years of experience, and Management Analysts generally require some, but less than five years, of experience. Nevertheless, this graph points to some key areas where there may be an undersupply of graduates to meet South Dakota's growing workforce needs, especially in nursing and accounting/auditing.

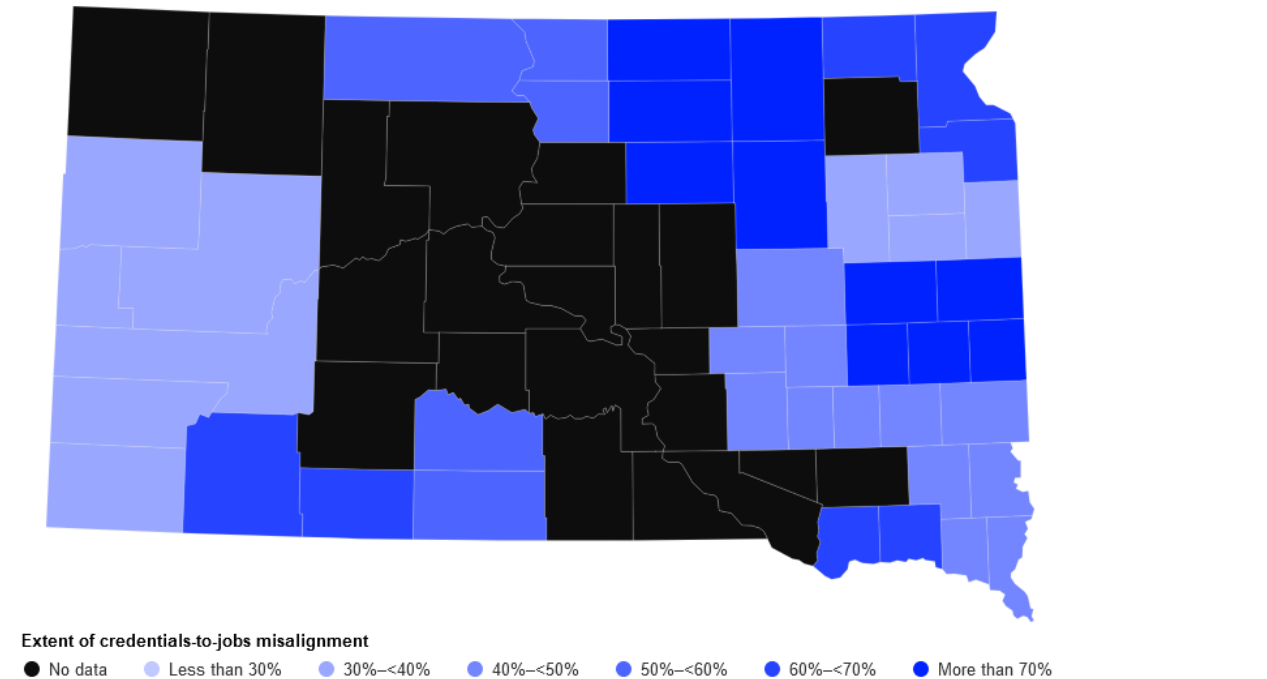
Figure 11. South Dakota Top Associates-and-Higher Occupations and SDBOR Graduates

Sources: JobsEQ, SDBOR. Notes: Includes the top 10 occupations in South Dakota, ranked by average annual openings, that typically require at least an associate degree. Awards include each occupation's typical entry level of education plus one level below and one level above. Programs and occupations are linked using JobsEQ's mapping. This may result in some awards being counted more than once if they are linked to multiple occupations. The mapping links multiple programs, not just Secondary Education degrees, to the occupation of Secondary School teachers, which explains why the number of relevant awards is higher than the number of graduates of Secondary Education programs. Occupation colors represent the typical entry level of education.

A recent report from the Georgetown Center on Education and the Workforce provides data on the misalignment between workforce needs and the supply of associate's degrees and sub-baccalaureate certificates across local areas across the nation. For South Dakota, their analysis suggests that the misalignment, where data are sufficient to measure it, is significant statewide. But the report measures misalignment in middle-skills jobs to be greatest in the counties surrounding NSU and SDSU, as well as the northeastern corner of the state and certain counties along the southern border (Figure 12). In these counties, it is typical that this misalignment is being driven by a lack of sub-baccalaureate credentials being produced that align to blue-collar jobs, along with an oversupply of postsecondary awards that lead to management positions, as illustrated by a more detailed graph of occupational categories and educational supply for the five counties including and surrounding NSU (Brown, McPherson, Edmunds, Faulk, and Spink counties) (Figure 13). These data suggest there exist ample opportunities to develop short-term certificate programs and associate degree programs to meet localized needs throughout the state.

While some of these programs may fit within SDBOR's mission, others will be under the purview of the South Dakota Board of Technical Education. Addressing this misalignment is not, therefore, solely the responsibility of SDBOR. (Indeed, it may be considered overreach or mission creep for SDBOR to begin offering truck driving, for example.) Rather, it suggests a need for a coordinated statewide approach between the two systems to meeting the state's current and future workforce demands. This approach likely includes SDBOR institutions offering additional subbaccalaureate credentials in areas that supplement, but do not compete with, the work of the state's technical colleges.

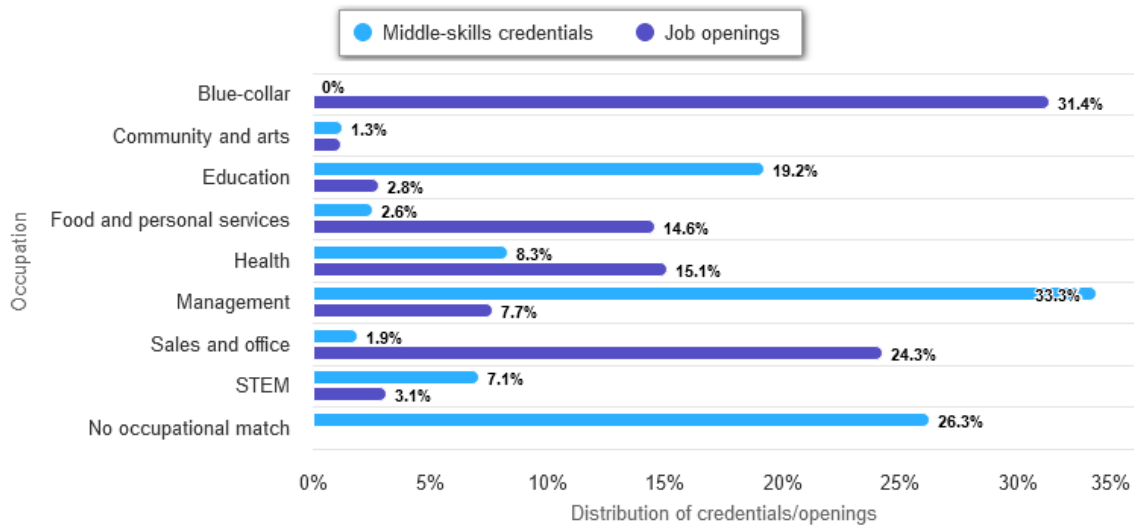
Figure 12. Misalignment in Sub-Baccalaureate Credentials and Jobs



Source: Georgetown Center on Education and the Workforce (2024). *The Great Misalignment: Addressing the Mismatch Between the Supply of Certificates and Associate’s Degrees and the Future Demand for Workers in 565 US Labor Markets*. Data available at <https://cew.georgetown.edu/cew-reports/greatmisalignment/#map>.

Figure 13. Misalignment of Sub-Baccalaureate Credentials and Jobs, Brown, McPherson, Edmunds, Faulk, and Spink Counties of South Dakota

Extent of credentials-to-jobs misalignment: 72.4%



Source: Georgetown Center on Education and the Workforce (2024). *The Great Misalignment: Addressing the Mismatch Between the Supply of Certificates and Associate’s Degrees and the Future Demand for Workers in 565 US Labor Markets*. Data available at <https://cew.georgetown.edu/cew-reports/greatmisalignment/#map>.

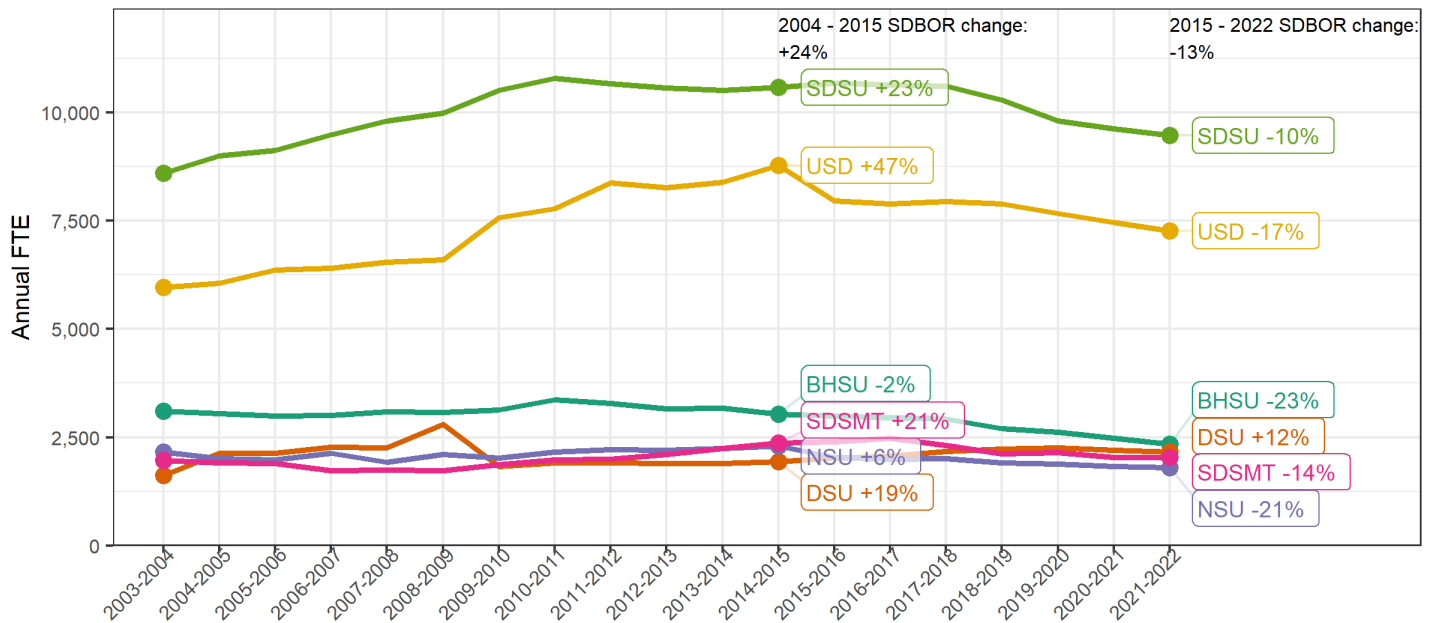
Enrollment and Program Trends

A review of the patterns of enrollment among the regental institutions provides a critical foundation for examining how their financial health may change in the coming years as demographic shifts buffet the higher education industry. These analyses help illustrate the potential vulnerabilities of the various institutions, as well as indicate the degree to which they may need to adjust either to accommodate reduced enrollment demand or to more effectively serve populations with different characteristics than has been the case historically.

Enrollment Trends and Projections

The SDBOR system gained significant enrollment from 2003-04 through 2014-15, at which point enrollment began to decline (Figure 14). The declines have been uneven across the system and have decreased 13% from the state’s high point in 2014-15 to 2021-22. The only institution that did not experience a decline during this time was DSU.

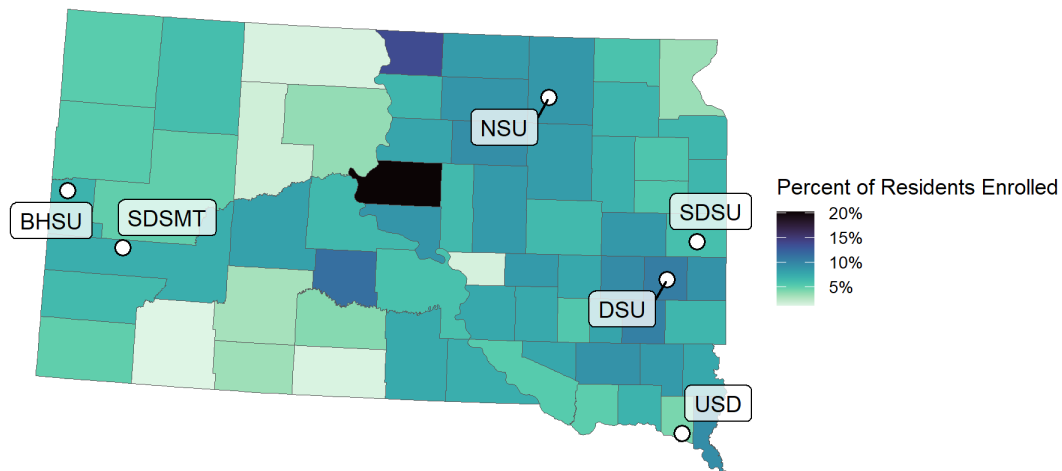
Figure 14. SDBOR FTE Enrollment Over Time



Source: NCES IPEDS 12-Month Enrollment Survey, files efiayyyy.

Participation rates (Figure 15) track closely with per capita income; the counties where residents have higher incomes also tend to be those with the highest percentage of residents enrolled in SDBOR institutions. The eastern half of the state has generally higher participation rates than the western half, and again the Lakota region has the lowest participation rates.

