

Differential Tuition by Residency Status: Landscape and Corollaries

**Prepared by MHEC Research^a
AUGUST 13, 2019**

RE: In response to an inquiry from the North Dakota State Auditor's Office, the purpose of this brief is to provide an overview of the prevalence and impact of differential tuition for non-resident students.

KEY INSIGHTS

- Many factors may influence a student's decision to attend an out-of-state institution, including the student's proximity to quality institutions, number of enrollment options, and merit scholarship and other financial aid opportunities.
- Out-of-state students pay more tuition than in-state students, pay more in future state taxes, and are equally likely as in-state students to locate in the state in which the institution they attended is located upon graduation.
- Out-of-state enrollment varies greatly across the Midwestern states. Out-of-state students represent the lowest proportion of enrollment in Illinois, with only eight percent of public university students coming from out-of-state. Nearly 60 percent of first-time students at North Dakota public universities are out-of-state students.
- Most public four-year institutions in the nation charge higher tuition for out-of-state students than they do for in-state students. However, ten states had at least one institution without differential tuition rates for non-resident students in 2017-18: Colorado, Minnesota, Mississippi, Illinois, Michigan, Nebraska, New York, North Dakota, Oklahoma, and Pennsylvania.
- The Midwestern state with the largest average premium for out-of-state tuition is Michigan (\$22,580 more than in-state tuition). The state with the smallest average out-of-state premium is South Dakota (\$3,470). South Dakota's technical colleges do not have differential tuition for non-residents.
- One way for an institution to increase out-of-state enrollment may be to join a tuition exchange. While states determine membership in exchanges, individual institutions have the ability to opt-in or -out of participation in an exchange. States like Nebraska, Kansas, and North Dakota all experienced net gains of students from membership in the Midwest Student Exchange Program (MSEP).
- Past research generally suggests that relatively high out-of-state net prices negatively affect the migration of students.

^a Policy and data analysis conducted by Chris Marsicano and Shaun Wyche. For additional information, contact Aaron Horn. (✉)

Introduction

As students begin to examine their potential college choices, those choices increasingly include public colleges and universities in a state other than their home state. Institutions target such students, not just because out-of-state students typically pay significantly larger sticker prices than in-state students, but because there is a certain amount of prestige associated with being able to draw students from across state borders. Several pressures - including changing demographics, state divestment in public higher education, and growing levels of student loan aversion - have forced colleges and universities to consider lowering the premiums they place on out-of-state resident tuition in order to compete for these highly sought-after students. Policymakers concerned about state institution revenue and quality, therefore, need to understand the current trends in student migration and the use of differential tuition as a form of finance policy. This policy brief examines out-of-state student enrollment and the prevalence of tuition differentials in the Midwestern states. It then provides an overview of tuition exchange programs and a summary of research on the impact of differential tuition.

WHY STUDENTS CHOOSE OUT-OF-STATE ENROLLMENT

Many factors may influence a student's decision to attend an out-of-state institution, including the student's proximity to quality institutions,^{1,2,3} number of enrollment options,⁴ and merit scholarship and other financial aid opportunities.⁵ For example, a student from a state with institutions perceived to be of low quality and few enrollment options may be more likely to choose a college or university out-of-state when compared to a student with an abundance of high-quality public institutions in his or her home state. Furthermore, the

literature on student migration has suggested overall cost of attendance matters for students who choose to attend an out-of-state institution; students are more likely to attend institutions with lower net prices.⁶

BENEFITS OF STUDENT IN-MIGRATION

Out-of-state enrollment and student in-migration provide multiple benefits to a state. Out-of-state students pay more tuition than in-state students, pay more in future state taxes, and are equally likely as in-state students to locate in the state in which the institution they attended is located upon graduation.⁷ For states facing challenging demographic trends - such as a declining population - out-of-state enrollment may offer new opportunities for growth as previous out-of-state residents become in-state taxpayers.

OUT-OF-STATE ENROLLMENT AT PUBLIC FOUR-YEAR INSTITUTIONS

In the 2017-2018 academic year across the United States, around 850,000 students attended in-state public four-year institutions, compared with around 190,000 domestic students attending out-of-state institutions, accounting for 18 percent of enrollment at public four-year institutions. Out-of-state enrollment accounts for a greater percentage of total enrollment at Midwestern institutions (21 percent). Out-of-state enrollment varies across institutional type in the Midwest, with 23 percent of students attending doctoral universities coming from out-of-state, compared to 17 percent for master's universities, and 20 percent for baccalaureate colleges.

