



OFFICE OF THE LEGISLATIVE AUDITOR

STATE OF MINNESOTA

EVALUATION REPORT

Higher Education Tuition Reciprocity



SEPTEMBER 2003

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OFFICE OF THE LEGISLATIVE AUDITOR

State of Minnesota • James Nobles, Legislative Auditor

September 24, 2003

Members
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Minnesota and other states use tuition reciprocity agreements to expand higher education opportunities for students. These agreements allow students to attend public colleges or universities outside their states of residence without paying nonresident tuition rates.

At the commission's request, the Office of the Legislative Auditor (OLA) evaluated Minnesota's reciprocity agreements. We found that the agreements provide many students with educational opportunities they would not otherwise consider affordable. We also found that the number of students participating in the reciprocity program has increased in recent years.

Nevertheless, we think some important policy issues deserve legislative attention. For example, Minnesota should seek a reinstatement of interstate payments from South Dakota, and a more accurate method of computing interstate payments under its agreement with North Dakota. In addition, Minnesota should explore options to make the tuition policies in its agreement with Wisconsin fairer to Minnesota residents.

Our report was researched and written by Joel Alter (project manager), Adrienne Howard, and Todd Wilkinson. We received the full cooperation of the Minnesota Higher Education Services Office, the University of Minnesota, and the Minnesota State Colleges and Universities system.

Sincerely,

/s/ James Nobles

James Nobles
Legislative Auditor

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Summary

The state's reciprocity program has expanded options for students, but provisions governing tuition levels and interstate payments merit review.

Major Findings

- Minnesota's tuition reciprocity agreements with Wisconsin, North Dakota, and South Dakota have expanded the choices available to college students, but the agreements vary in the tuition rates charged to participants and the interstate payments that result (pp. 11, 43-58).
- South Dakota has not made a payment to Minnesota in recent years—contrary to the requirements of South Dakota law and the original Minnesota-South Dakota agreement (p. 52). Also, Minnesota's agreement with North Dakota is based on a less accurate measure of costs and tuition paid than the method used in Minnesota's agreement with Wisconsin (p. 55).
- Reciprocity students from Wisconsin usually pay tuition rates at Minnesota schools that are less than those paid by Minnesota residents at these schools (p. 12). The Minnesota-Wisconsin agreement could be amended so that Wisconsin residents at Minnesota schools are charged resident tuition, but there are potential enrollment and fiscal impacts that merit careful consideration (pp. 49-51).
- Minnesotans cited academic preferences more than other factors as an important reason they decided to attend school outside Minnesota, according to a survey we

conducted. However, most Minnesotans who attended school in a reciprocity state said that they would not have been willing to pay nonresident tuition to attend that school (pp. 29-30).

- There has been a modest net outflow of reciprocity students from Minnesota to states with which Minnesota has tuition reciprocity agreements, but a significant percentage of departing students return to Minnesota to work after graduating from college (pp. 19, 37).

Recommendations

- The Minnesota Higher Education Services Office (HESO) should work with its counterpart agencies in neighboring states to seek (1) consistency in the tuition surcharges applied to Wisconsin residents at the University of Minnesota's campuses (p. 50), (2) collection of annual payments from South Dakota (p. 53), and (3) changes in the way that interstate payments are computed under the Minnesota-North Dakota agreement (p. 53).
- The Legislature should (1) require HESO to submit additional information to legislative committees regarding the reciprocity program (p. 63), (2) require periodic legislative reauthorization of the reciprocity program (p. 63), and (3) authorize HESO to collect additional data on reciprocity students (p. 42).

Minnesota has statewide reciprocity agreements with Wisconsin, North Dakota, and South Dakota.

Report Summary

Minnesota entered into its first interstate tuition reciprocity agreement—with Wisconsin—in the late 1960s. Such agreements allow students to attend a public college or university outside their home state without having to pay the standard nonresident tuition rate. Many states have interstate tuition reciprocity programs that pertain to a limited number of schools, programs, or geographic areas within the states. In contrast, Minnesota has *statewide* tuition reciprocity agreements with Wisconsin, North Dakota, and South Dakota—open to all residents of these states, and with participation by all public higher education institutions.¹

Reciprocity Agreements Have Provided Students with More Affordable, Convenient Academic Options

Minnesota law defines one purpose for the tuition reciprocity program: improved “educational advantages” for students. By reducing the tuition at out-of-state schools, the program provides students with more affordable or convenient educational options. In a survey of about 600 Minnesotans attending school in reciprocity states, we found that 57 percent of respondents said that the program and course options at their reciprocity state schools were preferable to those at the Minnesota schools they considered attending. Respondents most often cited academic factors as a key reason they left Minnesota to attend school.

On the other hand, only 15 percent of reciprocity students from Minnesota said that they would have been willing and able to pay nonresident tuition to attend the out-of-state school they

selected. Among students who said they would *not* have paid nonresident tuition, most said they would have attended a Minnesota school if the reciprocity program had not existed.

The patterns of enrollment in Minnesota’s reciprocity program partly reflect the location of participating states’ population centers and public higher education institutions. For example, about 3,500 Minnesotans attended two University of Wisconsin schools (River Falls and Superior) in Fall 2002 that were, on average, less than 50 miles from their residences. Nearly half of the River Falls students in Fall 2002 were from Minnesota, mostly from the Twin Cities area. Likewise, more than one-third of the students at Minnesota State University-Moorhead and Northwest Technical College in northwestern Minnesota were reciprocity students, mainly from North Dakota.

In addition, large research universities exert considerable “pull” on students from reciprocity states, sometimes attracting students from considerable distances. For example, the University of Minnesota-Twin Cities and the University of Wisconsin-Madison attracted more than 9,000 reciprocity students in Fall 2002, from an average distance of 230 miles from home.

Some Inconsistencies in Reciprocity Agreements Should be Changed

State law initially authorized Minnesota’s participation in interstate reciprocity agreements, but administrative agencies have exercised considerable discretion to implement program details. The agreements are negotiated by the Minnesota Higher Education Services Office (HESO) and

¹ In addition, a small number of students participate in Minnesota’s tuition reciprocity agreements with Manitoba (covering all public institutions) and Iowa (covering two colleges in northern Iowa and southern Minnesota).

Wisconsin reciprocity students at Minnesota schools usually pay lower tuition than Minnesota residents at these schools.

its counterpart agencies in other states, and they are subject to approval by Minnesota's public higher education governing boards. There are important variations in Minnesota's reciprocity agreements with Wisconsin, North Dakota, and South Dakota.

Under Minnesota's present agreements, most Wisconsin residents attending school in Minnesota pay Wisconsin resident tuition rates, while most North Dakota and South Dakota residents attending school in Minnesota pay Minnesota resident tuition rates. Most of Wisconsin's undergraduate resident tuition rates are lower than Minnesota's rates, sometimes substantially lower. Consequently, Minnesotans paid 28 percent more to attend the University of Minnesota-Twin Cities than did Wisconsin residents in 2002-03, and Minnesotans paid 49 percent more to attend the University of Minnesota-Duluth.

Raising the tuition charged to Wisconsin residents at Minnesota schools could discourage some Wisconsin students from enrolling in Minnesota, with adverse impacts on certain Minnesota campuses. In addition, such a tuition increase would increase Minnesota taxpayers' financial obligation to Wisconsin, according to the terms of the Minnesota-Wisconsin agreement. The agreement requires annual interstate payments, to account for differences in the reciprocity students' instructional costs borne by the two states. For the 2001-02 school year, Wisconsin paid Minnesota \$300,000 to compensate for the fact that Minnesota taxpayers bore slightly higher instructional costs for Wisconsin residents at Minnesota schools than Wisconsin taxpayers bore for

Minnesotans at Wisconsin schools. If Wisconsin residents had been charged the same tuition rates at Minnesota schools in 2001-02 that Minnesota residents were charged at these schools, the Minnesota-Wisconsin reciprocity agreement would have obligated Minnesota to make a payment of about \$6 million to Wisconsin for that year.² Legislators could offset these higher interstate payments by having the State of Minnesota capture some or all of the new tuition revenues from Wisconsin students that would otherwise go to Minnesota's public colleges and universities.

The merits of charging resident tuition to reciprocity students from Wisconsin are debatable, and this report offers no recommendation. But, at a minimum, the Minnesota-Wisconsin agreement should be modified to ensure consistency in the rates that Wisconsin students pay at the University of Minnesota's campuses. The agreement now requires a surcharge on Wisconsin students at the university's Twin Cities campus, which helps narrow the gap between the tuition charged to Wisconsin and Minnesota residents. Such a surcharge could be applied to the university's other three campuses with a fairly limited increase in Minnesota's financial obligation to Wisconsin.

In addition, the method of computing the interstate payments required by the Minnesota-North Dakota agreement is less accurate than the method used to compute the Minnesota-Wisconsin payment, and HESO should seek changes. In fact, the North Dakota agreement, unlike the Wisconsin agreement, would not allow Minnesota to receive an interstate payment unless

² The Minnesota-Wisconsin interstate payment is determined by comparing the amount of reciprocity students' instructional costs borne by the respective states. Charging higher tuition to Wisconsin residents at Minnesota schools would have reduced Minnesota's public costs for these students, and the cost to Wisconsin taxpayers for instructing Minnesota residents would have significantly exceeded the cost to Minnesota taxpayers of instructing Wisconsin residents. The \$6 million estimate assumes no changes in enrollment resulting from the tuition increase.

State law should require periodic legislative reauthorization of the reciprocity program.

more students came to Minnesota under the agreement than left Minnesota.

Also, due to an understanding reached between staff with the South Dakota Board of Regents and HESO, there has been no interstate payment between South Dakota and Minnesota for many years. Nevertheless, such a payment is required by the Minnesota-South Dakota reciprocity agreement and South Dakota law. Because Minnesota serves more students and bears a disproportionate share of the costs under this agreement, it would gain financially from a reinstatement of interstate payments.

To improve accountability and address inconsistencies, this report recommends that the Minnesota Legislature play a stronger role in oversight of the reciprocity agreements. State law should require HESO to provide legislative higher education committees with annual interstate memoranda related to the agreements, as well as worksheets showing interstate payment calculations. Also, the law should require periodic legislative reauthorization of the reciprocity program—perhaps every five years.

Many Minnesota Students Who Attend College in a Reciprocity State Return to Minnesota to Work

Nearly 22,000 Minnesota residents attended public colleges or universities in Wisconsin, North Dakota, or South Dakota in Fall 2002. Meanwhile, more than 18,000 residents of these three states attended public institutions in Minnesota, so there was a small net outflow of reciprocity students from Minnesota.

To evaluate the impact of the reciprocity program, however, it is important to consider not only where participants attend college but also where they seek employment after graduation. Such information could help the state assess its workforce and education strategies. Minnesota policy makers receive little ongoing data on the post-graduation employment of reciprocity students, and the Legislature should authorize HESO to collect the data needed for these analyses.

We conducted a limited review, examining the extent to which one year's graduates had Minnesota earnings three years after completing school. More than 60 percent of Minnesota residents who finished college in Wisconsin, North Dakota, or South Dakota in the 1997-98 school year had earnings in Minnesota during 2001. About half of the reciprocity students who graduated from schools in these states had Minnesota earnings exceeding \$20,000 in 2001.

Data also suggest that, in recent years, a substantial number of students from reciprocity states stayed in Minnesota after graduating from Minnesota institutions. Notably, 47 percent of reciprocity students who graduated from the University of Minnesota in 1997-98 had Minnesota earnings in 2001. In addition, 35 percent of reciprocity students who graduated from Minnesota State Colleges and Universities (MnSCU) institutions in 1997-98 had Minnesota earnings three years later.³

³ The percentage of reciprocity student graduates with 2001 Minnesota earnings exceeding \$20,000 was 39 percent for the University of Minnesota and 24 percent for MnSCU.

Introduction

Minnesota policy makers adopted a tuition reciprocity program to expand access to higher education.

For decades, Minnesota policy makers have taken steps to provide state residents with widespread access to higher education. Compared with other states, Minnesota has a large number of public colleges and universities, ensuring that most state residents are relatively close to a postsecondary campus.¹ Minnesota has also ranked high among states in its level of financial assistance to students, particularly through the State Grant Program.² In addition, Minnesota has tuition reciprocity agreements with several neighboring states, which allow Minnesotans to attend college in those states at reduced tuition (and allows residents of those states to attend college in Minnesota at reduced tuition).

In 2002, the Legislative Audit Commission asked our office to evaluate the tuition reciprocity program. Our study addressed the following questions:

- **What has been the extent of participation in the reciprocity program? How far do students travel to attend college under the reciprocity program, and what are their fields of study? What factors affect Minnesotans' decisions to attend college in reciprocity states?**
- **To what extent do Minnesotans who attend school in reciprocity states return to Minnesota after graduation? To what extent do residents of reciprocity states who attend Minnesota institutions stay in Minnesota after graduation?**
- **How do Minnesota's reciprocity agreements with different states vary? What are the merits of possible changes in the reciprocity agreements?**
- **What role should the Minnesota Legislature play in oversight of interstate reciprocity agreements?**

To conduct this study, we reviewed documents governing Minnesota's reciprocity program, including state laws, interstate agreements, and administrative memoranda. We examined literature regarding reciprocity programs in other states. We obtained data on program participants from the Minnesota Higher

¹ There are varying practices for counting institutions and campuses within states, but one leading source reported that Minnesota's number of public postsecondary "institutions" in 2000-01 ranked it tenth among states. See National Center for Education Statistics, *Digest of Education Statistics, 2001*, Table 245 (Washington, D.C., April 2002); <http://nces.ed.gov/pubs2002/digest2001/tables/dt245.asp>; accessed June 23, 2003.

² During 2001-02, Minnesota ranked seventh among states in the total amount of need-based financial aid provided to undergraduates; it ranked fourth in need-based aid per resident. Minnesota Higher Education Services Office, *Minnesota Maintains High National Ranking in Support for Need-Based Financial Aid* (St. Paul, May 1, 2003); <http://www.mheso.state.mn.us/mPg.cfm?pageID=1295>; accessed June 11, 2003.

Education Services Office, University of Minnesota, and Minnesota State Colleges and Universities (MnSCU) system, as well as higher education agencies in Wisconsin, North Dakota, and South Dakota. We examined trends in the number of reciprocity students since the program started more than 30 years ago. For Fall 2002 reciprocity students, we looked at the institutions they attended, the distance they traveled from home to attend school, and the fields of study in which they enrolled. We also interviewed representatives of higher education agencies in Minnesota and reciprocity states, as well as institution officials and student representatives.

To examine the reasons that Minnesota residents decided to attend school in reciprocity states, we sent surveys to a random sample of 1,200 Minnesotans who were enrolled as undergraduates in Wisconsin, North Dakota, or South Dakota schools in Fall 2002. We limited the survey to students who participated in the tuition reciprocity program for the first time in Fall 2002. We received responses from 597 students, or about a 50 percent response rate.

To assess the migration patterns of reciprocity students following graduation from college, we identified (1) reciprocity students from Wisconsin, North Dakota, and South Dakota who graduated from the University of Minnesota or MnSCU during the 1997-98 school year, and (2) Minnesotans who attended Wisconsin, North Dakota, or South Dakota institutions under the reciprocity program and finished their coursework during the 1997-98 school year.³ We examined the extent to which these students had Minnesota earnings during 2001, using wage data from the Minnesota Department of Employment and Economic Development's unemployment information system.

In addition, we modeled the possible impact of changes in Minnesota's reciprocity program, using formulas that participating states have developed to compute interstate reimbursement payments. We estimated the impact of individual factors—such as tuition changes—on interstate payments, assuming that other factors remained unchanged. We did not try to estimate the impact of changes in the reciprocity program on the decisions of students about where to attend school.

Chapter 1 provides background on the tuition reciprocity program and discusses differences in the tuition policies of Minnesota's reciprocity agreements with three neighboring states. Chapter 2 examines the characteristics of reciprocity students and factors that contributed to Minnesotans' decisions to enroll out of state. Chapter 3 discusses the extent of college-educated persons in Minnesota's population, and it examines the migration patterns of reciprocity program graduates. Chapter 4 examines interstate payments under the reciprocity program, including the likely impact on these payments that would result from various changes in tuition levels and reciprocity program policies. Chapter 5 discusses the Legislature's role in program oversight and miscellaneous policy options for the reciprocity program.

³ We did not have information on which reciprocity students actually graduated from other states' institutions, so we focused on categories of students who accumulated a large number of credits under the reciprocity program: at least 120 undergraduate credits, 50 to 119 undergraduate credits, or at least 24 graduate-level credits. We did not exclude persons who completed undergraduate work in 1997-98 and then did graduate-level work under the reciprocity program in subsequent years.

Background

SUMMARY

Minnesota has reciprocity agreements with four nearby states and one Canadian province. These agreements allow students to attend a public college or university outside their home state without having to pay the standard nonresident tuition rate. According to Minnesota law, state appropriations pay the same proportion of instructional costs for reciprocity students at Minnesota schools that they pay for Minnesota residents. State laws provide a general framework for the tuition reciprocity program, but most of the program details are specified in the administratively negotiated interstate agreements—including provisions regarding the tuition levels charged to reciprocity students. Unlike North Dakota and South Dakota residents, Wisconsin residents who attend Minnesota schools typically pay tuition rates less than those paid by Minnesota residents—sometimes substantially less.

Minnesota has two public higher education systems. The University of Minnesota offers baccalaureate, masters, professional, and doctorate degrees, with campuses in four locations (Twin Cities, Duluth, Crookston, and Morris). The Minnesota State Colleges and Universities (MnSCU) system offers baccalaureate and graduate programs at seven state universities, and it offers a variety of one- to two-year programs at 27 technical colleges, community colleges, and consolidated technical/community colleges.

In Fall 2002, more than 18,000 non-Minnesota residents attended University of Minnesota and MnSCU institutions under the tuition reciprocity program. Meanwhile, 22,000 Minnesotans attended schools in nearby states with which Minnesota has reciprocity agreements. In this chapter, we address the following questions:

- **What are the nature and purpose of Minnesota’s interstate tuition reciprocity program? What roles do state law and administrative agreements play in the implementation of the reciprocity program?**
- **In what ways do Minnesota state revenues pay for the tuition reciprocity program? How much did the reciprocity agreements cost Minnesota taxpayers in fiscal year 2002?**

- **Do Minnesota's reciprocity agreements with Wisconsin, North Dakota, and South Dakota have consistent policies regarding the tuition rates charged to participants? How do the tuition rates paid by reciprocity students at Minnesota institutions compare with the rates paid by Minnesota residents at these institutions?**

PROGRAM SCOPE AND PURPOSE

Public colleges and universities in the U.S. often charge significantly higher tuition to persons whose residence is outside the state where the institution is located.¹ For example, a 1996 survey found that nine states had laws or policies that set nonresident tuition at a predetermined percentage above resident tuition rates (ranging from 100 to 250 percent). In some other states, laws or policies set nonresident tuition at levels that covered the full cost of a student's instruction.²

All of Minnesota's public higher education institutions have nonresident tuition rates that are well above resident rates. For example, the University of Minnesota's annual nonresident undergraduate tuition rate at the Twin Cities campus is \$17,592 in the 2003-04 school year, compared with a resident rate of \$5,962.³ Nonresident tuition rates at MnSCU campuses are typically about twice the resident rates.⁴

Not all students from other states who attend Minnesota institutions pay nonresident tuition, however. As shown in Table 1.1,

- **Minnesota has several interstate reciprocity agreements that reduce the tuition rates of certain nonresidents.**

Minnesota law authorizes (but does not require) the Minnesota Higher Education Services Office (HESO) to negotiate and administer agreements with other states or Canadian provinces. The agreements may address "subjects that include remission of nonresident tuition for designated categories of students at public post-secondary institutions."⁵

Minnesota statutes define one purpose for Minnesota's tuition reciprocity program. Specifically, the agreements "shall be for the purpose of the mutual improvement of educational advantages for residents of this state and other states

¹ For higher education purposes, a Minnesota resident is defined as someone who resided in Minnesota for at least one calendar year prior to applying for admission or a dependent student whose parent or legal guardian resided in Minnesota at the time the student applied. See *Minn. Stat.* (2002), §135A.031, subd. 2.

² Melodie E. Christal, *State Tuition and Fee Policies: 1996-97* (Denver: State Higher Education Executive Officers, March 1997), 3-4, 32-33. The study cited nine states in which nonresident tuition was set at levels equal to or greater than 100 percent of the cost of instruction for all two- and four-year institutions.

³ Both rates are for students who took at least 13 credits per semester.

⁴ For example, a resident registering for 15 credits per semester at Minnesota State University-Mankato would pay \$3,806 in tuition in 2003-04, compared with \$8,075 for a nonresident. As we discuss in Chapter 5, MnSCU has authorized some of its institutions to waive nonresident tuition rates.

⁵ *Minn. Stat.* (2002), §136A.08, subd. 2.

Public colleges and universities typically charge higher tuition to "nonresidents."

Table 1.1: Minnesota's Interstate Tuition Reciprocity Agreements

Agreement	School Year That the Agreement Started	Participation by All or a Limited Number of Public Institutions	Total Number of Participating Minnesota Residents, Fall 2002
Minnesota-Wisconsin	1968-69	All	13,209
Minnesota-North Dakota	1975-76	All	6,912
Minnesota-South Dakota	1978-79	All	1,775
Minnesota-Manitoba	1989-90	All	8
Minnesota-Iowa	1978-79	Limited	151
Midwest Student Exchange Program	1994-95	Limited	109

SOURCE: Higher Education Services Office, *Report to the Governor and 2003 Legislature* (St. Paul, January 2003), 11; participant data from HESO and Midwestern Higher Education Commission.