Figure 15. SDBOR Undergraduate Enrollment as a Percent of the Population Age 18-44 with Less Than a Bachelor's Degree

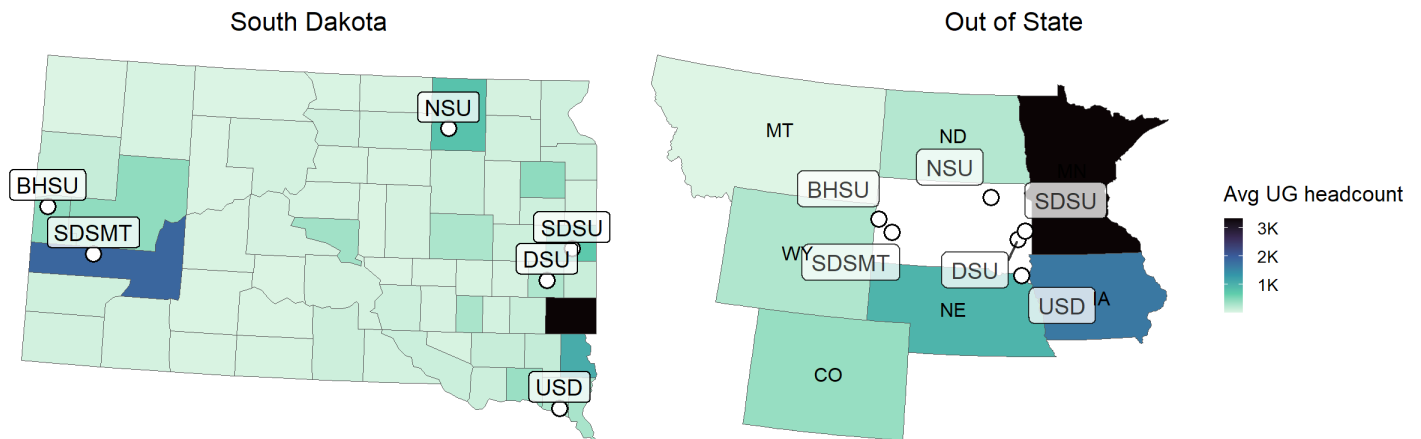


Sources: SDBOR; U.S. Census Bureau, 2022 American Community Survey Five-Year Estimates; Table B15001. Enrollment is average annual undergraduates at all six SDBOR institutions from 2018-19 through 2021-22, excluding accelerated learning high school students.

Figure 16 shows where SDBOR students originate from across all institutions. Systemwide, the state of Minnesota sends more students than any other state or South Dakota county to SDBOR institutions; over 3,500 students come from Minnesota to SDBOR institutions annually. Second is Minnehaha County (i.e., Sioux Falls), followed by Pennington County (i.e., Rapid City) and the state of Iowa. It is somewhat unusual for a state's public institutions to rely so heavily on enrollment from out of state. This is likely for a couple of reasons: First, all SDBOR institutions are located relatively close to South Dakota's borders and are likely closer to many out-of-state students' residences than their own "home" institutions. Second, SDBOR institutions offer relatively low tuition and routinely offer resident tuition to many out-of-state students.

While each SDBOR institution draws students from counties close to its campus, all of the institutions depend on one or both of the same population centers—Sioux Falls and Rapid City—for significant portions of their enrollment.

Figure 16. SDBOR Undergraduate Student Origins

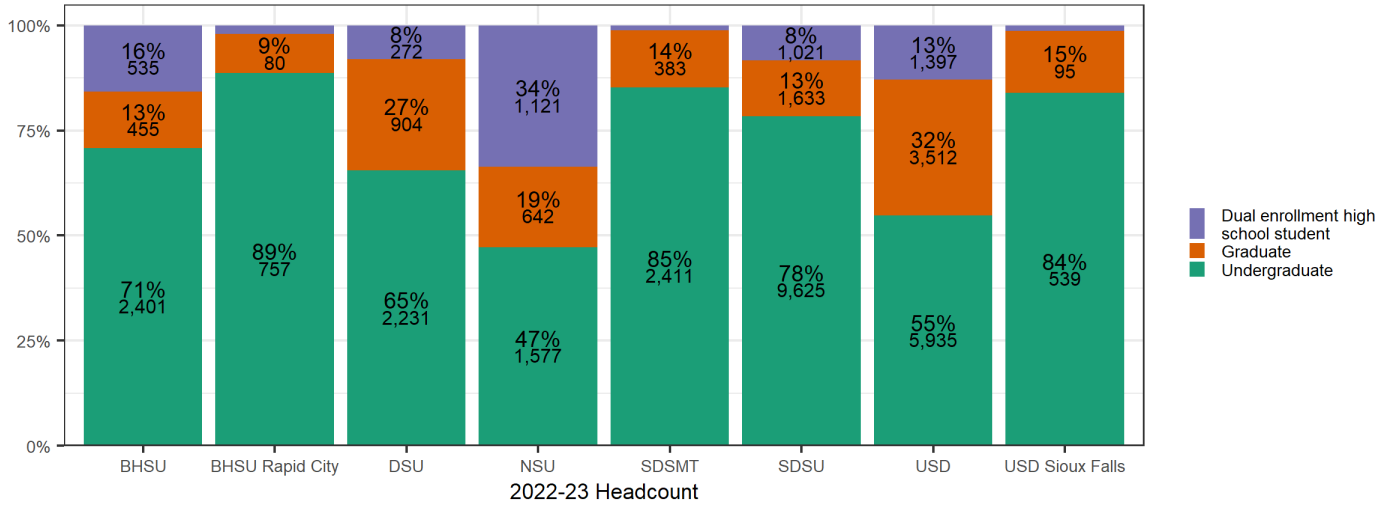


Source: SDBOR. Based on undergraduate enrollment (excluding dual high school students) from 2019-20 through 2022-23.

These patterns vary by institution. SDSMT is the only institution that enrolls the majority of its undergraduates from out of state, and the (small) outreach locations of BHSU Rapid City and USD Sioux Falls serve the highest proportions of in-state students.

Most students at SDBOR institutions are undergraduates, though the mix of students varies by institution in ways that impact finances (Figure 17). DSU and USD both have higher proportions of graduate students than do the other institutions, and the amount of dual enrollment also varies greatly among institutions (Note, however, that due to its size SDSU enrolls nearly twice the number of graduate students as DSU, even though they comprise only 13% of the SDSU student population). NSU enrolls a particularly high percentage of dual enrollment students, which brings in less revenue (\$153 per credit hour) compared to other types of enrollments (approximately \$256 per credit hour for face-to-face courses and \$355 per credit hour for distance courses).

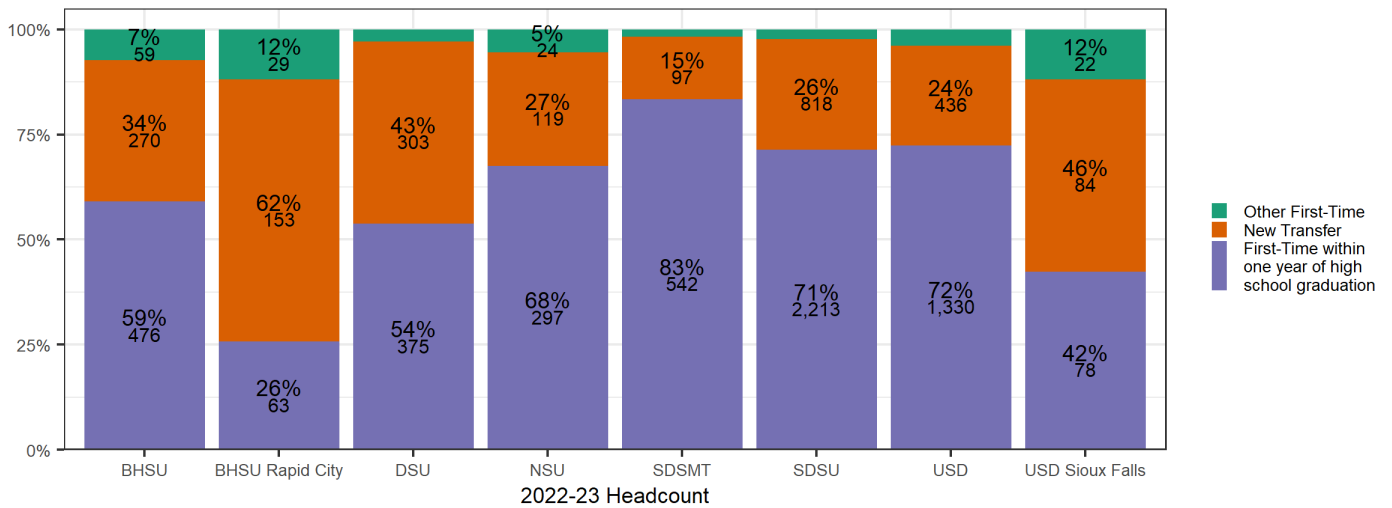
Figure 17. SDBOR 2022-23 Headcount by Student Level



Source: SDBOR. Notes: All students are counted at their home university. Those enrolled at Rapid City and Sioux Falls, regardless of home university, are additionally counted at those locations.

Among undergraduates, the SDBOR system relies on full-time students who enroll directly after graduating from high school. Figure 18 shows that SDBOR enrollment is heavily weighted towards students coming to college directly from high school; in 2022-23 this population accounted for 69% of new undergraduates entering the system. The balance of enrollment consists of transfer students, with very few individuals starting college at an SDBOR institution more than a year after graduating from high school. Related to the young age group that SDBOR institutions enroll, most students also attend full-time. The only two locations where direct-from-high-school students are the minority are BHSU-Rapid City and USD-Sioux Falls, and the enrollment at those two locations is very small.

Figure 18. SDBOR 2022-23 New/Entering Undergraduate Headcount by Type

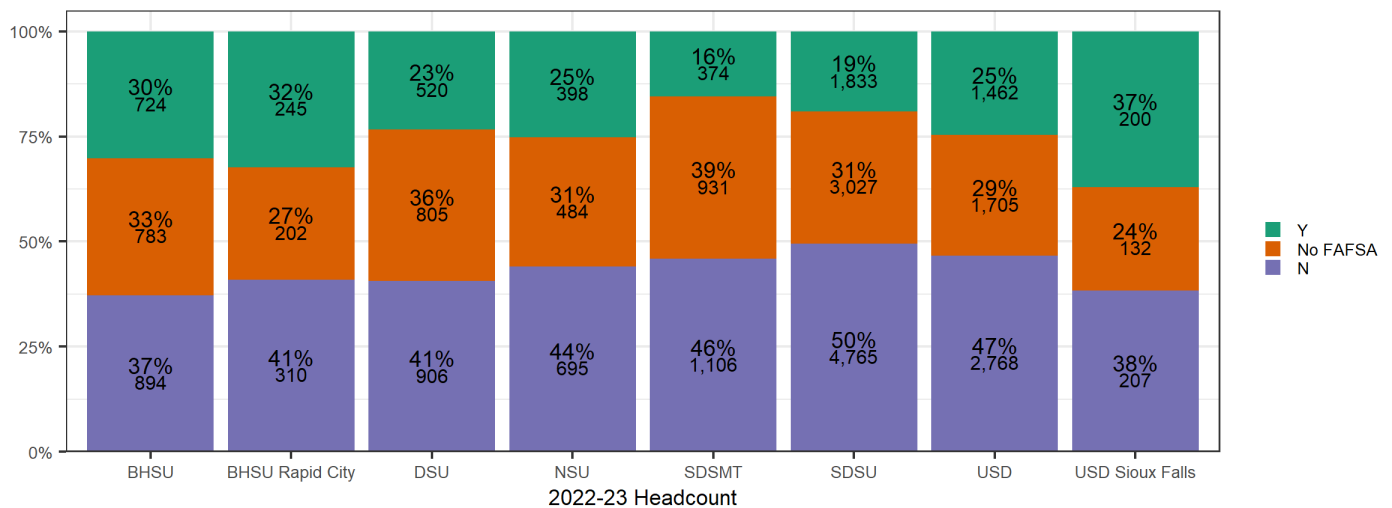


Source: SDBOR. Notes: Excludes continuing and re-enrolling students, dual enrollment H.S. students, and graduate students. All students are counted at their home university. Those enrolled at Rapid City and Sioux Falls, regardless of home university, are additionally counted at those locations.

Pell status is often used as a proxy for low-income status, though it is imperfect, particularly because many students do not complete the FAFSA and therefore their income status is unknown (Figure 19). However, there is a negative correlation between the percentage of undergraduates receiving Pell Grants and the percentage of out-of-state students at SDBOR institutions; schools with higher enrollment of out-of-state students tend to have fewer Pell Grant recipients. Although this is not uncommon elsewhere around the nation, it has implications for both state attainment goals and institutional/system finances.² It is financially advantageous for institutions to enroll higher percentages of out-of-state non-Pell students, as some of those students pay higher tuition rates, they tend to live on campus—which brings in auxiliary revenue—and they may require fewer support services. At the same time, enrolling more in-state Pell eligible students makes an important difference in achieving state attainment goals, as those students are likely to remain in the state after graduation and earn higher incomes than their families of origin.

A similar point may be made about first-generation status. The locations enrolling the highest percentage of first-generation students are those with the highest rates of Pell and adult students—BHSU Rapid City and USD Sioux Falls—plus DSU, which has more first-generation and adult undergraduate students than the other universities, though not more Pell students.

