
MAINTAINING MINNESOTA'S EDUCATIONAL ADVANTAGE

**An Analysis of Future Higher Education Needs and
Alternative Strategies to Address Them in Minnesota**

EXECUTIVE SUMMARY

February 1989

Prepared for:

**The MSPAN Project
Minnesota Higher Education Coordinating Board**

Prepared by:

SRI International

with the assistance of

MGT of America, Tallahassee, Florida

and

**James Hearn
Monica Manning
Lewis Mayhew
Caroline Turner**

MAINTAINING MINNESOTA'S EDUCATIONAL ADVANTAGE

Executive Summary

This document summarizes the findings of a major study on future needs and alternative strategies for postsecondary education in Minnesota's urban corridor. The highlights of the full technical report are presented here in a concise format. The tables at the end of the document describe the changing environment and potential new strategic directions for higher education in Minnesota. Copies of the full report are available from the Minnesota Higher Education Coordinating Board.

Project Background

Context

- By virtually all measures of quality of life, economic vitality, and civic culture, Minnesota is a success story among American states.
- Most observers would agree that postsecondary education has been an especially critical element in Minnesota's social, economic, and civic achievements and will be even more critical in its future.
- Without question, the state's higher education strategy and mix of institutions have served it well in the past.
- This study assesses how well positioned Minnesota's postsecondary education system and planning processes are to meet Minnesota's growing and changing educational needs and analyzes potential strategies for maintaining the state's "educational advantage" in the future.

The MSPAN Project

- This study is part of the MSPAN Project. MSPAN stands for Minnesota Postsecondary Access and Needs.
- It is intended as a major examination of current conditions and changing needs for postsecondary education among residents in Minnesota's urban population corridor from St. Cloud to Rochester, including the Twin Cities. A second phase of the study will address the needs of residents in the rest of the state.
- The study has been carried out by SRI International and its study team for the Higher Education Coordinating Board, at the request of the state legislature.

- The principal purposes of the project have been to:
 - Understand higher education issues emerging in a changing environment
 - Analyze changing needs and future demands for postsecondary education
 - Assess current institutional capacity for meeting changing needs and future demands
 - Identify and analyze alternative strategies for meeting future needs.
- This final report of the MSPAN Project represents an integration of two earlier draft reports submitted to the HECB. It includes both an analysis of current conditions and future needs and the identification and analysis of alternative strategies for meeting those needs.
- The report is based on a comprehensive program of research, data collection, consultation, and analysis that SRI and its project team have undertaken over the past 5 months.
- Throughout the report, SRI purposefully attempts to provide the state with a broader view and a more useful way of looking at postsecondary education, rather than simply focusing on a few selected issues or on collection of data.
- It also identifies and analyzes a wide range of potential strategies for future directions, rather than simply reviewing existing proposals for change.

Findings on Future Needs and Issues for Higher Education in Minnesota

Background on Higher Education

- Minnesota has a well-educated population with very high levels of participation in postsecondary education (fourth highest per capita in the nation).
- The state has a six-part system with regular, non-extension students distributed as follows:
 - The University of Minnesota (23%)
 - State universities (21%)
 - Private colleges and professional schools (19%)
 - Community colleges (19%)
 - Technical institutes (14%)
 - Private career schools (4%)
- The state provides high levels of financial support to higher education on a per capita basis (9th in the nation), but only average per-student expenditures (22nd) because of the high levels of postsecondary participation.

- The state operates a particularly strong and well-financed student financial aid program.
- Overall, postsecondary education's share of the state budget has been increasing in recent years, from 15.5% in 1981 to 19% today.

Changing Environment

The environment in which Minnesota operates higher education is undergoing dramatic and in many ways unprecedented change, with considerable implications for higher education in the future. See table 1.

