MINNESOTA STATE
DEMOGRAPHIC CENTER
DEPARTMENT OF ADMINISTRATION

AN ANALYSIS OF MIGRATION TRENDS AND PATTERNS IN MINNESOTA

APRIL 2024

EXECUTIVE SUMMARY

This report describes migration trends and patterns for the State of Minnesota with a special focus on domestic migration—the movement of people between Minnesota and other U.S. states.

We show that the importance of migration is growing as birthrates fall and the state's population ages. In 2023, total migration made up 42% of all population growth, a share that has been growing since 1950. Migration's share of overall growth is expected to continue to rise over the next 25 years as the number of Minnesota births continue to decline and the number of deaths associated with population aging climbs. By the late 2040s any population growth that the state experiences will be due to migration rather than natural growth (the balance of births minus deaths).

This report shows that:

- **For the past 20 years, Minnesota has consistently lost residents on net to other U.S. states.** After a brief period of much larger net outflows during the COVID-19 pandemic, losses moderated in 2023.

- **Minnesota is not alone; the majority of midwestern and northeastern states in the "Frost Belt" experience net outflows of people, and many states experience much higher levels of net out-migration than Minnesota does.**

- **About 30% of all domestic migrants are young people between the ages of 15 and 29 years.** The largest net losses of any age occur between ages 18 and 19 years when many young adults move away to attend college. While a fair share of college students returns to Minnesota after completing their degree in another state, the net losses are not fully countered in the older age groups.

- **Migration among Minnesota's middle- and later-age adults is relatively modest, consistent with a well-documented pattern of dwindling migration rates as people age out of their young adulthood.** Minnesota neither gains nor loses sizable numbers of people between the ages of 30 and 59 years.

- **Minnesota loses older adults on net to warm weather states including Arizona, Florida, and Texas.** Wisconsin also sends and receives a large share of Minnesota's older migrants.

- Minnesota's regular flows of about 100,000 people into and about 100,000 people out of the state per year should serve as a reminder that **there is no single explanation that captures why Minnesota experiences ongoing net losses due to domestic migration.**

State leaders wishing to bolster inflows of migrants and stem outflows should note that only a small proportion of residents move in any given year. Policies designed to reach young adults as they make important migration decisions could make a greater impact than policies taking a more blanketed approach to all possible movers. Further, viewing migration as a regional phenomenon rather than a national one, may help more effectively reach those who are most likely to move to the state.

INTRODUCTION

The topic of migration holds a certain fascination for people. What motivates individuals and families to move? Where do they venture when leaving their home state? Are they pushed away by specific factors? Do they eventually return? There's a genuine curiosity surrounding the stories of Minnesota migrants, and a prevailing notion that migration trends and patterns directly reflect the state's quality of life, public policies, and economic contexts.

In recent years, understanding migration has gained a newfound urgency as policymakers and employers grapple with the consequences of labor force shortages. Whether it's ensuring that there are enough school bus drivers, health care professionals, or direct care providers for vulnerable residents, the need to understand whether migration can fill these gaps has become increasingly pressing.

In this report, we focus almost entirely on domestic migration—the migration of people to and from Minnesota and other U.S. states.

DATA

Migration data in the U.S. come from a variety of sources including surveys and administrative records. No one data source offers a complete and perfect picture of migration. Instead, researchers are left to construct a view from multiple, varied sources. The data sources generally agree with each other, especially when it comes to broad trends and patterns, but more detailed information may not fully align across sources due to coverage and methodological differences. The data sources used in this report are described in Appendix A.

THE GROWING ROLE OF MIGRATION IN POPULATION GROWTH

Demographers split population growth into two components: natural change and migration. Natural change is the balance of births minus deaths and captures the extent to which population growth is fueled internally. Natural change is positive when births outnumber deaths (natural growth) and negative when deaths outnumber births (natural decline). The second component of population growth, migration, is often measured in terms of its net contribution to population change. Net migration is positive when more people move into an area than move out of it, and negative when more leave an area than move into it.