Reciprocity agreements are designed to improve educational opportunities for students.

or provinces with whom agreements are made.”⁶ Presumably, by improving the affordability of out-of-state higher education programs, students will have additional program options at more convenient locations. In addition, however, the tuition reciprocity program may serve other purposes. For example, a recent publication by the North Dakota University System said that the Minnesota-North Dakota reciprocity agreement (1) “eliminates the need for [a state’s] public institutions to be all things to all people,” thus foregoing the cost of starting programs not presently offered in the state, (2) allows higher education institutions to spread fixed costs over a larger student base, (3) adds diversity to the student body, and (4) attracts persons to the state who may decide to work in the state following graduation.⁷ Thus, while Minnesota law says that the reciprocity program is supposed to benefit students, policy makers may also wish to consider the program’s effects on the state’s workforce and higher education finances.

A recent survey indicated that 34 states had tuition reciprocity agreements with one or more states to provide reduced tuition for certain nonresident undergraduates at four-year institutions.⁸ Typically, however, interstate tuition reciprocity agreements are limited in scope. For instance, a Kentucky-Ohio agreement allows residents of eight counties in northern Kentucky to enroll in certain programs at the University of Cincinnati at the tuition rates charged to Ohio residents. Likewise, residents of five counties in southern Ohio can enroll in certain programs at the University of Northern Kentucky at resident tuition rates.

Minnesota’s first reciprocity agreement was also very limited in scope. When it started in 1969, the Minnesota-Wisconsin reciprocity program was only open to undergraduates who attended an institution within 40 miles of their home address. Today, however,

⁶ *Ibid.*

⁷ North Dakota University System, *Resource Guide: 2003 Legislative Session* (Bismarck, ND, December 2002), sec. 7, p. 7.1.

⁸ Christal, *State Tuition and Fee Policies: 1996-97*, 4, 34-35.

- **Unlike most states' tuition agreements, Minnesota's bilateral reciprocity agreements with Wisconsin, North Dakota, South Dakota, and Manitoba are *statewide* in scope—open to all of the jurisdictions' residents, and including nearly all academic programs at all of the jurisdictions' public higher education institutions.**

Under these agreements, *all public higher education institutions* in Wisconsin, North Dakota, South Dakota, and Manitoba charge tuition rates to Minnesotans that are less than their standard nonresident rates. In addition, all public colleges and universities in Minnesota charge tuition rates to residents of Wisconsin, North Dakota, South Dakota, and Manitoba that are below the rates typically charged to nonresidents.

Minnesota's agreements with North Dakota, South Dakota, and Manitoba apply to *all programs* offered by the jurisdictions' public higher education institutions. The only programs excluded from the Minnesota-Wisconsin agreement are dentistry, medicine, and veterinary medicine, as well as extension and distance learning courses.



Minnesota's agreements with Wisconsin, North Dakota, South Dakota, Iowa, and Manitoba reduce the tuition rates charged to nonresidents.

Minnesota has a limited reciprocity agreement with Iowa and more comprehensive agreements with other neighboring states.

In contrast, the Minnesota-Iowa agreement is very limited in scope. This agreement allows Minnesota residents to attend one northern Iowa community college (Iowa Lakes Community College) and pay tuition that is less than the nonresident rate. Meanwhile, the agreement allows residents of five counties in northern Iowa to pay less than nonresident tuition to attend Minnesota West Community and Technical College. There have been discussions about a statewide Minnesota-Iowa agreement at various times in the past, but Iowa higher education officials are not presently interested in such an agreement.⁹ As we discuss in Chapter 5, however, some other MnSCU institutions have decided to waive nonresident tuition for certain students not covered by reciprocity agreements—sometimes for the specific purpose of attracting students from Iowa.

⁹ An official with the Iowa Board of Regents told us that students coming to Iowa schools from other states outnumber Iowans who go out of state to school. Because of recent declines in state funding for Iowa higher education, he said, Iowa is not anxious to enter into an agreement that would reduce revenues from other sources, such as tuition. Robert J. Barak, deputy executive director, Iowa Board of Regents, "Re: Tuition Reciprocity," June 13, 2003 electronic mail to Joel Alter, Office of the Legislative Auditor.

Minnesota also participates in the Midwest Student Exchange Program with Kansas, Michigan, Missouri, Nebraska, and North Dakota.¹⁰ Under this program, nonresident students pay no more than 150 percent of a participating institution's resident tuition, plus any required fees. Although all of Minnesota's public colleges and universities participate in this program, some of the other states' public institutions (such as the University of Michigan and Michigan State University) do not.

STATE FUNDING

The state subsidizes nonresident reciprocity students attending Minnesota schools at the same rate it subsidizes residents.

The State of Minnesota pays for the tuition reciprocity program in two ways. First, the state pays a portion of the cost of instructing program participants from other states at Minnesota's public colleges and universities. Minnesota law requires that the state fund 67 percent of the estimated instructional costs of nonresidents who are attending a Minnesota institution under a tuition reciprocity agreement.¹¹ In fact, by law, Minnesota's higher education systems receive the same per-student instructional funding for nonresidents who are participating in the tuition reciprocity program that they receive for Minnesota *residents*.¹²

We estimated that:

- **State appropriations paid for at least \$74 million of reciprocity students' instructional costs at Minnesota institutions in fiscal year 2002.**

This estimate is based on the assumption that the per-student state appropriation for reciprocity students' instructional costs was identical to the average per-student appropriation for all students in Minnesota's public higher education systems.¹³ In fact, however, reciprocity students pay tuition rates that are lower than other nonresidents—and sometimes lower than the rates paid by Minnesota residents, as we discuss later in this chapter. Consequently, our estimate of state appropriations for reciprocity students probably understates the state's actual subsidies for this group.

¹⁰ This program is an initiative of the Midwestern Higher Education Commission, a nonprofit regional organization that encourages interstate cooperation among its ten member states. Illinois, Indiana, Ohio, and Wisconsin are also members of the commission but do not participate in the Midwest Student Exchange Program.

¹¹ *Minn. Stat.* (2002), §135A.031, subd. 2. This provision pertains to students covered by the Wisconsin, North Dakota, South Dakota, Iowa, and Manitoba agreements.

¹² The higher education systems receive smaller instructional cost subsidies for participants in the Midwest Higher Education Exchange program than they receive for students covered by bilateral reciprocity agreements. Each full-time participant in the Midwest Higher Education Exchange program is counted as one-half student for purposes of determining the amount of the instructional cost appropriations that the system shall receive.

¹³ We determined total state appropriations for instructional costs at University of Minnesota and MnSCU institutions by subtracting total tuition revenues and class fees from each institution's "fully allocated" instructional costs (direct and indirect). We computed each institution's per-student appropriations for instructional costs by dividing total appropriations by the total number of "full-year-equivalent" students (resident *and* nonresident) at the institution.

It is worth noting, however, that Minnesota taxpayers would not necessarily bear a smaller burden for higher education instructional costs if Minnesota did not participate in tuition reciprocity agreements. Thousands of Minnesotans attend non-Minnesota schools under the reciprocity program and, as we discuss in Chapter 2, these students outnumber the non-Minnesotans who attend Minnesota institutions under the program. Many of these Minnesotans might decide to attend a Minnesota institution if there was no reciprocity program to provide reduced tuition in neighboring states. If so, the “savings” from eliminating the subsidy that Minnesota provides to reciprocity students at Minnesota institutions would be offset—all or in part—by the cost of instructing more Minnesota residents at Minnesota colleges and universities. In addition, without the interstate tuition reciprocity agreements, there would likely be more persons eligible to participate in Minnesota’s State Grant Program, which provides financial assistance to Minnesota residents who attend Minnesota colleges and universities.

Minnesota's agreements with Wisconsin, North Dakota, and South Dakota provide for interstate payments.

A second type of state funding for Minnesota’s reciprocity agreements is interstate payments. Minnesota law authorizes HESO to negotiate provisions for interstate payments in the Wisconsin, North Dakota, and South Dakota agreements. These payments are intended to recognize differences in the instructional costs borne by participating states, due to differences in the states’ respective tuition rates and number of participating students.¹⁴ Although Minnesota’s net annual interstate payments have been as high as \$9 million (in fiscal year 1979),

- **Minnesota’s net interstate payments in fiscal year 2002 were about \$132,000.**

In fiscal year 2002, Minnesota made a payment to North Dakota (\$434,225) and received a payment from Wisconsin (\$302,741). There was no payment between Minnesota and South Dakota. Chapter 4 discusses interstate payments in more detail.

PROGRAM IMPLEMENTATION

According to Minnesota law, reciprocity agreements are not valid without the approval of the governing boards for the affected institutions.¹⁵ In Minnesota, the agreements negotiated by HESO must be approved by the University of Minnesota’s Board of Regents and the Minnesota State Colleges and Universities’ Board of Trustees. The Minnesota Legislature is not required to approve such agreements, and state statute says that an agreement remains valid “unless it is disapproved in law.”¹⁶

¹⁴ *Minn. Stat.* (2002), §136A.08, subd. 3 and 4.

¹⁵ *Minn. Stat.* (2002), §136A.08, subd. 6.

¹⁶ *Ibid.* The law also says that if the agreements result in financial liability to the state or governing boards “beyond enrollment funding adjustments,” they must be submitted to the Commissioner of Finance and chairs of the Minnesota House and Senate higher education finance divisions for review.

Minnesota law provides a broad framework for Minnesota’s tuition reciprocity agreements, prescribing few details about program implementation. Consequently,

- **Administrative agreements, memoranda, and informal understandings—rather than state laws—establish most of the rules that govern implementation of Minnesota’s tuition reciprocity programs.**

Using the example of the Minnesota-Wisconsin reciprocity program, Table 1.2 shows the basis for various practices related to interstate reimbursement payments. Minnesota law authorizes (but does not require) interstate payments

Table 1.2: Basis for Interstate Payment Practices in the Minnesota-Wisconsin Reciprocity Program

State law prescribes few details about implementation of the reciprocity program.

State laws

- Minnesota law authorizes, but not does require, interstate payments. Wisconsin law requires interstate payments between Minnesota and Wisconsin.
- The laws **provide general guidance on a formula for determining interstate payments**. “The determination of any amounts owed by either state under the agreement shall be based on an equitable formula which reflects the educational costs incurred by the two states” (Wisconsin law). “The formula shall recognize differences in tuition rates between the two states and the number of students attending institutions in each state under the agreement” (Minnesota law).

Administrative agreement

- For the purpose of calculating interstate payments, the Minnesota-Wisconsin agreement **provides a formula for computing each state’s financial obligation** under the program. (For example, Minnesota’s obligation equals credits taken by Minnesota residents in Wisconsin times “marginal costs” per credit, minus the tuition paid by the Minnesota residents at Wisconsin schools.)
- The agreement **defines marginal costs** as 64 percent of total student costs.
- The agreement **requires that the formula be calculated for each category of institutions**, but it does not specify which institutions in the two states are comparable.

Annual administrative memorandum^a

- The memo **defines the comparable categories of institutions** for purposes of determining interstate payments.
- The most recent memo says that “cost differentials [for each category of students and institutions] will be **based on actual costs** per student for the 2002-2003 academic year.”

Other

- Through an informal understanding between the agencies that administer the Minnesota-Wisconsin agreement, **actual Wisconsin instructional costs are used to determine the financial obligations of both Minnesota and Wisconsin**. For example, estimates of the cost of educating Wisconsin students at the University of Minnesota-Twin Cities campus are based on University of Wisconsin-Madison costs per credit.

^aThe annual memorandum issued jointly by the Minnesota Higher Education Services Office and the University of Wisconsin System specifies administrative details that are not addressed in the ongoing interstate reciprocity agreement between these two agencies.

between Minnesota and Wisconsin that reflect the number of participating students and the tuition rates they pay. Presently, Minnesota and Wisconsin operate under the terms of an agreement negotiated in 1997 between HESO and its Wisconsin counterpart. While the agreement provides a general framework for computing the interstate payments, further details are specified in annual administrative memos or through informal agreements. For example, HESO and Wisconsin officials compute interstate payments by applying Wisconsin instructional costs to both Minnesota and Wisconsin students—rather than by using actual Minnesota costs for Wisconsin students at Minnesota institutions. This practice is not dictated by state laws, the interstate agreement, or annual administrative memos developed by HESO and its Wisconsin counterpart.¹⁷

Minnesota residents who wish to receive reduced tuition under the Wisconsin agreement must submit applications to HESO, while most students applying for reciprocity under the North Dakota or South Dakota agreements apply by presenting a high school transcript to the institution they plan to attend.¹⁸ Minnesotans wishing to benefit from reduced tuition through the Manitoba, Iowa, or Midwest Student Exchange Program agreements are required to apply to the institution at which they plan to enroll.

Minnesota law authorizes HESO to negotiate agreements with reciprocity states that would allow reciprocity students to receive financial aid from their home states.¹⁹ No such provisions have been negotiated in Minnesota's reciprocity agreements, however. Thus, Minnesota residents attending school in reciprocity states are not eligible for the Minnesota State Grant Program, which provides financial assistance to students from low- and moderate-income families.²⁰

TUITION RATES PAID BY RECIPROCIITY STUDENTS

Until 1983, reciprocity students paid the resident tuition rate at the institution they attended.

Until 1983, Minnesota's reciprocity agreements with Wisconsin, North Dakota, and South Dakota had similar provisions regarding the tuition rates paid by participants. Under these agreements, participants were charged the resident tuition rate of the out-of-state institution they attended. Typically, however, this gave Minnesota residents the option of attending an out-of-state institution at a rate that was *less* than they would pay to attend a public college or university in Minnesota. All three interstate agreements were modified in 1983, partly because of concern that the reciprocity program might encourage out-migration of Minnesota residents.

Today, as shown in Table 1.3,

¹⁷ HESO officials said that this practice has been followed since the first Minnesota-Wisconsin agreement more than 30 years ago.

¹⁸ If Minnesota residents apply to North Dakota or South Dakota institutions later than 12 months after graduating from high school, they must submit reciprocity applications to HESO. Minnesota residents applying for tuition reciprocity at Wisconsin or South Dakota technical colleges must apply directly to the colleges.

¹⁹ *Minn. Stat.* (2002), §136A.08, subd. 5.

²⁰ Residents of reciprocity states are also not eligible to receive Minnesota state grants if they attend a Minnesota institution.

- **Minnesota’s interstate agreements have varying policies regarding the tuition rates that are charged to participants.**

For example, most undergraduate students participating in the Minnesota-North Dakota and Minnesota-South Dakota reciprocity programs pay the *higher resident tuition rate* of the school they are attending or a comparable school in their home state.²¹ In contrast, most undergraduates participating in the Minnesota-Wisconsin program pay tuition based on the *resident rate at a comparable school in their home state*. Typically, however, the resident

Table 1.3: Variation in Tuition Rates That Apply to Reciprocity Students, 2003

Categories of Students	Tuition Rate
<i>Minnesota-North Dakota Agreement</i>	
North Dakota residents attending the University of Minnesota...	Pay the University of Minnesota resident tuition rate.
Other participating students...	Pay the higher of the resident tuition rates at comparable institutions in the two states. ^a
<i>Minnesota-South Dakota Agreement</i>	
South Dakota residents attending Minnesota community colleges...	Pay the Minnesota resident tuition/fee rate, plus a percentage equal to the amount above South Dakota tuition/fees that Minnesota residents pay to attend South Dakota universities.
Other participating students...	Pay the higher of the resident tuition rates at comparable institutions in the two states. ^b
<i>Minnesota-Wisconsin Agreement</i>	
Wisconsin undergraduate students at the University of Minnesota-Twin Cities ...	Pay the University of Wisconsin-Madison resident tuition rate, plus 25 percent of the difference between the Twin Cities and Madison resident tuition rates.
Other undergraduate reciprocity students...	Pay the resident tuition rate at a comparable institution in their home state.
Graduate-level reciprocity students...	Pay the higher of the resident tuition rates at comparable institutions in the two states.

^aExceptions include Minnesota residents attending Dickinson, Mayville, Valley City, and Minot State universities and professional programs at the University of North Dakota, who pay North Dakota resident tuition plus a surcharge equal to the percentage by which the Minnesota State University System resident tuition rate exceeds the University of North Dakota/North Dakota State University resident rate.

^bTuition/fees for professional students are capped at 150 percent of resident tuition/fees at the institution attended.

SOURCE: Office of the Legislative Auditor review of interstate reciprocity agreements and memoranda.

Tuition policies for reciprocity students now vary.

²¹ Unlike the Wisconsin and North Dakota agreements, the Minnesota-South Dakota agreement provides for reciprocity not only on tuition but also on fees. Under the South Dakota agreement, students pay the higher of the sum of the resident tuition rate and general fee rate of (1) the school they are attending, and (2) a comparable school in their home state.

undergraduate tuition rates at Minnesota schools are higher than the resident rates at comparable schools in reciprocity states. Table 1.4 shows this for selected institutions (and groups of institutions) in Minnesota, Wisconsin, and North Dakota. Thus, for undergraduates,

- **North Dakota and South Dakota residents who attend Minnesota schools typically pay the Minnesota resident tuition rate. In contrast, Wisconsin residents at Minnesota schools usually pay tuition rates *less than* those paid by Minnesota residents—and sometimes substantially less.**

Table 1.4: Resident Undergraduate Tuition Rates at Minnesota, Wisconsin, and North Dakota Universities, 2002-03 School Year

<u>Institutions (Grouped by Categories Used in the Reciprocity Agreements)^a</u>	<u>2002-03 Annual Resident Tuition (\$)</u>
<i>Group 1</i>	
University of Minnesota-Morris	\$6,381
University of Minnesota-Twin Cities	5,420
University of Wisconsin-Madison	3,854
<i>Group 2</i>	
University of Minnesota-Duluth	5,585
University of Wisconsin-Milwaukee	3,738
<i>Group 3</i>	
University of Minnesota-Crookston	4,500
Minnesota state universities (Bemidji, Mankato, Marshall, Moorhead, St. Cloud, St. Paul, Winona)	3,395
University of Wisconsin comprehensive universities (Eau Claire, Green Bay, LaCrosse, Oshkosh, Parkside, Platteville, River Falls, Stevens Point, Stout, Superior, Whitewater)	3,028
North Dakota State University	2,904
University of North Dakota	2,954

NOTE: The resident rates for the Minnesota state universities and Wisconsin comprehensive universities are weighted averages, based on total 2002-03 enrollment.

^aUnder the Minnesota-Wisconsin agreement, tuition rates at the "Group 1" institutions are considered comparable, and tuition rates at the "Group 2" institutions are considered comparable. Under the Minnesota-Wisconsin agreement, tuition rates at the Minnesota state universities and the University of Minnesota-Crookston are considered comparable to the rates at the University of Wisconsin comprehensive universities. Under the Minnesota-North Dakota agreement, tuition rates at North Dakota State University and the University of North Dakota are considered comparable to the rates at the Minnesota state universities. Rates for other North Dakota universities are not shown here but ranged from \$1,782 to \$2,384.

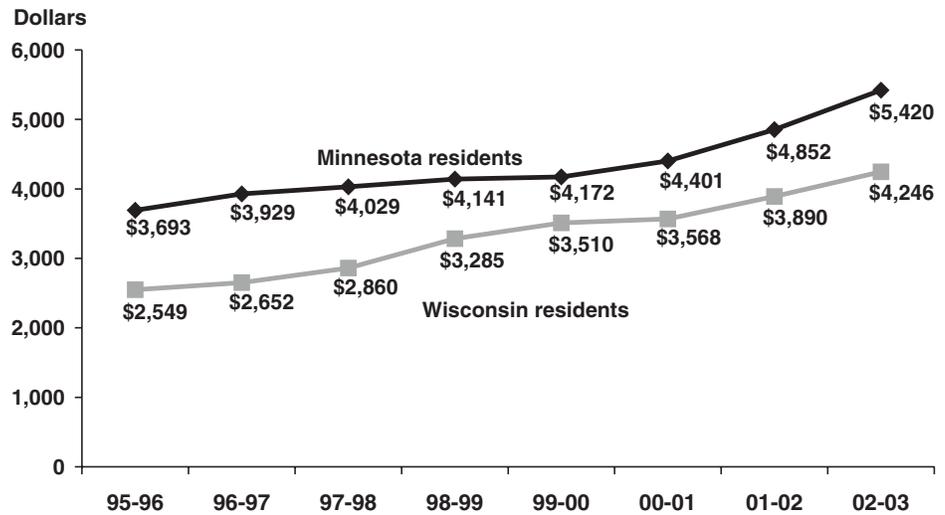
SOURCE: Office of the Legislative Auditor analysis of information from the Minnesota Higher Education Services Office.

Resident tuition rates at Minnesota schools are typically higher than the rates at comparable schools in reciprocity states.

The present Minnesota-Wisconsin agreement (which took effect in 1998) imposes a surcharge on undergraduate Wisconsin residents attending the University of Minnesota’s Twin Cities campus.²² Even with the surcharge, however, Minnesota residents at this campus still paid tuition that was \$1,174 higher (28 percent) than that paid by Wisconsin residents during 2002-03. The gap between the tuition paid by Minnesota and Wisconsin residents at this campus narrowed after the surcharge was first imposed but has subsequently widened (see Figure 1.1).

Figure 1.1: Annual Undergraduate Tuition Rates For Minnesota and Wisconsin Residents at the University of Minnesota-Twin Cities, 1995-96 - 2002-03 School Years

Minnesotans paid 28 percent more than Wisconsin residents to attend the University of Minnesota's Twin Cities campus in 2002-03.



SOURCE: Minnesota Higher Education Services Office.