- Demographic changes: steady population growth (fastest in the upper Midwest), concentrated in the urban corridor, aging of the population and labor force, substantially more minorities.
- Economic changes: a strong economy in the urban areas with an increasingly sophisticated advanced-manufacturing and advanced-service base, heavily dependent on a well-educated population for their competitiveness.
- Social issues: a growing number of urban social problems in the Twin Cities, increasing concerns about decline in the quality of the K-12 system in the state.
- Educational developments: a growing number of educational providers beyond the traditional institutions (particularly corporate providers, spending about \$1 billion annually), an expanding array of learning technologies available to institutions.
- Changing values: evidence that Minnesotans are placing an even higher importance on the value of postsecondary education, preference for collegiate over vocational education, stronger emphasis on quality of higher education by employers and older students (choosier customers).
- Competition from other states: several other states have made massive new investments in higher education, closing the gap somewhat with Minnesota in recent years. A recent nation-wide survey of education leaders indicates that Minnesota was not ranked among the country's top 10 systems of higher education.

Desired Characteristics for Higher Education

Given this dynamic environment, what characteristics should the region's postsecondary education enterprise possess? Against which criteria should it be measured?

- Minnesota has implicitly had a set of traditional criteria:
 - Quality
 - Access
 - Affordability
 - Efficiency
 - Individual choice.
- These criteria remain important but need to be reconsidered in light of the changing environment (e.g., access no longer simply means geography; for older students it also means time and location of courses).
- In addition, to respond effectively to the changing environment, the state needs to add a set of more contemporary criteria:
 - Institutional diversity
 - Responsiveness to rapidly changing needs
 - Orientation to new kinds of students -- older, part-time, minority
 - Active links with employers
 - Accountability for performance and responsiveness.

Looking At Higher Education as a Total System

Minnesota needs to take a holistic view of its higher education enterprise--public and private, graduate and undergraduate, upper division and lower division, 2-year and 4-year.

- SRI has analyzed Minnesota institutions according to their Carnegie classifications and their differing educational roles and styles.
- The state has a particular mix of institutions that restricts its ability to meet its full range of postsecondary educational needs effectively and efficiently.
- The University of Minnesota plays multiple roles: the state's only research university, the state land grant and flagship institution, the major undergraduate resource in Twin Cities, the urban university, etc.
- A gap in the middle of the higher education spectrum exists: no Carnegie-classified doctoral institution, no science and technology institution, no urban university, no large private institution, no highly market-responsive private institution.
- State universities: primarily undergraduate focused, limited graduate programs, relatively underdeveloped compared with their counterparts in other states.

- Private colleges: mostly small, focused on liberal arts, with a few exceptions such as St. Thomas, which is increasingly involved in professional programs for older students.
- Two-year institutions: a relatively large number of community colleges, actively responding to the demand from older and part-time students, and technical institutes (TIs), attempting to shift from a narrow vocational curriculum to a broader kind of technical education.

Issues Raised from a System-Wide View

Looking at Minnesota's postsecondary education system and all its elements in this way helps to illustrate a number of important findings about the state's particular mix of higher education institutions.

- Minnesota is unusually dependent on the U for multiple roles, many of which are not well suited for a research university striving to be among the top five public research universities in the nation.
- There are strong opportunities in the urban corridor (except Rochester) for research-oriented graduate and discipline-focused undergraduate education at the U.
- Compared with other states, there are relatively weak opportunities for applications-oriented graduate education (e.g., late in developing a part-time MBA, limited continuing education for engineering).
- There are plenty of continuing education courses, but a limited number of continuing education programs for part-time and older students.
- The Twin Cities area lacks an urban-oriented institution with strong expertise in and an explicit focus on urban issues, and it is weak in traditional public undergraduate education alternatives to the U.
- There is a clear lack of advanced technical education resources in Rochester; and there are clearly inadequate undergraduate education resources in St. Cloud, with no community college and an enrollment cap at St. Cloud State.
- As a whole, the urban corridor appears best served at the lower division of undergraduate education by the community colleges and TIs, but there are gaps in particular geographic areas (e.g., St. Paul, St. Cloud).

Changing Demand for Higher Education

The demand for higher education by education-hungry Minnesotans throughout the corridor is considerable, growing, and heterogeneous.

- There have been significant increases in enrollment at a time when declines were projected.

- There is a remarkably high participation rate by high school graduates, with a decidedly growing preference for collegiate education over vocational education.
- The largest enrollment increases have occurred at the state universities, community colleges, and private colleges, with modest declines at the U and the technical institutes.
- There is substantial growth in the number and proportion of older students (now 40% of the total), with most of them reporting plans to attend higher education throughout their working career.
- There has also been substantial growth in part-time students (now 30% of the total), and the numbers of women and minorities in postsecondary education have been increasing steadily.
- There is also a substantially greater amount of transfer activity by students within postsecondary education, especially in the Twin Cities.