When people consider how Minnesota's population grows, migration often comes to mind first. But for the last 70 years, natural growth has played a much more significant role in Minnesota's population growth than migration has. In 2023, 13,800 people were added to the state because of natural growth, whereas 9,900 people were added due to total net migration (1). In the past, the gap between natural growth and migration was much larger. In 1957—the height of the state's natural growth—57,400 people were added because of natural growth, whereas about 9,300 were lost due to migration (2).

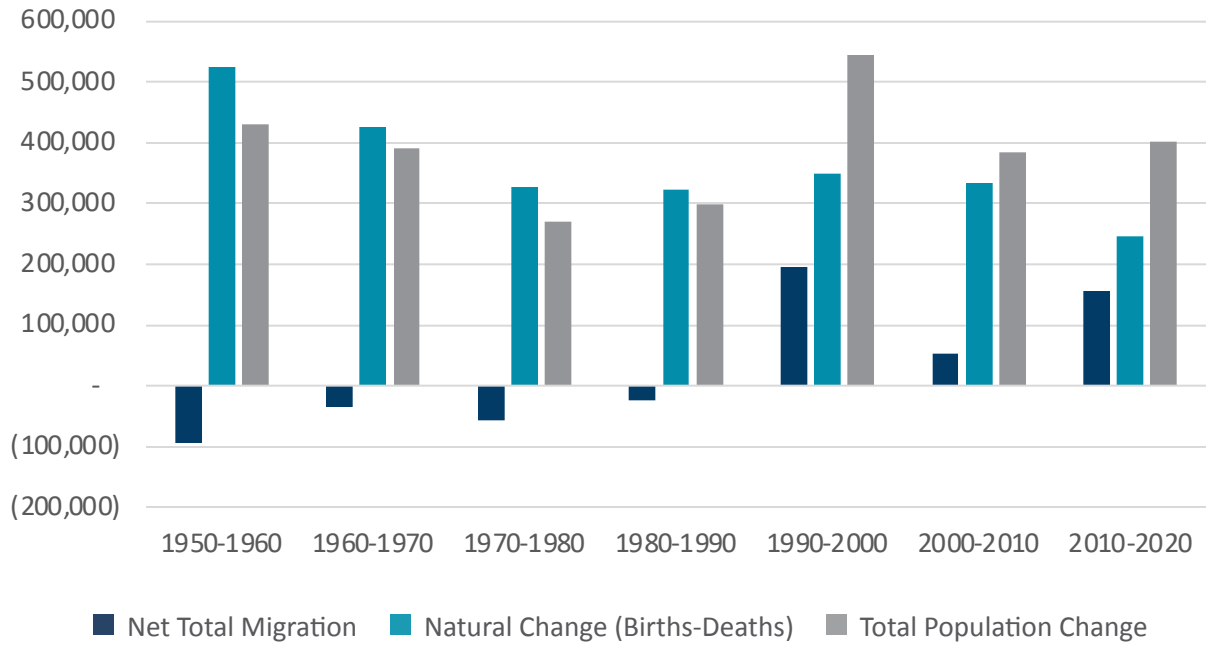
Figure 1 shows Minnesota's total population change each decade between 1950 and 2020, alongside the contributions of natural change and total net migration. Between 1950 and 1990, a pattern of strong natural growth coupled with net migration losses prevailed. Beginning in the 1990s when international immigration began to accelerate nationally, Minnesota's total net migration began to contribute positively to growth—a trend that has continued through today. While the number of total net migrants has declined since the 1990s, the share of total population growth that is attributable to migration has grown as natural growth has waned. In 2023, 42 percent of the state's total population growth was due to migration (3).

As our state's population continues to age, total population growth will slow. First, population aging will reduce the state's already-low birth rates, as a larger share of the state's population will be past their child-bearing years. Population aging also means that more of that state's residents will be in their later years of life, during which mortality rates are high, resulting in more deaths each year. With fewer births and more deaths, it will become increasingly difficult for Minnesota to grow from its own natural change.

Minnesota is not alone in this predictable march toward slower growth. In fact, many states are already experiencing natural decline. In 2023, 19 U.S. states saw fewer births than deaths, and of those, 8 states experienced a decline in their total population (4). The most recent population projections published by the Census Bureau suggest that the U.S. overall will experience natural decline by 2038 (5). Natural growth has quietly bolstered the state's population growth for the past 100 years, but over the next 20 years its contribution to growth will slowly wane. According to our most recent population projections, Minnesota will begin to experience natural decline by the late 2040s. After that time, the only potential source of population growth will be from migration.