The gap between the tuition paid by Wisconsin and Minnesota students at the University of Minnesota-Duluth is even larger than the gap at the Twin Cities campus. At the Duluth campus, Minnesota residents paid tuition that was \$1,847 higher (49 percent) than that paid by Wisconsin residents in 2002-03. Table 1.5 shows that there were also large tuition gaps between Wisconsin and Minnesota students at the University of Minnesota’s other two campuses, although there were relatively few Wisconsin reciprocity students at these locations. At Minnesota’s seven state universities, Minnesota residents typically paid about \$400 more (14 percent) than Wisconsin residents. At two-year community colleges and “consolidated” colleges,²³ Wisconsin residents paid a higher rate than Minnesota residents at about half of the schools.

22 The surcharge equals 25 percent of the difference between the resident rates of the University of Minnesota-Twin Cities and the University of Wisconsin-Madison. The surcharge does not apply to the other University of Minnesota campuses.

23 Consolidated colleges are those campuses where a community college and a technical college have merged.

Table 1.5: Difference Between Undergraduate Tuition Rates Paid by Minnesota and Wisconsin Residents at Minnesota Institutions, 2002-03

Institution (or Group of Institutions)	Fall 2002 Wisconsin Undergraduate Students Enrolled	How Much More Did Minnesota Residents Pay In Annual Tuition, Compared With Wisconsin Residents? ^a	
		Dollars	Percentage
University of Minnesota-Twin Cities	4,772	\$1,174	27.7%
University of Minnesota-Duluth	707	1,847	49.4
University of Minnesota-Morris	36	2,527	65.6
University of Minnesota-Crookston	22	1,472	48.6
Minnesota state universities	3,059	424	14.0
Minnesota community and consolidated colleges	1,249	-85	-3.1

NOTE: The tuition gap for Minnesota state universities and Minnesota community/consolidated colleges was computed by weighting the tuition gap at each institution by the number of credits taken at that institution by Wisconsin reciprocity students in Fall 2002.

^aNegative numbers indicate that Wisconsin residents paid more than Minnesota residents.

SOURCE: Office of the Legislative Auditor analysis of data from the Minnesota Higher Education Services Office.

Some legislators have questioned the fairness of the tuition policies in the Minnesota-Wisconsin reciprocity agreement.

The fact that Wisconsin residents pay less than Minnesota residents to attend many Minnesota institutions has led some legislators to question the fairness of the Minnesota-Wisconsin tuition reciprocity agreement. In Chapter 4, we discuss the fiscal impact of increasing the tuition that Minnesota institutions charge Wisconsin residents.

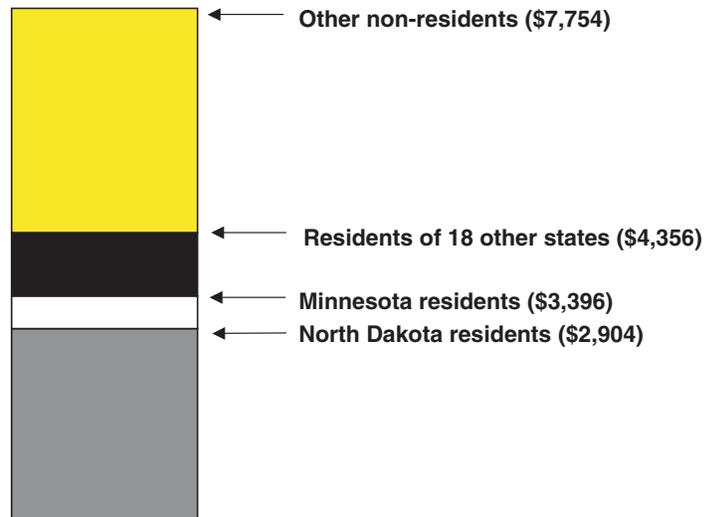
North Dakota and South Dakota residents who attend Minnesota institutions usually pay tuition equal to that paid by Minnesotans at these institutions. In contrast,

- **Minnesota residents typically pay higher tuition at South Dakota and North Dakota schools than residents of these states pay at the schools.**

Under the North Dakota and South Dakota agreements, reciprocity students from Minnesota pay the higher of the resident tuition rates at the out-of-state institution and a comparable Minnesota institution. As noted earlier, the resident tuition rates at Minnesota institutions are usually higher than the rates in North Dakota and South Dakota. But, although Minnesota residents usually pay more at North Dakota and South Dakota institutions than do residents of these states, Minnesota students still pay substantially less than the standard nonresident tuition rates at

institutions in reciprocity states. For example, as shown in Figure 1.2, Minnesota reciprocity students at North Dakota State University paid annual tuition of \$3,396 in 2002-03, while other non-residents paid tuition ranging from \$4,356 to \$7,754.

Figure 1.2: North Dakota State University Tuition Rates, 2002-03



SOURCE: North Dakota State University admissions office;
http://www.ndsu.edu/ndsu/prospective_students/cost; accessed May 7, 2003.

Reciprocity Program Participation

SUMMARY

Enrollment in the tuition reciprocity program has grown in recent years, but the Minnesotans participating in the program have consistently outnumbered the reciprocity state residents who have attended school in Minnesota. In part, this reflects the close proximity of Minnesota's population to several universities in reciprocity states. Minnesotans cite academic preferences more than other factors as the main reason they decided to attend school outside Minnesota. Most reciprocity students report that, without the reciprocity program, they would not have paid nonresident tuition to attend the school they selected.

To evaluate the tuition reciprocity program, it is important to consider who uses the program, why they use it, and where they use it. This chapter addresses the following questions:

- **How many students participate in Minnesota's tuition reciprocity program? How does the inflow of students to Minnesota from reciprocity states compare with the outflow of Minnesotans to reciprocity states' institutions?**
- **What portion of various institutions' students are participants in the reciprocity program?**
- **How far, on average, do reciprocity students travel to attend college? What fields of study do they pursue? How do the college entrance exam scores of reciprocity students compare with those of other students?**
- **What factors are most important in Minnesota residents' decisions to attend college in a reciprocity state? What higher education options would reciprocity program participants consider if the program did not exist?**

This chapter examines the number and characteristics of students participating in Minnesota's reciprocity agreements with Wisconsin, North Dakota, and South Dakota. These three agreements account for the vast majority of students in Minnesota's reciprocity program.

NUMBER OF PARTICIPANTS

By 1978, Minnesota had entered into tuition reciprocity agreements with Wisconsin, North Dakota, and South Dakota. Since that time, there has been a significant increase both in the number of Minnesotans attending college in reciprocity states and the number of reciprocity state residents attending college in Minnesota. Some of the early enrollment increases may have reflected the time that it took for states and their institutions to publicize the program's availability. Also, enrollment levels in the program's early years may have been affected by various changes in the agreements' eligibility and tuition policies, some of which we discussed in Chapter 1. Thus, we focused on changes in participation levels since 1985, by which time the reciprocity program was well established in these four states.

Table 2.1 shows the annual number of Minnesota residents who attended colleges or universities in Wisconsin, North Dakota, and South Dakota since 1985. The number of Minnesotans enrolling in Wisconsin schools has consistently been greater than the number at North Dakota and South Dakota schools. Since 1985, the increase in the number of Minnesota residents attending reciprocity state schools was 29 percent for North Dakota, 53 percent

Table 2.1: Number of Minnesota Reciprocity Students in Wisconsin, North Dakota, and South Dakota Institutions, 1985-2002

Year (Fall)	Minnesota Residents Attending Institutions In:			Total
	Wisconsin	North Dakota	South Dakota	
1985	8,659	5,360	1,027	15,046
1986	9,112	5,385	1,038	15,535
1987	9,428	5,537	903	15,868
1988	9,876	6,144	968	16,988
1989	10,122	6,380	1,098	17,600
1990	10,140	5,873	1,233	17,246
1991	11,150	5,731	1,451	18,332
1992	10,877	5,936	1,638	18,451
1993	10,377	6,062	1,726	18,165
1994	10,634	6,120	1,923	18,677
1995	10,719	6,150	1,872	18,741
1996	11,137	6,129	1,867	19,133
1997	11,499	5,968	1,821	19,288
1998	12,290	6,026	1,754	20,070
1999	12,733	6,021	1,731	20,485
2000	13,022	6,393	1,683	21,098
2001	13,136	6,636	1,699	21,471
2002	13,209	6,912	1,775	21,896
Percentage Increase, 1985-2002	52.5%	29.0%	72.8%	45.5%
Percentage Increase, 1990-2002	30.3%	17.7%	44.0%	27.0%
Percentage Increase, 1995-2002	23.2%	12.4%	-5.2%	16.8%

SOURCE: Minnesota Higher Education Services Office.

A majority of reciprocity students from Minnesota attend school in Wisconsin.

for Wisconsin, and 73 percent for South Dakota. The number of Minnesotans attending South Dakota institutions has declined slightly since 1995, however.

Table 2.2 shows the annual number of reciprocity state residents who attended school in Minnesota. Since 1985, the number of Wisconsin residents attending Minnesota colleges or universities has increased 129 percent, compared with 41 percent for North Dakota residents and 24 percent for South Dakota residents. Since 1995, however, South Dakota residents' enrollment in Minnesota institutions has grown significantly (47 percent).

Table 2.2: Number of Wisconsin, North Dakota, and South Dakota Reciprocity Students at Minnesota Institutions, 1985-2002

Year (Fall)	Reciprocity Students From:			Total
	Wisconsin	North Dakota	South Dakota	
1985	4,579	4,131	1,707	10,417
1986	4,746	4,240	1,950	10,936
1987	5,557	4,461	1,960	11,978
1988	6,204	4,630	2,098	12,932
1989	6,782	4,763	2,099	13,644
1990	7,412	5,160	2,051	14,623
1991	7,856	4,974	2,066	14,896
1992	8,245	4,742	1,965	14,952
1993	7,242	4,582	1,595	13,419
1994	7,451	4,349	1,511	13,311
1995	8,184	4,168	1,432	13,784
1996	8,585	4,295	1,623	14,503
1997	8,714	4,869	1,632	15,215
1998	9,559	5,024	1,821	16,404
1999	9,283	5,549	1,835	16,667
2000	9,414	5,357	2,133	16,904
2001	9,756	5,662	2,220	17,638
2002	10,487	5,818	2,109	18,414
Percentage Increase, 1985-2002	129.0%	40.8%	23.6%	76.8%
Percentage Increase, 1990-2002	41.5%	12.8%	2.8%	25.9%
Percentage Increase, 1995-2002	28.1%	39.6%	47.3%	33.6%

The number of other states' reciprocity students at Minnesota schools has increased 77 percent since 1985.

SOURCE: Minnesota Higher Education Services Office.

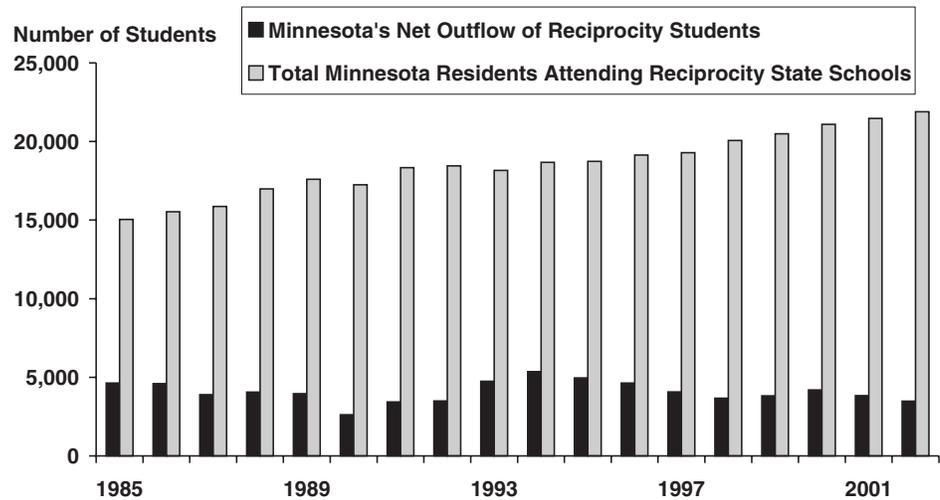
Over the duration of the reciprocity program, the number of Minnesota residents who have enrolled in Wisconsin and North Dakota institutions has consistently exceeded the number of these states' residents who have enrolled at Minnesota institutions. The flow of participants between South Dakota and Minnesota has been more variable, but in most years Minnesota institutions have served more South Dakota residents than vice versa. Altogether,

- **The total number of Minnesotans who attended school in Wisconsin, North Dakota, and South Dakota has consistently been greater than the total number of residents of these three neighboring states who attended school in Minnesota.**

Since 1985, the size of this net outflow of Minnesota students has ranged from 2,623 (1990) to 5,366 (1994), as shown in Figure 2.1. In general, however, the annual net outflow *as a percentage of all Minnesota reciprocity participants* has been declining. In 1985, the net outflow of Minnesota residents to reciprocity states (4,629) represented 31 percent of the total number of Minnesotans who participated in the program (15,046). By 2002, however, the net outflow of Minnesota residents to reciprocity states (3,482) represented 16 percent of the Minnesotans who participated in the program (21,896).

Minnesota's outflow of participants in the reciprocity program has consistently exceeded its inflow from other states.

Figure 2.1: Minnesota's Net Outflow of Reciprocity Students, Compared With Total Minnesotans in the Reciprocity Program, 1985-2002



SOURCE: Office of the Legislative Auditor analysis of HESO data for Minnesota's agreements with Wisconsin, North Dakota, and South Dakota.

The patterns of enrollment in the reciprocity program partly reflect the location of the participating states' population centers and public higher education institutions. Notably, Minnesota's largest urban areas—Minneapolis-St. Paul and Duluth—are relatively close to several four-year, public universities in the western part of Wisconsin. Meanwhile, Wisconsin's most densely populated counties are in the southeastern part of the state, far from the Minnesota-Wisconsin border.

Table 2.3 shows the universities in Minnesota, Wisconsin, North Dakota, and South Dakota where reciprocity students comprised the largest percentages of the Fall 2002 student population. The table shows that:

- **Reciprocity students comprised at least 10 percent of the student population at four Minnesota universities and nine universities in surrounding states.**

Table 2.3: Reciprocity Students as a Percentage of All Students, Selected Universities in Minnesota and Reciprocity States, Fall 2002

Institutions in Reciprocity States	Fall 2002 Reciprocity Students From Minnesota	Reciprocity Students, as a Percentage of Student Body
University of Wisconsin-River Falls (WI)	2,578	45.7%
University of Wisconsin-Superior (WI)	1,016	35.5
North Dakota State University (Fargo, ND)	3,334	29.9
University of Wisconsin-Stout (Menomonie, WI)	2,076	26.3
University of North Dakota (Grand Forks, ND)	2,996	24.1
University of Wisconsin-Eau Claire (WI)	2,344	21.6
Mayville State University (Mayville, ND)	113	15.1
University of Wisconsin-LaCrosse (WI)	1,235	14.1
North Dakota State College of Science (Wahpeton, ND)	344	14.1
University of Wisconsin-Madison (WI)	3,031	7.4
Valley City State University (Valley City, ND)	74	7.2

Minnesota Institutions	Fall 2002 Reciprocity Students From Wisconsin, North Dakota, and South Dakota	Reciprocity Students, as a Percentage of Student Body
Minnesota State University-Moorhead	2,961	38.7%
Winona State University	1,905	24.0
University of Minnesota-Twin Cities	6,149	14.4
University of Minnesota-Crookston	135	11.6
University of Minnesota-Duluth	796	8.7
Southwest State University-Marshall	355	7.8
Minnesota State University-Mankato	991	7.2
St. Cloud State University	1,104	6.8
University of Minnesota-Morris	98	5.5
Bemidji State University	168	3.4
Metropolitan State University	129	1.9

NOTE: Based on Fall 2002 headcounts, including undergraduate and graduate students. Non-degree students at the University of Minnesota campuses were excluded when calculating the percentages.

SOURCE: Office of the Legislative Auditor analysis of data from HESO, the University of Minnesota, MnSCU, and reciprocity states.

Topping the list was the University of Wisconsin-River Falls, where Minnesota residents comprised 46 percent of the Fall 2002 population. The non-Minnesota institution with the largest *number* of Minnesota residents enrolled was North Dakota State University at Fargo, with 3,334 students from Minnesota.

Reciprocity students comprised widely varying percentages of the student population at Minnesota universities, ranging from less than 2 percent at Metropolitan State University to 39 percent at Minnesota State University-Moorhead. At the University of Minnesota’s Twin Cities campus,

At some schools, reciprocity students account for a large proportion of the student body.

reciprocity students from Wisconsin, North Dakota, and South Dakota comprised about 20 percent of the undergraduate student population in Fall 2002—and about 14 percent of the combined undergraduate and graduate population. The university's highest concentration of reciprocity students was in the College of Architecture and Landscape Architecture at the Twin Cities campus, where 148 of 472 undergraduate students (31 percent) were from Wisconsin, North Dakota, and South Dakota in Fall 2002.

One Minnesota campus has relied on North Dakota students for more than half of its enrollment.

Two-year colleges usually attract students from shorter distances than universities, but a few of Minnesota's two-year colleges are also very dependent on reciprocity states for their students. Northwest Technical College, with several campuses in northwestern Minnesota, had more than 1,800 reciprocity students in Fall 2002, comprising 38 percent of its student body.¹ One of this college's campuses—at East Grand Forks—drew more than half of its student population from North Dakota. In addition, reciprocity students accounted for 29 percent of the student body at Minnesota State College-Southeast Technical (with campuses at Red Wing and Winona). Some administrators at Minnesota colleges near state borders acknowledge that it might be challenging to sustain their campus enrollments in the absence of the reciprocity program.

Finally, we observed that:

- **The number of reciprocity state residents attending Minnesota two-year colleges far exceeds the number of Minnesota residents attending two-year colleges in reciprocity states.**

For example, there were more than 1,700 full-time-equivalent (FTE) students from Wisconsin who attended Minnesota two-year colleges in 2001-02. On the other hand, there were only about 500 FTE students from Minnesota who attended two-year colleges in Wisconsin in 2001-02. Similarly, the number of North Dakota residents attending Minnesota two-year colleges (about 2,000 FTE) far exceeded the number of Minnesota residents attending North Dakota's two-year colleges (about 200 FTE). Thus, from an enrollment standpoint, Minnesota has benefited more than surrounding states by including two-year colleges in tuition reciprocity agreements.

PARTICIPANT CHARACTERISTICS

Distance Between Home and School

We evaluated how far reciprocity students traveled to attend their higher education schools of choice in Fall 2002. Using the zip codes of students' home state residences and the schools they attended, we analyzed the average distance

¹ Until July 1, 2003, Northwest Technical College had campuses in Bemidji, Detroit Lakes, East Grand Forks, Moorhead, and Wadena. Subsequent to July 1, Northwest Technical College's only campus is at Bemidji; the Detroit Lakes, Moorhead, and Wadena campuses became part of the new Minnesota State Community and Technical College, and the East Grand Forks campus became part of Northland Community and Technical College.

traveled by reciprocity students at various four-year institutions.² As shown in Table 2.4,

- **Minnesota residents traveled relatively modest distances, on average, to attend several universities in reciprocity states.**

For example, a total of about 3,500 Minnesota residents attended two University of Wisconsin campuses (River Falls and Superior) that were, on average, less than 50 miles from their residences. Two other campuses (Stout and Eau Claire) were, on average, less than 100 miles away. The proximity of the Twin Cities to the Wisconsin border had a significant impact on participation, as more than 60 percent of the Minnesota residents attending four Wisconsin universities (Madison, River Falls, Stout, and Eau Claire) came from the seven-county Twin Cities metropolitan area.³

The proximity of the Twin Cities to the Wisconsin border is one reason that many Minnesotans attend Wisconsin schools.

Table 2.4 also indicates the relative “pull” of various institutions on residents of neighboring states. The “total miles traveled” column was computed by multiplying the number of reciprocity students attending each institution times the average miles traveled from home for these students. It is interesting to note that, by this measure,

- **Large research universities exerted the most “pull” on students from reciprocity states, sometimes attracting students from considerable distances.**

The University of Minnesota’s Twin Cities campus had more “pull” among reciprocity state students than any other institution, attracting students from a total of 1.4 million miles away. In contrast, Metropolitan State University—with a main campus in St. Paul that is only 20 miles from the Wisconsin border—attracted a small number of reciprocity students, from a total of only 4,100 miles away. Among other states’ institutions, the research universities in Madison, Fargo, and Grand Forks had the most “pull.” For example, Minnesota residents traveled a total of about 700,000 miles from home to attend the University of Wisconsin-Madison, or an average of 232 miles per reciprocity student.

Overall, Table 2.4 suggests that the levels of participation in the reciprocity program reflect a combination of factors. Schools that are close to population centers in other states often attract significant numbers of reciprocity students. On the other hand, reciprocity students may travel significant distances to attend institutions with reputable programs, broad curricula, and graduate degrees.

² We relied on a web-based distance calculator at <http://www.zipfind.net>. This calculator computes distances between the population-weighted centroids of zip codes, and it measures distances “as the crow flies.”

³ In addition, our survey of reciprocity students in other states (described later in this chapter) indicated that 11 percent of Minnesotans enrolled in Wisconsin, North Dakota, or South Dakota institutions reported that they lived in Minnesota most of the time during Fall 2002 while they attended school.