¹ Frenette, M. (2006). Too Far to Go On? Distance to School and University Participation. *Education Economics*, 14(1), 31-58.

² Mulder, C. H., & Clark, W. A. (2002). Leaving home for college and gaining independence. *Environment and Planning A*, 34(6), 981-999.

³ Cooke, T. J., & Boyle, P. (2011). The Migration of High School Graduates to College. *Educational Evaluation and Policy Analysis*, 33(2), 202-213.

⁴ Orsuwan, M., & Heck, R. H. (2009). Merit-Based Student Aid and Freshman Interstate College Migration: Testing a Dynamic Model of Policy Change. *Research in Higher Education*, 50(1), 24-51.

⁵ Zhang, L., & Ness, E. C. (2010). Does State Merit-Based Aid Stem Brain Drain? *Educational Evaluation and Policy Analysis*, 32(2), 143-165.

⁶ Adkisson, R. V., & Peach, J. T. (2008). Non-resident enrollment and non-resident tuition at land grant colleges and universities. *Education Economics*, 16(1), 75-88.

⁷ Groen and White, 2004

TABLE 1. Residency Status of First-Time Students at Public Four-Year Institutions, 2017-18

Context	Level	In-State First-Time Students	Out-of-State First-Time Students	Residence Unknown or Foreign Country	% Out-of-State	Number of Institutions
National	Baccalaureate Colleges	37,385	6,234	1,489	14%	87
	Masters-Level	294,767	40,741	6,536	12%	269
	Doctoral-Level	518,372	142,821	33,341	21%	193
	U.S. Total	850,524	189,796	41,366	18%	549
	Midwest Baccalaureate Colleges	5,772	1,486	170	20%	16
	Indiana	594	4	7	1%	1
	Michigan	320	29	14	8%	1
	Minnesota	397	138	27	25%	2
	Missouri	1,864	481	25	20%	3
	North Dakota	312	186	17	36%	3
	Ohio	1,511	430	18	22%	4
	Wisconsin	774	218	62	21%	2
	Midwest Master's Colleges & Universities	56,707	11,544	1,046	17%	57
	Illinois	4,652	499	62	10%	7
	Indiana	6,505	745	62	10%	7
	Iowa	1,595	164	20	9%	1
	Kansas	2,696	768	83	22%	4
	Michigan	9,565	887	146	8%	6
	Minnesota	8,307	1,959	108	19%	8
	Missouri	7,689	1,814	247	19%	6
	Nebraska	1,711	386	44	18%	4
	Ohio	239	78	40	22%	1
	South Dakota	1,753	323	124	15%	1
	Wisconsin	820	367	21	30%	3
	Midwest Doctoral Universities	124,579	40,382	8,694	23%	46
	Illinois	15,212	1,422	1,483	8%	5
	Indiana	17,759	6,876	1,860	26%	5
	Iowa	6,287	4,541	524	40%	2
	Kansas	6,490	2,508	277	27%	3
	Michigan	23,311	5,922	1,536	19%	8
	Minnesota	3,845	1,928	422	31%	1
	Missouri	5,239	1,941	106	27%	4
	Nebraska	5,292	1,305	408	19%	2
	North Dakota	1,578	2,929	54	64%	2
	Ohio	31,125	6,636	1,384	17%	10
	South Dakota	1,974	1,572	67	44%	2
	Wisconsin	6,467	2,802	573	28%	2
	Midwest Total	187,058	53,412	9,910	21%	119

Notes: Data come from Integrated Postsecondary Education Data System (IPEDS). Midwest institutions include the Title IV participating public 4-year institutions in the Great Lakes and Plains, in the “Doctoral Universities: Highest Research Activity”, “Doctoral Universities: Higher Research Activity”, “Doctoral Universities: Moderate Research Activity”, “Master’s Colleges & Universities: Larger Programs”, “Master’s Colleges & Universities: Medium Programs”, “Master’s Colleges & Universities: Small Programs”, “Baccalaureate Colleges: Arts & Sciences Focus”, and “Baccalaureate Colleges: Diverse Fields” Carnegie Classifications. Missing values were imputed with 2016-17 data.

Table 2 shows that out-of-state enrollment varies greatly across the Midwestern states. Out-of-state students represent the lowest proportion of enrollment in Illinois, with only eight

percent of public university students coming from out-of-state. Nearly 60 percent of first-time students at North Dakota public universities are out-of-state students.