Limited Capacity to Meet Changing Needs

The capacity of institutions in the state to fully meet these expanding and changing needs, while maintaining quality in existing programs, is limited.

- Minnesota institutions are actively attempting to respond to increasing demands for higher education.
- Most public campuses, however, are tight on existing facilities, are experiencing equipment obsolescence, and have high student-faculty ratios--all exceeding national norms.
- Capital expansion is not matching enrollment growth, and there are no major plans for capital or program expansion.
- Most private colleges are small and focused on the liberal arts; few have the capacity or the orientation to respond to the changing needs described above.
- Although there are plenty of continuing education courses, there are relatively few complete program offerings for older and part-time students.
- There is a clear lack of middle-tier institutions in the Twin Cities, with resulting gaps in applications-oriented graduate programs.

Summary of Concerns

- Unquestionably, postsecondary education will be an increasingly critical factor in Minnesota's future social and economic success; the state's future and its higher education enterprise are inexorably linked.

- Minnesota currently has a "pretty good" postsecondary education system; it ranks well on such traditional criteria as access, affordability and choice, but less well on more contemporary criteria, such as responsiveness, orientation to new kinds of students, and links with employers.
- But "pretty good" isn't good enough to meet even more demanding challenges in the future; Minnesotans cannot afford to be complacent about their higher education enterprise as their state's "educational advantage" is threatened.
- The environment is changing, with demand for more and different kinds of education coming from more and different kinds of students.
- The capacity to respond to changing and growing needs is limited by the lack of excess capacity and the inadequate mix of existing institutions.
- Minnesota clearly needs to develop more and different kinds of capacity to maintain its historic "educational advantage."

Analysis of Alternative Strategies to Address Higher Education Needs in Minnesota

Focus of the Analysis of Strategies

- Recognizing the size and breadth of growing demand, the state needs to think broadly and creatively about new strategies to meet these needs, moving beyond old structures and processes.
- The analysis covers a wide range (30) of alternative strategies to address the various higher education needs in the urban corridor.
- The analysis is intended, not as a final statement, but as a starting point for discussion and as a stimulus to well-informed debate among Minnesota's public, private, and educational leaders.
- The analysis is based primarily on the experience and professional judgment of the project team, a review of materials provided by higher education representatives from Minnesota, and a review of the relevant experiences of Minnesota and other states in employing such strategies.

Policy and Strategy Considerations

- Deciding which strategies to pursue, from the many reviewed in this report, will require Minnesota's decision-makers to make a number of tough choices. The state faces the dual challenge of both ensuring that existing programs are adequately funded to provide quality education and that new capacity be developed to meet new needs.

- In terms of financing, Minnesota already spends a high level of state resources on higher education on a per capita basis but spends only an average level of resources on a per student basis.
- To be among the top states on per student spending, the state government would need to invest roughly \$150 million or more annually than it currently does (roughly \$240 million of new investment in higher education when one considers tuition revenue and state appropriations for financial aid).
- The state also needs to consider: encouraging more students to attend less costly institutions, making greater use of cost-effective educational technologies, making difficult but necessary decisions to eliminate expensive but underutilized and low-priority programs, and encouraging greater private sector support for higher education.
- The state's decisions also need to be made within the context of a policy framework that supports not only the traditional higher education criteria but also the emerging set of higher education criteria that reflect new societal forces and educational realities, as described above.
- Based on the direction of the HECB, the analysis of alternative strategies has been done in terms of seven priority state educational objectives which correspond to the various needs and issues identified in the research phase of the MSPAN project.

Strategies for Meeting Educational Policy Objectives

The project team identified seven educational policy objectives for Minnesota and analyzed a series of strategies for each objective. The objectives and their corresponding strategies are listed below.