Table 2.4: Average Distance From Residence to School for Reciprocity Students at Selected Universities, Fall 2002

Universities in Reciprocity States	Fall 2002 Reciprocity Students ^a	Average Miles From Home Residence to School	Total Miles Traveled From Home Residence to School	Percent of Minnesota Reciprocity Students With Home Zip Codes in the Seven-County Twin Cities Area
University of Wisconsin -Madison	3,031	232	703,192	78.2%
University of North Dakota -Grand Forks	2,996	178	533,288	31.9
North Dakota State University-Fargo	3,334	155	516,770	22.2
University of Wisconsin -Eau Claire	2,344	92	215,648	68.5
University of Wisconsin -Stout (in Menomonie)	2,076	77	159,852	64.3
South Dakota State University-Brookings	1,380	112	154,560	11.0
University of Wisconsin -LaCrosse	1,235	107	132,145	42.1
University of Wisconsin -River Falls	2,578	43	110,854	68.7
University of Wisconsin-Superior	1,016	44	44,704	8.2
Minnesota Universities				
University of Minnesota -Twin Cities	6,149	230	1,414,270	N/A
University of Minnesota -Duluth	796	154	122,584	N/A
University of Minnesota -Morris	98	219	21,462	N/A
University of Minnesota -Crookston	135	138	18,630	N/A
Minnesota State-Moorhead	2,961	90	266,490	N/A
St. Cloud State	1,104	222	245,088	N/A
Minnesota State-Mankato	991	202	200,182	N/A
Winona State	1,905	101	192,405	N/A
Southwest State	355	124	44,020	N/A
Bemidji State	168	235	39,480	N/A
Metropolitan State	129	32	4,128	N/A

NOTES: "Total miles traveled from home state residence to school" equals the number of students (Fall 2002 headcount, not including University of Minnesota non-degree students) times the average miles from home residence to school. "Average miles from home residence to school" was computed only for students for whom we had home zip code data. "NA" is not applicable.

^aFor Minnesota universities, this is the number of students from Wisconsin, North Dakota, and South Dakota. For reciprocity states' universities, this is the number of students from Minnesota.

SOURCE: Office of the Legislative Auditor analysis of data from HESO, the University of Minnesota, and MnSCU.

Fields of Study

An outflow of Minnesota residents in a particular field could indicate that Minnesota institutions are not meeting residents' needs.

In addition to examining the flow of students between states and the distances they travel, we examined the fields of study that reciprocity students choose. Potentially, the reciprocity program could help Minnesota higher education institutions defer the start-up of new and possibly expensive educational programs if similar programs are already available in reciprocity states. Also, Minnesota may benefit if students come to Minnesota to enroll in a college or university program and then decide to stay in the state to work (see Chapter 3). On the other hand, an outflow of Minnesota students in a particular field may indicate subject areas in which Minnesota colleges and universities are not fulfilling the needs of state residents.

We obtained data from higher education administrative agencies regarding the declared majors of Fall 2002 reciprocity students—including those attending Minnesota institutions and Minnesota residents attending school in reciprocity states. For Minnesotans attending North Dakota institutions, we were able to obtain data on student majors for just one institution (North Dakota State University), and these data were for undergraduates only.⁴ Also, in all states, some Fall 2002 students for whom we obtained data had not yet declared a major.⁵ These limitations prevented us from making detailed comparisons of Minnesota's inflow and outflow of reciprocity students in various fields of study, but we think it is still instructive to look at some broad patterns. Table 2.5 shows the most common declared majors among undergraduate reciprocity students. We found that:

- **The most popular majors declared by Minnesota residents enrolled in reciprocity states' public institutions were business (Wisconsin), health-related professions (South Dakota), and engineering (North Dakota State University).**
- **The most popular major among reciprocity state undergraduates enrolled at Minnesota public institutions was education.**

Representatives of Minnesota student organizations told us that some Wisconsin schools have provided programs that are not readily available to students in the Twin Cities region. For example, the two public baccalaureate institutions in the Twin Cities metropolitan area (the University of Minnesota and Metropolitan State University) offer a very limited number of programs for undergraduates interested in teaching. This may help to explain why more than 750 Minnesotans

⁴ We obtained data from the University of Minnesota, MnSCU, University of Wisconsin, and South Dakota Board of Regents. North Dakota State University, which accounts for about half of Minnesotans attending school in North Dakota, provided us with data on undergraduate majors only. The other higher education systems provided data on the declared majors of undergraduate reciprocity students, as well as the program areas of students in graduate and professional programs.

⁵ For example, 25 percent of the undergraduate reciprocity students at Minnesota institutions did not have a declared major.

Table 2.5: Most Common Undergraduate Majors Among Reciprocity Students, Fall 2002

	Number of Students
<u>Minnesota residents at:</u>	
<u>Wisconsin Schools</u>	
Business	2,119
Education	1,190
Visual and performing arts	775
<u>South Dakota Schools</u>	
Health professions and related sciences	286
Engineering	217
Social sciences and history	162
<u>North Dakota State University^a</u>	
Engineering	776
Business	397
Architecture	249
<u>Wisconsin, North Dakota, and South Dakota residents at Minnesota Schools</u>	
Education	1,312
Business	1,245
Social sciences and history	835
Visual and performing arts	761
Biology	664

NOTE: This analysis grouped majors into broad categories, based on the National Center for Education Statistics' Classification of Instructional Programs (CIP). We categorized majors using two-digit CIP codes.

^aData for other North Dakota universities were not available.

SOURCE: Office of the Legislative Auditor analysis of data from the University of Minnesota, MnSCU, University of Wisconsin, South Dakota Board of Regents, and North Dakota State University.

majored in education-related undergraduate programs at the University of Wisconsin's River Falls, Eau Claire, and Stout campuses in Fall 2002.⁶

The number of reciprocity students leaving Minnesota to seek engineering degrees far surpassed the number who enrolled in Minnesota's engineering programs.

Engineering was perhaps the most noteworthy field in which Minnesotans going to reciprocity states outnumbered the reciprocity state residents coming to Minnesota. We estimated that at least 1,400 Minnesota residents enrolled in engineering programs in reciprocity states in Fall 2002, compared with about 350 reciprocity state residents in engineering programs at Minnesota schools. As Table 2.6 shows, Minnesota schools produce a relatively small number of engineers per 10,000 residents, while the states surrounding Minnesota produce engineers at rates above the national average. Engineering programs generally have some of the highest costs per student among higher education programs, and Minnesotans' enrollment in other states' engineering programs has probably limited the public cost of operating engineering programs at Minnesota institutions. But the wisdom of relying this much on other states' engineering programs to meet Minnesota's workforce needs depends, in part, on the extent to

⁶ Although education was the most common major of undergraduate reciprocity students attending Minnesota schools, it appears that the number of Minnesotans seeking teaching degrees in reciprocity states exceeded the number of reciprocity state residents seeking teaching degrees in Minnesota. Data indicated 1,312 reciprocity students with education majors at the University of Minnesota and MnSCU in Fall 2002. There were 1,190 Minnesotans in education programs in Wisconsin, 154 in South Dakota, and an undetermined number at the University of North Dakota and other North Dakota schools.

Table 2.6: Engineering Graduates Produced (Selected States and U.S. Total), 1996-97

State	Number of Graduates			Engineering Graduates per 10,000 Population		
	Bachelors	Masters	Doctoral	Bachelors	Masters	Doctoral
Minnesota	754	186	98	1.61	0.40	0.21
Wisconsin ^a	1,468	424	127	2.82	0.82	0.24
North Dakota	387	32	6	6.04	0.50	0.09
South Dakota	337	115	0	4.61	1.57	0.00
Iowa	937	277	96	3.28	0.97	0.34
5-state total	3,883	1,034	327	2.75	0.73	0.23
U.S.	65,091	30,574	6,986	2.43	1.14	0.26

^aPrivate institutions accounted for 502 of Wisconsin's bachelors degrees in engineering, plus 81 masters degrees and 9 doctoral degrees. Private institutions do not participate in Minnesota's interstate reciprocity agreements.

SOURCE: Engineering Workforce Commission of the American Association of Engineering Societies, Inc., *Engineering and Technology Degrees: 1997* (Washington, D.C., 1997), pages 3-35; population data from U.S. Census Bureau.

which graduates of these programs seek employment in Minnesota following graduation (see Chapter 3).

Among reciprocity students in graduate or professional programs at Minnesota institutions, the most common field of study was education. In Fall 2002, there were 347 reciprocity students in graduate-level education programs at Minnesota schools, followed by 210 reciprocity students in health-related graduate programs.⁷

Academic Performance

Minnesota's interstate reciprocity agreements require that reciprocity students be subject to the same admission requirements that are applied to residents of the state in which the institution is located. Thus, for example, the agreements do not give residents of reciprocity states preference over Minnesota residents at Minnesota colleges and universities, nor do the agreements authorize any restrictions on the admission of students from reciprocity states.

A 2000 analysis by HESO found that reciprocity students from Wisconsin, North Dakota, and South Dakota who enrolled in Minnesota schools as freshmen in 1998 had better average ACT Assessment scores (24.1) than the Minnesotans who left the state that year to enroll in reciprocity states (22.9).⁸ Thus, although Minnesota annually loses more students to other states through the reciprocity

⁷ Among Minnesotans in graduate-level education at Wisconsin schools, the most common field of study was education (334 students). We were unable to obtain data on the fields of study of graduate-level reciprocity students at North Dakota institutions, and the total number of graduate-level reciprocity students at South Dakota institutions was relatively small (73 in Fall 2002).

⁸ HESO, *Insight Newsletter* (St. Paul, February 2000); <http://www.mheso.state.mn.us/insight.cfm?file=act>; accessed July 1, 2003. The data were from ACT Research for new entering freshmen.

program than it gains, perhaps this loss is offset by the stronger academic credentials of the reciprocity students attracted to Minnesota. We further examined this issue by comparing the average ACT scores of freshmen reciprocity students at the University of Minnesota and MnSCU schools with those of all freshmen students in these institutions. The data showed that:

- **The average college entrance examination scores of reciprocity students at Minnesota’s public universities exceeded those of other new students at these schools.**

Reciprocity students at Minnesota schools have had above-average entrance exam scores.

For example, reciprocity students who entered the University of Minnesota’s four campuses as undergraduates in 2001 and 2002 had average ACT scores of 25.2, compared with 23.7 for all incoming freshmen. At the university’s Twin Cities campus, incoming reciprocity students had average scores of 25.6, compared with 24.2 for all freshmen. At Minnesota state universities, incoming reciprocity students had average ACT scores of 21.8 in Fall 2002, compared with an average score of 21.3 for all new students.⁹ Overall, it appears that reciprocity students enrolling in Minnesota institutions have had relatively strong academic credentials, potentially enriching the schools they attend.

REASONS FOR ATTENDING SCHOOL IN RECIPROCITY STATES

In Chapter 1, we noted that Minnesota law declares a single purpose for the tuition reciprocity program: improved “educational advantages” for students. The law does not specify exactly what this means, but presumably it means that tuition reciprocity will provide participating students with more affordable or convenient educational options. To help us further examine the reasons that Minnesotans decided to enroll in reciprocity states, we sent surveys to a random sample of 1,200 reciprocity students in June 2003. We surveyed Minnesota residents who were first-time participants in the reciprocity program in Fall 2002, attending institutions in Wisconsin, North Dakota, or South Dakota.¹⁰ We received responses from 597 students, a 50 percent response rate.¹¹

⁹ At the University of Wisconsin-Madison, freshmen reciprocity students from Minnesota had average ACT scores of 27.0 in 2002, the same as the campuswide freshman average.

¹⁰ We obtained information on all Fall 2002 Minnesota residents who participated in the reciprocity program from HESO. We limited the survey to undergraduate students who took at least 12 credits in Fall 2002. A large majority of the survey recipients were freshmen, but some were students who transferred to non-Minnesota institutions as sophomores or juniors. We thought that first-time participants would be more likely to recall the reasons they decided to enroll out of state and which Minnesota institutions they considered attending. In addition, the mailing addresses we had for students were their addresses at the time they applied for the reciprocity program, and we thought that mailings to these addresses would be more likely to be forwarded to the students if we focused on recently-enrolled students.

¹¹ There were 11 persons in our sample of 1,200 for whom we did not have a valid mailing address. There is the possibility that the characteristics and viewpoints of persons who responded to our survey may differ from those who did not respond, although the percentage of Wisconsin, North Dakota, and South Dakota respondents was similar to the percentage of students in our full sample from each of these states. The survey results have a margin of error of plus or minus 4 percentage points (at a 95 percent confidence level).

We asked reciprocity students about the types of institutions they considered attending. Our survey indicated that:

- **Most Minnesotans who eventually enrolled at public colleges or universities in reciprocity states also considered attending a public institution in Minnesota.**

Table 2.7 shows that, according to our survey, more than 80 percent of reciprocity students from Minnesota considered applying to a public Minnesota institution, and nearly half said that they were admitted to one. Much smaller percentages of reciprocity students from Minnesota reported having been admitted to a Minnesota private college. In fact, our survey indicated that, for 79 percent of Minnesotans who eventually enrolled in a reciprocity state, the Minnesota school they *most seriously* considered was a *public* college or university.¹²

Nearly half of the Minnesotans who enrolled at Wisconsin, North Dakota, or South Dakota schools were also admitted to a public college or university in Minnesota.

Table 2.7: Types of Institutions Considered by Minnesota Residents Who Eventually Enrolled in Wisconsin, North Dakota, or South Dakota Institutions

Type of Institution	Percentage of Reciprocity Students Who Said They:		
	Considered Applying	Applied for Admission	Were Admitted
Minnesota public college/university	83%	50%	46%
Minnesota private college/university	35	19	17
Public college/university in a state other than Minnesota, Wisconsin, North Dakota, or South Dakota	34	21	18
Non-Minnesota private college/university	29	18	16

NOTE: Respondents were asked about colleges/universities they considered at the time they were deciding whether to enroll at the institution they eventually attended in Fall 2002.

SOURCE: Office of the Legislative Auditor, June 2003 survey of reciprocity students attending school in Wisconsin, North Dakota, or South Dakota in Fall 2002. (N=597)

We asked reciprocity students from Minnesota to identify the factors that were most important in distinguishing the out-of-state school where they enrolled from the Minnesota school they most seriously considered attending. Table 2.8 shows that:

- **Reciprocity students cited improved academic choices more than other factors as a major reason they decided to attend school outside Minnesota.**

Fifty-six percent of reciprocity students from Minnesota said that a “major factor” in their decision was that the reciprocity state institutions provided them with “course or program options that were more consistent with what [they were] looking for” than did the Minnesota institutions they most seriously considered.

¹² Only 14 percent said that the Minnesota institution they most seriously considered was a private college or university, and 6 percent said that they did not consider attending any Minnesota college or university. Two percent of survey respondents left this question unanswered.

Table 2.8: “Major Factors” in the Decisions of Minnesota Residents to Enroll in Reciprocity State Schools

Most reciprocity students from Minnesota cite academic considerations as a “major factor” in their preference for an out-of-state school.

Factor	Percent of Respondents Who Said This Was a “Major Factor” In Their Preference of the Reciprocity State School Over a Minnesota School
Had course or program options that were more consistent with what I was looking for	56%
Had a better academic reputation in my field of study	53
Had a better overall academic reputation	42
Had a friendlier atmosphere	41
Had lower tuition/fees	41
Had a more appealing campus	40
Had a smaller student body	32
Had a lower cost of living	23
Had better social or recreational opportunities	19
Was closer to my permanent home	16
Had a better financial aid package	14
Was attended by more friends or relatives of mine	12
Was farther from my permanent home	12
Recruited me more actively	12
Had better job opportunities for me to consider after graduation	10
Had better job opportunities for me to consider while in school	8
Had a larger student body	6

NOTE: Respondents were asked to evaluate the importance, if any, of each of these factors in their decision to attend college outside Minnesota. Respondents were asked to indicate whether each was a “major factor,” “minor factor,” or “not a factor,” based on a comparison with the Minnesota college/university that they most seriously considered attending.

SOURCE: Office of the Legislative Auditor, June 2003 survey of reciprocity students attending school in Wisconsin, North Dakota, or South Dakota in Fall 2002. (N=597)

Slightly fewer students cited the academic reputation of the school or the program they entered as a major factor.

Although many students said that they preferred the academic options offered by the out-of-state school they eventually chose, the survey indicated that the reduced tuition rates provided by the reciprocity program were an important factor in students’ decisions to attend non-Minnesota schools. As shown in Figure 2.2,

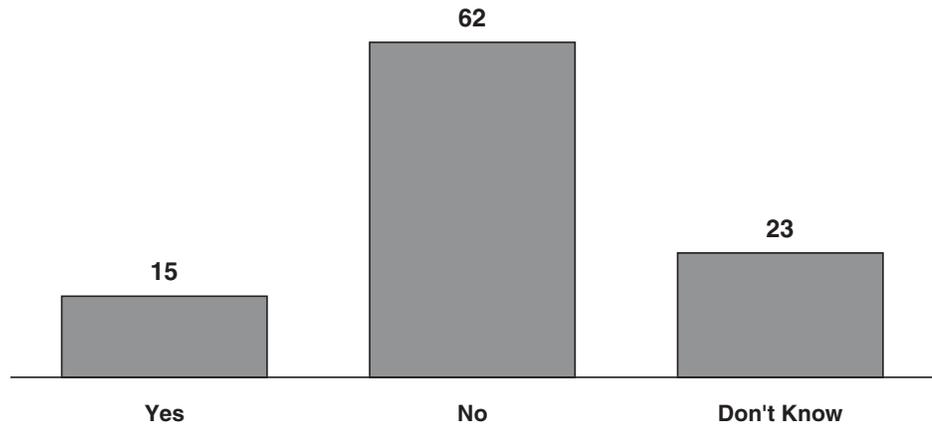
- **Sixty-two percent of reciprocity students from Minnesota said that, without the tuition reciprocity program, they would not have paid nonresident tuition to attend the school they selected.**

Of those who said they would not have paid nonresident tuition to attend the school they selected, 70 percent said they would have attended a Minnesota college or university if the reciprocity program did not exist.¹³

¹³ In addition, 10 percent said they would have attended some other out-of-state institution, 5 percent said they would not have attended college, and 16 percent said they did not know what they would have done or did not answer the question.

Figure 2.2: Percentage of Survey Respondents Who Said They Would Have Enrolled at Their Non-Minnesota School Without Reduced Tuition

The tuition reciprocity program plays a key role in the decisions of participants about where to attend school.



NOTE: The survey asked: "If the interstate tuition reciprocity program did not exist, would you have been willing and able to pay nonresident tuition to attend the school in which you enrolled in Fall 2002?"

SOURCE: Office of the Legislative Auditor, June 2003 survey of reciprocity students attending school in Wisconsin, North Dakota, and South Dakota in Fall 2002. (N=597)

Overall, our survey suggests that the tuition reciprocity program appears to be fulfilling its goal of providing educational options that students would not likely consider if the program did not exist. Also, it appears that a sizable number of Minnesotans choose to enroll in non-Minnesota schools based on their judgment that these schools' academic opportunities are preferable to those at Minnesota's institutions.

Student Migration

SUMMARY

A sizable percentage of Minnesota residents who attend college in reciprocity states return to Minnesota to work following graduation. More than 60 percent of Minnesota residents who finished college in Wisconsin, North Dakota, or South Dakota in the 1997-98 school year had earnings of some sort in Minnesota during 2001, and about half of these graduates had 2001 Minnesota earnings exceeding \$20,000. In addition, 47 percent of reciprocity students who graduated from the University of Minnesota in 1997-98 had Minnesota earnings in 2001, compared with 35 percent of reciprocity students who graduated from MnSCU schools. In general, Minnesota has fared better than surrounding states and the nation as a whole in its ability to retain and attract college graduates.

In recent years, some policy makers have expressed concerns about so-called “brain drains”—that is, the out-of-state migration of prospective college students or college-educated workers. Minnesota’s tuition reciprocity agreements provide Minnesotans with more options for attending college out of state, just as they improve the affordability of Minnesota colleges and universities for residents of neighboring states. Until now, however, there has been very limited information about where reciprocity students find employment following graduation. Such information may help policy makers judge the impact of the reciprocity program on Minnesota’s workforce.

This chapter addresses the following questions:

- **How does Minnesota compare with other states in its retention of college-bound students? How has the growth of Minnesota’s college-educated population compared with that of other states?**
- **To what extent do Minnesota residents who attend school in reciprocity states return to Minnesota to work following graduation? To what extent do reciprocity state residents who attend school in Minnesota stay in Minnesota following graduation?**
- **Do Minnesota higher education agencies have sufficient authority to track the post-graduate earnings of reciprocity program participants?**

GENERAL MIGRATION PATTERNS

To provide context for our analysis of migration by reciprocity students, we examined general migration patterns among prospective college students and college-educated persons. We compared Minnesota with other states on several measures, using data from the U.S. Census Bureau and National Center for Education Statistics. As we noted in Chapter 2, Minnesota experiences a net “loss” of a few thousand college students annually under the tuition reciprocity program. But it is likely that other factors, such as Minnesota’s overall job climate, play far greater roles than the reciprocity program in the decisions of college graduates about whether to seek employment in Minnesota.

As a starting point for this review of general migration patterns, it is worth noting that a relatively high percentage of Minnesota’s high school graduates enroll in college immediately following graduation. A recent analysis showed that 64 percent of Minnesota’s 2000 high school graduates enrolled in college in Fall 2000, which was ninth highest among the states.¹

Although a high percentage of Minnesota high school graduates attend college,

- **Nationally, and compared with surrounding states, Minnesota has ranked relatively low in its percentage of college-bound high school graduates who have remained in their home state to attend college.**

Table 3.1 shows that 74 percent of Minnesota residents who became college freshmen within a year of high school graduation attended a college in Minnesota in Fall 1998. This ranked 34th among the states, and it was below the national average of 81 percent. In addition, Minnesota has been a net “exporter” of college freshmen—that is, the freshmen leaving the state have outnumbered the freshmen coming to Minnesota institutions from other states. Minnesota’s net loss of

Minnesota has been a net "exporter" of college freshmen.