FIGURE 1

Components of Population Change, Minnesota, 1950-2020



*Net Migrants in this graph are under the age of 75 to maintain consistency across the series. Migrants over the age of 75 typically make up a relatively small share (<10%) of the total number of net migrants.

Sources: Total population: U.S. Census Bureau, Decennial Censuses. Natural change: Derived from Total population change and net total migration estimates. Migration: Egan-Robertson, David, Katherine J. Curtis, Richelle L. Winkler, Kenneth M. Johnson, and Caitlin Bourbeau, Age-Specific Net Migration Estimates for U.S. Counties, 1950-2020.

Natural growth has quietly bolstered the state's population growth for the past 100 years, but over the next 20 years its contribution to growth will slowly wane. According to our most recent population projections, Minnesota will begin to experience natural decline by the late 2040s.

TRENDS IN DOMESTIC NET AND INTERNATIONAL NET MIGRATION

The 1990s were a unique decade in Minnesota's migration history. Not only did the state see more gains from migration than in any subsequent decade, but the source of those gains was also notable. During the 1990s, Minnesota grew more from domestic migration than it did from international migration; a situation that has not since been repeated. In the 1990s, the state gained an average of 9,600 people each year due to domestic migration, and an additional 6,000 people from other countries (Figure 2). In the early 2000s, domestic migration began to register net losses with an average of 4,500 people each year and 2,800 people lost on net each year during the 2010s.

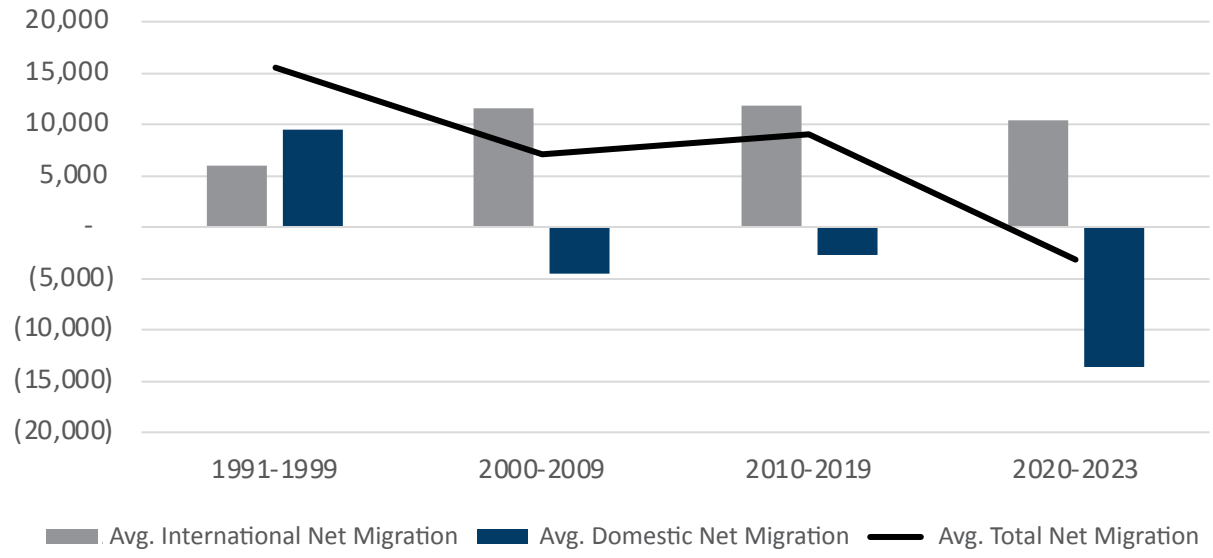
In the late 2010s and early 2020s, migration patterns deviated from their once-predictable pattern of fairly robust international gains coupled with modest domestic losses. Figure 3 shows the annual estimates of total, international, and domestic net migration since 2010. In 2016, Minnesota grew from international migration by about 16,800 people, the most of any year that decade or since that time. After 2016, international migration slowed steadily, and by 2021 the state gained only about 5,500 people, on net, from abroad. This slowdown was due to several factors including changes in federal immigration policy that lowered the ceiling on refugee resettlements nationwide and slowed the processing of visas. In 2020 and 2021, the COVID-19 pandemic also contributed to a slowdown in international migration, both in Minnesota and nationally. However, by 2022 and 2023, international migration returned to the higher levels seen in Minnesota in the early 2010s, with about 14,000 international migrants added on net in each of those two years.