- (1) Strengthening the University of Minnesota as one of the nation's top five public research universities, since this is the state's only research university and needs to be among the nation's best to serve the state's needs.
 - Implementation of Commitment to Focus.
- (2) Meeting the Twin Cities' undergraduate and urban-related needs, particularly in light of enrollment reductions at the U, strong population growth in the metropolitan area, and intensified urbanization (with all the problems and opportunities that brings to an area).
 - A new urban university
 - Conversion of Metropolitan State University into a comprehensive, 4-year university
 - Expansion of 2+2 arrangements with the community colleges

- Development of a community college in St. Paul
 - Expansion of private college capacity at the undergraduate level
 - Use of Metro State to coordinate a consortium of public and private institutional programs and services
 - An increased presence for St. Cloud and Mankato State universities in the Twin Cities.
- (3) Developing practitioner-oriented graduate programs to meet the needs of working professionals, which are distinct from those met by the largely research-oriented graduate programs at the U.
- Utilizing a new urban university to provide graduate education
 - Strengthening the role of state universities in graduate education
 - Expanding the capacity of private colleges to provide graduate education.
- (4) Meeting specialized science and technology education needs in the urban corridor to overcome surprisingly striking deficiencies in fields so critical to the increasingly technology-based economy of the state.
- Enhanced support for the Institute of Technology at the U under Commitment to Focus
 - Development of a private science and technology institution
 - Strengthening the role of the state universities in engineering education
 - Strengthening technical institutes to provide more comprehensive technical education
 - Development of a public-private technical training institute and training consortia
 - Encouraging alternative delivery systems for technical education.
- (5) Addressing the needs of new kinds of students in the urban corridor, particularly the rapidly increasing numbers of older, part-time, and minority students.
- Development of employer/college/TI partnerships for adult learning
 - Creation of a new private institution focused on older and part-time students

- Facilitated articulation and transfer among institutions
 - Conduct of a major special study of minority student needs
 - Systemic or institutional incentives to promote responsiveness to new student populations.
- (6) Addressing specific educational needs in St. Cloud and Rochester, which are distinct from those in the Twin Cities, taking into account the impacts of new capacity in the Twin Cities on St. Cloud and the potential effectiveness of new programs being started now in Rochester.
- Expanding undergraduate capacity in St. Cloud
 - Expanded graduate and technical education in Rochester.
- (7) Undertaking more proactive state planning for higher education, in terms of both attitude (openness to innovation) and practice.
- Reconnaissance and environmental scanning of higher education issues and trends
 - New funding mechanisms to encourage institutional responsiveness
 - New uses of financial aid to address new educational priorities
 - Development of new performance and accountability mechanisms
 - Establishment of a business/higher-education forum
 - Supplemental research on additional topics identified during the MSPAN study.

Implications of the MSPAN Research and Analysis

Potential New Directions for Higher Education in Minnesota

- The HECB is responsible for considering SRI's analysis of these various alternatives and developing a final set of detailed recommendations for the state legislature.
- In the collective professional judgment of the members of the SRI project team, the implications of the MSPAN research and analysis suggest that a comprehensive, multifaceted strategy is needed to address effectively the multiple educational objectives the state must meet. See table 2.

- Although SRI has not been asked to develop detailed recommendations for the HECB, the following 10-point strategy is designed to provide a focused starting point for discussion and debate in Minnesota:
 - Implementation of the Commitment to Focus Initiative at the U.
 - Strengthening of the state universities in Minnesota, especially their professional and master's level programs.
 - Conversion of Metropolitan State University into a more comprehensive, 4-year, urban university.
 - Expanded use of 2+2 arrangements with the community colleges and improved articulation and transfer arrangements.
 - Encouragement of the expansion of private college capacity.
 - Continued development of the TIs as providers of comprehensive technical education.
 - Encouragement of the expanded use of new, cost-effective educational technologies.
 - Encouragement of increased responsiveness to the needs of new kinds of students, especially older, part-time, and minority students.
 - Establishment of an educational ventures fund to encourage creative responses to changing educational needs.
 - The promotion of more proactive higher education planning through a variety of initiatives.
- In the judgment of the SRI project team, this 10-point strategy provides the most comprehensive and integrated approach to meeting the current and future higher education needs of the state.
- Such a strategy, if effectively implemented over the long term, can provide Minnesota what it needs to maintain its increasingly important "educational advantage."