Table 3.1: Percentage of College Freshmen Who Attended A College or University in Their Home State, Fall 1998

State	Percent	State Rank
Iowa	86.3%	15th
North Dakota	84.3	19th
Wisconsin	82.5	25th
MINNESOTA	74.4	34th
South Dakota	73.5	35th
U.S.	80.8	

NOTE: The data include college freshmen who graduated from high school in the past 12 months and attended a degree-granting postsecondary institution.

SOURCE: National Center for Education Statistics, *Digest of Education Statistics, 2001*, <http://nces.ed.gov/pubs2002/digest2001/tables/dt205.asp>; accessed June 12, 2003.

¹ Tom Mortenson, “Chance for College by Age 19 By State in 2000,” *Postsecondary Education Opportunity*, n. 123 (September 2002).

college freshmen in Fall 1998 was larger than that of all but six states (plus many states experienced net gains).²

As discussed in Chapter 2, Minnesota's net outmigration of reciprocity students partly reflects the demographic features of Minnesota and its neighboring states. Minnesota's largest urban area—the Minneapolis-St. Paul metropolitan area, with nearly three million residents—is close to the Wisconsin state border, and there are several universities in Wisconsin that are within easy driving distance of the Twin Cities. In contrast, the areas bordering Minnesota in Wisconsin, North Dakota, and South Dakota provide a much smaller population base in close proximity to Minnesota's colleges and universities.

We also looked at recent changes in states' populations of college-educated persons. Such changes depend on (1) the number of college graduates that a state's institutions produce over time, and (2) the state's net migration rate of persons with college degrees. We found that:

- **Minnesota has fared better than most states in its ability to retain and attract college graduates.**

Table 3.2 shows that Minnesota's *number* of persons age 25 and older with bachelors degrees increased by 263,498 between 1990 and 2000—an increase of 43.6 percent, compared with a national increase of 37.6 percent. In addition, Minnesota's *percentage* of persons age 25 and older with at least a bachelors degree grew from 21.8 percent in 1990 to 27.4 percent in 2000. Compared with the nation as a whole, a larger percentage of Minnesota's population age 25 and older has at least a bachelors degree, and the gap between the percentages of Minnesota and the nation widened over the past decade.

Between 1990 and 2000, Minnesota's growth in its population with bachelors degrees or higher (263,498) was larger than the total number of persons with

In recent years, Minnesota has been a relatively attractive place for persons with college degrees.

Table 3.2: Persons Age 25 or Greater With at Least a Bachelors Degree, 1990 and 2000

State	Number of Residents Age 25 or Greater With at Least a Bachelors Degree				Percentage of Persons Age 25 or Greater With at Least a Bachelors Degree:	
	1990	2000	Increase, 1990-2000	Percentage Increase, 1990-2000	1990	2000
MINNESOTA	604,584	868,082	263,498	43.6%	21.8%	27.4%
Wisconsin	548,970	779,273	230,303	42.0	17.7	22.4
North Dakota	71,639	89,843	18,204	25.4	18.1	22.0
South Dakota	73,891	102,012	28,121	38.1	17.2	21.5
Iowa	299,392	402,090	102,698	34.3	16.9	21.2
U.S.	32,310,253	44,462,605	12,152,352	37.6	20.3	24.4

SOURCE: U.S. Census Bureau.

² Minnesota's net loss was 1,917 students. National Center for Education Statistics, *Digest of Education Statistics, 2001*, Table 205, <http://nces.ed.gov/pubs2002/digest2001/tables/dt205.asp>; accessed June 12, 2003.

bachelors degrees produced by Minnesota institutions during this period (236,929). In contrast, all of the states surrounding Minnesota saw their population with bachelors degrees increase at a slower rate than the number of bachelors degrees that they produced. This suggests that, compared with neighboring states, Minnesota attracted more persons to the state with bachelors degrees, retained more of its college graduates, or both.

Overall, although parts of Minnesota have faced workforce shortages in some fields, the state as a whole has a relatively well-educated population. Many of Minnesota's high school graduates leave the state to attend colleges and universities, but Minnesota has been an attractive place for persons with college degrees.

POST-GRADUATION MIGRATION OF RECIPROCIDTY STUDENTS

In Chapter 2, we noted that the students leaving Minnesota under the reciprocity program have consistently outnumbered the students coming to Minnesota under the program. If students tend to leave Minnesota for college and never return, then policy makers may question whether the benefit of expanding educational opportunities for Minnesotans is worth the long-term cost to Minnesota's workforce.

We tracked the Minnesota earnings of nearly 7,000 reciprocity students.

To help determine the workforce impacts of the tuition reciprocity program, we tracked students who completed their degrees during the 1997-98 school year. The University of Minnesota and Minnesota State Colleges and Universities (MnSCU) provided us with information on Wisconsin, North Dakota, and South Dakota residents who graduated from Minnesota's public institutions during 1997-98.³ For Minnesota residents who were reciprocity students in Wisconsin, North Dakota, and South Dakota, we did not have information that identified those who graduated. Thus, we used Higher Education Services Office (HESO) data to identify reciprocity students who accumulated large numbers of credits at public institutions in these states between the 1992-93 and 1997-98 school years and had no reciprocity credits in subsequent years.⁴ We refer to these students as "graduates," although it is possible that some of them did not complete a degree.

³ MnSCU's data were incomplete, due to inconsistent ways that institutions converted data in 1999 to a new information system. For example, MnSCU was unable to identify all of the reciprocity students at St. Cloud State, Bemidji State, and Southwest State universities who graduated in 1997-98.

⁴ Our primary sample included persons who accumulated at least 120 undergraduate credits or 24 graduate-level credits. We did *not* exclude from our sample those students who took the last of their 120+ undergraduate credits in 1997-98 and then took graduate credits as a reciprocity student in a subsequent year. As a secondary sample, we tracked the earnings of students who finished 50 to 119 undergraduate credits, ending in the 1997-98 school year. It is likely that some of these students graduated from a reciprocity state institution with two- or four-year degrees, possibly after transferring from a Minnesota institution. Our analysis showed relatively small differences between undergraduates in our primary and secondary samples in the overall percentage of students with Minnesota earnings, so this chapter reports results for the entire sample of students we tracked.

For a total of 6,820 reciprocity students who graduated in 1997-98, we looked for evidence of Minnesota earnings during calendar year 2001.⁵ We examined Minnesota Department of Employment and Economic Development data on Minnesota income earned by individuals during 2001. These data do not include Minnesota earnings from self-employment or federal employers.⁶

Among reciprocity students who graduated in 1997-98 and had Minnesota earnings in 2001, the median level of Minnesota earnings was \$36,977 for University of Minnesota graduates, \$27,926 for MnSCU graduates, and \$32,410 for graduates of reciprocity states' schools.⁷ As one measure of post-graduation employment, we looked at the percentage of 1997-98 graduates who had Minnesota earnings exceeding \$20,000 during 2001. The \$20,000 threshold is arbitrary, but such a measure excludes some persons whose jobs were part time or paid low wages—that is, jobs on which the person's college degree probably had less impact. As a second measure of post-graduation employment, we examined the percentage of 1997-98 graduates who had *any* Minnesota income three years after college—including those with Minnesota earnings of \$20,000 or less. Some persons with relatively low incomes may have taken entry-level jobs, entered graduate school, or started families in the years immediately following graduation.⁸ Arguably, however, having any Minnesota earnings three years after college graduation suggests a potentially important connection to Minnesota's workforce, even in cases where the amount of the earnings in 2001 was not large.

We found that:

- **More than 60 percent of Minnesota residents who finished college in Wisconsin, North Dakota, or South Dakota in the 1997-98 school year had earnings in Minnesota during 2001. About half of the reciprocity students who graduated from schools in these states had Minnesota earnings exceeding \$20,000 in 2001.**

Figure 3.1 shows the “return rate” to Minnesota for the out-of-state institutions that Minnesotans most often attended. Nearly 80 percent of Minnesota residents who graduated from the universities in River Falls, Menomonie (Stout), and Superior in 1997-98 had some Minnesota earnings in 2001, and 55 to 63 percent of these graduates had Minnesota earnings exceeding \$20,000. Of the institutions shown, the University of Wisconsin-Madison was the only one in which less than 50 percent of its graduates had some Minnesota earnings three years later.

5 This included 1,121 University of Minnesota graduates and 1,626 MnSCU graduates. For Minnesota residents who attended school in other states, we tracked 2,356 students who completed at least 120 undergraduate credits or 24 graduate-level credits; we also tracked 1,717 students who completed 50 to 119 undergraduate credits.

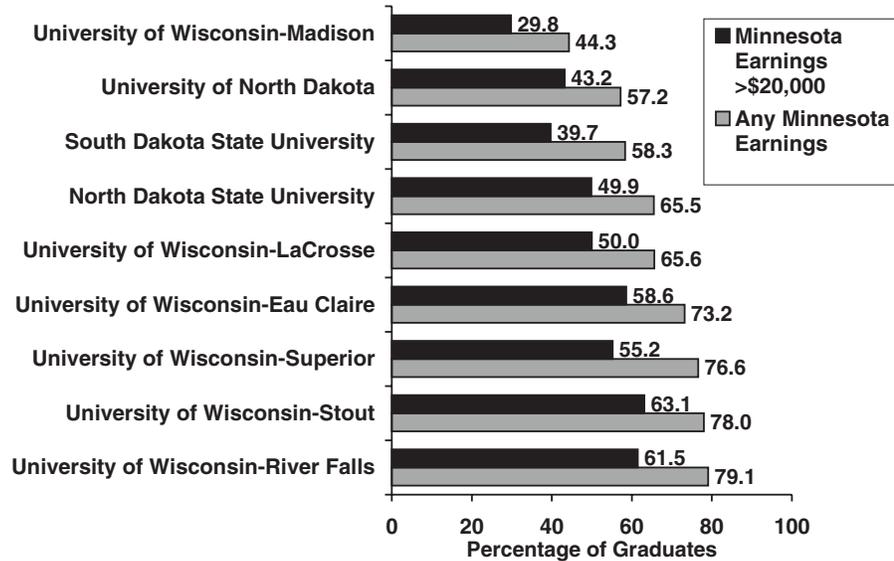
6 In addition, we used state tax records to identify persons for whom the Department of Employment and Economic Development data showed no Minnesota earnings for 2001 but who filed 2001 Minnesota tax returns. These tax filers likely included Minnesota residents who were federal employees, self-employed, or nonworking spouses. Counting such persons as “Minnesota earners” in our analysis would have increased our reported percentages of graduates with Minnesota earnings, typically by at least two or three percentage points. On the other hand, because Minnesota has tax reciprocity agreements with Wisconsin and North Dakota, some of these filers may live in Minnesota but actually work in Wisconsin or North Dakota.

7 Of all of the 1997-98 graduates we tracked, about 4 percent had Minnesota earnings between \$1 and \$5,000 in 2001, and about 14 percent had Minnesota earnings between \$1 and \$20,000.

8 Also, some 2001 Minnesota incomes may have been low for persons who lived in Minnesota for only part of 2001—moving into or out of the state at some time during the year.

A majority of Minnesotans who attended school in reciprocity states had Minnesota earnings three years after graduation.

Figure 3.1: Percentage of Reciprocity Students From Minnesota Who Had Minnesota Earnings in 2001 Following 1997-98 Graduation, Selected Institutions



Half of the Minnesotans who graduated from Wisconsin schools in 1997-98 had Minnesota earnings exceeding \$20,000 in 2001.

SOURCE: Office of the Legislative Auditor analysis of HESO data on reciprocity students and earnings data from the Minnesota Department of Employment and Economic Development.

Overall, we found that 66 percent of Minnesota residents graduating from Wisconsin institutions had some Minnesota earnings in 2001, compared with 62 percent of graduates from North Dakota schools and 58 percent of graduates from South Dakota schools.⁹ In addition, we found that 50 percent of Minnesotans who graduated from Wisconsin schools had Minnesota earnings exceeding \$20,000 in 2001, compared with 46 percent of graduates from North Dakota schools and 40 percent of graduates from South Dakota schools. These percentages would likely be slightly higher if income from federal jobs and self-employment were included in the analysis.¹⁰

Meanwhile, we found that a sizable proportion of reciprocity students who graduated from Minnesota institutions worked in Minnesota after graduation. Specifically,

⁹ Graduates who did not have Minnesota earnings in 2001 did not necessarily work in 2001 in the states where they attended school—for example, in cases where the graduates moved to places other than Minnesota or the states in which they attended college.

¹⁰ In general, college graduates tend to move more often and are more likely to move across state lines than persons with lower education levels—see Yolanda K. Kodrzycki, “Migration of Recent College Graduates: Evidence from the National Longitudinal Survey of Youth,” *New England Economic Review* (January/February 2001): 13-34. This study found that, five years after college graduation, 30 percent of graduates lived in a state other than the one in which they attended college. Students who went to college in a state other than the one in which they attended high school (that is, “nonresident” college students) were more likely to move in the years after college graduation than were “resident” students.

- **About 47 percent of reciprocity students who graduated from the University of Minnesota in 1997-98 had Minnesota earnings in 2001, compared with 35 percent of MnSCU graduates. The percentage of reciprocity student graduates with 2001 Minnesota earnings exceeding \$20,000 was 39 percent for the University of Minnesota and 24 percent for MnSCU.**

Table 3.3 shows that, in general, graduate-level students were somewhat less likely than undergraduates to work in Minnesota after graduation. Perhaps graduates with advanced degrees have limited opportunities in any particular location (such as Minnesota) in the specialized fields in which they have studied, or perhaps they are more likely than undergraduates to be recruited by employers from other states.¹¹

Figure 3.2 shows that reciprocity students from North Dakota were less likely than students from Wisconsin and South Dakota to earn income in Minnesota after graduating from a Minnesota college or university. Among the University of Minnesota's campuses, the Crookston campus (which enrolls reciprocity students primarily from North Dakota) had the lowest percentage of graduates who subsequently earned income in Minnesota—21 percent, compared with 56 percent for Morris, 55 percent for Duluth, and 48 percent for the Twin Cities.

Table 3.3: Percentage of Reciprocity Students Who Had 2001 Minnesota Earnings After Graduating From a Minnesota Institution in 1997-98, by Degree Type

Degree Type	University of Minnesota	
	Number of Reciprocity Graduates	Percentage With 2001 Minnesota Earnings
Bachelors	845	48.2%
Masters	159	44.0
Professional	66	51.5
Ph.D.	38	39.5
Other	13	30.8
TOTAL	1,121	47.3

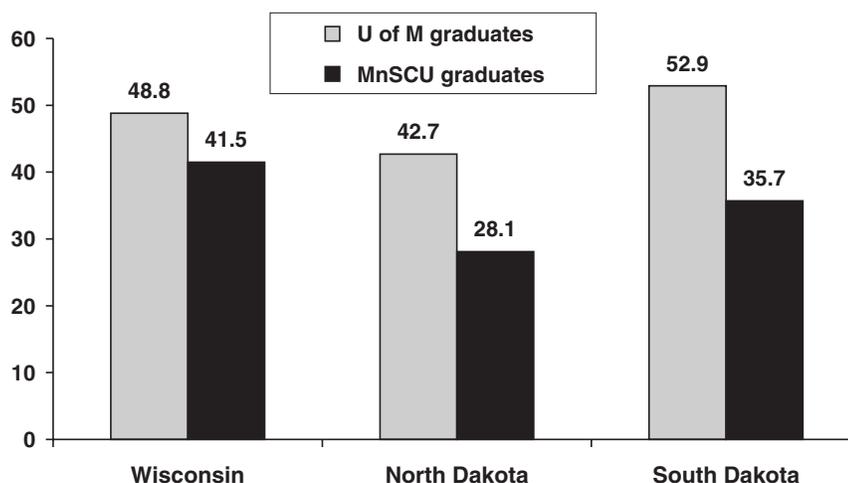
Degree Type	Minnesota State Colleges and Universities	
	Number of Reciprocity Graduates	Percentage With 2001 Minnesota Earnings
Certificate	131	38.2%
Diploma	269	26.8
Associate	371	37.2
Bachelors	747	36.6
Masters	44	25.0
Other	64	34.4
TOTAL	1,626	34.8

SOURCE: Office of the Legislative Auditor analysis of data from the University of Minnesota, MnSCU, and Department of Employment and Economic Development.

¹¹ Another study found the likelihood of migration increased as science and engineering students attended increasingly "research-intensive" institutions. See Southern Technology Council, *Who Will Stay and Who Will Leave? Individual, Institutional and State-Level Predictors of State Retention of Recent Science and Engineering Graduates* (Research Triangle Park, NC, May 2001), 21.

Reciprocity students from other states who graduated from the University of Minnesota were more likely to stay in Minnesota to work than those who graduated from MnSCU schools.

Figure 3.2: Percentage of Reciprocity Students Who Had 2001 Minnesota Earnings After Graduating From a Minnesota Institution in 1997-98 (Undergraduates Only), by State of Residence



SOURCE: Office of the Legislative Auditor analysis of data from the University of Minnesota, MnSCU, and Minnesota Department of Employment and Economic Development.

Overall, although the Minnesotans who participate in the tuition reciprocity program outnumber participants from other states who come to Minnesota, this net “outmigration” is offset by the relatively high percentage of departing students who return to Minnesota as wage earners following graduation. In addition, a substantial proportion of reciprocity students graduating from Minnesota institutions stay in the state after graduation, particularly graduates of the University of Minnesota. It is worth reiterating, however, that our analysis does not address some questions that would be interesting to know. For instance, we looked at Minnesota earnings in only the third or fourth year following graduation, and we did not assess earnings or places of residence over the longer term. In general, students’ likelihood of living in the state where they attended college declines over time.¹² However, some states may fare better than others in retaining graduates over the long term—depending, for example, on the strength of the labor market near the institution.

Also, we do not know the extent to which reciprocity students who returned to Minnesota were working in fields directly related to their college degrees. In fact, we had limited information on the fields of study of the 1997-98 graduates, so did not comprehensively assess whether graduates in certain fields of study were

¹² For example, an analysis of University of Minnesota alumni mailing addresses indicated that 90 percent of Minnesotans who completed their undergraduate degrees at the University of Minnesota in 2001 still lived in Minnesota the next year, compared with 70 percent of 1981 graduates. See Peter Zetterberg, *How Many Reciprocity Students Remain in Minnesota After Graduation?* (University of Minnesota Office of Institutional Research and Reporting, unpublished, October 2002). Compared with our evaluation, this analysis found somewhat lower percentages of reciprocity state graduates who remained in Minnesota after graduation.

more likely than others to return to Minnesota (or stay in Minnesota). We did, however, ask North Dakota State University (NDSU) to provide us with information from its Fall 2002 placement surveys for Minnesotans who graduated from NDSU's engineering and pharmacy programs during the previous year. We observed that many Minnesotans have enrolled in these specialized programs, and Minnesota policy makers might have concerns if large proportions of these students left Minnesota to attend school and did not return. The NDSU placement surveys indicated that:

- Of 100 Minnesotans who graduated from NDSU with undergraduate engineering degrees in the 2001-02 school year, 44 were employed in Minnesota in Fall 2002.¹³
- Of 13 Minnesotans who graduated from NDSU with a pharmacy doctorate degree during the 2001-02 school year, 7 were employed in Minnesota in Fall 2002.¹⁴ The pharmacy doctorate is a six-year professional program, and it is somewhat outside the usual definitions of bachelors, masters, and Ph.D. programs.

DATA ISSUES

We are not aware of any published reports prior to this study that have examined the post-graduation earnings of Minnesota reciprocity students. In 2002, the Minnesota House of Representatives considered but did not pass a bill that would have authorized the Minnesota Higher Education Services Office (HESO) to track the Minnesota earnings of nonresidents who graduated from the University of Minnesota and MnSCU institutions.¹⁵

We think that officials from Minnesota's executive and legislative branches will periodically ask questions regarding the post-graduation earnings of reciprocity students. For example, policy makers may wish to examine the Minnesota earnings of reciprocity students at various points in time after their graduation. Or, they may wish to know the extent to which reciprocity students in specialized fields stay in (or move to) Minnesota. We think that HESO—the administrative agency for the tuition reciprocity program—should be in a position to address these questions, although the University of Minnesota and MnSCU may also want to conduct such tracking for their own purposes. We think that data on individual earnings collected by the Minnesota Department of Employment and Economic Development would probably be the most useful for this purpose, but tax records

The Legislature should authorize the Higher Education Services Office to track the earnings of reciprocity students.

¹³ There were also 27 graduates working in North Dakota, and the remaining 29 were in various states and foreign countries.

¹⁴ There were three graduates in North Dakota and three in other states.

¹⁵ *H.F. 2824*, Minnesota Legislature (2002). Under the bill, tracking would only have occurred in cases where students granted their consent. The bill would have required HESO to forward social security numbers of students to the Minnesota Department of Revenue to match against tax records. Because of restrictions on disclosure of student records under the Federal Education Rights and Privacy Act, however, it may be preferable if HESO could directly access state data on Minnesota earnings—for example, as MnSCU now does—rather than providing student records to other agencies.

from the Minnesota Department of Revenue might also be helpful.¹⁶ HESO already has student identifiers for Minnesota residents attending school in reciprocity states, but it does not have identifiers for reciprocity state residents attending school in Minnesota.

RECOMMENDATION

The Legislature should authorize HESO to access state data on Minnesota earnings for the purpose of monitoring the extent to which reciprocity students eventually become Minnesota wage earners. The Legislature should also require the University of Minnesota and MnSCU to provide student identifiers to HESO for this purpose, as needed.