Figure 19. SDBOR 2022-23 Undergraduate Headcount by Pell Status



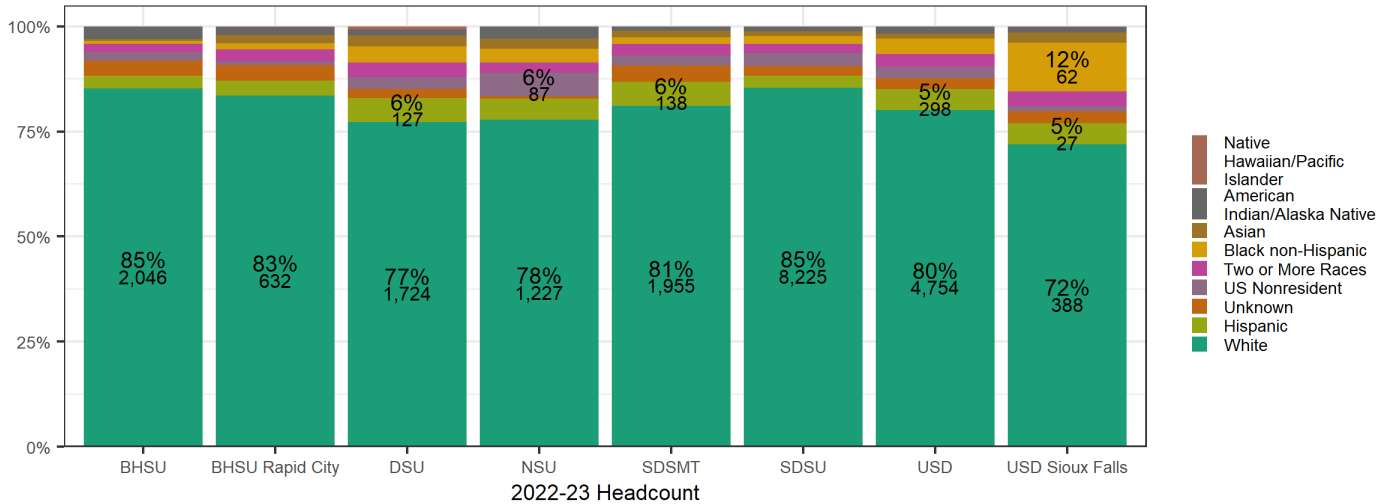
Source: SDBOR. Notes: Excludes dual enrollment H.S. students and graduate students. All students are counted at their home university. Those enrolled at Rapid City and Sioux Falls, regardless of home university, are additionally counted at those locations.

SDBOR institutions' enrollment generally mirrors the population of South Dakota (Figure 20). In all regions of the state, participation rates also vary by race/ethnicity (Figure 21), and the lower overall participation rates in the Lakota region are likely related to that region's high percentage

² Jaquette, O., Curs, B.R., & Posselt, J.R. (2016). Tuition Rich, Mission Poor: Nonresident Enrollment Growth and the Socioeconomic and Racial Composition of Public Research Universities. *Journal of Higher Education* (87) 5, pp. 635-673.

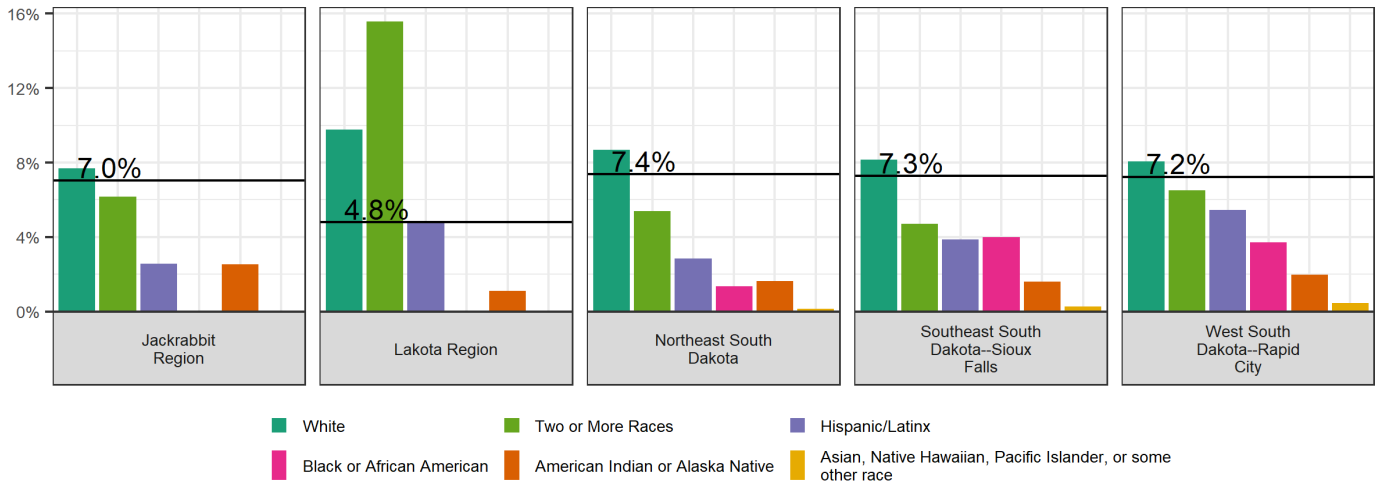
of American Indian residents, who attend SDBOR institutions at sharply lower rates than most other races/ethnicities.

Figure 20. SDBOR 2022-23 Undergraduate Headcount by Race/Ethnicity



Source: SDBOR. Notes: Excludes dual enrollment H.S. students and graduate students. All students are counted at their home university. Those enrolled at Rapid City and Sioux Falls, regardless of home university, are additionally counted at those locations.

Figure 21. SDBOR Undergraduate Enrollment per Population age 18-44 with less than a Bachelor’s Degree, by Area and Race/Ethnicity³



Sources: SDBOR; U.S. Census Bureau; American Community Survey (ACS), 2018-2022 5-year ACS Public Use Microdata Sample (PUMS)
 Notes: Groups with margins of error larger than 30% of their population estimates have been removed.
 Students of unspecified race are included in the overall rates (black lines), but excluded from the individual race/ethnicity columns.
 In some cases, this means total participation is higher than that of each of the races/ethnicities.

NCHEMS also projected future enrollment for the six SDBOR institutions as part of the financial modeling. These projections are based on past enrollment trends among undergraduate,

³ Geographic areas referenced here are U.S. Census “Public Use Microdata Areas,” which are the regions available in American Community Survey Public Use Microdata.

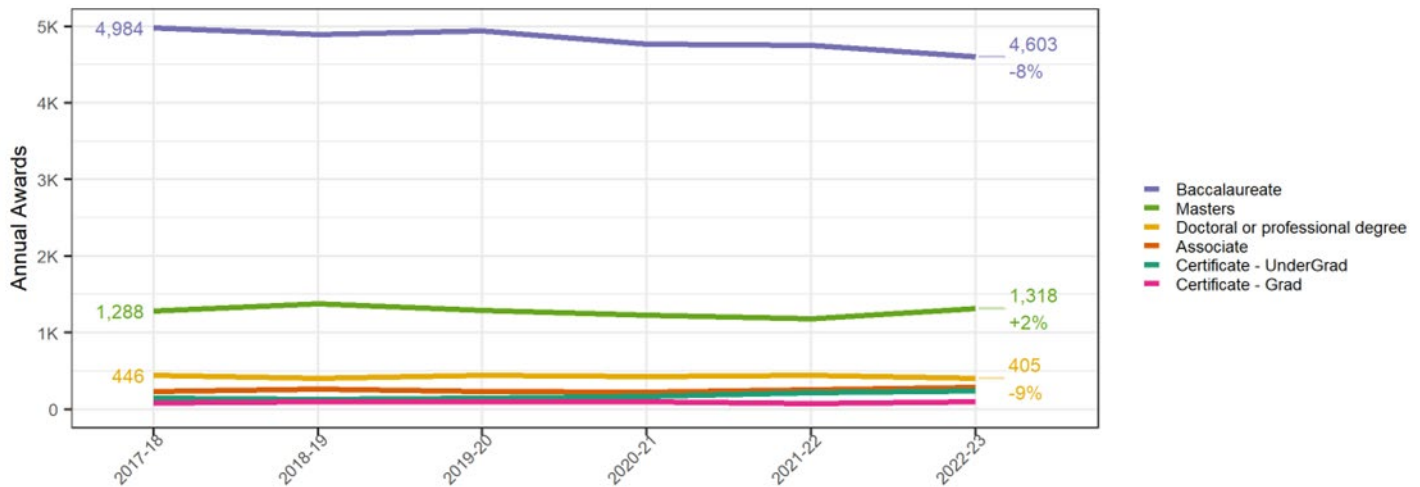
graduate, and dual enrollment students; forecasted 9th grade enrollments and high school graduate numbers in the locations from which each institution has historically drawn students (based on new WICHE projections), trends in college-going rates, transfer student enrollments, adult student enrollments, retention rates, and average credits enrolled per student. Though trends vary by institution, our projections generally show modest enrollment increases for 1-2 years and then flat or slightly decreasing enrollment for several subsequent years. Decreases, where they exist, are due largely to projected declines in the number of high school graduates in each institution's traditional service area.

The foregoing analysis makes it clear how much variation there is in the characteristics of the institutions' respective student bodies. This variation is important to appreciate because it demonstrates how changes in the underlying market for students of different types and in the state's policy environment will have quite different affects on the institutions.

Programs

Across the SDBOR system, bachelor's degrees comprise the vast majority of awards conferred. In the five-year period from 2018 to 2023, the number of bachelor's degrees awarded declined by 8% (Figure 22). As illustrated in Figure 14, the system also experienced enrollment declines during this period.

Figure 22. SDBOR Awards by Level Over Time

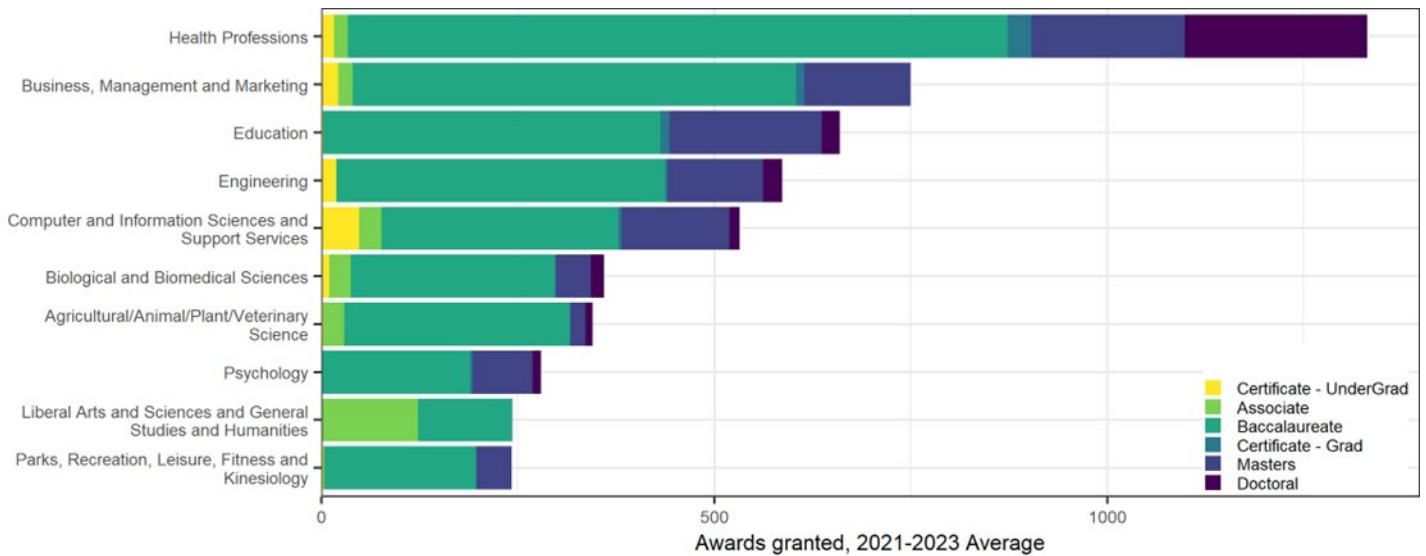


Source: SDBOR. Notes: Students who received multiple awards will be duplicated.

Health, Business, and Education are the three largest disciplines across the SDBOR institutions as measured by number of awards conferred (Figure 23), which is typical of institutions nationally. However, the individual institutions within the system offer differentiated program mixes, and their largest disciplines vary (Figure 24). Both BHSU and NSU focus on education, business, and liberal arts and sciences (including visual and performing arts). USD's largest discipline is health; SDSU focuses on both health and agriculture; SDSMT emphasizes engineering; and DSU emphasizes computer programs. This reflects a clearer differentiation among institutional

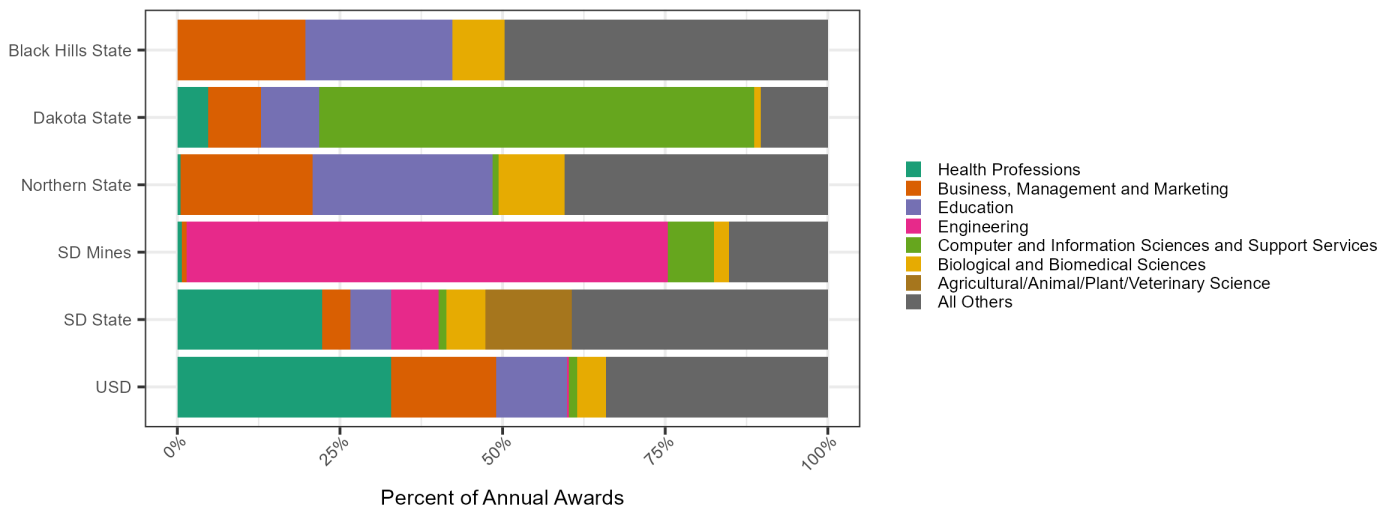
missions of SDBOR institutions, as reflected in the programs being offered, than is common in many other states/systems.