Like international migration, domestic migration also departed from its longer-term pattern during the COVID-19 pandemic. Between 2020 and 2022 Minnesota lost nearly 50,000 people due to domestic migration, with the largest losses occurring in 2022, according to the most recent Census Bureau estimates. However, 2023 marked a return to pre-pandemic patterns with an estimated 4,700 people lost due to domestic migration during that year, a number much more in line with Minnesota's long-term domestic migration trend spanning the past 20 years.

While Minnesota's recent migration picture has improved since the COVID-19 era, a long-term pattern of small domestic losses is still a cause for concern. Small losses accumulate quickly over time, and as we have already noted, the historically reliable engine of natural growth will weaken in the future as the population continues to age. In recent years, many Minnesota employers have had trouble finding workers to fill the jobs they have. Of utmost concern to state and local leaders is the ability to provide critical services that Minnesotans have come to expect. Today many essential jobs are going unfilled—including those in health care, K-12 education, childcare, direct care for older adults and people with disabilities, and emergency management. While several factors may be contributing to these issues (e.g. low wages, geographic location of workers, the availability of childcare), a slow-growing labor force is the demographic foundation of many of these problems. Therefore, while the 2023 migration data show a return to modest net out-migration, the urgency of the annual small losses is heightened among labor force shortages and the prospect of weakening of natural growth.

FIGURE 2

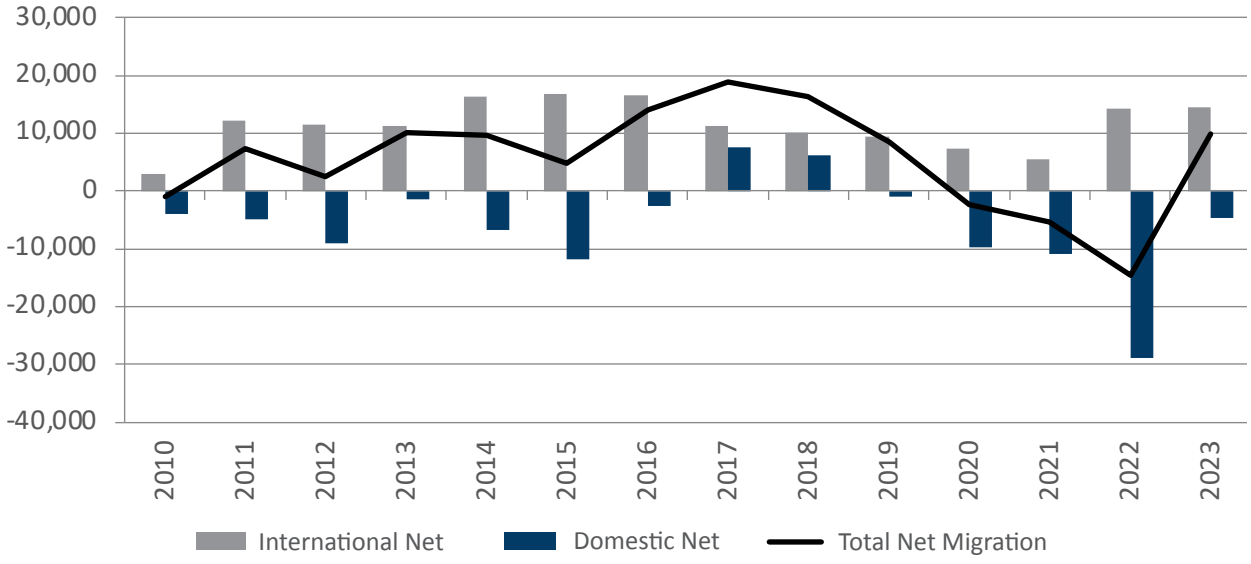
Average Annual Net Migration (International, Domestic, and Total), Minnesota, 1991-2023