TABLE 2. Out-of-State Enrollment of First-Time Students at Public Four-Year Institutions in the Midwest, 2017-18

	Number of First-Time Undergraduates - In-State	Number of First-Time Undergraduates - Out-of-State	Residence Unknown or Foreign	Percent Out-of-State	Number of Institutions
Illinois	19,864	1,921	1,545	8.2	12
Indiana	24,858	7,625	1,929	22.2	13
Iowa	7,882	4,705	544	35.8	3
Kansas	9,186	3,276	360	25.5	7
Michigan	33,196	6,838	1,696	16.4	15
Minnesota	12,549	4,025	557	23.5	11
Missouri	14,792	4,236	378	21.8	13
Nebraska	7,003	1,691	452	18.5	6
North Dakota	2,129	3,193	111	58.8	6
Ohio	34,389	7,389	1,526	17.1	15
South Dakota	2,794	1,939	88	40.2	5
Wisconsin	18,416	6,574	724	25.6	13

Sources: IPEDS. Missing values were imputed with 2016-17 data.

There is also great variation in out-of-state enrollments across institutions within states. Table 3 shows the top 10 importers of first-year freshmen from other states among public four-year institutions in the MHEC region. The University of Michigan – Ann Arbor led all public MHEC

institutions with around 3,000 out-of-state first-year students. The top importers of out-of-state students are among the largest institutions by enrollment in their states. On the other end of the distribution, Ohio State University-Lima Campus enrolled only two out-of-state first-year students.

TABLE 3. Top Ten Midwestern Institutions by Total First-Year Out-of-State Enrollment, 2017-18

Rank	Institution	State	Number Out-of-State
1	University of Michigan-Ann Arbor	Michigan	2,987
2	Indiana University-Bloomington	Indiana	2,879
3	Iowa State University	Iowa	2,608
4	Purdue University-Main Campus	Indiana	2,525
5	University of Wisconsin-Madison	Wisconsin	2,358
6	University of Iowa	Iowa	1,933
7	University of Minnesota-Twin Cities	Minnesota	1,928
8	North Dakota State University-Main Campus	North Dakota	1,732
9	Ohio State University-Main Campus	Ohio	1,654
10	University of Kansas	Kansas	1,577

Source: Integrated Postsecondary Education Data System (IPEDS).

Table 4 shows the top ten Midwestern institutions by percent of total first-year students taken up by out-of-state enrollment. While state flagship and AAU institutions account for most of the institutions with the largest out-of-state populations, the list of those with large proportions of their student bodies coming from out of state is a little more varied. Almost two-thirds of North Dakota State University and University of North Dakota students come from out-of-

state. In fact, North Dakota institutions in general heavily rely on out-of-state students to fill their classes. Over half of the student population of Central State University and the University of Wisconsin – River Falls are not in-state residents. Students from outside the state of Michigan account for 44 percent of the total first-year enrollment at that state’s flagship institution.

TABLE 4. Top Ten Midwestern Institutions by Percent of First-Year Out-of-State Enrollment, 2017-18

Rank	Institution	State	Number Out-of-State
1	North Dakota State University-Main Campus	North Dakota	66%
2	University of North Dakota	North Dakota	62%
3	Central State University	Ohio	54%
4	University of Wisconsin-River Falls	Wisconsin	52%
5	South Dakota State University	South Dakota	47%
6	Lincoln University	Missouri	46%
7	Chadron State College	Nebraska	44%
8	University of Michigan-Ann Arbor	Michigan	44%
9	Mayville State University	North Dakota	44%
10	Iowa State University	Iowa	41%

Source: Integrated Postsecondary Education Data System (IPEDS).

PREVALENCE OF DIFFERENTIAL TUITION FOR NON-RESIDENT STUDENTS

Most public four-year institutions in the nation charge higher tuition for out-of-state students than they do for in-state students (see Table 5). However, ten states had at least one institution without differential tuition rates for non-resident students in 2017-18: Colorado, Minnesota, Mississippi, Illinois,

Michigan, Nebraska, New York, North Dakota, Oklahoma, and Pennsylvania.

