



VERTERE
COLLEGIATE ADVISORS
Driving Institutional Stability and Transformation

White Paper

Bismarck State College

Polytechnic Transformation & Turnaround

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Executive Overview

This white paper outlines the institutional transformation and financial stabilization of Bismarck State College and presents a replicable operational model for institutional stability and transformation in higher education. The transformation was not the result of a single initiative, enrollment surge, or external funding increase. Instead, it resulted from a coordinated institutional strategy that aligned enrollment management, instructional delivery economics, academic program vitality, operational efficiency, and strategic reinvestment.

Many colleges and universities facing enrollment decline and financial pressure attempt to solve these challenges primarily through enrollment growth or budget reductions. The Bismarck State College transformation demonstrated that long-term institutional stability is achieved through a different approach: aligning instructional costs with enrollment demand, improving operational efficiency, using data to guide academic program decisions, and reinvesting operational savings into strategic programs and student success initiatives.

The institutional transformation model implemented at Bismarck State College consists of five integrated components:

1. Strategic Enrollment Management
2. Data-Driven Academic Program Management
3. Instructional Cost Alignment through Unit Cost Analysis
4. Operational Efficiency and Scheduling Optimization
5. Strategic Reinvestment into Workforce Programs and Student Success

Together, these components form a repeatable institutional stability and transformation model that can be applied to other colleges and universities facing enrollment decline, structural deficits, inefficient program portfolios, and financial instability.

Challenge and Response

Bismarck State College entered 2020 facing one of its most serious institutional challenges: a decade-long downward enrollment trend compounded by the onset of the COVID-19 pandemic. At its low point, BSC's Composite Financial Index (CFI) sat at just 0.6 — well below the 1.1 minimum threshold required to maintain accreditation. Forty percent of all course sections had fewer than 10 students enrolled, and the college had no defined goals for enrollment, retention, or completion.

In addition to enrollment decline and financial pressure, the institution faced operational inefficiencies common across higher education. A large percentage of course sections had low enrollment, academic leaders lacked real-time operational metrics for program performance, scheduling patterns were inefficient, and institutional resources were not always aligned with enrollment demand or workforce needs.

In response, BSC launched a comprehensive turnaround strategy anchored in a new strategic plan with four pillars:

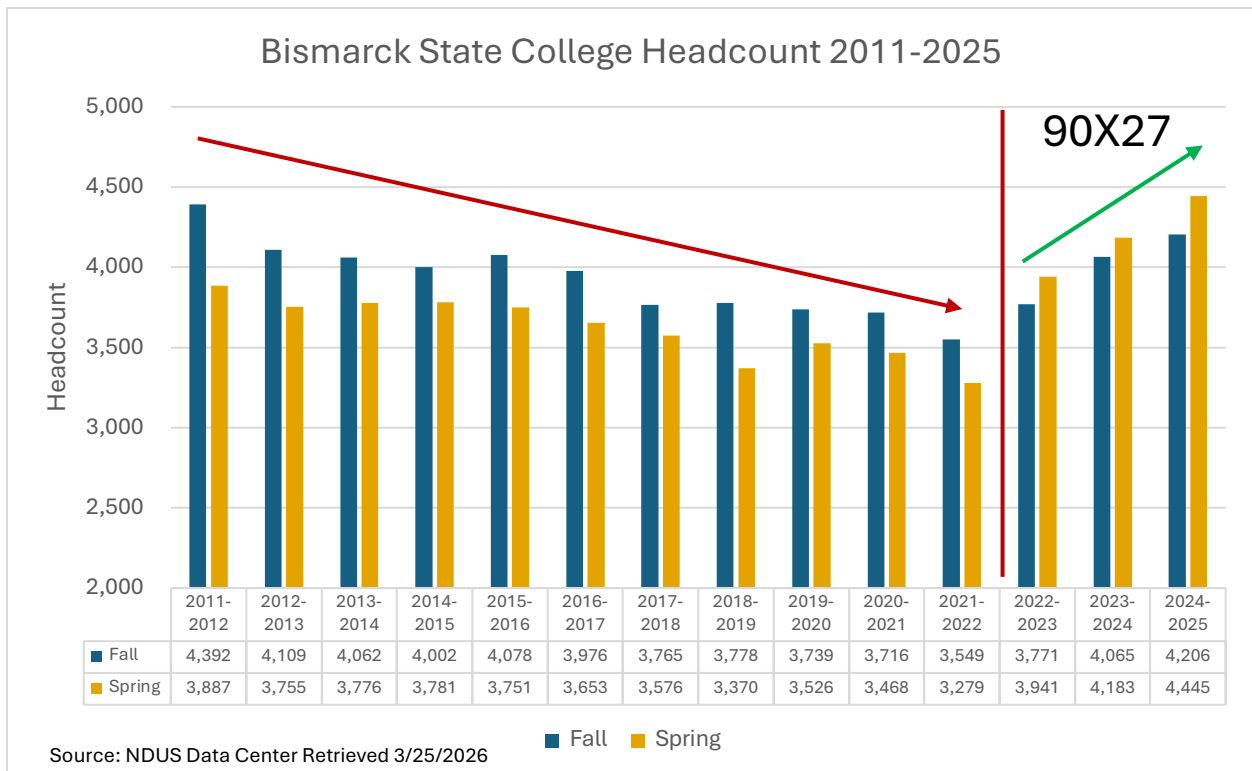
- Student Success
- Linking Talent with Opportunity
- Fiscal Stability