Figure 23. Awards by Discipline, All SDBOR Institutions



Source: SDBOR. Note: Includes only top 10 2-digit CIP codes. Awards may be duplicated in cases where a graduate receives multiple awards.

Figure 24. Percent of Awards by Discipline and Institution



Source: SDBOR. Notes: Based on average awards from 2019-2023. 'All Others' includes disciplines (as defined by 2-digit CIP code) that comprise less than 10% of the awards at each of the six institutions. Students who received multiple awards will be duplicated.

Finance

As reflected in the everchanging national landscape of higher education, universities face financial pressure from shifting and declining student populations, stagnant or declining revenue, economic downturns, employee compensation costs, and other challenging events. Annual assessment of an institution’s financial health provides a proactive framework by which university and System leaders can collaborate to enhance an institution’s financial success. SDBOR should be commended for its focus on university financial health, as reflected in its

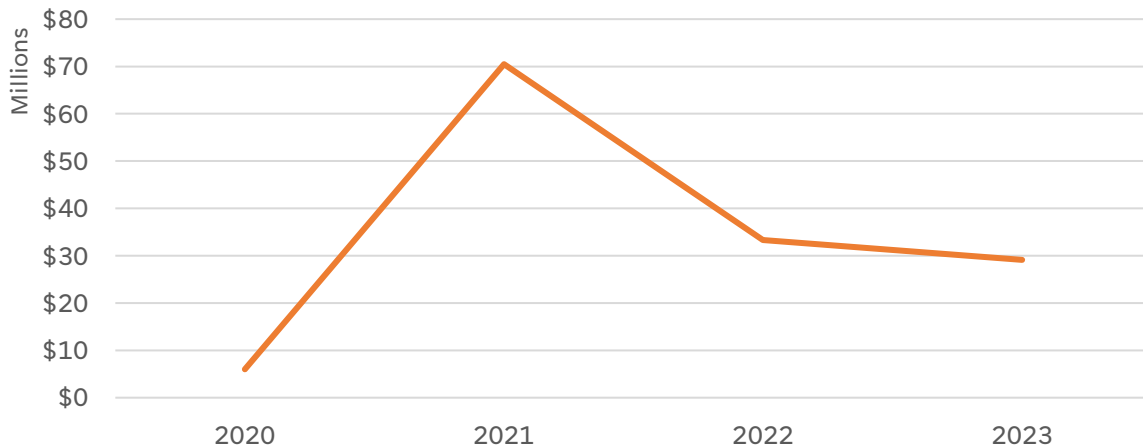
strategic goals (Goal 5: Financial Health, Competitiveness) and its rigorous annual review of university financial data, trends, and ratios.

Similarly, NCHEMS' financial assessment was conducted through trend analyses, including enrollment, revenue, expenses, reserves, cash, and net position; as well as performance on common financial ratios over time. Particular attention was given to the operating margin, primary reserve ratio and viability ratio. Although not a financial measure, enrollment is also considered a leading indicator of financial health due to its direct relationship with revenue generation and impact on expenses.

South Dakota's state appropriation includes funding to support institutional operations, stewardship of capital facilities, scholarships, portions of employee compensation adjustments, and—in several recent years—tuition freezes. In addition to state funding, SDBOR institutions have been the beneficiary of significant support from private donors for new facilities, academic programs, scholarships, and other uses.

Historically, the state has restricted the majority of its support to the SDBOR institutions to operational support rather than capital funding or state financial aid programs. Although the state has provided funding for maintenance and repairs as well, that support has fluctuated in recent years, in part due to the influx of federal stimulus funding (Figure 25). The state also articulates a goal of providing a reasonable minimum of annual maintenance and repair support consistent with 2% of replacement value of facilities. To provide additional funding for capital needs—maintenance and repair of the institutions' physical plants and for new construction deemed necessary—the SDBOR has adopted a policy of requiring a portion of tuition revenue to be captured for capital improvements of academic facilities.⁴

⁴ To our knowledge, this policy is not widespread among states. It is a good practice that the system and its institutions plan and set aside resources for the upkeep of facilities and to avoid the accumulation of deferred maintenance. Yet this requirement also diverts tuition dollars from funding instruction and other operational requirements toward expenditures to maintain educational facilities that are state assets.

Figure 25. South Dakota Capital Appropriations to Higher Education

Source: SHEEO SHEF

NCHEMS performed a trend analysis on each university's enrollment, revenue, expenses and staffing for the period of FY 2012-13 through FY 2021-22. NCHEMS also benchmarked each SDBOR institution against similar institutions for trends in enrollment, expenses and staffing per FTE student for the period of FY 2015-16 through FY 2021-22.

On the expenditure side of the ledger, SDBOR universities routinely reflect a lower expense structure per student than at similar institutions. This appears to be due largely to lower personnel expenses at SDBOR institutions.

The trends of each university's financial ratios, excluding the activity of component units, were reviewed for the period of FY 2016-17 through FY 2022-23. Traditionally these ratios have been reported, as required by the Higher Learning Commission (HLC) and IPEDS, to reflect the combined activity of both the university and its component units (e.g., foundations, research affiliates). For internal purposes, in fall 2023, the System also began calculating the operating margin and primary reserve ratios for the universities exclusive of the component units.

Recent trends indicate that most of the universities have stable and/or improving financial health. Even those with the greatest fiscal challenges exhibit stable results in at least one of the three critical financial ratios NCHEMS examined. Each institution's recent history can be characterized by generally fiscally prudent behavior, notwithstanding some challenges. Given the likely turmoil the future holds for higher education nationally, it is not enough to report on the past but rather to imagine how potentially adverse scenarios could reveal serious weaknesses in institutional financial health.

Summary of Feedback from Stakeholder Engagement

During the course of the project, NCHEMS staff conducted two rounds of site visits to each of the regental institutions, one in November 2023 and the second in March 2024. During these visits, the staff met with institutional leadership, administrators, faculty, staff, students, and members of the community—employers, civic leaders, representatives of K-12, and others. The participants in these conversations provided information that has helped to shape the

recommendations that are presented in this report. While some of this information was specific to individual institutions, there were some overarching themes that are particularly instructive. Key among these common threads are the following stakeholder perceptions.

1. South Dakota appears to have one overriding, albeit not-formally-adopted, statewide goal for postsecondary education—to keep postsecondary education affordable for students. This goal is being pursued primarily by minimizing (often freezing) increases in tuition and fees charged to students. Institutions are contributing by devoting considerable energy to raising funds that can be used for scholarships that reduce the net price to students. It appears that this goal is at least partially being successfully addressed; NCHEMS staff heard no complaints from students about the cost of their education being out of reach, although no interviews or focus groups were conducted with individuals who were not or have not enrolled in SDBOR institutions out of concerns over their ability to pay. Meanwhile, the data indicate large swaths of the state have relatively low participation rates in higher education.

However, the focus on affordability has left the System institutions without a plan for other key state needs, for example, responsiveness to workforce needs and contributing to the expansion and diversification of the state’s economy. In the absence of a broader statewide plan, SDBOR has promulgated its own strategic plan and works to align policies and practices with it. Absent a clear statement of statewide goals, the BOR is deprived of a tool critical to support decision-making in key areas of Board responsibilities, especially in relation to how it directs funding to institutions (where state attention could help drive otherwise difficult changes that would better incentivize institutional behaviors in alignment with that goal), in determining which programs should be offered by which institutions, and in seeking to work more collaboratively among SDBOR institutions and with the technical colleges. SDBOR institutions often do collaborate on program delivery with one another and with the technical colleges. Yet more can be done to deliver programs housed at one institution to students who attend another—bringing programs to students rather than expecting students to find ways to go to the programs are.

2. Although mission differentiation among the regental institutions may be more advanced than in some other states, there is still room for improvement in sorting out confusion over the priorities the state believes each separate institution should be pursuing and about final decisions on programs submitted for approval (both their own and those submitted by other SDBOR institutions). The institutions’ dependency on tuition revenue forces them into intensifying competition for students—often the same ones—and especially in the Sioux Falls area and creates regulatory barriers to program development that can impede an institution’s nimbleness. The results sometimes fall more heavily on the smaller institutions, who claim that their larger counterparts are able to intrude on their core programmatic areas while the larger institutions’ relative size overwhelms their own priorities.

3. The current “base plus” approach to allocating state general funds has several limitations. These include an inability to adapt to changing enrollment levels and underlying student characteristics, both of which are driven by changing demography and labor market requirements for postsecondary education; a failure to allocate the majority of state general funds based on how SDBOR institutions’ costs are changing overall and relative to one another; neglect for the way SDBOR institutions’ program offerings are evolving in ways that affect costs; and a lack of responsiveness to changes in institutional enrollment. These limitations have disproportionately affected certain institutions more than others. Additionally, the “base plus” model assumes that the funding levels at the time the base was set accurately reflected the cost structures, needs, and missions of each institution, which may not have been the case then or now.
4. The current ambiguity on the program approval process has hindered the development of effective mechanisms to respond to regional workforce needs. Consequently, there is limited encouragement for institutions to collaborate on delivering necessary programs without duplication, and a cohesive, systemwide approach to online delivery is lacking.
5. The System does not have a well-developed strategy for meeting the educational needs of adult students. Adult students represent a largely untapped market for the programs offered by regental institutions. However, policies, procedures, and institutional actions are geared to serving traditional students.
6. In general, institutions are managing their budgets with a recognition that they will be held accountable for showing good performance on the financial indicators used by the SDBOR to monitor their financial health.
7. The historic unwillingness to charge a lower price in Sioux Falls has hampered SDBOR’s ability to serve that market’s clear and distinct needs, especially by offering a no-frills version of key in-demand programs to adult learners who are less likely to be interested in a traditional college experience featuring residence halls, athletics, a wide array of student organizations and activities, etc. This has worked directly in opposition to the need to serve more students in the state’s largest and fastest-growing market with easily accessible, relevant, and flexible programming. Addressing this challenge will necessitate the BOR’s active participation in advocating to policymakers that Sioux Falls’ needs can best be met with a new model designed for diverse student populations—adults, low-income and first-generation students, and new Americans, who may not be drawn to other SDBOR institutions. Additionally, it will be important to manage any concerns among other regental institutions regarding student competition.

Academic Unit/Program-Level Analysis

In the section that follows, we discuss how the inter-related nature of academic programs, faculty, and students introduces efficiencies into higher education institutions but complicates assessing individual academic programs from a financial perspective.

Background

In addition to the trend analysis and stakeholder engagement, NCHEMS was also asked to examine the relationship between academic programs offered at the BOR institutions and institutional financial health, workforce demand, and the enrollment pipeline. In the preceding sections, we provided statewide trends on workforce demand and enrollment. Here, we use those findings to inform a discussion of academic programs and financial health. We begin with an overview of considerations policymakers should keep in mind in this area and an overview of SDBOR's current process. We then analyze the BOR institutions' academic programs and departments, according to several metrics related to financial health, and provide a set criteria that NCHEMS would recommend the institutions and the BOR use in further evaluating how an institution's program mix is related to its overall financial health.

Worth noting is that the data informing the subsequent analyses includes the years when the pandemic contributed to enrollment declines. They do not include more recent data from the current academic year that show growth in enrollment across the board among SDBOR institutions. That growth will eventually be reflected in program enrollment numbers; however, it is unlikely that all programs will benefit equally.