TABLE 5. Percentage of Public Four-Year Institutions with Differential Tuition for Non-Resident Enrollment in 2017-18

State	Institutions with Differential Tuition	Institutions with Aligned Tuition	Percent of Institutions with Differential Tuition
Alabama	14	0	100%
Alaska	3	0	100%
Arizona	7	0	100%
Arkansas	10	0	100%
California	32	0	100%
Colorado	12	1	92%
Connecticut	6	0	100%
Delaware	2	0	100%
District of Columbia	1	0	100%
Florida	13	0	100%
Georgia	19	0	100%
Hawaii	3	0	100%
Idaho	4	0	100%
Illinois	11	1	92%
Indiana	13	0	100%
Iowa	3	0	100%
Kansas	7	0	100%
Kentucky	8	0	100%
Louisiana	14	0	100%
Maine	8	0	100%
Maryland	12	0	100%
Massachusetts	12	0	100%
Michigan	14	1	93%
Minnesota	8	3	73%
Mississippi	5	3	63%
Missouri	13	0	100%
Montana	6	0	100%
Nebraska	5	1	83%
Nevada	3	0	100%
New Hampshire	5	0	100%
New Jersey	13	0	100%
New Mexico	6	0	100%
New York	34	1	97%
North Carolina	15	0	100%
North Dakota	5	1	83%
Ohio	15	0	100%
Oklahoma	12	1	92%
Oregon	7	0	100%
Pennsylvania	36	1	97%
Rhode Island	2	0	100%
South Carolina	12	0	100%
South Dakota	5	0	100%
Tennessee	9	0	100%
Texas	34	0	100%
Utah	5	0	100%
Vermont	4	0	100%
Virginia	15	0	100%
Washington	8	0	100%
West Virginia	10	0	100%
Wisconsin	13	0	100%
Wyoming	1	0	100%

Source: Integrated Postsecondary Education Data System (IPEDS).

The size of premiums in out-of-state tuition differ greatly across states and institutions. Tables 6 and 7 list the ten institutions with the highest and lowest out-of-state tuition and fee premiums, respectively. For those institutions that charge a premium in sticker price for tuition and fees, the smallest premium was \$28 at Chadron State College in Nebraska. The largest was at the University of Michigan at Ann Arbor with a premium in excess of \$30,000. Four of the lowest premium institutions are in the Dakotas. Only one – Western Michigan University – is a doctoral-granting institution.

Table 7 lists only those MHEC state institutions for which there is a tuition and fee premium charged to out-of-state students. Some institutions do not charge a tuition and fee premium to out-of-state students, including Western Illinois University, Minot State University, Peru State College, Southwest Minnesota State University, Lake Superior State University, Bemidji State University, and the University of Minnesota-Crookston. Those institutions have in-state populations in excess of 78 percent. Western Illinois University enrolls only 4 percent of its student body from out-of-state.

TABLE 6. Top Ten Midwestern Institutions by Out-of-State Premium, 2017-18

Rank	Institution	State	Out-of-State Premium
1	University of Michigan-Ann Arbor	Michigan	\$33,381
2	Michigan State University	Michigan	\$24,649
3	Indiana University-Bloomington	Indiana	\$24,312
4	University of Wisconsin-Madison	Wisconsin	\$24,250
5	University of Iowa	Iowa	\$21,644
6	Indiana University-Purdue University-Indianapolis	Indiana	\$20,472
7	Ohio State University-Lima Campus	Ohio	\$19,104
8	Ohio State University-Main Campus	Ohio	\$19,104
9	Purdue University-Main Campus	Indiana	\$18,802
10	Miami University-Oxford	Ohio	\$18,185

Source: Integrated Postsecondary Education Data System (IPEDS).

TABLE 7. Bottom Ten Midwestern Institutions by Out-of-State Premium, 2017-18

Rank	Institution	State	Out-of-State Premium
1	Chadron State College	Nebraska	\$28
2	Youngstown State University	Ohio	\$360
3	Southern Illinois University-Edwardsville	Illinois	\$920
4	Central State University	Ohio	\$1850
5	University of Minnesota-Morris	Minnesota	\$2020
6	Mayville State University	North Dakota	\$2628
7	Dickinson State University	North Dakota	\$2672
8	Western Michigan University	Michigan	\$2756
9	Dakota State University	South Dakota	\$2930
10	Northern State University	South Dakota	\$2930

Source: Integrated Postsecondary Education Data System (IPEDS). *Conditional on having a premium.*

Table 8 shows the state-by-state differences in premiums charged. The state with the largest average premium is Michigan, owing mostly to the premium charged by the University of Michigan – Ann Arbor. The state with the smallest average out-of-state premium is South Dakota, with a premium of only \$3,470 for out-of-state students at South Dakota State University (edging out the University of South Dakota’s premium by only one dollar). In addition,

South Dakota’s technical colleges do not have differential tuition for non-residents. It is important to note that out-of-state students very likely do not pay the full sticker price and therefore do not pay the full premium. For example, in the 2016-17 academic year, out-of-state students at MHEC institutions paid an average of \$5,128 less than the sticker price.