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- Communication

A Strategic Enrollment Master Plan (SEMP) was created to map the full student journey — from initial interest through graduation or transfer — and to identify targeted interventions at every stage.

The results have been transformative. BSC achieved six consecutive semesters of headcount growth from Fall 2022 through Spring 2025, a remarkable feat given that spring semesters traditionally yield lower headcounts than the preceding fall. The 90X27 initiative — a goal to reach 90,000 annual credit hours by 2027 — is now on track to be completed a full year ahead of schedule, with projections showing over 100,000 credit hours by 2027, representing a 35.5% increase over 2021–2022 results.



CFI in 2016	0.6 (below accreditation threshold of 1.1)
CFI in 2023	6.19
Consecutive Semesters of Headcount Growth	6 (Fall 2022 – Spring 2025)
Projected Credit Hours by 2027	100,000+ (35.5% increase over 2021-22)

Strategic Direction and Polytechnic Mission Alignment

The institutional transformation began with a clear strategic direction and mission alignment. The college repositioned itself as North Dakota's Polytechnic Institution, aligning academic programs with workforce needs in key industry sectors including agriculture, energy, cybersecurity, defense, and technical workforce development.

Mission clarity became a foundational component of the institutional turnaround because it aligned enrollment strategy, program development, workforce partnerships, and institutional investment decisions. As North Dakota's only Polytechnic Institution, BSC repositioned its program portfolio to directly serve the state's most critical workforce needs, organized around three strategic industry sectors:

- Agriculture — supporting the industries that feed the region, nation, and world
- Energy — powering communities through workforce training in traditional and emerging energy sectors
- Cybersecurity & Defense — defending critical infrastructure at the regional, national, and global level

Dashboards and Program Vitality Reports

A critical component of BSC's turnaround has been replacing intuition-based program management with data-driven decision-making. Prior to 2020, the college lacked operational metrics beyond traditional budget management — academic leaders had limited visibility into how programs were performing in real time.

BSC addressed this gap by developing the Vitality Report, a comprehensive PowerBI application that gives faculty, assistant deans, and deans a clear, real-time view of program health across multiple dimensions. The platform reports on:

- Enrollment trends by academic discipline, modality, and term
- Student retention rates and academic performance outcomes
- Credit hour production by program and academic year
- Comparative analysis across degree plans and delivery formats
- Section enrollment and fill rates

The Vitality Report empowers academic managers to identify underperforming programs early, allocate resources more effectively, and make informed decisions about course offerings and staffing. Rather than discovering problems at the end of a semester, leaders can now monitor and respond to signals throughout the term.

This shift toward continuous, data-informed management has been central to BSC's ability to reduce low-enrollment sections — cut from 40% to approximately 20% of all scheduled sections — and to sustain the academic improvements that drive financial recovery.

Instructional Cost Alignment — Liberated \$2.8M in Operational Budget

BSC's financial recovery was not built on new funding or increased state appropriations — it was built on operational efficiency. A central component of the institutional transformation was the implementation of Unit Cost Analysis, which evaluates instructional delivery economics at the discipline, program, course, and section level.

Many institutions build budgets at the department or college level, but instructional delivery actually occurs at the course section level. Financial inefficiencies often arise from low-enrollment sections, inefficient scheduling patterns, underutilized facilities, and faculty workload misalignment. These inefficiencies are often not visible in traditional financial statements.

Instructional hours differ from credit hours in an important way: they reflect the actual time faculty spend in the classroom. By calculating tuition revenue and delivery costs per instructional hour, BSC created a discipline-level profitability framework that academic managers could act on. Unit Cost Analysis evaluates metrics such as:

- Revenue per instructional hour
- Cost per instructional hour
- Net revenue per instructional hour
- Cost per student credit hour
- Section fill rate
- Cost per completer
- Low-enrollment sections
- Room and facility utilization

BSC generates approximately 90,000 instructional hours per year. Each dollar of unit cost reduction therefore liberates \$90,000 in budget dollars that can be reinvested. Over three consecutive years of declining unit cost, BSC freed up more than \$2.8M in operational budget. These savings were put directly back into the institution — funding the Great Plains Promise, supporting the Office of Workforce and Economic Development, and rewarding employees.