Source: U.S. Census Bureau, Population Estimates Program

FIGURE 3

Annual Net Migration (International, Domestic, and Total), Minnesota, 2010-2023



Source: U.S. Census Bureau, Population Estimates Program

MINNESOTA'S TRENDS IN DOMESTIC IN-MIGRATION AND OUT-MIGRATION

Another data source, the U.S. Census Bureau's American Community Survey (ACS), gives additional insights into Minnesota's domestic migration picture by providing an estimate of the flow of people into and out of the state each year. While the net number of people gained or lost each is a relatively small number—less than 5,000 people lost on average each year—these net numbers belie the much larger number of people who move across Minnesota's state lines annually. In 2022, for example, 120,500 were estimated to have moved into Minnesota and 124,300 moved out of the state.

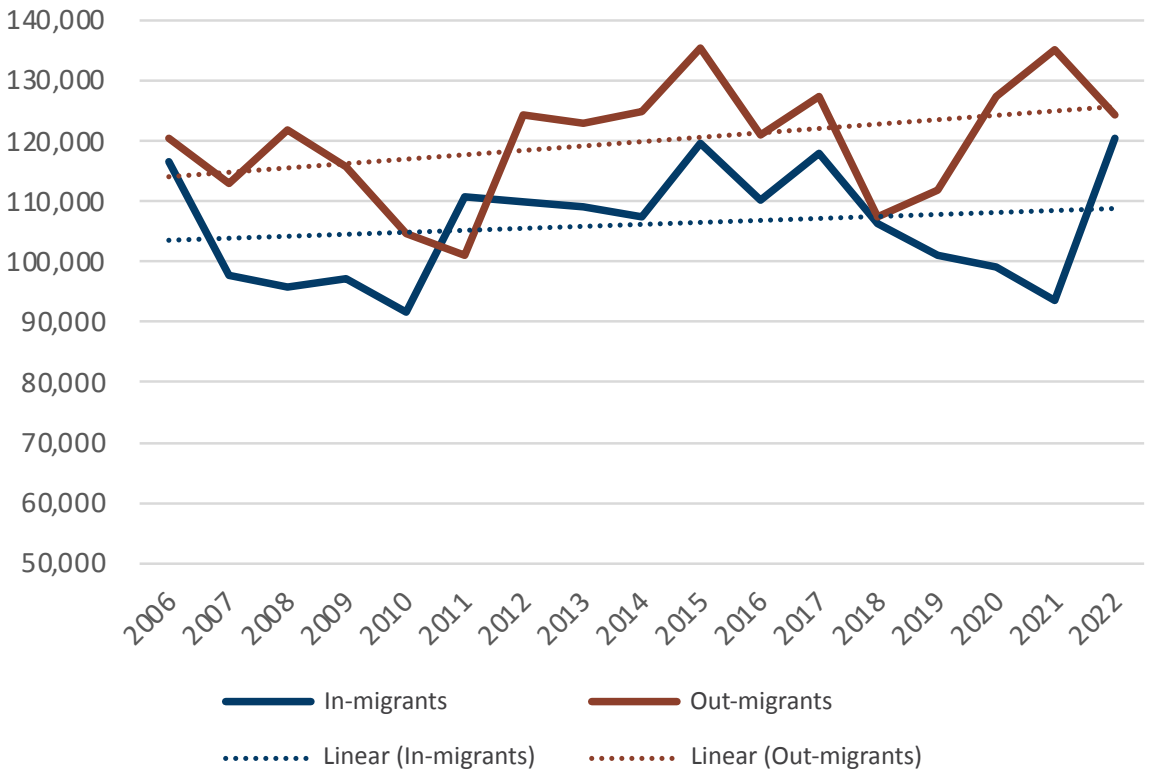
Figure 4 shows that since 2006, the number of in-migrants to Minnesota has been less than the number of out-migrants in nearly every year, with the two trend lines repeatedly diverging and converging over the 16-year period. The flow of in-migrants to the state has ranged from a low of 91,800 in 2010 to a high of 120,500 in 2022. For out-migrants, the low of 101,100 occurred in 2011; with peaks occurring in 2015 (135,500) and 2021 (135,200). The years following the Great Recession and the COVID-19 pandemic marked periods of greater net outflow as fewer people moved to Minnesota and more people left the state during those two spans of time.