Decision-Making Considerations

- Ultimately, the final decisions about the future of higher education in Minnesota will need to be made by decision-makers in Minnesota, based on their perceptions about which of the strategies are most appropriate for the state given its needs, its history and traditions, its civic culture and values, and its resource base.

- Clearly, Minnesota faces tough choices in the months and years ahead. As Minnesotans make these choices, a number of decision-making considerations should be kept in mind:
 - Recognize the need to adequately support existing institutions as well as to address changing and expanding needs for higher education.
 - Give renewed attention to quality.
 - Recognize that the solution to the state's higher education challenges needs to be an integrated one.
 - Understand that decisions need to be made for the long-term benefit of Minnesota.
 - Be wary of the conservatism and protectionism of existing institutions and systems.
 - Do not hesitate to be bold and aim high.
 - Finally, take the time necessary to make sound decisions.

In the end, Minnesota will need to make a number of difficult decisions. If history is any measure, the quality and far-sightedness of those decisions will have much to do with Minnesota's future economic, social and civic success.

The SRI project team hopes that its study will help the citizens and policymakers of Minnesota to understand better the changing needs for higher education in the state and begin to show which new strategic directions are most appropriate for the state to help preserve and build on the special quality of life Minnesota enjoys today.

While the decisions will not be easy ones, Minnesota's "problem" is in many ways a wonderful one -- figuring out how to meet the growing and changing demands for higher education from an education-hungry citizenry who see education as essential to their quality of life and economic success. In a very real sense, not having this problem would be a much worse situation for the state of Minnesota than the challenges identified in this report.

Table 1

**CHANGING ENVIRONMENT FOR HIGHER EDUCATION
IN MINNESOTA'S URBAN CORRIDOR**

<u>Old Environment</u>	<u>New Environment</u>
Stable population	Steady population growth
Homogeneous population	Culturally diverse population
Resource-based economy	Advanced-manufacturing/service-based economy with sophisticated needs
Lack of social problems	Inner-city-type social problems
Strong K-12 system	Increasing K-12 difficulties
Most college students age 18-24	Almost half over age 25
Nearly all students full-time	Most student growth in part-time
Education in classroom	Array of learning technologies
Education provided by schools	Growing array of educational providers
Education stops at 25	Lifelong learning
Minnesota as education leader	Competition from other states
Focus on access	Concern with quality
Stable, predictable education needs	Dynamic educational environment

Source: SRI International

Table 2

POTENTIAL NEW STRATEGIC DIRECTIONS
FOR HIGHER EDUCATION IN MINNESOTA

<u>Current Strategy (Implicit)</u>	<u>Potential Future Strategy</u>
Assign multitude of educational responsibilities to the U.	Assign education responsibilities to institutions best suited to meet specific needs; follow through on Commitment to Focus at the U; develop urban university for Twin Cities.
Limit research and Ph.D. focus to the U; maintain state universities as largely undergraduate institutions.	Encourage private colleges and allow state universities to develop applied research and graduate capacity to meet needs not met by the U.
Provide access through state universities, community colleges, and TIs.	Relate access to institutional capacity to meet particular needs; use 2+2 as means of expanding access.
Tap private colleges for liberal arts education.	Encourage existing private colleges to expand breadth of programs (e.g., technical fields) and explore creation of new private institutions.
Deal with adults, part-timers, minorities through special programs.	Change basic institutional policies and practices to meet needs of changing student base.
Promote affordability and choice through strong financial aid program.	Continue model financial aid program.
Maintain current mix of institutions.	Encourage diversity and fill in gap in the middle by strengthening state universities and encouraging development of private institutions.
Adopt laissez-faire approach to identifying and meeting new needs.	Take proactive approach to meeting needs; use incentive funds to encourage development of needed new programs.
No policy on links with employers.	Provide encouragement, incentives for links to industry, improved communication linkages.
Define efficiency in terms of avoiding program duplication.	Reconsider use of high-cost research university to carry out roles that could be done by less costly institutions; use cost-effective educational technologies; eliminate expensive, underutilized programs.
Lack of measures for performance and accountability mechanisms.	Develop new measures of performance; install accountability mechanisms.

Source: SRI International.