Budget Liberated Through Unit Cost Savings	\$2.8M+ over three years
Employee Bonuses Distributed	Three rounds of \$1,000 per employee
Employee Salaries	Raised to competitive market rates

The Great Plains Promise — which offered free tuition to eligible North Dakota students — was made possible entirely through these operational savings, with no additional legislative appropriations required. This model demonstrates that mission-driven investment can be self-funded through disciplined management.

Operational Efficiency and Scheduling Optimization

Operational efficiency improvements were achieved through several operational levers that influence instructional economics:

- Section size management
- Section consolidation
- Faculty load alignment
- Adjunct and overload management
- Twelve-month scheduling
- Evening and summer scheduling expansion
- Classroom and laboratory utilization standards
- Program portfolio review
- Modality mix management
- Procurement and operational cost controls

One of the largest cost drivers in higher education is low-enrollment course sections. A course with eight students costs nearly the same to offer as a course with twenty-four students. Increasing average section size and reducing the number of low-enrollment sections significantly reduces cost per student and improves instructional efficiency. By reducing underenrolled sections from 40% to roughly 20% of all scheduled offerings, BSC improved financial performance while maintaining the course availability students need to complete their degree plans.

Operational efficiency improvements across instructional delivery resulted in declining unit costs and improved operating margins without eliminating core academic programs.

Strategic Reinvestment Model

The purpose of operational efficiency was not simply cost reduction. The purpose was to generate reinvestment capacity to support strategic initiatives that would strengthen the institution. Operational efficiency improvements generated millions of dollars in reinvestment capacity that were directed toward:

- Workforce program development
- Technology and online program development
- Student success initiatives
- Advising and retention programs
- Equipment and laboratory upgrades
- Faculty positions in high-demand disciplines
- Marketing and recruitment
- Tuition assistance programs

This reinvestment strategy allowed the institution to grow strategically rather than cut programs. The institution was able to fund new initiatives, support workforce development programs, and invest in employees without relying on new legislative appropriations.

Workforce Alignment and Program Portfolio Strategy

The institution aligned its academic program portfolio with workforce needs in key industry sectors. The creation of the Office of Workforce and Economic Development allowed the institution to work directly with industry partners to develop programs, credentials, and training aligned with workforce demand. The Office takes an entrepreneurial approach, partnering with industry and community stakeholders to deliver workforce-relevant training and education through multiple pathways:

- Traditional degree programs
- Certificates and stackable credentials
- Workforce training programs
- Non-credit training and upskilling programs
- Online and hybrid delivery models

This workforce alignment strategy ensured that program growth was aligned with labor market demand and regional economic needs.

The Institutional Stability and Transformation Model

The Bismarck State College transformation demonstrates a replicable institutional stability model built on five integrated components:

1. Strategic Enrollment Management
2. Data-Driven Academic Program Management
3. Instructional Cost Alignment through Unit Cost Analysis
4. Operational Efficiency and Scheduling Optimization
5. Strategic Reinvestment into Programs and Student Success

These five components work together as an integrated institutional management framework. Enrollment growth alone does not stabilize institutions. Budget cuts alone do not stabilize institutions. Program closures alone do not stabilize institutions.

Institutional stability is achieved when enrollment management, instructional delivery economics, program portfolio management, operational efficiency, and reinvestment strategy are aligned and managed together.

This model provides a framework that can be applied to other colleges and universities seeking to improve financial stability, align programs with workforce demand, improve operational efficiency, and strengthen long-term institutional sustainability.

Results and Institutional Outcomes

The institutional transformation resulted in significant improvements in enrollment, financial health, operational efficiency, and program alignment. Enrollment began to grow after multiple years of decline, credit hour production increased, low-enrollment sections were reduced significantly, operational savings were generated and reinvested, and the institution's Composite Financial Index improved substantially — from 0.6 in 2016 to 6.19 in 2023.



The Polytechnic Transformation & Turnaround

The institution moved from financial instability toward long-term financial sustainability through operational discipline, enrollment management, program alignment, and reinvestment. Looking ahead, the 90X27 plan provides a roadmap for continued program growth, with semester-level credit hour goals through 2027 guiding enrollment strategy across all departments.

Conclusion

The transformation of Bismarck State College demonstrates that institutional financial stability and enrollment growth can be achieved through operational efficiency, instructional cost alignment, data-driven academic management, workforce-aligned program development, and strategic reinvestment of operational savings.

The key lesson from this transformation is that many institutions do not have a revenue problem alone; they have a cost alignment and operational efficiency problem. By improving instructional efficiency and reinvesting savings into strategic initiatives, institutions can improve financial stability while strengthening academic programs and student success.

The institutional stability and transformation model developed through this transformation provides a repeatable framework that can be applied to colleges and universities across the country facing enrollment decline, structural deficits, and program inefficiencies.

Vertere Collegiate Advisors was created to help institutions implement this institutional stability and transformation model and guide colleges and universities through enrollment recovery, financial stabilization, academic program alignment, and long-term institutional sustainability.