To answer questions that arise about post-graduation earnings of Minnesota residents who have attended school in reciprocity states, HESO may need to obtain additional data from those states. For example, legislators may wish to know how many of the Minnesota residents who get an engineering degree from a reciprocity state return to Minnesota to work, but HESO does not have information on which reciprocity students have graduated and their fields of study. We think that such information should be provided by reciprocity states to HESO on an “as needed” basis.

RECOMMENDATION

HESO should seek language in future reciprocity agreements (or in annual interstate memoranda) that require the state in which a student attended school to share information with the resident state regarding the student’s graduation status and field of study, if requested by the resident state.

¹⁶ The Department of Employment and Economic Development (DEED) has data on individuals, while tax records include a mix of individual and joint returns. DES has data on earnings reported by Minnesota employers, while tax records may include Minnesota income as well as income earned outside Minnesota. The DEED data, however, do not include some types of earnings, such as self-employment earnings or the wages of federal employees.

Interstate Payments

SUMMARY

Requiring Wisconsin residents to pay more to attend Minnesota institutions may be desirable from a fairness perspective (given that many now pay substantially less than Minnesota residents), but the potential fiscal and enrollment impacts of such a change merit careful consideration. At a minimum, however, the Minnesota-Wisconsin reciprocity agreement should be amended so that the surcharge that Wisconsin residents now pay at the University of Minnesota's Twin Cities campus would be applied to the university's other campuses. In addition, the Minnesota Higher Education Services Office (HESO) should seek interstate payments from South Dakota, reflecting the higher costs borne by Minnesota under its reciprocity agreement with South Dakota. HESO should also seek changes in Minnesota's agreement with North Dakota so that interstate payments are (1) based on more accurate measures of instructional costs and tuition levels, and (2) not dictated solely by which state instructs the larger number of reciprocity students.

Minnesota laws governing the tuition reciprocity program authorize a transfer of funds between Minnesota and three states (Wisconsin, North Dakota, and South Dakota). In this chapter, we address the following questions:

- **What is the rationale for interstate reimbursement payments in Minnesota's tuition reciprocity agreements? How large have these payments been? Has Minnesota usually *made* these payments or *received* them?**
- **To what extent do the tuition levels of institutions in participating states affect the interstate payments?**
- **Are there differences in the provisions for interstate payments in Minnesota's agreements with Wisconsin, North Dakota, and South Dakota?**
- **How might changes in Minnesota's tuition reciprocity programs affect the interstate reimbursement payments? Should these payments be capped?**

BASIS AND AMOUNT OF THE INTERSTATE PAYMENTS

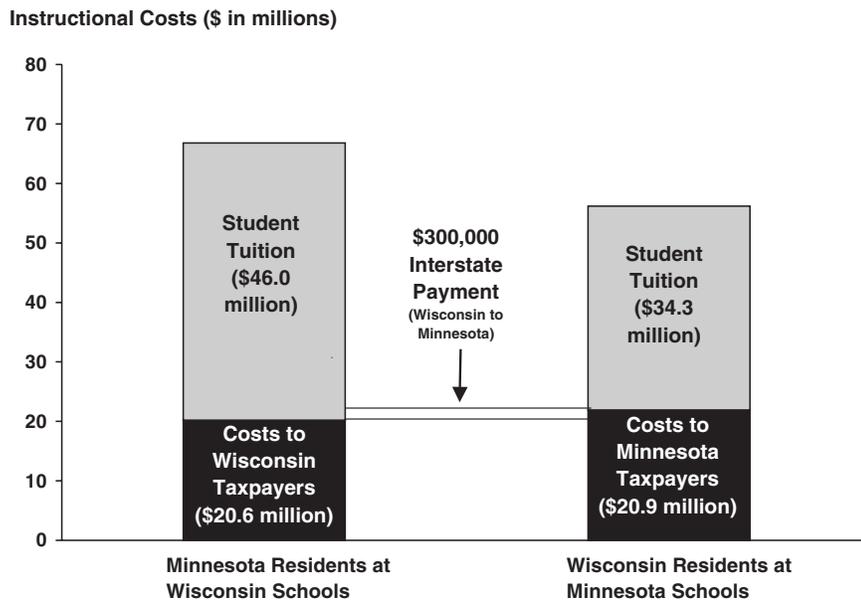
Interstate payments compensate for unequal taxpayer burdens between states participating in reciprocity agreements.

Annual interstate payments are a way for one state to reimburse another if the instructional costs borne by the states' taxpayers under a tuition reciprocity agreement are unequal. Payments can be affected by the respective states' number of participating students, tuition rates, or instructional costs per student.

To compute interstate payments under the Wisconsin and North Dakota agreements, higher education officials assume that 64 percent of higher education instructional costs are "marginal" costs.¹ Marginal costs are those costs presumed to vary with the number of students—in contrast to the remaining 36 percent of costs, which are viewed as fixed. When a new student enrolls, an institution must recover at least the marginal costs through a combination of student-paid tuition and taxpayer support.

Figure 4.1 shows, for the Minnesota-Wisconsin reciprocity agreement, how the participating states' taxpayer obligations compared for 2001-02. Minnesota residents took about 367,000 credits at Wisconsin public colleges and universities—representing an estimated \$66.6 million in marginal instructional costs. These students paid \$46.0 million in tuition, leaving Wisconsin taxpayers to pay for \$20.6 million. Wisconsin residents took about 277,000 credits in

Figure 4.1: Costs Borne Under the Minnesota-Wisconsin Reciprocity Agreement, 2001-02



SOURCE: Minnesota Higher Education Services Office.

¹ This marginal cost assumption is stated in the Minnesota-Wisconsin reciprocity agreement. This assumption is not stated in the Minnesota-North Dakota reciprocity agreement, but it is stated in the annual tuition reciprocity administrative memoranda issued by these two states.

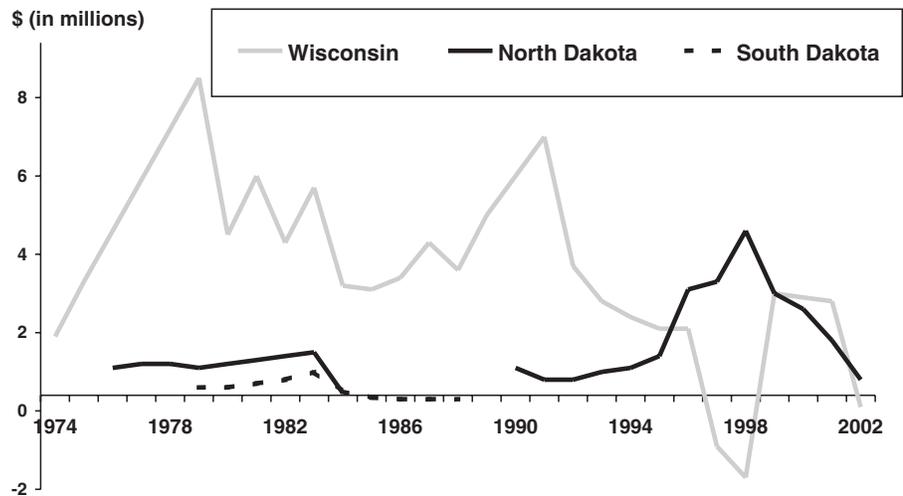
Minnesota—representing an estimated \$55.2 million in marginal instructional costs. These students paid \$34.3 million in tuition, leaving Minnesota taxpayers to pay for \$20.9 million. Because reciprocity students from Wisconsin imposed a slightly larger burden on Minnesota taxpayers than reciprocity students from Minnesota imposed on Wisconsin taxpayers (\$20.9 million vs. \$20.6 million), Wisconsin made a reimbursement payment to Minnesota for the difference (\$0.3 million)—consistent with the interstate payment provisions in the Minnesota-Wisconsin reciprocity agreement.

Figure 4.2 shows the history of interstate payments that have been made pursuant to Minnesota’s bilateral tuition reciprocity agreements. Unadjusted for inflation, Minnesota has made net payments totaling \$16 million over the past five years. Interstate payments were typically larger in the early years of the reciprocity program than they have been in recent years, particularly Minnesota’s payments to Wisconsin. In the 29-year history of interstate payments under the reciprocity program, Minnesota has made net payments totaling \$124 million, mainly to Wisconsin and North Dakota.

In 26 of the 29 years, Minnesota has made payments to Wisconsin, rather than vice versa. There was a period of years where the Minnesota-North Dakota reciprocity agreement did not require interstate payments, but Minnesota has made a payment to North Dakota in all 22 other years that the agreement was in place. Minnesota and South Dakota made interstate payments between fiscal years 1979 and 1988, with Minnesota making the payment in a majority of these years.

Minnesota has made payments to Wisconsin and North Dakota in most years, but there have been no Minnesota-South Dakota payments since the late 1980s.

Figure 4.2: Tuition Reciprocity Interstate Payments, FY 1974-2002



NOTE: Negative numbers reflect that Minnesota received, rather than made, a payment. There was no payment between Minnesota and North Dakota in FY 1985-89; there has been no payment between Minnesota and South Dakota since FY 1988.

SOURCE: Higher Education Services Office.

IMPACT OF TUITION CHANGES

Interstate payments depend partly on the tuition levels in the participating states.

Variation in annual tuition reciprocity interstate payments has depended partly on factors over which policy makers have limited control, such as changes in the number of participating students and the average instructional costs of the institutions they attend. Furthermore, interstate payments can be affected by the tuition levels in *both* states that participate in a reciprocity agreement. Although legislators and higher education governing boards oversee tuition levels in their respective states, they have no control over the tuition rates in other states that participate in reciprocity agreements.

For the Minnesota-Wisconsin and Minnesota-North Dakota agreements, we examined the impact that various increases in resident tuition rates would have had on 2001-02 interstate payments, while holding all other factors constant. For each of these agreements, we assumed that Minnesota resident tuition rates increased 15 percent beyond the actual 2001-02 tuition levels, and we examined the impact of 5, 15, and 25 percent increases in the other state's resident tuition rates. Tuition increases might reduce the number of students choosing to participate in the reciprocity program, but we did not assume such changes.² Table 4.1 shows the interstate payments that would result under various tuition scenarios. In general,

- **Increasing Minnesota's resident tuition rates by a percentage equal to or greater than the increase in the rates of Wisconsin or North Dakota would have reduced Minnesota's financial obligation to the other state (or increased the size of the payment Minnesota received).**

For instance, if tuition had increased (beyond 2001-02 tuition levels) by 15 percent for Minnesota and 5 percent for Wisconsin, we estimated that Minnesota would have received a \$4.4 million interstate payment from Wisconsin for the 2001-02 year, rather than the \$303,000 payment that it actually received.³ Similarly, tuition increases of 15 percent for Minnesota and 5 percent for North Dakota would have eliminated Minnesota's net financial obligation to North

² Studies have generally shown that low-income students, minority students, and two-year college students are more responsive to changes in tuition than other students. Also, first-time students are usually more responsive to tuition levels than upperclassmen. One review of previous research estimated that enrollment typically decreased 1.8 percent for each \$100 tuition increase (Larrie L. Leslie and Paul T. Brinkman, "Student Price Response in Higher Education: The Student Demand Studies," *Journal of Higher Education* 58, n. 2 (March/April 1987): 181-204. A more recent study estimated that community college enrollment would decrease 2.3 percent and four-year university enrollment would decline 0.5 percent with a tuition increase comparable to that in the Leslie and Brinkman study (Donald E. Heller, "The Effects of Tuition and State Financial Aid on Public College Enrollment," *The Review of Higher Education* 23, n. 1 (Fall 1999): 65-89.) Student responses to increased tuition depend on various factors, including who pays for their education (students vs. parents), their incomes, and the perceived return on investment of a college education, among others.

³ In Wisconsin, tuition revenues paid by Minnesota residents above the Wisconsin resident rate go to the Wisconsin General Fund, not to the institutions. In 2001-02, 14 percent of Minnesotans' tuition revenue at Wisconsin schools went to the Wisconsin General Fund. If Minnesota's 2001-02 resident tuition rate had increased another 15 percent compared to 5 percent for Wisconsin, most of Wisconsin's increased tuition revenue would have gone to the Wisconsin General Fund. In Minnesota, all revenues from tuition increases go to the University of Minnesota and MnSCU, not to the Minnesota General Fund.

Table 4.1: Hypothetical Impact of Various Tuition Increases on Minnesota’s Interstate Payments, 2001-02 School Year

Minnesota could face larger interstate payments if tuition levels in Wisconsin or North Dakota increased faster than Minnesota tuition levels.

	Interstate Payment (+ Indicates That Minnesota Would Receive The Payment; - Indicates That Minnesota Would Make The Payment)
Minnesota-Wisconsin agreement	
Actual 2001-02 payment	+ \$302,741
Hypothetical scenario:	
Minnesota tuition up 15%, Wisconsin tuition up 5%	+ \$4,448,339
Minnesota tuition up 15%, Wisconsin tuition up 15%	+ \$2,057,885
Minnesota tuition up 15%, Wisconsin tuition up 25%	- \$424,024
Minnesota-North Dakota agreement	
Actual 2001-02 payment	- \$434,225
Hypothetical scenario:	
Minnesota tuition up 15%, North Dakota tuition up 5%	0 ^a
Minnesota tuition up 15%, North Dakota tuition up 15%	0 ^b
Minnesota tuition up 15%, North Dakota tuition up 25%	- \$1,186,563

^aThe Minnesota-North Dakota payment calculation formula indicates that North Dakota would owe Minnesota \$1,731,575, but the interstate agreement prohibits interstate payments to the state that sent the larger number of students.

^bThe Minnesota-North Dakota payment calculation formula indicates that North Dakota would owe Minnesota \$272,506, but the interstate agreement prohibits interstate payments to the state that sent the larger number of students.

SOURCE: Office of the Legislative Auditor analysis of data from the Minnesota Higher Education Services Office.

Dakota, compared with the \$434,000 payment that Minnesota actually made to North Dakota.

Alternatively, an increase in Minnesota’s rates that was significantly less than the other state’s rate increase would have increased Minnesota’s financial obligation to that state. For instance, if tuition had increased 15 percent for Minnesota and 25 percent for North Dakota, Minnesota’s 2001-02 payment to North Dakota would have increased from \$434,000 to \$1.2 million. Likewise, with a 15 percent increase in Minnesota tuition and a 25 percent increase in Wisconsin tuition, Minnesota would have become obligated to *make* a payment to Wisconsin in 2001-02—rather than *receiving* a payment, as was the case. Most North Dakota and Wisconsin schools have lower resident tuition rates than their Minnesota counterparts, and Minnesota would be at risk of larger interstate payments if either of these states sharply increased its resident tuition levels.

IMPACT OF INCREASING WISCONSIN RESIDENTS' TUITION RATES AT MINNESOTA SCHOOLS

In Chapter 1, we noted that Wisconsin residents usually pay lower undergraduate tuition to attend public colleges and universities in Minnesota than Minnesotans pay at these same institutions. This is because the Minnesota-Wisconsin agreement—unlike the agreements with North Dakota and South Dakota—requires participants to pay the resident tuition rate of a home state institution comparable to the institution they are attending, not the higher of the two resident rates. In recent years, resident tuition rates at Minnesota's public institutions have consistently been higher than the resident rates at comparable Wisconsin institutions.

There are three ways that the Minnesota-Wisconsin reciprocity agreement could be changed to improve the fairness of the tuition levels paid by Wisconsin residents at Minnesota schools:

There are several options for improving the fairness of tuition levels paid by Wisconsin residents at Minnesota schools.

- **Option 1:** The reciprocity agreement could be amended to require Wisconsin residents to pay a tuition rate at least equal to the resident rate that Minnesota residents pay at the same institution. A bill to require such an approach was introduced in the Minnesota House of Representatives in 2003.⁴
- **Option 2:** The agreement could be changed to require Wisconsin residents in the reciprocity program to pay the higher of two tuition rates: (1) the average resident rate for a category of Minnesota institutions (including the institution attended), and (2) the average resident rate for a category of comparable Wisconsin institutions. Minnesota and Wisconsin presently use such groupings of comparable institutions for purposes of computing interstate reimbursements. Under this approach, there could still be circumstances where Wisconsin residents would pay lower tuition than Minnesota residents at the same institution, but the size of these tuition differences would usually be much smaller than is now the case.⁵
- **Option 3:** The agreement could impose a surcharge on the gap between the resident tuition rate at the institution attended and the rate at a comparable home state institution. An example of this approach is the 25 percent surcharge that has been imposed on Wisconsin residents at

⁴ H.F. 77, Minnesota Legislature (2003).

⁵ For example, the average undergraduate resident tuition rate for state universities in 2002-03 was \$3,395, but the rates of individual universities ranged from \$3,137 (Metro State) to \$3,782 (Bemidji State). If the reciprocity agreement was amended to charge students the higher of two resident rates, based on average rates at comparable institutions, a Wisconsin resident at Bemidji State could still pay a lower tuition rate (\$3,395) than the rate charged to Minnesotans at Bemidji State (\$3,782).

the University of Minnesota-Twin Cities campus since the 1997-98 school year.⁶

We examined the fiscal impact these options would have had in 2001-02, holding all factors constant except for the tuition rates paid by Wisconsin students.⁷ All of these options would have increased the amount of tuition revenues paid by Wisconsin students, increasing the revenues of the Minnesota institutions they attended. For instance, each of the first two options would have increased the University of Minnesota's tuition revenues by about \$5.3 million and MnSCU institutions' revenues by \$900,000 in the 2001-02 school year. But,

- **Reducing or eliminating the tuition disparities between Minnesota and Wisconsin residents at Minnesota schools would increase Minnesota taxpayers' financial obligation to Wisconsin.**

In 2001-02, Minnesota received a \$303,000 payment from Wisconsin to compensate for unequal costs borne by the two states under the reciprocity program. Holding factors other than tuition rates constant, we estimated that:

- Under Option 1 (charging Wisconsin residents a rate at least equal to the rate paid by Minnesotans at the same institution), Minnesota would have owed Wisconsin an interstate payment of \$5.9 million in 2001-02.
- Under Option 2 (charging reciprocity students the higher of two resident tuition rates), Minnesota would have owed Wisconsin an interstate payment of \$6.0 million in 2001-02.
- Under various surcharge scenarios (Option 3), Minnesota would have been required to make a payment to Wisconsin in 2001-02, or Wisconsin's payment to Minnesota would have been smaller than it actually was. For example, by charging Wisconsin students at the University of Minnesota's Twin Cities campus a surcharge equal to 50 percent of the difference between the Minnesota and Wisconsin resident rates (rather than the 25 percent surcharge now in effect), Minnesota would have owed Wisconsin a payment of \$1.1 million in 2001-02. Minnesota's obligation would have increased to \$2.6 million with a 75 percent surcharge and \$4 million with a 100 percent surcharge. By charging Wisconsin students at the University of Minnesota-Duluth a surcharge equal to 25 percent of the difference between the Minnesota and Wisconsin resident rates (just like the 25 percent surcharge now in effect at the Twin Cities campus), Wisconsin's 2001-02 payment to Minnesota would have declined from \$303,000 to

But each option could increase Minnesota's financial obligation to Wisconsin.

⁶ The 25 percent surcharge is applied to the difference between the resident tuition rate at the University of Minnesota's Twin Cities campus and the University of Wisconsin's Madison campus. For example, if Minnesota's resident tuition rate was \$1,600 more than Wisconsin's, Wisconsin residents at the University of Minnesota would pay the Wisconsin resident rate plus a \$400 surcharge.

⁷ We assumed no changes in marginal instructional costs or credits taken, although it is possible that higher tuition levels at Minnesota schools might lead to a reduction in the number of credits taken by Wisconsin residents. These options would not have affected the tuition that Minnesotans paid at Wisconsin schools because Minnesota's resident tuition rates were higher than those at comparable Wisconsin institutions.

\$63,000.⁸ With a 50 percent surcharge at the Duluth campus, Minnesota would have paid Wisconsin \$176,000; with a 100 percent surcharge, Minnesota would have paid Wisconsin \$655,000.

Officials from the University of Minnesota-Duluth expressed concerns to us about the gap between tuition rates paid by Minnesota and Wisconsin students at their campus, and they said that students have similar concerns.⁹ The 25 percent surcharge on Wisconsin reciprocity students, negotiated by HESO and its Wisconsin counterpart in 1997, has helped to address concerns about the fairness of tuition rates at the university's Twin Cities campus. According to HESO staff, however, neither the University of Minnesota nor University of Wisconsin pursued the extension of this 1997 surcharge to the University of Minnesota's other campuses.

The tuition surcharge applied to Wisconsin students at the University of Minnesota's Twin Cities campus should be applied at the university's other campuses, too.

To make tuition practices under the Minnesota-Wisconsin agreement more consistent across institutions, we think that the tuition surcharge now in place at the University of Minnesota-Twin Cities should be applied to Wisconsin students at the university's Duluth, Morris, and Crookston campuses. By law, any interstate reciprocity agreements negotiated by HESO will require approval by the University of Minnesota and MnSCU governing boards, so we suggest that an initiative to change the surcharge on Wisconsin reciprocity students should begin with a request to HESO from the University of Minnesota.

RECOMMENDATION

With the assent of the University of Minnesota, the Minnesota Higher Education Services Office (HESO) should renegotiate the Minnesota-Wisconsin reciprocity agreement to include a tuition surcharge that would be applied identically to Wisconsin residents at all University of Minnesota campuses.