TABLE 8. Average Out-of-State Tuition and Fee Premiums, MHEC States, 2018-2019

State	In-State Tuition and Fees	Out-of-State Tuition and Fees	Out-of-State Premium	Five-Year % Change (In-State Tuition and Fees)
Illinois	\$13,970	\$26,470	\$12,500	2.93%
Indiana	\$9,490	\$28,980	\$19,490	-1.44%
Iowa	\$9,080	\$26,550	\$17,470	7.39%
Kansas	\$9,100	\$23,040	\$13,940	9.14%
Michigan	\$13,420	\$36,000	\$22,580	7.24%
Minnesota	\$11,540	\$23,020	\$11,480	2.22%
Missouri	\$8,670	\$20,220	\$11,550	-0.70%
Nebraska	\$8,510	\$22,190	\$13,680	7.84%
North Dakota	\$8,660	\$16,190	\$7,530	10.36%
Ohio	\$10,790	\$24,880	\$14,090	0.61%
South Dakota	\$8,690	\$12,160	\$3,470	5.38%
Wisconsin	\$9,080	\$23,850	\$14,770	-3.72%

Source: The College Board.

LOWERING DIFFERENTIAL TUITION THROUGH STATE TUITION EXCHANGES

One way for an institution to increase out-of-state enrollment may be to join a tuition exchange. Even though exchanges decrease the out-of-state tuition for matriculants, the tuition price is frequently greater than the price institutions charge for in-state tuition. Furthermore, when exchanges bring students from other states to an institution, those students may be just as likely to stay in that institutions’ state after

graduation (depending on the labor market conditions in the state)⁸ – increasing the number of college graduates in a state and increasing the tax base.

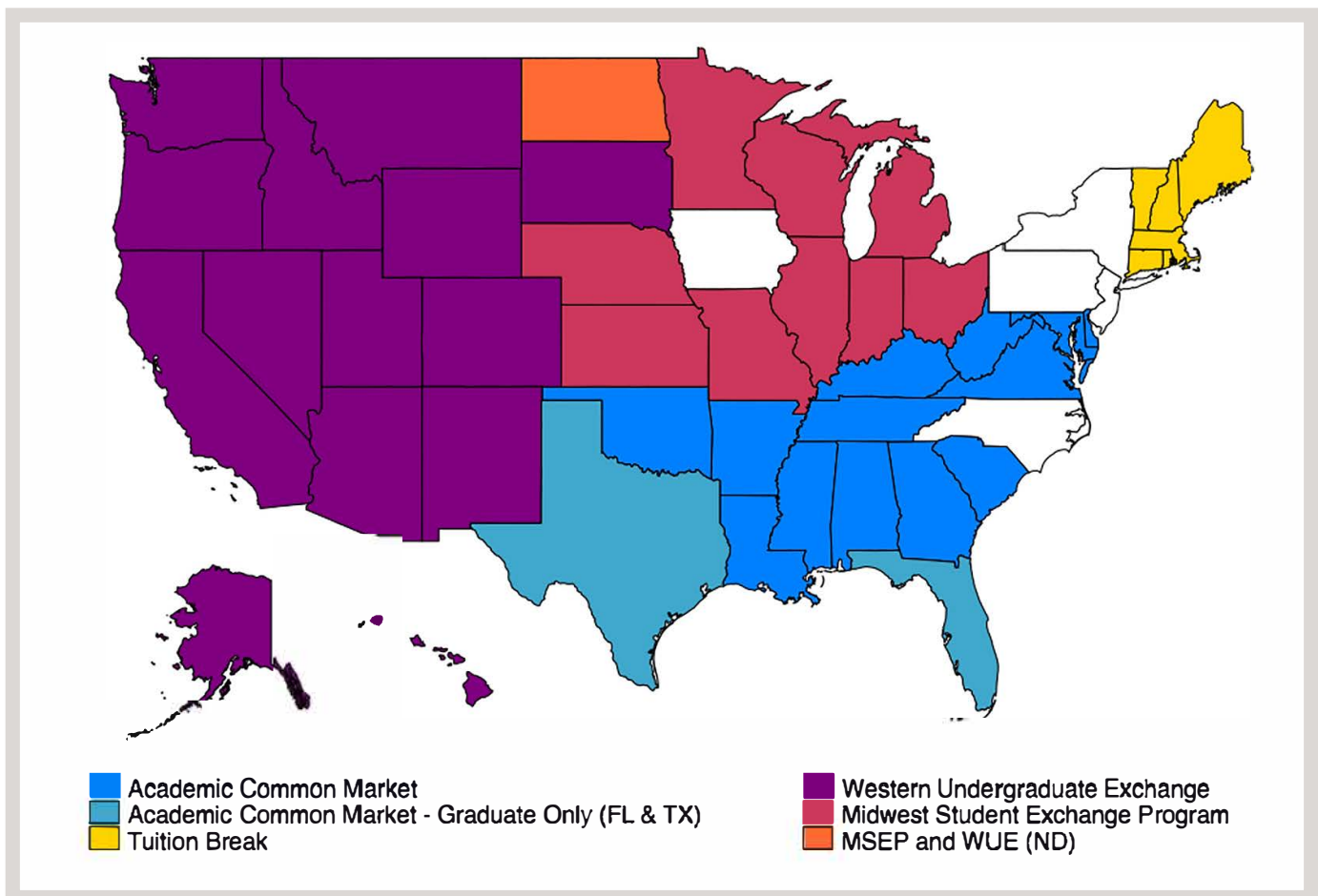
Four major regional exchanges exist and include 45 of the 50 states as participants. Figure 1 provides a map of these major exchanges. The Academic Common Market (ACM) includes almost every southern state as far north as Maryland, Kentucky, and West Virginia and as far west as Oklahoma and Texas. Texas and Florida, while members of the exchange, participate only at the graduate level. While a charter member of the Academic Common Market, North Carolina stopped

