4 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

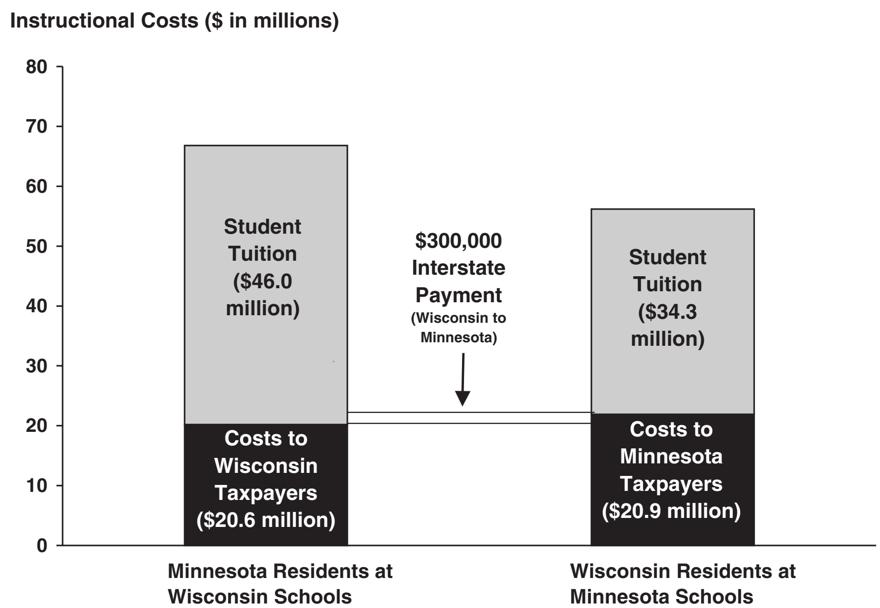
Interstate payments compensate for unequal taxpayer burdens between states participating in reciprocity agreements.

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.

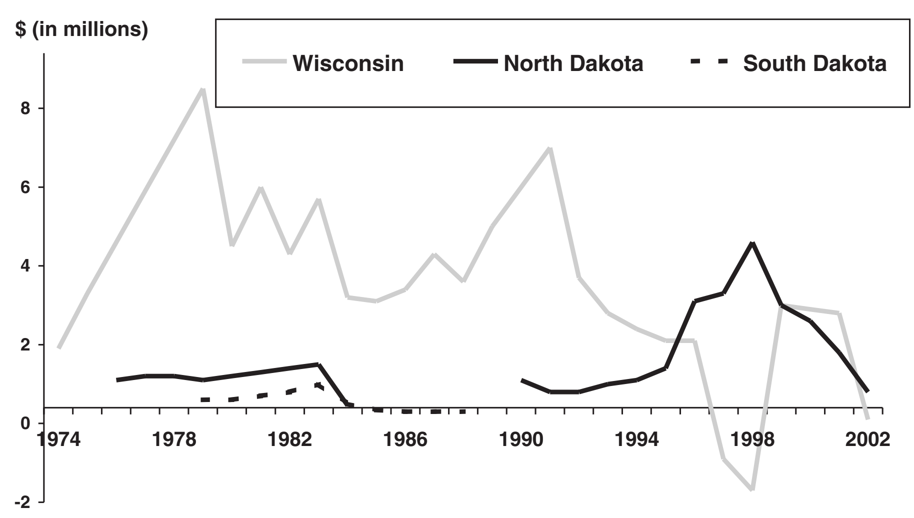
Minnesota—representing an estimated $55.2 million in marginal instructional costs. These students paid $34.3 million in tuition, leaving Minnesota taxpayers to pay for $20.9 million. Because reciprocity students from Wisconsin imposed a slightly larger burden on Minnesota taxpayers than reciprocity students 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.

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

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

	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

[a]The 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.

[b]The 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:

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

- 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

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.

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.

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

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 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.

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

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.**

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

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.

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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).

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.

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

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.

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.**

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

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'

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-equivalant (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.

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]

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

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

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

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).

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.

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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.