We offer no recommendation about the appropriate level of the surcharge. In our view, there are legitimate questions about the fairness of charging several thousand Wisconsin residents lower tuition than Minnesota residents to attend Minnesota institutions. But addressing these fairness issues could come at significant cost to Minnesota taxpayers, particularly if Wisconsin students were required to pay the *same* tuition that Minnesotans pay at Minnesota institutions. In addition, charging Minnesota resident tuition to Wisconsin reciprocity students would, in many cases, result in a very large tuition increase, likely discouraging

⁸ The Duluth campus is considered comparable to the University of Wisconsin's Milwaukee campus under the Minnesota-Wisconsin agreement, so we compared the resident rates of these two campuses for our surcharge analysis.

⁹ The gap between the tuition paid by Minnesota and Wisconsin students at the University of Minnesota would be even larger if the university had not instituted a flat "university fee" on all students in fiscal year 2002 (instead of raising these revenues through larger tuition increases than were adopted). Revenues from this fee are controlled by the university's central administration, while tuition revenues are controlled by the campuses. For the 2003-2004 year, the university fee will be \$300 per semester.

Tuition fairness issues could be addressed without incurring new state spending.

some Wisconsin students from participating in the reciprocity program.¹⁰ We suggest that legislators carefully consider these impacts before mandating changes in the Minnesota-Wisconsin agreement.

For legislators who want to address the tuition fairness issue without incurring new state spending, one option would be to pass legislation that authorizes the State of Minnesota to capture increased revenues that result from charging higher tuition to Wisconsin residents attending Minnesota schools. If the Minnesota-Wisconsin reciprocity agreement were amended to require reciprocity students from Wisconsin to pay



Wisconsin residents usually pay lower undergraduate tuition to attend public colleges and universities in Minnesota than Minnesotans pay to attend these same institutions.

Minnesota resident tuition, for example, most Wisconsin reciprocity students would have to pay higher tuition to attend a Minnesota public college or university. Through the state appropriations process or a change in state law, however, the State of Minnesota could capture some or all of these additional revenues from the MnSCU and University of Minnesota systems, and these revenues could offset the state's higher interstate payments to Wisconsin.¹¹ Presumably, such an approach could allow the University of Minnesota and MnSCU to maintain their present levels of revenue (tuition and state appropriations) per reciprocity student. Again, however, it is worth noting that large increases in tuition rates could result in less participation by Wisconsin residents in the reciprocity program, and this might be a source of concern to officials in the University of Minnesota and MnSCU systems.

¹⁰ One analysis estimated that if, in fiscal year 1998, Wisconsin residents had been charged the same tuition at the University's Twin Cities campus that Minnesota residents were charged, 31 fewer new freshmen from Wisconsin would have enrolled (see Stephen L. DesJardins, "Simulating the Enrollment Effects of Changes in the Tuition Reciprocity Agreement Between Minnesota and Wisconsin," *Research in Higher Education* 40, n. 6 (1999): 705-716. But the gap between the tuition that Minnesota and Wisconsin residents pay has grown at the Twin Cities campus since this study was done. Also, the study did not consider the enrollment impacts of such a change on the University's other campuses or the MnSCU institutions. Thus, it may be reasonable to expect that charging resident tuition to all Wisconsin residents at Minnesota schools would have a larger enrollment impact than suggested by the DesJardins study.

¹¹ For example, the state could collect from the University of Minnesota and MnSCU an amount for each Wisconsin reciprocity student equal to the difference between the Wisconsin and Minnesota resident tuition rates (or, at the University's Twin Cities campus, the difference between the Wisconsin rate with the present 25 percent surcharge and the Minnesota rate).

SOUTH DAKOTA INTERSTATE PAYMENTS

Annual interstate payments have been a longstanding part of Minnesota's tuition reciprocity agreements with Wisconsin and North Dakota. In most years, Minnesota has paid each of these two states, partly reflecting the fact that Minnesotans who have attended school in these states have outnumbered the residents of these states who have attended school in Minnesota. In contrast, however,

- **There have been no Minnesota-South Dakota interstate payments in recent years, contrary to South Dakota law and the terms of the original Minnesota-South Dakota reciprocity agreement.**

Minnesota law authorizes but does not require HESO to enter into an agreement with South Dakota that includes provisions for interstate payments. Meanwhile, South Dakota law requires that “the state with the greater total credit hours of participation shall reimburse the other.”¹² Similarly, the original interstate agreement negotiated by HESO and the South Dakota Board of Regents also requires a reimbursement payment by the state whose residents account for the larger number of credit hours of participation. In each of the seven years after the Minnesota-South Dakota agreement was first negotiated in the late 1970s, Minnesota made annual payments to South Dakota—totaling about \$1.8 million. South Dakota subsequently made small payments to Minnesota for fiscal years 1985 through 1988, and there have been no interstate payments between Minnesota and South Dakota since then.¹³ Despite the fact that the Minnesota-South Dakota interstate agreement still requires interstate payments, the annual memoranda negotiated by HESO and the South Dakota Board of Regents have not. The most recent annual memorandum said:

The Agreement does not require reimbursement from one state to the other, however, a payment may be negotiated in the future if student flow or reciprocity tuition and fee charges become excessive.¹⁴

HESO and South Dakota Board of Regents staff told us that South Dakota officials initiated the proposal to discontinue interstate payments in the late 1980s, anticipating that South Dakota might be obligated to make continued (and possibly growing) payments to Minnesota. According to a former HESO official, the governing boards of Minnesota's public higher education systems and leaders of Minnesota's higher education legislative committees were aware of the decision to discontinue the Minnesota-South Dakota payments and supported it.

¹² *S.D. Codified Laws* (2002), §13-53B1, art. VIIB.

¹³ Through annual administrative memoranda, HESO and the South Dakota Board of Regents agreed to limit interstate payments to \$100,000 starting in fiscal year 1987, and they agreed to eliminate payments entirely starting in fiscal year 1989.

¹⁴ Robert Poch, Director, HESO, and Robert T. Tad Perry, Executive Director, South Dakota Board of Regents, *Minnesota-South Dakota Public Higher Education Reciprocity Agreement: Administrative Memo of Understanding: 2002-2003 School Year* (July 2002).

South Dakota law and the Minnesota-South Dakota reciprocity agreement require interstate payments.

In recent years, South Dakota residents have taken more credit hours at Minnesota schools than Minnesota residents have taken at South Dakota schools. Consequently,

- **The absence of interstate payments under the Minnesota-South Dakota agreement has adversely affected Minnesota in recent years.**

For example, during the 2001-02 school year, South Dakota residents enrolled for about 66,000 credits at Minnesota institutions, compared with the 47,000 credits that Minnesota residents took at South Dakota institutions. Under South Dakota law and the terms of the Minnesota-South Dakota agreement, this credit imbalance should require South Dakota to pay Minnesota as compensation for the states' unequal cost burdens.

The Minnesota-South Dakota reciprocity agreement prescribes a method for calculating the size of the interstate payment.¹⁵ But interstate payments between the two states have not been computed for many years, and higher education staff in Minnesota and South Dakota with whom we spoke were uncertain about how they might today apply the method that was outlined in the agreement. To estimate the amount of the interstate payment that South Dakota would have been obligated to send Minnesota in 2001-02, we used the Minnesota-North Dakota method of computing the interstate payment—partly because various aspects of the Minnesota-South Dakota reciprocity agreement are based on the Minnesota-North Dakota agreement. Using this approach, we estimated that South Dakota would have owed Minnesota a payment of about \$1.0 million for 2001-02. But, as we discuss in the next section, we think there are ways to improve the accuracy of the interstate payment calculation under the Minnesota-North Dakota agreement. When we incorporated several such improvements into our South Dakota payment calculation, we estimated that South Dakota would have owed Minnesota about \$350,000 for 2001-02.¹⁶

In our view, provisions pertaining to interstate payments in the annual administrative memoranda between the South Dakota Board of Regents and HESO should not override the continuing provisions of South Dakota law and the original Minnesota-South Dakota agreement.¹⁷ Furthermore, regardless of the

¹⁵ The agreement says that, to compute the interstate payment, the difference between the two states' total number of credit hours should be multiplied by a "tuition differential factor" for the year in question. However, a tuition differential factor has not been computed by these states for many years, and officials from these states were unclear how this factor was once determined.

¹⁶ We made the \$1.0 million estimate by analyzing costs and tuition revenues for the five Minnesota schools that accounted for about 90 percent of South Dakota's reciprocity students—just as the North Dakota payment calculation is based on costs and revenues for the two North Dakota schools that account for about 90 percent of that state's reciprocity students from Minnesota. Our \$350,000 estimate was based on the following refinements: (1) we analyzed costs and tuition revenues for *all* Minnesota schools that reciprocity students attended in Minnesota, not just the five schools most often attended, (2) we used data on the number of reciprocity students at each school to compute weighted averages of costs and tuition revenues per student, rather than simple averages, and (3) we computed separate costs per student for subcategories of students at each school (undergraduate, graduate, and professional), rather than simply computing an overall cost per student at each school.

¹⁷ South Dakota and HESO officials told us that they thought that the annual memoranda superceded the provisions of the original Minnesota-South Dakota agreement. But South Dakota law authorizes the annual memoranda to address application procedures, eligibility determinations, and tuition schedules; it does not specifically authorize the memoranda to alter provisions in law or the original agreement regarding interstate payments.

Based on recent experience, a reinstatement of interstate payments between Minnesota and South Dakota would benefit Minnesota.

legal obligations of South Dakota, we think that a policy of interstate compensation makes sense when one of the participating states bears a disproportionate share of the instructional costs.

RECOMMENDATION

The Minnesota Higher Education Services Office (HESO) should work with the South Dakota Board of Regents to reinstate interstate reimbursement payments, consistent with the Minnesota-South Dakota reciprocity agreement. Staff from these agencies should discuss reasonable methods for computing interstate payments, and the agreement should be amended to clarify this.

We offer no opinion on whether Minnesota or South Dakota would have any recourse to collect interstate payments that may have been owed but not paid since the late 1980s. We suggest that HESO staff discuss this issue with the South Dakota Board of Regents.

METHODS OF CALCULATING INTERSTATE PAYMENTS

The Minnesota-Wisconsin and Minnesota-North Dakota interstate payments are both based on a calculation of the costs of educating reciprocity students, but we observed several noteworthy differences in the calculation methods. First,

- **Unlike the Wisconsin agreement, the North Dakota agreement would not allow Minnesota to receive an interstate payment unless more students came to Minnesota under the agreement than left Minnesota.**

The Minnesota-North Dakota agreement says that the state that enrolls the lesser number of reciprocity students must make a payment to the state that enrolls the larger number of students. For the entire history of the Minnesota-North Dakota agreement, the number of Minnesota residents attending school in North Dakota has annually exceeded the number of North Dakota residents attending school in Minnesota. Consequently, in each of the 22 years in which there have been interstate payments under the Minnesota-North Dakota agreement, North Dakota has received a payment from Minnesota. In contrast, even though the number of Minnesota residents attending Wisconsin schools has always outnumbered the Wisconsin residents attending Minnesota schools, the Minnesota-Wisconsin agreement sometimes results in Wisconsin making a reimbursement payment to Minnesota. This can happen, for example, if Minnesota's resident tuition rates exceed Wisconsin's resident tuition rates by a sizable amount.¹⁸ The Minnesota-Wisconsin agreement contains a calculation of the two states'

There are important differences in the methods used to compute interstate payments under Minnesota's agreements with Wisconsin and North Dakota.

¹⁸ Wisconsin's costs for educating Minnesota residents are borne either by student tuition (determined by Minnesota's resident tuition rates) or by Wisconsin taxpayers. If Minnesota's resident tuition rates are higher than Wisconsin's, then Wisconsin taxpayers pay less per student to educate Minnesotans than they pay for students from Wisconsin.

respective obligations in a given year, rather than simply asserting that the state that enrolls the larger number of students should receive compensation. Consequently, Wisconsin has paid Minnesota in 3 of the past 29 years—including the most recent year (2001-02 school year).

Table 4.2 shows the method used to compute the size of Minnesota's annual payment to North Dakota. This approach has been mutually agreeable to officials with HESO and the North Dakota University System. If the "net state obligation"

Table 4.2: Method of Computing Minnesota's Reciprocity Payment to North Dakota, 2001-02 School Year

1. **Compute North Dakota's operating costs per full-year-equivalent (FYE) student.** For the 2001-03 biennium, sum the state appropriations and estimated tuition revenues for the University of North Dakota (UND), North Dakota State University (NDSU), and the UND Medical School. (Do not include revenues for capital expenditures.) Divide by two to get the annual revenues available for expenditure. Divide these annual "expenditures" by 2001-02 actual undergraduate and graduate FYE students.
2001-02: \$173,146,751 expenditures/21,136 FYE = \$8,192/FYE
2. **Compute marginal operating expenditures per FYE.** Multiply the total operating expenditures per FYE by 0.64. (Each year, it is assumed that 64 percent of instructional costs vary with the number of students taught, while the remaining costs are fixed.)
2001-02: \$8,192/FYE x 0.64 = \$5,243/FYE
3. **Subtract the tuition collected per student by UND and NDSU.** To compute the marginal expenditure per student that is not covered by tuition, subtract the average 2001-02 undergraduate resident tuition rate (\$2,754) for these institutions.
2001-02: \$5,243/FYE - \$2,754 resident tuition = \$2,489/FYE
4. **Compute North Dakota's gross state obligation for the "gap" students.** Multiply the remaining marginal expenditure per student (Step 3) by the number of "gap" students—that is, the difference between the number of Minnesota residents enrolling at North Dakota schools in 2001-02 and the number of North Dakota residents enrolling at Minnesota schools.
2001-02: \$2,489/FYE x 982 gap FYE = \$2,443,825
5. **Compute the payments by Minnesota students that exceed the North Dakota resident tuition rate.** Multiply the total number of Minnesota students who attended North Dakota university system institutions in 2001-02 (6,280) by the difference between the tuition rate these students paid and North Dakota's 2001-02 resident tuition rate (\$320).
2001-02: 6,280 FYE x \$320 = \$2,009,600
6. **Compute the "net state obligation."** Assuming that more Minnesotans attend school in North Dakota, rather than vice versa, Minnesota makes a payment to North Dakota that is equal to the amount by which the aggregate marginal expenditures of the "gap" students (Step 4) exceeds the payments made by Minnesota students (Step 5).
2001-02: \$2,443,825 (gross state obligation) - \$2,009,600 (student payment) = \$434,225

SOURCE: Office of the Legislative Auditor analysis of information provided by Laura Glatt, vice-chancellor for administrative affairs, North Dakota University System, to Virginia Dodds, HESO, regarding calculation of the 2001-02 Minnesota-North Dakota interstate payment (based on November 27, 2002 data).

computed in Step 6 is a positive number, then this is the amount of the payment that Minnesota must make to North Dakota. But if this number is negative—suggesting that North Dakota collected more revenues from Minnesota residents than it cost to educate them—then North Dakota would *not* be obligated to pay Minnesota. Under two of the hypothetical tuition increase scenarios that we examined earlier in this chapter, the amount of Minnesota’s net state obligation would have been negative—yet, North Dakota would not have been required to compensate Minnesota for its costs.¹⁹ In fact, the only way that North Dakota would be obligated to pay Minnesota would be if the North Dakotans enrolled at Minnesota schools outnumbered the Minnesotans enrolled at North Dakota schools.

In addition,

- **The method for determining the Minnesota-North Dakota interstate payment is based on a less accurate measure of costs and tuition paid than the method used in the Wisconsin agreement.**

When computing the Minnesota-North Dakota tuition reciprocity interstate payment, HESO and officials with the North Dakota University System have agreed to determine the instructional costs of Minnesotans attending North Dakota institutions on the basis of just two universities: the University of North Dakota (UND) and North Dakota State University (NDSU)—see Step 1 in Table 4.2. These two institutions accounted for about 90 percent of Minnesota’s reciprocity students at North Dakota schools in 2001-02, but they also had higher instructional costs per student than most other North Dakota institutions that Minnesotans attended.²⁰ By not considering costs at the less expensive North Dakota institutions, the formula for computing interstate payments has overstated the cost of Minnesota residents at North Dakota schools. In contrast, the Minnesota-Wisconsin tuition reciprocity agreement takes into account the cost of reciprocity students at all institutions, including higher cost schools and less expensive ones.

We also found that the calculation of tuition paid by Minnesotans at North Dakota schools (see Step 3) has been based on a less accurate approach than that used in the Minnesota-Wisconsin agreement. First, the calculation uses the average tuition paid at only two schools (UND and NDSU) to estimate tuition paid by Minnesota residents at all North Dakota institutions.²¹ Second, the calculation

¹⁹ In 2001-02, Minnesota paid North Dakota \$434,225. If Minnesota’s tuition had increased an additional 15 percent and North Dakota’s tuition had increased 5 percent in that year, there would have been a negative “net state obligation” of \$1.7 million. Likewise, if both states’ tuition levels had increased an additional 15 percent, there would have been a negative “net state obligation” of \$273,000. Nevertheless, North Dakota would not have been obligated to make a payment to Minnesota.

²⁰ In 2001-02, the average operating expenditure per full-year-equivalent (FYE) student at UND and NDSU was \$8,192. We computed average expenditures per FYE by weighting the costs of all North Dakota baccalaureate institutions by the number of Minnesota reciprocity students that attended them in 2001-02. The resulting weighted average (\$7,927) was 3 percent lower than the cost per FYE that was used to compute interstate payments.

²¹ In 2001-02, the Minnesota-North Dakota interstate payment was computed based on the assumption that Minnesotans paid average tuition levels of \$2,754 at North Dakota schools. We computed an average tuition level (undergraduate and graduate) of \$2,678 for 2001-02—for all North Dakota universities, weighted by the number of reciprocity students in undergraduate and graduate programs at each institution.

Using a more accurate method to compute Minnesota-North Dakota financial obligations would be advantageous to Minnesota.

has been based entirely on undergraduate tuition rates at these two schools, with no consideration of the higher rates paid by graduate students. Third, the calculation is based on an *estimate* of tuition revenue collected (rather than data on the *actual* tuition amounts paid by Minnesotans), and this estimate does not reflect the higher tuition levels paid by part-time students.²² In contrast, under the Minnesota-Wisconsin agreement, interstate payments are computed based on data that show the actual undergraduate- and graduate-level tuition paid by reciprocity students at all public baccalaureate institutions.²³

We think that a more accurate method of calculating the Minnesota-North Dakota interstate payment would be fiscally advantageous to Minnesota. The existing approach overstates North Dakota's instructional costs and understates the tuition paid by Minnesota residents to cover these instructional costs. Using a weighted average of Minnesota reciprocity students' instructional costs and tuition levels at North Dakota schools, based on the number of reciprocity students at each institution, we determined that Minnesota's payment to North Dakota in 2001-02 would have been \$89,000, rather than the \$434,000 actually paid. Minnesota's payment would have been even lower if the higher tuition levels of part-time students were accurately reflected in the formula. Because of these fiscal impacts, we recommend that HESO seek changes in its tuition reciprocity agreement with North Dakota.²⁴

RECOMMENDATION

The Minnesota Higher Education Services Office (HESO) should seek changes in its agreement with North Dakota so that interstate payments are (1) based on more accurate measures of instructional costs and tuition levels, and (2) not dictated solely by which state instructs the larger number of reciprocity students.

We also examined the method used to compute interstate payments under the Minnesota-Wisconsin tuition reciprocity agreement. In general, the Minnesota-Wisconsin agreement outlines a more comprehensive approach than the Minnesota-North Dakota agreement for assessing the respective costs borne by the participating states. Wisconsin law says that the interstate payment "shall be based on an equitable formula which reflects the educational costs incurred by the two states."²⁵ Administrators for Minnesota and Wisconsin higher education agencies have agreed that the formula should be based on "actual costs" for various categories of institutions, determined after each state's higher education

²² Under the Minnesota-North Dakota approach, the tuition paid by Minnesotans is estimated by multiplying the number of FYE students by the tuition rate that full-time students pay. HESO officials told us that it would not be administratively difficult to collect information on the actual tuition levels paid by Minnesotans at North Dakota institutions, as is the practice under the Minnesota-Wisconsin agreement.

²³ Another difference in the tuition revenue calculations is that the Minnesota-Wisconsin approach takes into account the tuition revenues paid by students from *both* states, while the Minnesota-North Dakota method considers only tuition paid by students from Minnesota (the state sending the larger number of students).

²⁴ HESO could either negotiate (1) revisions to the current North Dakota method (such as those discussed above), or (2) the adoption of a more comprehensive method for assessing costs and tuition paid (such as the Wisconsin approach discussed in this section).

²⁵ *Wis. Stat.* (2001-02), §39.47 (1).

operating budgets have been finalized.²⁶ While the Minnesota-North Dakota interstate payment is based largely on a calculation of the *additional* costs incurred by whichever state educates more students, the Minnesota-Wisconsin agreement appears to outline a method of calculating interstate payments based on the *total* costs incurred by each state under the reciprocity program.

In practice, however, per-student costs at *Wisconsin* schools are used to determine the costs for *both* Minnesota students at Wisconsin schools and Wisconsin students at Minnesota schools. In our view, using one state's per-student costs to compute interstate payments seems contrary to the two states' agreement to use actual costs to compute these payments.²⁷ Consequently, we looked at whether there were significant differences between the unit costs of Minnesota and Wisconsin. We found that the costs per credit for undergraduate students at comparable Minnesota and Wisconsin schools were very similar—so we concluded that using Wisconsin's unit costs to compute total costs for both states' undergraduate reciprocity students is reasonable. Meanwhile, the costs per credit for graduate students at Wisconsin's institutions were much higher than the costs for graduate students at Minnesota's institutions, for reasons that higher education administrators in neither state could explain.²⁸ We offer no recommendation for a change in the method of computing Minnesota-Wisconsin interstate payments, which is relatively accurate for the majority of students using the program.