⁸ Bailit, H. L., & Beazoglou, T. J. (2003). State financing of dental education: impact on supply of dentists. *Journal of Dental Education*, 67(12), 1278-1285..

participation in 2011. Tuition Break for New England residents includes every state in New England. The Midwest Student Exchange Program (MSEP) includes most Midwestern states, although Iowa and South Dakota do not currently participate. The largest exchange in terms of the number of participating states, the Western Undergraduate Exchange (WUE), includes Alaska, Hawaii, and all states at the same longitude and west of Colorado. Only one state, North Dakota, is a member of

two exchanges – the Midwest Student Exchange Program and the Western Undergraduate Exchange. Only five states- Iowa, New York, New Jersey, North Carolina, and Pennsylvania- are not part of any major exchange. While states determine membership in exchanges, individual institutions have the ability to opt-in or -out of participation in an exchange. Therefore, not all institutions in an exchange state participate.

FIGURE 1. State Participation in Regional Tuition Exchanges



Source: Authors' analysis.

MHEC’s tuition exchange, the Midwest Student Exchange Program, served 13,763 students in the 2017-18 academic year. Table 9 breaks down MSEP enrollment by student state of residence. States like Nebraska, Kansas, and North Dakota all experienced net gains of students from membership in the

program. North Dakota enrolled over 19 times the number of students who took advantage of the program to enroll elsewhere.

TABLE 9. MSEP Enrollment by State of Residence

State	MSEP Enrollment	In-Migration	Net-Migration
Illinois	7,658	0	-7,658
Indiana	306	1,638	1,332
Iowa	<i>Did Not Participate</i>		
Kansas	735	1,547	812
Michigan	939	441	-498
Minnesota	1,431	306	-1,125
Missouri	881	3,035	2,154
Nebraska	881	1,011	130
North Dakota	90	1,739	1,649
Ohio	113	0	-113
South Dakota	<i>Did Not Participate</i>		
Wisconsin	729	4,046	3,317

Source: Midwestern Higher Education Compact.⁹

There are also a number of smaller regional exchanges.¹⁰ For example, Minnesota, Wisconsin, the Dakotas, and Manitoba in Canada participate in a regional exchange. Residents of Monroe County, Michigan, receive in-state tuition at the University of Toledo. Residents of border counties in Kentucky, Illinois, Indiana, Ohio, Tennessee, and West Virginia may also receive in-state tuition at participating public institutions. While Iowa does not participate in MSEP, it does

have reciprocal agreements with individual states for Iowa students to attend select institutions in South Dakota at 150 percent of in-state tuition. Minnesota students may also attend one community college that nestles the Minnesota-Iowa border for Iowa’s in-state tuition. Lastly, some institutions strategically offer in-state tuition to out-of-state students in certain urban areas across the country.