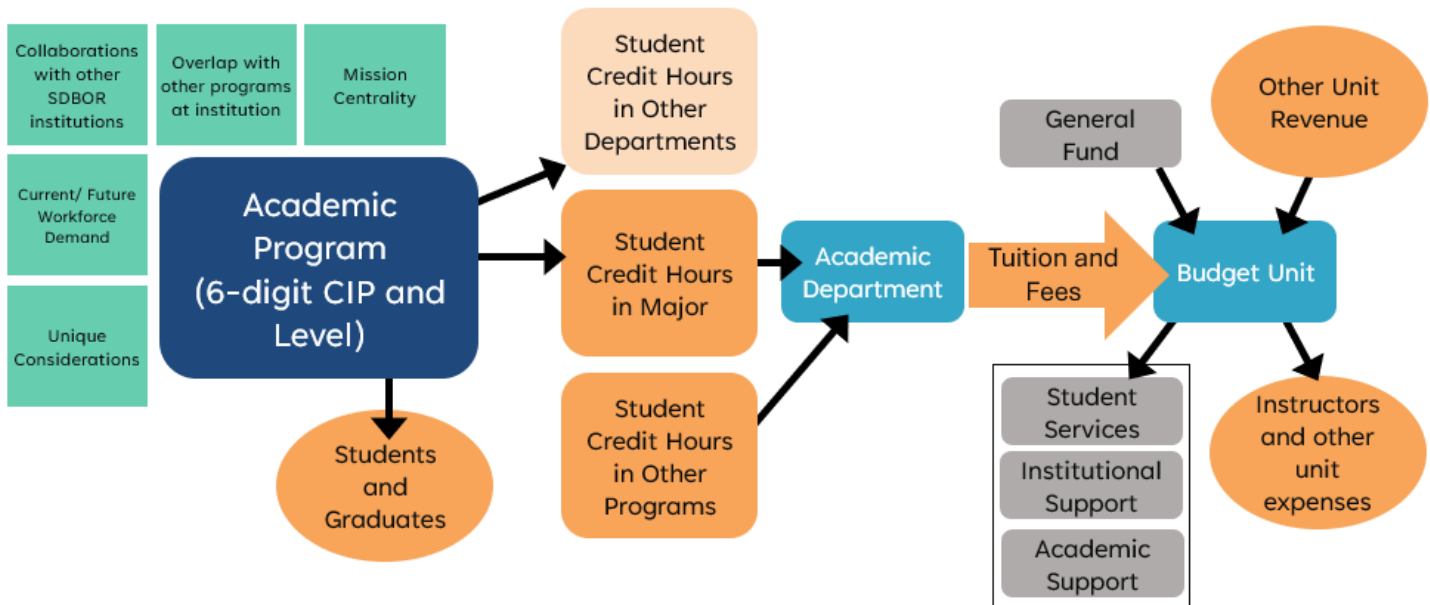
It is crucial to recognize that any assessment of a program's value or productivity is extremely complicated in ways that make it difficult to judge a program solely on the basis of the number of its graduates. The complications relate to the unavoidably tangled relationships between academic programs and institutional financial health as well as the interrelated nature of academic departments, academic programs, and degree requirements. These interrelationships exist among undergraduate and graduate programs, where students at both levels are enrolled in the same classes (albeit often with different course numbers) or where graduate students are used as instructors or teaching assistants for a department's undergraduate courses. They also arise from the presence of general education requirements for which students from all major programs are required to take courses in other departments, leading to situations in which departments that can claim only a few enrolled majors are nevertheless significant producers of semester credit hours. (This case also applies to electives, but in such cases, it is less widespread and systematic.)

This means that each academic program is typically connected to multiple different departments, which are where costs are incurred. To further complicate matters, academic departments themselves are not self-contained units; colleges and universities exist as a collection of departments and units whose budgets often influence one another. Faculty members often teach courses not only within their home department but in other departments as well. Revenue earned by a department via tuition and fees is not dedicated solely to that individual department's operations; it is also needed to support the larger institution's operations in the areas of student services, academic support, institutional support, and physical plant.

In this context, which is not unique to South Dakota, pinpointing how a particular program contributes to an institution's financial health is not straightforward. Figure 26 illustrates the relationships between a single academic program and multiple departments, which may or may

not be equivalent to a budget unit within the institution's chart of accounts, and the associated revenues and costs.

Figure 26. Relationships between Academic Programs, Departments, Revenues, and Expenses



The interrelated and overlapping nature of academic programs means that eliminating particular programs or areas of study can negatively affect the costs of instruction and degree completion in other departments and programs in the university, because students take general education and elective classes outside of the department that houses their academic program. It also means that eliminating some programs may not actually produce cost savings since the elimination or restructuring of a particular program does not necessarily equate to the discontinuation of offered classes. For example, it is possible that an institution may serve very few Math majors but will still need to offer all of its math courses regardless of whether it offers a Math degree or not, because math courses are graduation requirements for students in other programs. Nevertheless, in such cases it remains appropriate that the institution monitors the extent to which it is offering courses that attract reasonably strong enrollment; it should still avoid running too many upper-division courses with few students and that are not requirements for other majors.

In conducting cost analyses, a critical measure is the semester credit hours (SCH) produced by the department relative to the costs associated with producing those credit hours. Thus, when identifying potentially unproductive programs, it is necessary to look not only at the number of degrees produced in the program, but at the credit hour production of the department housing the program. Indeed, it may be most appropriate to identify departments that teach few SCHs at relatively high cost, then assess the number of degrees produced by those low-productivity departments.

Additionally, program costs will always vary by discipline, and this is to be expected. Some necessary courses are costlier for institutions to offer than others. The differences are due to

inevitable variations in pedagogy, accreditation standards, equipment requirements, the amount of hands-on instruction required to master course content, the salaries needed to attract and retain faculty in different disciplines, and accreditation or licensing requirements, among other dimensions. For example, accreditation standards may require low student-to-faculty ratios in some classes—often clinical experiences—as well as specify that faculty must have adequate time for preparation, administrative duties, etc. Accreditation standards for nursing provide a good example of this type of requirement.

Though course costs vary, student tuition prices are typically the same for all courses. Although SDBOR institutions levy a Special Discipline Fee designed to offset the costs of expensive courses or programs, these fees may not cover the full cost differentials among all programs. Mismatches between revenues and costs among departments means that the financial health of one department impacts the financial health of others. Universities balance costs across a diverse set of programs. Cross-subsidies that allow low-cost courses to subsidize high-cost programs can expand the array of programs a university offers.

In many cases, high-cost programs are vital to institutions' missions. The state workforce requires graduates in many different fields, some of which will be more expensive for institutions than others. Additionally, institutions may choose to operate programs at a financial loss because they serve a population of focus in meeting statewide attainment goals (e.g., adult students, rural students, or first-generation students); or because they advance the university's mission or strategic priorities in another way, such as in terms of research or economic development.

Finally, it is important to consider the array of programs across institutions within the system because they impact one another. SDBOR's six institutions do not serve entirely distinct service areas or student populations, and do not offer entirely unique program mixes. The health of an academic program at one institution impacts not just that individual institution, but also other SDBOR institutions, as well as the system overall.

Process and Analysis

These complications, however, do not relieve institutions or the BOR from ensuring that the programs offered by each institution are consistent with the institution's mission, align to workforce demand, meet students' needs, are financially sustainable in the aggregate, are complementary and, where possible, collaborative. The first step in aligning academic programs to financial health, workforce demand, institutional missions, and state attainment goals is to consider individual programs against a set of criteria. This step is already in place according to the existing Board of Regents Academic Program Evaluation and Review Policy. This policy was recently refreshed as part of the implementation of SB 55, legislation passed in 2020 that led to a statewide task force to promote efficiencies among SDBOR institutions. The policy establishes a schedule and process for program review and identifies reasonable metrics for evaluating the health of existing programs. Specifically, it requires institutions to do the reviews themselves and simultaneously establishes minimum thresholds for degrees conferred and student headcount. A related policy lays out a rigorous process for considering new program proposals that relies on financial and enrollment projections, indications of workforce demand for graduates, and a

review of the competitive marketplace among program providers, including the other SDBOR institutions.

The current program review process focuses on completions and enrollment (number of majors as well as course enrollments) as metrics of program productivity, which is a sensible place to start an examination of program productivity. But they alone are not sufficient to identify the impact of a program on institutional finances. The process does include a comparison of revenues and expenses, but those numbers lack the context and nuance necessary to identify how an individual program fits into the university's larger financial picture.

To build upon the newly installed program productivity review process, NCHEMS analyzed all existing programs and departments at all six SDBOR institutions using several additional metrics, designed to assess their financial performance. However, only at the institutional level is it possible to fully understand all the contributions, impacts, and unique considerations of any given academic program. Institutions will need to situate these financial metrics alongside their knowledge of program alignment with the institutional mission and workforce needs; accreditation requirements; structural limitations to the number of students a program can serve; whether the program is new and still growing; the program's ability to attract outside funding; its track record of student success; the amount of teaching, research and public service being done by faculty and graduate students; its prominence as part of the institution's history or brand recognition; and more.

The NCHEMS analysis adds two key components to the existing productivity metrics. First, we developed a method for disentangling programs from departments. This involves identifying the number of student credit hours enrolled in each department by students in each academic program. This will allow SDBOR to identify how each program impacts its "home" department relative to other departments, and the extent to which each department educates students in its own programs versus students in programs housed within other departments. This analysis can also show the extent to which each program is "self-contained" within its home department or is more interdisciplinary and spread across multiple departments. A low-enrollment but interdisciplinary program is likely to have a negligible financial impact—either positive or negative—on the institution. That is, its existence neither adds to nor detracts from institutional costs in a meaningful way because its students are not taking courses that are concentrated in any particular department.

Second, an analysis of the number of faculty, relative to the number of students, is a key indicator of departmental costs. This is a simple but useful window into financial efficiency, as the bulk of expenses within an academic department are in faculty salaries and benefits. This type of metric also avoids some of the challenges associated with looking at expense- to- revenue ratios at the departmental level, which can vary with unavoidable equipment costs and the different salary levels paid to different individuals. Simply looking at revenue versus expenses also obscures the fact that departmental tuition revenue is expected to subsidize other functions within a university.

Finally, a comparison of average class sizes at different course levels (lower division, upper division, graduate) offers another indicator for operational efficiency at the departmental level. Legitimate differences in pedagogy, lab space requirements, program caps, etc., impact

departmental student-faculty ratios, and both regents and institutions should consider those differences when drawing meaning from class size data.

Since costs are located within departments, departments that have both low credit hour production relative to faculty FTE and small class sizes offer a good place to start looking for places for a deeper examination into programs that may not be meeting expectations for productivity. A next step is to search for especially small programs across all departments that have little impact, in terms of credit hour production, on other departments. Programs identified through this process are ones that warrant further examination. Departments that are below their respective institutional averages across all three of these metrics—student credit hours per teaching faculty FTE, lower-division class size, and upper-division class size—are likely worth a closer look. Though many departments will be below the institutional average on one of these metrics, only a small minority of departments are likely to show up as below average on all three. It is appropriate to ensure that departments where faculty are disproportionately dedicated to research and/or public service are not flagged as being underproductive by a method such as identifying teaching faculty FTE by multiplying each individual faculty member's FTE by the percentage of their load dedicated to teaching.

As each institution defines its departments differently, it is not possible to compare departments across institutions, even ones that have similar names. Some institutions are organized to have very few departments while other institutions have more, which impacts the analysis. It is possible to compare departments to each other within a given institution, and to compare each department to institution-wide and system-wide averages.

For those departments that have low class sizes and low credit-hours-per-faculty, academic programs with few graduates may exist. By itself, a low number of graduates does not necessarily indicate a financially unsustainable program. However, when a program produces few graduates *and* is housed in a department that is educating a below-average number of students per class and per faculty member, it warrants a closer look. Changing or eliminating small programs in financially weaker departments has the potential to improve the department's, and by extension, the institution's overall financial health. It is important to make sure that certain programs are excluded, such as inactive programs, programs in the process of being phased out, and noted cases in which programs have already been granted exceptions to SDBOR productivity thresholds through the existing review process.

The definitions of “program” and “department” vary. To help SDBOR overcome this challenge, NCHEMS created crosswalks between budget units and academic departments, and collapsed some majors/programs together that have the same 6-digit Classification of Instructional Programs (CIP) code. This approach has the advantages of simplifying the analysis and combining programs that are likely to be substantially similar in terms of coursework requirements, meaning their institutional financial impacts are highly intertwined by virtue of using the same faculty, staff, and other costs. Teasing apart the details of individual majors/programs, and the differences that exist between units within larger departments, will be an important subsequent step in examining programs that are identified, through the process described above, as warranting further analysis.

Next Questions

Programs/Departments identified using a methodology like the one described above may warrant a deeper dive. Institutions should provide context and answer the following questions.

1. Does this program have a special purpose in:
 - Serving the institution's mission?
 - In particular, this may apply to areas that advance universities' research missions and programs that serve a population of focus.
 - Meeting state/local workforce demand?
 - Meeting attainment of other state goals?

2. How is this program/department connected to other programs/departments?
 - If the program is small, would its courses need to be offered as part of the general education curriculum or a related-but-larger program even if the program itself is eliminated? If so, it may not be financially inefficient.
 - If the student-FTE-per-faculty FTE is low, do faculty members teach in other departments or as part of a collaboration across institutions? If the answer is yes, the department may be more productive than this measure of its faculty's instructional activity indicates.
 - How would eliminating the program affect the teaching loads of the various departments in the institution, including the home department? Assume that none of the students enrolled in the program enroll in other programs.

3. Are there ways to improve this program/department's efficiency?
 - Possible options that some SDBOR institutions are already using:
 - Combine small programs/departments to eliminate overhead.
 - Reallocate resources from Graduate to Undergraduate areas or from Upper Division to Lower Division courses.
 - Redesign the curriculum so that fewer courses are offered as options in the program. This will have the double benefit of creating larger, more efficient classes and ensuring that students have a more coherent path through the program.
 - Redesign the curriculum and/or course scheduling to attract more students.
 - Offer programs/courses as collaborative efforts with other SDBOR institutions rather than via standalone departments.

4. Are there other special factors that should be considered (e.g., the program has a strong track record of attracting grant funding, the program is new and still growing, the program was just recently overhauled, the program is already scheduled to be phased out)?

Additionally, while concern for financial viability demands attention to inefficient programs and departments, the BOR should not lose sight of the need to identify programs that should be added or expanded. Larger, more vigorous programs also have an impact on financial viability—

in this case a positive impact. In identifying programs in which additional investments are warranted, the following factors should be considered:

- Workforce demand juxtaposed against production of degrees in related fields. Does workforce demand significantly exceed the degree production in fields that prepare individuals for entry into this occupation? In answering this question, the assessment of existing degree production should include non-BOR institutions.
- Would expansion of the program reinforce the offering institution's existing mission, without expanding it?
- Would investment in the program enhance the capacity of the institution to deliver the program to sites elsewhere in the state and improve overall efficiency of program delivery across the institution or the system?
- Would investment in the program provide access to the program for students who currently have limited access?