CAPPING OR ELIMINATING INTERSTATE PAYMENTS

For the 2001-02 school year, Minnesota's net interstate payment for tuition reciprocity agreements was \$131,484. This was the smallest net payment Minnesota has made since the reciprocity program started. During the past 15 years, Minnesota's annual net payments exceeded \$5.0 million on three occasions (1989-90, 1990-91, and 1998-99).

Minnesota's net interstate payment in 2001-02 was the smallest since the tuition reciprocity program started.

As noted earlier, interstate payments are intended to help ensure that reciprocity agreements do not impose undue financial burdens on a participating state. If a state were to bear a substantial, uncompensated fiscal burden for educating reciprocity students, that state might decide against continued participation in reciprocity agreements.

²⁶ Robert Poch, Director, Minnesota Higher Education Services Office, and Jane Hojan-Clark, Executive Secretary, State of Wisconsin Higher Educational Aids Board, *Administrative Memorandum for the Minnesota-Wisconsin Interstate Tuition Reciprocity Program, 2002-2003 Academic Year* (July 2002).

²⁷ According to HESO staff, Wisconsin per-student costs have been used for several reasons: (1) more Minnesota reciprocity students attend Wisconsin institutions than Wisconsin reciprocity students attend Minnesota institutions, so using Wisconsin costs is a way to measure the cost of serving the students who comprise this difference; (2) using both states' costs might create an incentive for manipulation of the cost data; and (3) there have been concerns in the past about the reliability of some of Minnesota's cost data.

²⁸ If costs per credit at Minnesota's institutions had been used (instead of costs per credit at Wisconsin institutions) to determine the cost of Wisconsin residents at Minnesota institutions, Minnesota would have been required to make an interstate payment to Wisconsin for 2001-02, rather than receiving a payment from Wisconsin. This shift would have occurred largely because of the graduate-level unit cost differences that neither state could explain.

On the other hand, however, policy makers may wish to consider limiting interstate payments—or, at a minimum, further scrutinizing these payments. Although Minnesota’s interstate payment was small in 2001-02, some budget officials expressed concern to us about the unpredictability of interstate payments. Changes by one state—such as increases in tuition levels—could have a significant impact on another state’s payment obligation, as we discussed earlier in this chapter. In addition, even if the methods of calculating interstate payments have good justifications, they have generally not been a topic of discussion by Minnesota legislators.

Furthermore, there is some precedent for not compensating states (or individual institutions) for the fiscal impacts of tuition waivers or reductions. For instance, there are no interstate payments under the Midwest Student Exchange Program, discussed in Chapter 1. Also, some individual MnSCU institutions have voluntarily (and without state financial assistance) decided to waive nonresident tuition for certain students. Officials from these institutions perceive that the revenue loss from tuition waivers will be offset by the benefits of this practice—such as attracting top students and maximizing the use of campus facilities (such as classrooms and residence halls).

On balance, we think that provisions for interstate payments are still a justifiable part of Minnesota’s tuition reciprocity agreements. We offer no recommendations to cap or eliminate these payments at this time, although a cap could be considered if interstate payments were to rise sharply or fluctuate unpredictably in future years. But, as we recommend in Chapter 5, we think that the Legislature should periodically review and discuss the basis for the interstate payments.

SUMMARY

The Legislature initially authorized Minnesota's participation in interstate tuition reciprocity agreements in 1967, but it has played a limited role in subsequent oversight of the agreements. To facilitate more active legislative review of the reciprocity program, state law should require periodic legislative reauthorization of the program. This chapter discusses, without recommendation, several other policy options that would fundamentally change the reciprocity program or state funding for nonresident students.

Chapter 4 reviewed the possible impact of various changes in Minnesota's reciprocity agreements, particularly the impact on interstate payments. In this chapter, we address several additional policy issues regarding Minnesota's tuition reciprocity program. Specifically, this chapter discusses the following:

- **What is the appropriate role for the Minnesota Legislature in its oversight of the tuition reciprocity agreements?**
- **What would be the impact of replacing the existing reciprocity agreements with a reciprocity program based on the Midwest Student Exchange Program? What would be the fiscal impact of extending tuition waivers to additional nonresident students? Should eligibility for the tuition reciprocity program be based on family income?**

LEGISLATIVE ROLE

The 1967 Minnesota Legislature authorized the Minnesota Liaison and Facilities Commission for Higher Education to enter into agreements with neighboring states for waiver of nonresident tuition.¹ Although the Legislature was instrumental in the start-up of the tuition reciprocity program, it has played a limited role in the program's implementation. In fact, we observed that:

- **Minnesota law requires no legislative approval of tuition reciprocity agreements, unlike the laws in Wisconsin and South Dakota.**

Minnesota law says that interstate agreements negotiated by the Higher Education Services Organization (HESO) require the approval of the University of

¹ *Minn. Laws* (1967), ch. 866, sec. 1. This commission was a predecessor to the Higher Education Coordinating Board and later the Higher Education Services Office.

Minnesota Board of Regents and the Minnesota State Colleges and Universities (MnSCU) Board of Trustees before they apply to the institutions governed by these bodies.² In addition, if an agreement “incurs additional financial liability to the state or to any of the Minnesota public post-secondary boards, beyond enrollment funding adjustments,” it must be submitted to the Commissioner of Finance and the chairs of the House and Senate higher education finance committees for review.³ The agreement remains valid unless it is disapproved in law.

In contrast, Wisconsin law requires approval of reciprocity agreements by the legislative Joint Committee on Finance.⁴ In Chapter 1, we noted that some of the key provisions governing implementation of the reciprocity agreements are in annual administrative memoranda developed by the participating states. Wisconsin law requires submission of these annual memoranda to the Joint Committee on Finance. The memoranda take effect if (1) the committee chooses not to meet and discuss them, or (2) the committee meets and approves them.⁵ In recent years, the committee has not met to discuss the memoranda, but legislative fiscal analysts have reviewed the memoranda to help the committee decide whether to meet. Like Wisconsin law, South Dakota law requires legislative approval of that state’s tuition reciprocity agreement with Minnesota.⁶ North Dakota law does not require legislative approval of reciprocity agreements.⁷

Minnesota’s interstate tuition reciprocity agreements have undergone substantial change during the past 30 years, mostly through administrative actions. Some of these actions have had far-ranging effects. For instance, until 1983, Minnesotans who participated in the reciprocity program paid the resident tuition of the institution they attended. In 1983, administrative agencies in the participating states negotiated changes that required Minnesotans to pay their home state resident rates to attend college in Wisconsin, North Dakota, and South Dakota—thus removing financial incentives for Minnesotans to attend out-of-state schools. This change increased Minnesota reciprocity students’ tuition rates and reduced Minnesota’s net interstate payment obligations.

In general, the laws governing the reciprocity program are not very prescriptive, leaving much discretion to HESO and Minnesota’s two public higher education governing boards. The Legislature can pass legislation to invalidate an administratively negotiated reciprocity agreement,⁸ but it has never done so.

Minnesota laws governing the reciprocity program are not very prescriptive.

² *Minn. Stat.* (2002), §136A.08, subd. 6.

³ *Ibid.* HESO officials said that this requirement has been met through the state’s biennial budget process, as well as the provision of information to the finance commissioner and legislative committees regarding key changes in the agreements (such as the tuition surcharge for Wisconsin students attending the University of Minnesota-Twin Cities).

⁴ *Wis. Stat.* (2001-02) §39.42.

⁵ *Wis. Stat.* (2001-02) §39.47.

⁶ *S.D. Codified Laws* (2002) §13-53-6.2.

⁷ North Dakota law requires that “before entering into any such agreement which necessitates the expenditure of state funds, the state board of higher education return to the legislative assembly for approval of such expenditures” (*N.D. Cent. Code* (2001), §15-10.1-01.1). Thus, while North Dakota law does not require legislative approval of the reciprocity agreement, it requires legislative authorization for reciprocity-related state spending.

⁸ *Minn. Stat.* (2002), §136A.08, subd. 6.

Meanwhile, HESO and its counterpart agencies in the reciprocity states have developed fairly complex formulas governing interstate payments that have not been subject to much legislative review in Minnesota. The Legislature's main ongoing role in the reciprocity program has been to appropriate funding each biennium for the program's interstate payments. While it is reasonable for administrative agencies to play the lead role in negotiating the manner in which the reciprocity program will be implemented, we think that the Legislature should more actively oversee these administrative actions.

RECOMMENDATION

State law should require periodic legislative reauthorization of the reciprocity program.

State law should be amended to require that HESO annually submit to the House and Senate higher education committees for information purposes (1) annual interstate administrative memoranda regarding the reciprocity program, and (2) worksheets showing how interstate payments with each state were calculated for the previous year. Also, state law should require periodic legislative reauthorization of the reciprocity program—perhaps every five years.

We suggest that the reciprocity program be subject to a “sunset” provision so that HESO and Minnesota's two public higher education governing boards would have to periodically make a case for program continuation. In our view, a legislative reauthorization process would provide a forum for discussion of program trends, the terms of the agreements, fiscal impacts, policy options, and legislative concerns about program implementation. To facilitate such discussions, it would be useful for HESO to present legislative committees with a report on the reciprocity program prior to decisions regarding reauthorization.

BROADER POLICY OPTIONS

In Chapter 4, we discussed the potential impacts on interstate payments of various changes in the interstate reciprocity agreements and tuition levels. Below, we briefly discuss other options that could be considered as alternatives or supplements to the present tuition reciprocity agreements. It is worth reiterating that the Legislature can invalidate a negotiated reciprocity agreement by passing a law to “disapprove” it,⁹ but Minnesota law does not specifically authorize the Legislature to unilaterally change individual *components* of reciprocity agreements that have been negotiated between two states. The Legislature could, however, direct HESO to try to negotiate different provisions in the agreements.

⁹ *Ibid.*

Substitute the Midwest Student Exchange Program for the Reciprocity Agreements

Minnesota participates in the Midwest Student Exchange Program (MSEP) with Kansas, Michigan, Missouri, Nebraska, and North Dakota.¹⁰ Under this program, nonresident students pay no more than 150 percent of a participating institution's resident tuition, plus any required fees.

Some legislators asked us about the possible impact of substituting an MSEP-type program for Minnesota's existing reciprocity agreements. But, of the three states with which Minnesota has statewide reciprocity agreements, only one (North Dakota) participates in MSEP. Wisconsin is a member of the Midwestern Higher Education Commission, which sponsors MSEP, but Wisconsin has chosen not to participate in MSEP. South Dakota does not participate in either the Midwestern Higher Education Commission or MSEP. Minnesota could not unilaterally substitute an MSEP-type program for its three existing reciprocity agreements, and it is doubtful whether Wisconsin and South Dakota would choose to participate in MSEP. Also, if Wisconsin, North Dakota, and South Dakota participated in MSEP, there is no guarantee that all of the public colleges and universities in these states would choose to participate; in contrast, all of the public colleges and universities in Wisconsin, North Dakota, and South Dakota participate in Minnesota's reciprocity agreements.

Even if all of these states chose to participate in MSEP,

- **The main impact of adopting an MSEP-type program in place of the existing reciprocity program is that most reciprocity students would likely pay higher tuition to attend school out of state than they do now.**

For example, we examined the fiscal impact if (1) Wisconsin and Minnesota participated in MSEP instead of the present reciprocity program, (2) all Minnesota-Wisconsin reciprocity students in 2001-02 continued to participate in MSEP, and (3) nonresident students paid 150 percent of resident tuition at the institution they attended. Under this scenario, we estimated that the \$34.3 million in tuition revenues that Minnesota institutions received from Wisconsin reciprocity students in 2001-02 would have increased to \$58.8 million.¹¹ Meanwhile, Wisconsin institutions' tuition revenues from Minnesota residents would have increased from \$46.0 million to \$57.2 million. But price-sensitive Minnesotans would have likely found Wisconsin schools less appealing, and price-sensitive Wisconsin residents would have likely found Minnesota schools less appealing.

In addition, states in MSEP presently do not make interstate payments to compensate for instances in which participating states bear unequal instructional costs. In part, however, interstate payments have not been part of MSEP because

¹⁰ This program is an initiative of the Midwestern Higher Education Commission, a nonprofit regional organization that encourages interstate cooperation among its ten member states. Illinois, Indiana, Ohio, and Wisconsin are also members of the commission but do not participate in the Midwest Student Exchange Program.

¹¹ We assumed that all Minnesota and Wisconsin institutions would participate in the program. As noted in Chapter 1, not all institutions in MSEP states have chosen to participate.

Wisconsin and South Dakota do not participate in the Midwest Student Exchange Program.

relatively few students participate in the program, and the cost impacts have been small. If MSEP replaced the tuition reciprocity program and participation levels in MSEP increased dramatically, participating states might be inclined to consider adopting provisions for interstate payments.

Waive Nonresident Tuition for More Nonresidents

Some higher education officials have suggested that state funding formulas should recognize nonresidents who are not reciprocity students in the same manner that students from Minnesota and reciprocity states are recognized by the formulas. Minnesota law says that state appropriations must provide for at least 67 percent of the estimated instructional expenditures for students who are residents of Minnesota and reciprocity states.¹² If state appropriations provided the same level of state funding for all resident and nonresident students, Minnesota's public higher education institutions might consider the option of eliminating higher tuition rates for nonresidents.

The Minnesota State Colleges and Universities (MnSCU) system proposed such a change in its 2002-03 budget as a "strategy for long-term labor force development."¹³ In fiscal year 2002, 5 percent of MnSCU students were nonresidents who were *not* covered by some type of interstate reciprocity agreement. Under MnSCU policy, more than half of these students paid Minnesota resident tuition rates—for instance, certain students from other countries. But about 2,700 full-year-equivalent students were nonresidents who were not covered by an interstate tuition reciprocity agreement or another type of tuition waiver.

MnSCU's proposal was not approved by the Legislature. Notably,

- **Providing equivalent state appropriations to Minnesota's higher education systems for each resident and nonresident student would significantly increase state higher education costs.**

A MnSCU pilot project authorizes certain institutions to waive nonresident tuition.

MnSCU estimated that such a change for its students would have cost the state \$26.4 million more than existing funding formulas during the 2002-03 biennium. In the meantime, MnSCU has authorized a pilot program under which individual institutions can charge resident tuition to nonresidents who are not covered by the interstate reciprocity agreements, although these institutions do not receive additional funding for doing so. Since 1999, 13 MnSCU colleges and universities have participated in this pilot project, for various reasons: for example, to increase enrollment, compete with the recruiting efforts of other states' institutions, increase residence hall occupancy, and attract future workers to regions with workforce shortages. For now, we think it is wise to allow individual institutions to judge whether the benefits they gain from nonresident tuition waivers exceed the tuition revenues they lose. At some future date, MnSCU's pilot project may shed light on whether there would be significant benefits to

¹² *Minn. Stat.* (2002), §135A.031, subd. 2.

¹³ Minnesota Department of Finance, *State of Minnesota 2002-03 Biennial Budget* (St. Paul, January 2001), B-162.

Minnesota from expanding state higher education subsidies to nonresidents who are not from reciprocity states.

Target the Reciprocity Program to Financially Needy Students

Minnesota's tuition reciprocity program is open to all residents in participating states, regardless of family income. In contrast, eligibility for Minnesota's main financial aid program for students—the State Grant Program—is based on income. Students who receive Minnesota state grants can use these grants at either a public or private higher education institution in Minnesota, while participants in the reciprocity program must enroll at public colleges or universities.

Private college representatives told us that the tuition reciprocity program may encourage price-sensitive students to attend public rather than private institutions.¹⁴ They suggested that policy makers should consider narrowing the scope of the reciprocity program—for example, by making eligibility for the program dependent on family income.¹⁵

It is unclear whether states that now participate in reciprocity agreements with Minnesota would favor eligibility limitations.

In our view, the reciprocity program presently fulfills Minnesota law's broadly-stated purpose for this program. Minnesota law states that the tuition reciprocity program's purpose is to improve educational opportunities for participating students, and the law does not specify any particular categories of students for whom these opportunities should be improved. The Legislature could decide to modify the law's stated purpose for the reciprocity program, but there is no assurance that the other states that participate in reciprocity agreements with Minnesota would be willing to participate in a program with more limited eligibility provisions. We offer no recommendation on such a policy change.

¹⁴ In addition, private college officials have generally expressed a preference for the state giving subsidies directly to students, to use at the institutions they choose, rather than giving subsidies to public institutions.

¹⁵ We found that available data on the average family incomes of reciprocity students are limited and not conclusive. The University of Minnesota and MnSCU have family income data for about half of their students, and it is doubtful whether the students on which they have data are representative of the full population. A 2001 report by HESO and the Minnesota Department of Children, Families and Learning said that Minnesota high school graduates who enrolled at schools in reciprocity states had higher average family incomes than those of graduates who attended various Minnesota institutions. But the survey on which this report was based included just 156 reciprocity students, so its margin of error was relatively high.

Summary of Recommendations

The Legislature should authorize HESO to access state data on Minnesota earnings for the purpose of monitoring the extent to which reciprocity students eventually become Minnesota wage earners. The Legislature should also require the University of Minnesota and MnSCU to provide student identifiers to HESO for this purpose, as needed. (p. 42)

HESO should seek language in future reciprocity agreements (or in annual interstate memoranda) that require the state in which a student attended school to share information with the resident state regarding the student's graduation status and field of study, if requested by the resident state. (p. 42)

With the assent of the University of Minnesota, HESO should negotiate the Minnesota-Wisconsin reciprocity agreement to include a tuition surcharge that would be applied identically to Wisconsin residents at all University of Minnesota campuses. (p. 50)

HESO should work with the South Dakota Board of Regents to reinstate interstate reimbursement payments, consistent with the Minnesota-South Dakota reciprocity agreement. Staff from these agencies should discuss reasonable methods for computing interstate payments, and the agreements should be amended to clarify this. (p. 54)

HESO should seek changes in its agreement with North Dakota so that interstate payments are (1) based on more accurate measures of instructional costs and tuition levels, and (2) not dictated solely by which state instructs the larger number of reciprocity students. (p. 57)

State law should be amended to require that HESO annually submit to the House and Senate higher education committees for information purposes (1) annual interstate administrative memoranda regarding the reciprocity program, and (2) worksheets showing how interstate payments with each state were calculated for the previous year. Also, state law should require periodic legislative reauthorization of the reciprocity program—perhaps every five years. (p. 63)

Further Reading

Christal, Melodie E. *State Tuition and Fee Policies: 1996-97*. Denver, CO: State Higher Education Executive Officers Association, March 1997.

DesJardins, Stephen L. "Simulating the Enrollment Effects of Changes in the Tuition Reciprocity Agreement Between Minnesota and Wisconsin." *Research in Higher Education* 40, no. 6 (1999): 705-716.

Kodrzycki, Yolanda K. "Migration of Recent College Graduates: Evidence from the National Longitudinal Survey of Youth." *New England Economic Review* (January/February 2001): 13-34.

Midwest Higher Education Commission. *Midwest Student Exchange Program: 2003-2004 Bulletin*. Minneapolis, MN: Midwest Higher Education Commission, August 2002.

Minnesota Higher Education Services Office, *Report to the Governor and 2003 Legislature*. St. Paul, 2003, 10-12.

———. *Tuition Reciprocity Overview*. St. Paul, January 2003.

Minnesota Higher Education Services Office and Minnesota Department of Children, Families, and Learning. *The 1999 Minnesota High School Follow-Up Survey*. St. Paul, November 2001.

Minnesota House of Representatives, Research Department. *Tuition Reciprocity Program*. St. Paul, July 2003;
<http://www.house.leg.state.mn.us/hrd/issinfo/sstuitrec.htm>.

Opatz, Representative Joe. *Report on Minnesota's Tuition Reciprocity Agreements: A Policy Analysis*. St. Paul, January 2002.

Southern Technology Council. *Who Will Stay and Who Will Leave?: Individual, Institutional and State-Level Predictors of State Retention of Recent Science and Engineering Graduates*. Southern Growth Policies Board, May 2001.

Wisconsin Legislative Fiscal Bureau. *Education and Income Tax Reciprocity Agreements*. Madison, WI: Wisconsin Legislative Fiscal Bureau, January 2003.



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August 25, 2003

Mr. James Nobles
Legislative Auditor
Room 140 Centennial Office Building
658 Cedar Street
Saint Paul, Minnesota 55155-1603

Dear Mr. Nobles:

Thank you for the opportunity to review the final report on higher education tuition reciprocity. We appreciated the responsiveness of your staff to our thoughts and suggestions throughout the study process and the thoroughness with which they approached this important part of Minnesota post-secondary education. We believe the report to be an insightful and fundamentally fair representation of interstate tuition reciprocity.

While paying all due attention to the report findings and recommendations, it is worth underscoring the importance of interstate tuition reciprocity to student access and choice. Tuition reciprocity helps thousands of Minnesotans to pursue a broader range of educational options and opportunities than otherwise would be available to them. Like the Minnesota State Grant Program, tuition reciprocity is a key part of Minnesota's long-standing investment in students and their capacity to exercise educational choice.

The Minnesota Higher Education Services Office (MHESO) will make full use of the evaluation report and looks forward to working with elected officials, the University of Minnesota, and the Minnesota State College and University (MnSCU) system in reviewing the recommendations that are contained within. Please note that MHESO shares program information proactively with the Legislature, the University of Minnesota and MnSCU.

Thank you again for the opportunity to review the report and to work collaboratively with your staff.

Sincerely,

/s/ Robert K. Poch

Robert K. Poch
Director

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