⁹ Midwestern Higher Education Compact. (2018). MSEP 2017-18 enrollment data. Retrieved from <https://www.mhec.org/resources/2017-18-msep-enrollment-data>.

¹⁰ Minnesota Office of Higher Education. (2019). Reduced out-of-state tuition options. Retrieved from <https://www.ohe.state.mn.us/mPg.cfm?pageID=97>.

IMPACTS OF DIFFERENTIAL PRICING FOR IN-STATE STUDENTS AND OUT-OF-STATE STUDENTS

Limited research has directly examined the impact of offering in-state tuition to out-of-state students, though economists generally believe that differential fees negatively impact student migration. Kennan's (2015) migration model showed that interstate differences in tuition affect out-of-state enrollment decisions.¹¹ Earlier studies also indicated that high tuition rates for out-of-state students can discourage enrollment.^{12, 13} Previous student-level analyses found that out-of-state students are sensitive to net price (the price of enrollment after accounting for grant aid) when compared to in-state students.^{14, 15} Out-of-state students may be sensitive to institutional financial aid offers, meaning institutional financial aid is an important way to target potential out-of-state students. However, an analysis of major land-grant universities showed that out-of-state sticker price growth did not have a strong influence on non-resident student enrollment.¹⁶

The pricing literature therefore suggests that student college choice may not be affected by sticker price but that net price may impact student enrollment decisions. Institutional scholarships are an important tool to bring down the net price for students and increase demand. One such scholarship is the DC Tuition Assistance Grant (DC TAG)

program, which allows students in the District of Columbia to attend public institutions in any U.S. State at the in-state tuition price. Studies of DC TAG,^{17, 18} find that such programs could increase out-migration and overall enrollment. The program was linked to increased college enrollment among DC residents, and an increase in DC resident enrollment at public four-year institutions in neighboring states. The DC TAG program, therefore, facilitates “brain gain” for nearby states.

Economists have also attempted to model the welfare gains or losses associated with charging differential tuition prices for in-state and out-of-state students. There is some evidence from a border discontinuity study to suggest that there are substantial welfare losses from charging differential sticker prices for in-state and out-of-state students.¹⁹ Knight and Schiff (2019) suggest that differential tuition inefficiently distributes students to institutions. Students who might choose to attend an out-of-state institution if it charged the same tuition as an in-state institution decline to attend an institution that would otherwise be the best academic fit for them. They argue that policymakers in all states should therefore work towards ending differential tuition for in-state and out-of-state students, not just within states, but across states. Another model based on data from Germany concerning the same concept of welfare loss contends that differential tuition prices discourage students who want to leave their home states from migrating for a university education (Hübner, 2012).

¹¹ Kennan, J. (2018). Spatial Variation in Higher Education Financing and the Supply of College Graduates.

¹² Morgan, J. N. (1983). Tuition policy and the interstate migration of college students. *Research in Higher Education*, 19(2), 183-195.

¹³ Noorbakhsh, A., & Culp, D. (2002). The demand for higher education: Pennsylvania's nonresident tuition experience. *Economics of Education Review*, 21(3), 277-286.

¹⁴ Curs, B., & Singell Jr, L. D. (2002). An analysis of the application and enrollment processes for in-state and out-of-state students at a large public university. *Economics of Education Review*, 21(2), 111-124.

¹⁵ Curs, B. R., & Singell Jr, L. D. (2010). Aim high or go low? Pricing strategies and enrollment effects when the net price elasticity varies with need and ability. *The Journal of Higher Education*, 81(4), 515-543.

¹⁶ Adkisson, R. V., & Peach, J. T. (2008). Non-resident enrollment and non-resident tuition at land grant colleges and universities. *Education economics*, 16(1), 75-88.

¹⁷ Kane, T. J. (2007). Evaluating the Impact of the D.C. Tuition Assistance Grant Program. *The Journal of Human Resources*, 42(3), 555-582.

¹⁸ Abraham, K. G., & Clark, M. A. (2006). Financial Aid and Students' College Decisions: Evidence from the District of Columbia Tuition Assistance Grant Program. *The Journal of Human Resources*, 41(3), 578-610.