Workforce demand data suggests that there may be real opportunities to develop programming that lead to sub-baccalaureate credentials that are linked to South Dakota's specific economy related to construction, machining, and agriculture, among other blue-collar occupations. Considering the demand for individuals with bachelor's degrees, there appears to be a shortage of accountants, teachers, health care providers and managers. In some cases, such as with teachers, it is unclear whether the supply bottleneck is due to inadequate capacity or insufficient student demand. This indicates that the solution may not simply be as simple as establishing or expanding a program. These data, together with our experience elsewhere, suggests that programs that may have the brightest growth potential are those that are shorter-term, low-cost options in fields such as health care administration and business management.

Examining SDBOR Institutions' Financial Viability

A central element in this project's scope was to develop a means by which the BOR, its staff, and the institutions can assess the likely impact changes in enrollment and other drivers of revenue and expenditure patterns may have on each institution's future financial health. This section provides a brief overview of other states' efforts to monitor institutions' financial health, outlines the conceptual approach that underpins the "stress tests" that we developed, and describes the tests themselves and how they work.

Overview of States' Financial Monitoring Approaches

Across the country, states vary in their approach to understanding the financial health of their public postsecondary institutions. In some states, South Dakota included, a statewide governing body is responsible for the ongoing viability and sustainability of the state's public higher education institutions (or a portion thereof) to ensure educational opportunities for its citizenry and good stewardship of state resources. To fulfill this responsibility, many governing bodies have developed frameworks by which university and system leaders collaborate to enhance an institution's financial success through monitoring financial health and, when necessary, requiring institutions to take actions to ensure their ongoing viability and sustainability.

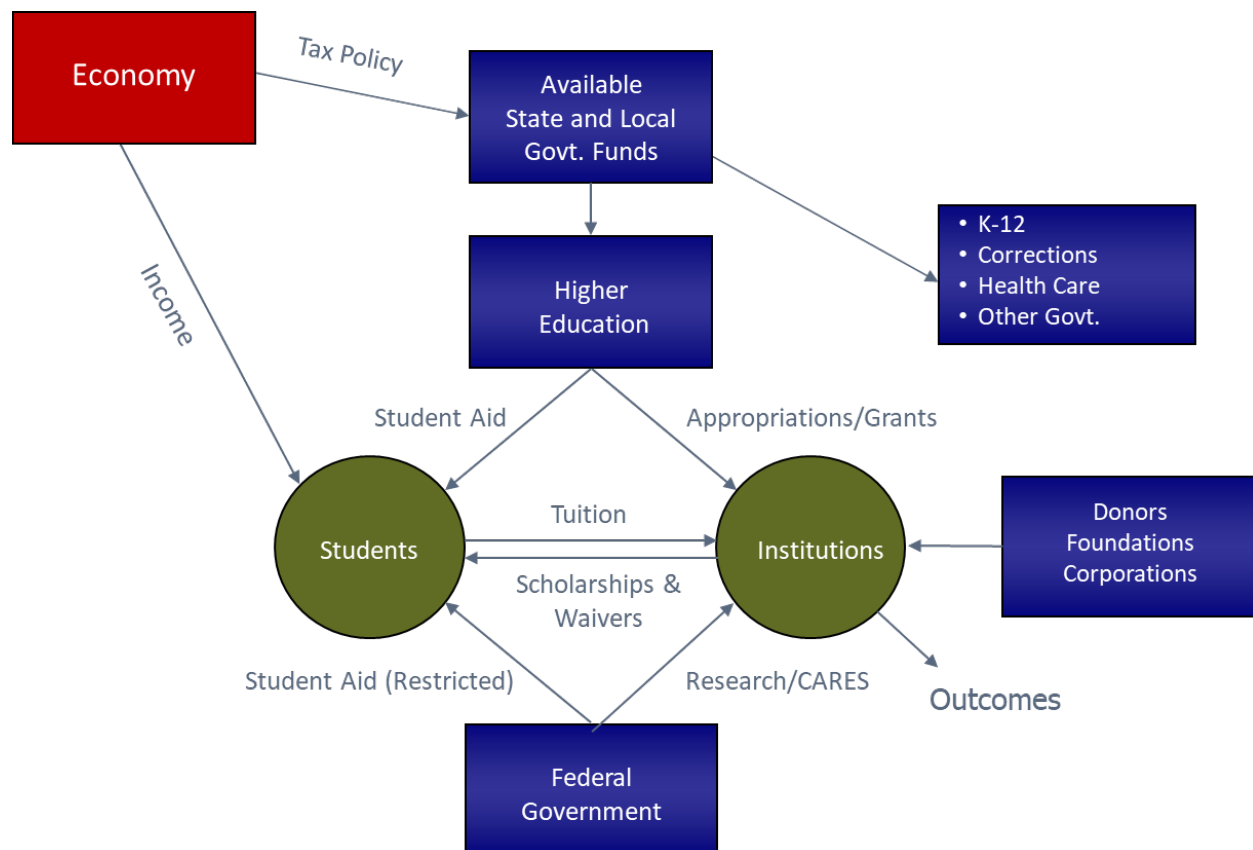
No two states execute the responsibility to ensure financial health of colleges and universities in the exact same way. Across the nation, however, similarities emerge:

- **Monitoring health at the institutional level:** States that monitor financial health typically do so at the institution level, and do not extend their analyses into the divisions or departments of the college or university. Some states' governing boards do require institutions to conduct periodic or episodic reviews of their programs and report results.
- **Use of financial ratios:** The use of certain financial ratios has become a standard for the states that monitor financial health. Trend analysis of enrollment, revenue, expenses, reserves, and debt and associated ratios figure predominately in the evaluation process.
- **Use of thresholds:** The National Association of College and University Business Officers (NACUBO) has worked over the years to develop standards for these broad financial ratios: operating margin, primary reserve ratio, minimum reserves, and the viability ratio (which focuses on debt). Accreditors evaluate institutions against financial health standards that use these ratios. Likewise, the states that monitor financial health often adopt these NACUBO standards as thresholds or establish their own for each of the monitored ratios. When institutions' ratios fall below specified levels, steps designed to lead to improvement are commonly required. State agencies with responsibility for financial monitoring sometimes work with accreditors to conduct these reviews.
- **Latitude to allow institutions to define paths to viability:** Of the states that monitor financial health, institutions are often called to develop and execute plans to confront current or anticipated financial challenges. While a state- or system-wide governing body may provide feedback on those plans, and guide their development and implementation, it is relatively rare for governing bodies to substantively adjust, revise, or change institutionally defined strategies to improve their financial standing, except in clear cases of financial exigency.

Conceptual Approach

Public higher education institutions derive revenue from an array of sources, often in interrelated patterns as reflected in Figure 27. The importance of these diverse revenue streams varies among institutions according to their missions and student body characteristics; but in all cases the two principal sources of discretionary funding that are most closely related to institutional financial health are state appropriations and tuition revenue.

Figure 27. The Flow of Funds



Although additional revenues come from philanthropic sources, few of these dollars can be used for on-going operations and should not be counted on to fill funding gaps. The same is true of restricted funding for research.

The revenue streams from the state and students depend on the health of the state's economy. The healthier the economy the higher the levels of tax revenues available to the state and the more income available to students and their families. But healthier state revenue collection does not necessarily translate into more funding for higher education. States have many competing demands for these revenues—K-12 education, health care, public safety, etc.; higher education funding ultimately depends on legislative priorities and allocation decisions.

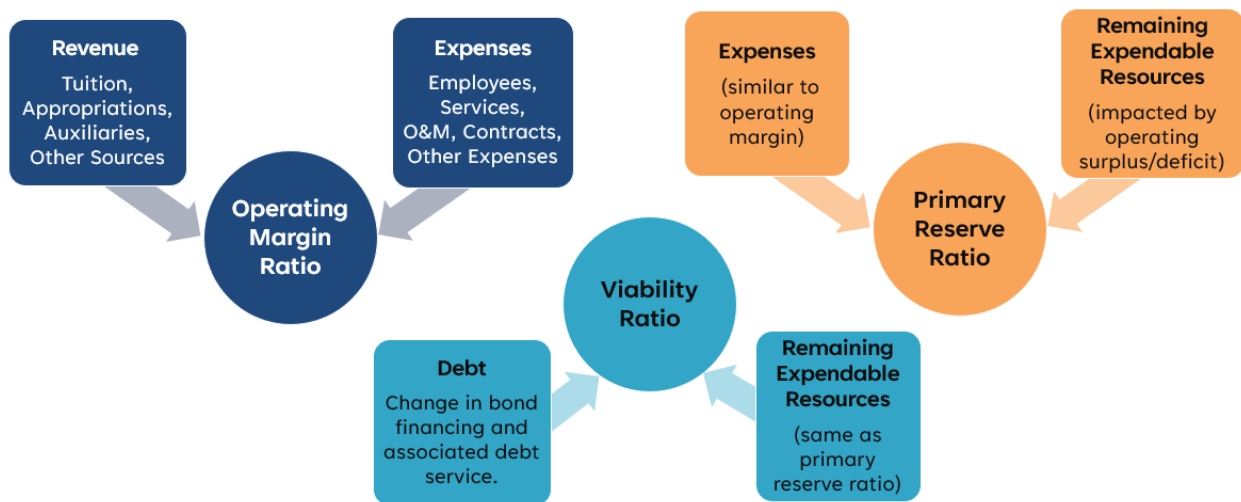
The Stress Tests

As the financial viability of public institutions ultimately is dependent on revenues from students and the state—and the ability of the institutions to control costs—the stress tests need to focus on the impacts of potential changes in those two revenue sources and in expenses. The extent to which institutions can contribute to their own financial sustainability through expenditure reductions is revealed at a macro level from comparisons of expenditure levels at peer institutions. More detailed information about the ability of institutions to control expenditures can be obtained from analyses of department and program level data as described previously in this report.

In designing the stress tests, the first necessary decision was to select the metrics to use as evidence of financial health. The federal government and accrediting agencies have traditionally used the Composite Financial Index (CFI) for this purpose. The CFI is a combination of four other financial metrics: the operating margin ratio, the primary reserve ratio, the viability ratio, and the return on net assets ratio. Although the CFI itself is not always useful due to its high level of abstraction, the underlying metrics—other than the return on net assets ratio, which measures the performance of endowments and other investments and is more relevant for private institutions—provide a good view into the financial health of public institutions, especially if they are not obscured by combining them into a composite index. Therefore, the stress tests are designed to estimate the impact of changing conditions and assumptions on each of those three measures.

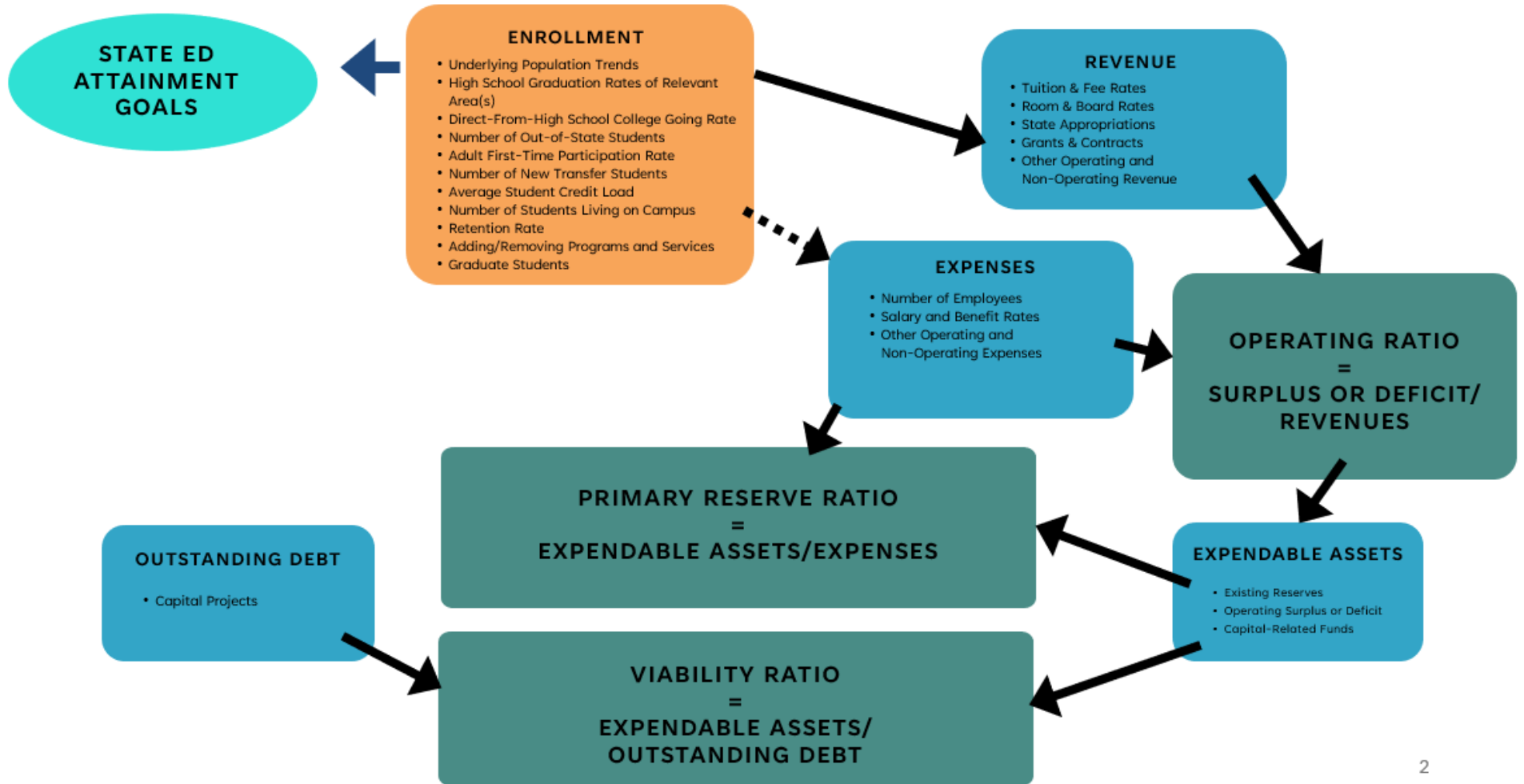
The basic components of each of these three ratios are illustrated in Figure 28.

Figure 28. Modeling Financial Viability



To implement the stress tests, NCHEMS developed an interactive tool that re-calculates each of these three measures for each institution for five future years based on changes in the underlying data. For example, if we assume that the college-going rate will rise, the model will produce an improvement in the operating margin ratio based on additional revenue generated by the new students (and partially offset by additional costs to serve them), as well as related changes in the primary reserve and viability ratios that each rely on information about projected operating margins. Figure 29 provides a more detailed illustration of the variables that affect each of the metrics, and the specific mathematical relationships among them. Each of the variables in the orange and blue boxes can be adjusted to produce new estimates of the three measures of financial health.

Figure 29. Adjustable Variables in Relationship to Measures of Financial Health



Although the model permits adjustments of any of the variables listed above, the model also incorporates data from the BOR reaching back to 2017 to allow for trend analysis and support the creation of realistic scenarios (which will be discussed later). NCHEMS also developed enrollment projections for each institution based on empirical data about the geographic areas from which the institution typically recruits along with projections for high school graduates for those areas developed for this project in partnership with the Western Interstate Commission for Higher Education (WICHE).⁵

Finally, it is important to recognize that the stress test's focus on institutional financial health provides valuable information, but it does not address whether an institution is making meaningful contributions to the state's educational attainment and economic development goals. An institution can be addressing critical talent shortages and offering educational opportunities to residents who would otherwise have no such access, and still be struggling to make ends meet. Viewed against how well the institution is contributing to state goals, the stress test provides an indication for how well an institution is positioned to be able to continue making contributions of the same magnitude. The teal oval in Figure 33 is a visual reminder of the importance of this perspective.

Ultimately, this model supports the SDBOR's planning responsibilities as higher education faces a confluence of factors that will put pressure on institutions' financial positions. The model allows SDBOR to manipulate key variables such as changes in state funding, swings in enrollment demand from each institution's historic sources (those that are based on geography, income profile, age, and other characteristics), shifts in cost structures (such as benefits), and even system or institutional decisions (about debt, programs, marketing, etc.). Together with detailed realistic, and carefully sourced enrollment projections for each of its institutions,⁶ the model gives SDBOR a powerful tool for designing and testing how each institution may be impacted by different scenarios.

Limitations

As with any effort to develop accurate projections, the modeling developed for this project are subject to various limitations. Caution is needed when interpreting the results of simulations. Given the limitations of financial modeling, the scenario results should not be construed to be exact, but rather more of a directional indication of whether or not a certain set of assumptions will improve or impair the financial health of an institution. The most important limitations of the tool include:

⁵ WICHE's *Knocking at the College Door* report is the nation's most commonly used source of projections of high school graduates.

⁶ NCHEMS gathered data from SDBOR about the geographies from which each institution draws its students. We then provided that geographic data to the Western Interstate Commission for Higher Education (WICHE), which developed the projections of 9th graders and high school graduates that went into the model. WICHE has a well-established reputation for making projections of high school graduates by state and race/ethnicity, for which it published updates on a 4-5 year cycle (knocking.wiche.edu). These projections which are widely used by enrollment managers throughout the nation to develop recruitment and retention strategies. The projections WICHE produced for this analysis are based on the data used for their 2024 projections.

1. Lack of precision in enrollment projections. While the demographic data underlying enrollment projections are reliable, there is increasing uncertainty about rates of participation in higher education and student choices of institutions.
2. Possible imprecision in revenue and expense projections. For many dollar values, the tool allows users to toggle between using a linear trend, the current value, the current value plus predicted inflation, and other options. Predicting how inflation will change, and whether current trends will continue, requires assumptions that may prove to be incorrect. Additionally, there are some values that are simply unpredictable and change from year to year. Examples include: revenue from grants & contracts, expendable assets dedicated to capital projects, depreciation, future changes in long-term debt, and “other” operating and nonoperating revenue and expenses.
3. Inability to predict legislative actions. There are reasonable assumptions that can be made based on past levels of state support, but there is no formula or other funding model in place in South Dakota that could be used to calculate estimates for future state appropriations levels according to changes in enrollment, performance, or other factors. Rather, the level of state appropriations to higher education institutions in South Dakota is largely a product of political negotiations.
4. The model does not capture all of the relationships between variables. A large increase in tuition, for example, may lead to a decrease in enrollment, which would reduce the revenue expected from the tuition increase. The tool does not model these types of complex relationships.
5. The model cannot predict the impact of strategic investments. Institutions regularly invest up-front money in programs and initiatives that are designed to increase revenue over time (often through increased enrollment resulting from recruitment or retention efforts) or reduce expenses. These investments may make the balance sheet look worse in the short term, but better in the long term. Each investment’s likely ROI will have to be calculated outside of this model, though the model can incorporate the results.
6. In order to generate results for the institutions in a comparable manner, NCHEMS has applied a consistent methodology for the scenarios described below. There may be appropriate reasons to modify that approach to account for distinct conditions at any single institution that might produce results that better reflect those conditions. Institutions will have better information about their own future strategic plans and how those plans may affect the results of these stress tests.

Summary

Given the analysis on the preceding pages, the following list summarizes the issues that we believe to be a priority for the SDBOR to address:

1. While South Dakota is not projected to see a decline in traditional sources of postsecondary enrollment demand, that does not mean that it will not be impacted by bleak demographic forecasts beyond its borders. SDBOR institutions attract many non-resident students, especially from Minnesota and Iowa, states expecting downturns in

numbers of traditionally aged students. In addition, Minnesota’s new North Star free college program may affect SDBOR institutions’ recruitment in as-yet-unknown ways. Moreover, even if the statewide projections are positive, population shifts within South Dakota will differentially impact SDBOR institutions. The bottom line is that these broad demographic trends will intensify competition for students—even among South Dakota residents. These trends may also potentially alter the composition of the student bodies that SDBOR institutions enroll, in terms of attendance intensity (full- or part-time), status as a first-generation student, geographic origin, and family income.

2. This demographic context, as well as the uncertainty of state funding, means that SDBOR must continue to monitor its institutions’ financial health. The modeling conducted for this project highlights risks that vary for each institution. These tests offer South Dakota a first-of-its-kind tool to carry out this oversight. System office staff and the Regents are understandably concerned about efficiency and effectiveness in the performance of academic programs. Our analysis unsurprisingly (based on our experiences elsewhere) finds that program productivity is highly variable across the SDBOR institutions, but the options for addressing those that appear to be inefficient are also complicated by issues of joint production, inter-disciplinary activities, and budgeting structures, making it difficult to simply cut an underperforming program. In addition, there may be pedagogical reasons for below-average performance, and workforce-related reasons to keep a low-performing program active (while potentially also seeking improvements).
3. Like most states, South Dakota makes appropriations to the institutions based mainly on what institutions received the prior year (known as “base plus” models). Changing demography and other pressures are revealing the limitations of this funding approach in other states, one which also fails to direct the bulk of state aid to institutions on the basis of costs (apart from marginal costs related to inflationary pressures) or a direct linkage to state or system goals. Moreover, base plus approaches fail to ensure that funding streams adapt to address changes among institutions in the programs they offer and the students they serve—both of which can be linked to variations in costs. This neglect has disproportionately impacted some institutions more than others. Finally, a base plus mechanism assumes that the funding level at the time when the base was established was a fair reflection of the funding the institutions needed to carry out their different missions effectively and efficiently. That may or may not be the case in South Dakota, but we have found reason to question that assumption based on our experiences in other states in which we have worked. In sum, the SDBOR institutions are not currently funded in a manner that recognizes the costs of maintaining state assets, adequately supports the different missions and student populations served by each institution and stimulates an empirically informed policy conversation about the shares of overall funding to be borne by the state versus students.
4. Against the demographic backdrop just described, institutions cannot afford to “be all things to all people” as they could under conditions of stable growth. To support efficient operations and ensure the delivery of high-quality academic programs to residents everywhere within their borders, it is increasingly important for states to have a clear sense of how their investments are complementary across the institutions they own. The

good news is that South Dakota institutions are already reasonably differentiated, with each institution having their own specialties. However, as conditions and needs are constantly shifting, both the state and the institutions would benefit by continuing to review and refine “operational missions” for each institution—statements that describe what services each institution is expected to provide to what audiences, and what special history, status, and other characteristics (e.g., Land-grant, tribal-serving) are essential aspects of an institution’s identity. Enhanced clarity in these statements provide easier answers to the following key questions: What should be the programmatic specialties in each institution? At what level, especially graduate-level programs? How should program development into new knowledge areas (such as Artificial Intelligence) be managed in ways that maximize the insights to be gained from and applications to be made of that knowledge? What audiences should each institution be specially focused on serving, in terms of full- and part-time attendance, traditional-aged students or adult learners? SDBOR policies do offer more programmatic guidance than many other states do, by listing the various disciplinary foci of each institution.⁷ With respect to audiences, South Dakota also offers more direction for who each institution is expected to serve than most other states (many of which make no mention of this at all), but usually by describing students as residential or not, traditional or not, and sometimes as part-time enrollees (although where this information is described in policy is under a section confusingly titled “Organizational Structure” not “Audiences”). This leaves some latitude that can result in populations being left out by not more explicitly assigning audiences to institutions.

This question of mission extends more generally to a broader concern about evolving workforce demand for postsecondary degrees and certificates. Namely, to what extent should the BOR institutions—and which ones—develop and expand vocationally oriented sub-baccalaureate programming to meet specific statewide and local needs, as well as to provide more attractive educational options for working adults who are finding it necessary to develop new knowledge and skills? These questions are particularly germane for USD and BHSU in their oversight of campuses located in the two largest population centers in the state.

Also critical to answering this question will be understanding how the BOR can bolster constructive collaborations with the technical colleges in South Dakota in ways that leverage the technical colleges’ expertise and capacity while also expanding it so that there are enough workforce-focused programs and graduates to meet employers’ needs throughout the state. Partnerships with the technical colleges can additionally address ways that smooth students’ pathways from technical degrees and certificates to associate and bachelor’s degrees.

Moving beyond the academic portfolio, there are likely opportunities for the system to generate more efficiency by introducing more scale in administrative services for all or a

⁷ See the Section D, “Academic Curriculum and Credentials” for each institution under SDBOR policy 1.2. Mission Statements.

subset of its institutions (e.g., managing accounts payable on behalf of all six institutions). In such cases, SDBOR will want to determine if the standardization that often comes with centralization is equally beneficial to all institutions, or just to those that have less capacity to manage certain services for themselves? SDBOR will also need to determine whether it is best to operate a shared service from the board office, or if it is more sensible to do so by assigning that task to one of the institutions with a particular competency in a given area? In the latter case, how will it ensure that the needs of other institutions are given appropriate priority?

5. Notwithstanding progress made by SDBOR in the wake of the SB 55 implementation that yielded new program review and approval policies that contain many worthy elements, there is room for improvement in the measures used to align that policy to workforce and student demands. Among the remaining challenges are:

- a. Greater clarity concerning how the Regents will interpret what duplication means in their review of program proposals. This is especially true with respect to programs offered exclusively online.
- b. A need for program approval processes that add student characteristics to the criteria to be applied when assessing whether a program is unnecessarily duplicative.
- c. More purposeful incentives that spur institutions to collaborate on program delivery in ways that ensure widespread access to programs, especially those that are closely linked to state and regional workforce needs and promote efficient use of resources. Under emerging conditions, it will be important that institutions operate as efficiently as possible, which will require institutions to shed costs, including those related to program oversight and delivery.

Collaborations among institutions can ensure that these choices do not come at the expense of access to programs. The state will need to build new approaches that align institutional missions, statewide strategy, and funding in ways that encourage institutions to be both suppliers of programs to students attending other institutions and receive sites for needed programs produced elsewhere. The expectation should be that institutions will seek to import programs from other institutions and offer them in a collaborative fashion rather than create new programs. To the system's credit, SDBOR institutions already participate in a number of collaborations that allow them to offer programs that would not otherwise be financially viable. Funding mechanisms that encourage more of these types of collaborations would help ensure that they continue, and expand, in the future.

Similarly, and as discussed above, SDBOR institutions have an opportunity to increase their collaboration with South Dakota's technical colleges. NCHEMS understands that SDBOR recently passed a policy intended to smooth transfer and articulation for students moving from the technical colleges to one of the regental institutions, and this is promising. In addition, there are programmatic collaborations, especially in programs linked to high-demand occupations, which may improve student's academic progress, promote affordability, and satisfy local and statewide workforce needs.