¹⁹ Knight, B., & Schiff, N. (2019). The Out-of-State Tuition Distortion. *American Economic Journal: Economic Policy*, 11(1), 317-50.

Final Remarks

Historically, public institutions have charged differential tuition for in-state and out-of-state students. That arrangement allows public institutions to increase revenue when compared to in-state students and incentivize in-state students to attend their home state's institutions for college and stay and work in the state upon graduation. Yet, demographic and economic trends of the past few decades have called into question that model. As the traditional college-age population of some states is in decline, states and their public institutions may need to rely more heavily on out-of-state enrollment in the future.

As states and institutions consider the role out-of-state tuition and fee sticker prices play in overall enrollment and revenue trends, they may want to undertake a number of interventions to increase out-of-state enrollment. Following general economic theory, reducing the price of out-of-state tuition could increase demand, leading to more out-of-state students attempting to enroll in public institutions. Price sends a signal of quality, however, and many of the institutions with the highest out-of-state premiums also have large and stable out-of-state enrollment numbers (e.g., the University of Michigan – Ann Arbor, Indiana University – Bloomington, and the University of Iowa). Given the prestige associated with state flagship institutions and research universities, lowering out-of-state sticker prices at those institutions likely would increase demand without dramatically decreasing prestige. However, doing so could significantly lower total tuition income, thereby reducing a stable form of revenue.

The institutions most likely to gain from tying out-of-state tuition with in-state tuition are those with moderate levels of prestige and dwindling in-state populations. For states like North and South Dakota, where net population change among the traditional college-age population is projected to decline by 15 percent over the next few years, reducing out-of-state tuition may make sense if only to keep enrollment numbers stable. In the case of both of those states, low

tuition premiums likely mean that reducing tuition for out-of-state students would not dramatically decrease perceived prestige or demand. Given the past reliance on out-of-state students in those states, however, it may decrease overall revenue, unless reductions are concurrent with increased appropriations.

While policymakers have incentives to keep differential tuition as a way to maintain a stream of non-tax revenue, they may also pay attention to their constituents' concerns about out-of-state students crowding out in-state students – especially at public flagship universities. Occasionally, state policymakers may establish caps on the proportion of first-year students allowed to come from out-of-state. The University of North Carolina, for example, caps out-of-state enrollment at no more than 18 percent of first-year enrollment at most of its institutions. Institutions that exceed the cap receive a financial penalty, like the \$1 million fine assessed to UNC-Chapel Hill in 2015 when it exceeded the 18 percent cap by 41 students.²⁰

An alternative to lowering or eliminating differential tuition is to provide targeted scholarships for out-of-state students. As institutions seek greater prestige, they need to enroll students with high academic credentials. Rather than lowering out-of-state tuition to align with in-state tuition for all out-of-state students, institutions of higher education may consider discounting tuition for specific students who will increase the prestige of the institution. Doing so would likely result in a small increase in demand for the institution, without resulting in significant declines in revenue. After several years of enrolling high-quality out-of-state students who receive targeted scholarships, institutions would likely gain some prestige in national rankings systems. Targeted scholarships, therefore, represent a less extreme approach than aligning all tuition and fees, while also maintaining revenue stability and institutional prestige.

²⁰ Pennington, B. (2016, May 28). Cap on out-of-state students costs UNC millions. Retrieved from <https://www.wral.com/cap-on-out-of-state-students-costs-unc-millions/15733895/>



105 Fifth Avenue South, Suite 450
Minneapolis, MN 55401
612-677-2777 or 855-767-MHEC
MHEC.ORG | mhec@mhec.org

Midwestern Higher Education Compact (MHEC)

Legislatively created, the Midwestern Higher Education Compact's purpose is to provide greater higher education opportunities and services in the Midwestern region. Collectively the 12 member states work together to create solutions that build higher education's capacity to better serve individuals, institutions, and states by leveraging the region's resources, expertise, ideas, and experiences through multi-state: convening, programs, research, and contracts.

Compact Leadership, 2018-19

President

Ms. Susan G. Heegaard

Chair

Dr. Ken Sauer, Senior
Associate Commissioner
and Chief Academic Officer,
Indiana Commission for
Higher Education

Vice Chair

Ms. Olivia Madison,
Professor Emerita and Dean
Emerita of Library Services,
Iowa State University

Treasurer

Dr. David Eisler, President,
Ferris State University

Past Chair

Mr. Tim Flakoll, Provost,
Tri-College University and
North Dakota Governor's
Designee