- d. A more proactive role for SDBOR, working in collaboration with other state agencies, to direct institutions to develop (innovative) programs that address specific state and regional workforce needs in the state.
6. South Dakota is fortunate among the U.S. in being able to anticipate growth in the traditional pipeline. However, more attention to two particular populations is warranted according to our analysis of the data, reinforced by observations drawn from our engagement with stakeholders.
 - a. Adult learners who would benefit from upskilling and retraining to be better positioned to be full participants in the evolving economy. This may involve more meaningful collaboration with the technical colleges in the state, as previously discussed.
 - b. Expanding service to South Dakota's Native American populations is another subject for special attention, especially given the relatively low participation rates throughout the center of the state, where those populations are concentrated. State policy in support of the tribal colleges would be worthwhile to consider, among which might be incentivizing collaboration between them and SDBOR institutions.
7. Effectively meeting the postsecondary education needs of Sioux Falls has long been a challenge for SDBOR, with multiple governance and structural arrangement over the past few decades, yet SDBOR and its institutions must develop an approach that effectively leverages USD's existing campus in Sioux Falls that addresses the needs of underserved populations in a manner that is complementary to what the other SDBOR institutions are offering Sioux Falls residents. In this context where unproductive competition among its institutions is a real possibility, SDBOR has a role to play given that the needs of the city's residents and its employers are unlikely to be well served by the collective actions of institutions pursuing their own self-interest. It will be critical that the BOR maintain focus on how its member institutions are working together effectively to meet Sioux Falls's diverse needs. SDBOR faces similar issues in Rapid City. That area's adult learners who want to upskill or otherwise advance in fields need easy access to a variety of relevant programs (beyond those offered by SDSMT) just as residents of Sioux Falls do.

Recommendations

To address the issues identified during the project, NCHEMS makes the following recommendations. All of these recommendations are intended to work in alignment with the current SDBOR strategic plan.

1. The BOR should enhance operational missions for each institution for the purposes of:
 - a. Creating more focus for each institution to help ensure that institutions know what their "lane" is (and is not).
 - b. Better ensuring that sub-populations of South Dakota's communities are more effectively served. In particular, the operational mission for each institution should specify the extent to which it should serve:
 - i. Adult learners of varying ages.

- ii. Transfer students from other SDBOR institutions, technical colleges, and tribal colleges.
 - iii. Residential students versus commuter students.
 - iv. Geographic locations, especially concerning Sioux Falls and the large expanse of underserved populations in the Lakota region of the state.
 - c. Streamlining the program review process in ways that allow institutions to establish programs within their operational mission with a less intensive review focused primarily on evidence of demand for graduates of the proposed program, as well as enrollment and financial projections. New program approval processes should also employ comparable and defensible methods for evaluating proposals and metrics provided to justify them. The extent to which these efforts can be streamlined presumes that the operational missions are defined in a way that describes an institutions' program array and audience so clearly that concerns over inefficient program duplication are largely addressed.
 - d. Better aligning each institution's brand with its own comparative strengths and using that focused brand to drive more effective recruitment activities. In Dakota State, SDBOR already has an example of the power of leaning into a distinctive mission for differentiating itself from other broad-access public regional comprehensive institutions across the country, many of which are facing similar enrollment challenges from unfavorable demographic conditions.
- 2. The BOR should continue to review and adapt its policies and practices related to program review and approval in the following ways.
 - a. The BOR should enhance its existing policy for identifying programs that are subject to review and potentially eliminated or paused by examining the relevance of programs to measures of local demand for graduates and student success.
 - i. Occupational projections that are sensitive to different locations within South Dakota will help demonstrate employers' demand for graduates of a specific program. Care should be taken, however, to not draw simplistic links between programs and occupations in numerous fields, as graduates of numerous programs are qualified to fill some occupations in demand. Such information should be supplemented by data about the skills requirements of jobs in demand (as these data become more widespread), both to pinpoint how competencies being taught in programs are relevant in the workforce as well as to offer feedback on the curriculum.
 - ii. Student retention and graduation rates. SDBOR should monitor the extent to which programs are effectively helping students complete and raise concerns about those that post consistently poor measures of student success. Programs with lagging outcomes that fail to make improvements should be subject to a deeper examination that could possibly result in suspension.
 - iii. Employment outcomes among program graduates. SDBOR should raise questions about programs that do not yield earnings above a certain

threshold sufficient to indicate that the payoff to an award is worth the cost. Thresholds such as earnings relative to 200% of poverty or relative to a high school graduate's median income are options for triggering a closer review of programs. Care should be taken to recognize that many socially important jobs are relatively low-paying ones, despite a requirement for a degree, such as teacher, social worker, etc.

Additionally, SDBOR should supplement its current focus on programs' enrolled students and graduates by taking a broader view of costs that are situated within departments that house programs. By better accounting for the complex relationship between majors, general education courses, and departmental resource allocation, SDBOR can provide assistance for achieving cost reductions. While the analyses that follow should respect important pedagogical differences that contribute to varying costs, additional analyses that will help guide decisions about the continuation of a program or the organization of the academic structure at an institution include:

- i. Semester credit hour production by the department housing the program in total and per (teaching) faculty member. This measure helps account for the extent to which program faculty may carry a heavier burden of the instructional load than the size of their program alone would indicate. If the department housing the program produces a large number of credit hours, closing the program is unlikely to make a significant difference in costs.
- ii. Average course/section sizes and number of courses offered at each level (lower-division, upper-division, master's, and doctoral) by departments. These views offer insight into where cost savings may be achieved. Such analyses should be careful not to establish fixed thresholds (e.g., "below average") that fail to account for real differences in pedagogy across departments and may also become gradually more difficult to clear as institutional efficiency improves, thereby raising the average.
- iii. Costs of delivery. Institutions should take care that decisions about how best to deliver courses, with what resources and through which modality, best meet the needs of students, promote their success, preserve (or enhance) quality, and simultaneously are budget-conscious. Such considerations might factor in whether a department hires an (appropriately qualified) adjunct faculty member versus paying for an overload at a higher rate to a full-time faculty member.

Finally, when a program is out of step with the institution's operational mission, SDBOR should press the institution to explain how that program's continuation reinforces the institution's strategic priorities and its contributions to state educational goals. This is especially true in cases where a program is flagged for low productivity. When a program is designated for discontinuation, SDBOR should ensure that any remaining students can complete their studies at another institution in a manner that avoids imposing unreasonable additional costs or

inconvenience. SDBOR should also consider how preserving access to the program through collaboration with another system institution might address students' and local workforce needs, particularly when those workforce needs do exist but are predictably low from year-to-year.

- b. Regarding the approval of new programs, it is becoming apparent that states and systems across the country are facing heightened tension over new program development, as institutions increasingly view new programs as a marketing tool to attract a dwindling number of traditional-age students. South Dakota is experiencing some of this phenomenon as well. The BOR should work to ameliorate those tensions with a couple of strategic activities.

First, the BOR should clarify its definition of what constitutes “duplication.” Current policy simply states that duplication is only allowable when workforce demand justifies it, and that the Board may elect not to approve programs that it deems to be duplicative. As described elsewhere in this report, institutional leaders are not clear about the criteria that may apply in such cases. More substantively, the Board’s current allowance for duplication should be supplemented to account for programs that are programmatically similar but are designed to serve an entirely different student population. For example, the Board might consider a program aimed at working adults that offers courses in the evening, on weekends, through competency-based assessments or some other delivery model to not be duplicative of a more traditional, residential program. In such cases, it would also be appropriate for the Board to require institutions to pursue collaborative arrangements that could make potentially duplicative programs available to wider audiences. Programs offered exclusively online merit special consideration. Yet even for online programs, institutions can combine forces to deliver content and provide effective, often in-person student support services where appropriate to drive student success in such settings.

Second, the BOR has an opportunity to play a more proactive role in identifying programs to be offered to students in different parts of the state. In this regard, its role should be to:

- i. Conduct needs assessments, including data analysis of occupational demand and job postings in order to identify gaps in the supply of, and demand for, academic programs. This analysis should address the need for sub-baccalaureate degrees and certificates, not just demand for programs leading to a bachelor’s or graduate degree. The BOR staff should work closely with the Department of Labor to identify these gaps, which should be specific to the various regions in the state.
- ii. Identify institutions best equipped to meet identified unmet needs. In general, our review of South Dakota’s workforce needs shows ample room for graduates of sub-baccalaureate programs that deliver specific skills in demand. When combined with South Dakota’s relatively weak participation among adults, it seems apparent that SDBOR’s proactive role in this space could help by assigning (through some consultative

process with the institutions) the task of designing and implementing programs to meet these needs. Wherever possible, such programs should be developed to complement and amplify the work of the state's technical colleges to maximize efficiency.

- iii. Ensure collaborative delivery of programs when appropriate, including by establishing a funding source to incentivize collaboration and overcome the real (actual) monetary and non-monetary costs institutions face when they try to develop and sustain joint programs. The established procedures under Board policy 2.3.2.1.2 should also be modified to require either the executive director and/or the Academic Affairs Council to evaluate whether new programs being proposed may be opportunities for collaborative delivery. Such a step should occur as early as possible, ideally at the Intent to Plan phase, and full program proposals should include a required response about how the proposing institution had weighed opportunities to collaborate.

This proactive role would help to ensure that workforce demands in all parts of the state are met. It would also provide a sound basis for making judgments in the program approval process. To aid in this effort, it may be worthwhile for the System Office to consider how it assigns this task in a manner that ensures it is a priority for an individual or individuals in the office. Such a role would center on being a single point of contact for employer relations and workforce development and ensuring that attention remains fixed on this task and on building a coherent strategy across the system around the widely varied input likely to come from employers.

3. SDBOR should conduct a “policy audit” of state laws and regulations and BOR policies and procedures to identify barriers to the successful enrollment and completion of adult students, as well as alignment to the SDBOR strategic plan. Meeting shifting economic and workforce needs and bolstering institutional enrollments depend on the ability of BOR institutions to serve this population.
4. SDBOR institutions range in size, complexity, and mission in ways that directly impact their respective costs of operating. Operating costs for research universities across the nation are generally higher than for teaching-focused institutions due to additional costs of the research enterprise (such as grants management, compliance, and safety) and because the required teaching loads for faculty are quite different, often half what is expected at a regional comprehensive university. Additional consideration should be given to economies of scale and their impact on funding at smaller institutions. South Dakota should develop a funding model for allocating state funds to the institutions in a manner that:
 - a. Provides support for each institution's fixed costs and the maintenance of state assets, including buildings, technology, and other equipment, while treating the curricula as an asset to be preserved. Current board policy 5.5.1.2 sets aside 11.5% of all tuition revenue collected for a higher education facilities fund. The policy further requires institutions to set aside an additional \$2.29 per credit hour

of tuition revenue in a separate locally held fund to be used on board-approved maintenance and repair projects. These policies shift the burden of paying the costs of maintaining state-owned assets onto students, though the state does also contribute general funds. At minimum, the funding model for supporting state-owned institutions should clearly specify how the state itself will share in the costs of maintaining its own assets, in the process distinguishing which facilities and their maintenance costs are borne exclusively by the state versus which are at least partially paid for by students and other sources. Ideally, the annual state allocation should incorporate funds equal to 2.5–3.0% of the replacement value of facilities to ensure that deferred maintenance does not accumulate further.

- b. Recognizes differences in institutional missions by accounting for distinct administrative costs related to research and other distinct functions of the different institutions (e.g., NSU's Center for Statewide E-Learning, SDSU's cooperative extension services).
- c. Further recognizes differences in institutional missions related to instruction—cost variation that is reflected in the fields and levels of programs offered and in the characteristics of students served by the different institutions, especially those students whose success will be meaningfully improved by additional or different support services than what is normally available.
- d. Specifies the shares of these costs to be borne by students and the state, recognizing the uneven capacity of the different institutions in their ability to attract students who have greater ability to pay (out-of-state students, relatively wealthier resident students), and factoring in estimates of the number of students who might benefit from SD Advantage.
- e. Potentially includes performance measures that provide unambiguous direction about state priorities and reward institutions for their success in making increased contributions to the attainment of those priorities.
- f. Allows discretion in directing resources to the system to build capacity—new programs, initiatives to transform delivery—above and beyond what an institution currently has, as well as to pay for services an institution provides on behalf of the state because it is, effectively, the most suitable vendor to do so.

Such a model would provide baseline information on the amount of funding needed to adequately fund each institution, while shaping incentives for institutions to pursue state priorities with greater energy. It would also provide a conceptually sound basis for developing legislative funding requests by encouraging both institutions and legislators to explicitly tie those requests to new capacity or improved outcomes. Finally, such a model would also provide a basis for determining (potentially different) levels of tuition increases at the regental institutions.

5. In keeping with efforts to provide affordable access to adult learners, new Americans, and other demographic groups in Sioux Falls, SDBOR should work with USD and with BHSU to ensure that respective Sioux Falls and Rapid City campuses offer a different kind of postsecondary option that deliberately targets specific underserved audiences. Such an option would address the particular needs of non-traditional and first-

generation students who seek a local non-residential/commuter campus offering relevant programs delivered in convenient formats. While it would need to provide ample, carefully calibrated student support services it would otherwise offer a no-frills teaching-focused college experience. SDBOR and its institutions would be wise to consider certain curricular innovations that are gaining traction among institutions, employers, and even accreditors. Such features include short-term skills-focused programming, competency-based programs, credentials of workforce value and stackable certifications embedded along the path to a degree, and selected baccalaureate programs at 90-100 credits.

Such a model is unlikely to be a significant source of competition for students because it would not be designed for, and would not appeal to, the students who have long been the focus of recruitment by other SDBOR institutions or private institutions. Accordingly, SDBOR should ensure that students attending USD's Sioux Falls and Black Hills' Rapid City campuses face a substantially lower tuition price in line with a no-frills, low-cost option, than students attending campuses with a wider array of amenities and more expensive research missions. Of particular concern is that South Dakota's efforts to serve the Sioux Falls market have struggled to be effective historically, undergoing numerous structural changes. Maintaining tuition pricing that equals or exceeds prices at other BOR institutions will continue to hamper efforts to advance educational attainment in and around Sioux Falls for the targeted populations. SDBOR should work with the legislature to find any resources necessary to offset a loss in tuition revenue that might result from implementing this recommendation.