Migration into and out of Minnesota, then, has ebbed and flowed between 2006 and 2022. The result of these annual fluctuations has been small net outflows of people over time—a stable, long-term demographic feature of the state. While many people have interpreted Minnesota's average net losses to be a direct indicator of certain state-level attributes, such as public policies or quality of life factors, these alone do not explain the sustained net outflows over time. With over 100,000 across state lines in each direction every year, we must keep in mind that overall migration trends cannot fully be explained by people leaving the state. Nor can they be explained by a lack of people moving here. Both migration flows are operating each year and within those flows a multitude of micro and macro contexts exist on which migration decisions are being made.

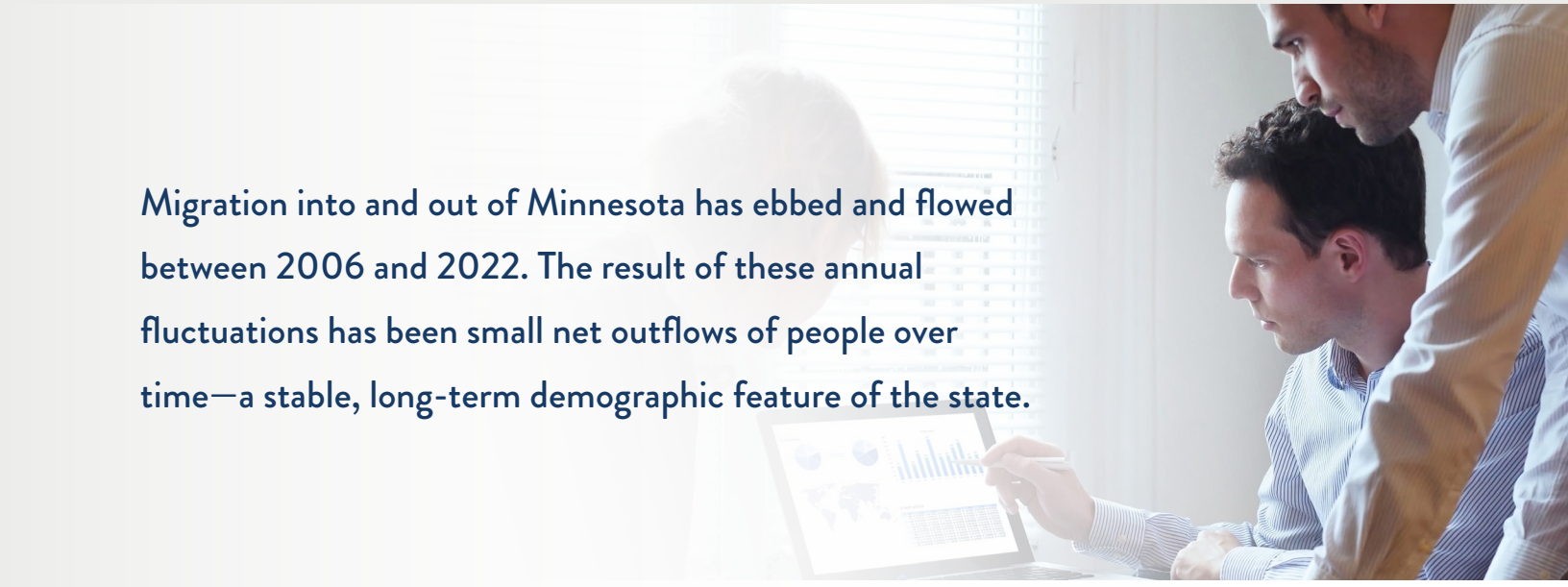
While Minnesota's recent migration picture has improved since the COVID-19 era, a long-term pattern of small domestic losses is still a cause for concern. Small losses accumulate quickly over time, and as we have already noted, the historically reliable engine of natural growth will weaken in the future as the population continues to age.

FIGURE 4

Annual In-Migration and Out-Migration, Minnesota, 2006-2022



Source: ipums.org from U.S. Census Bureau, American Community Survey data



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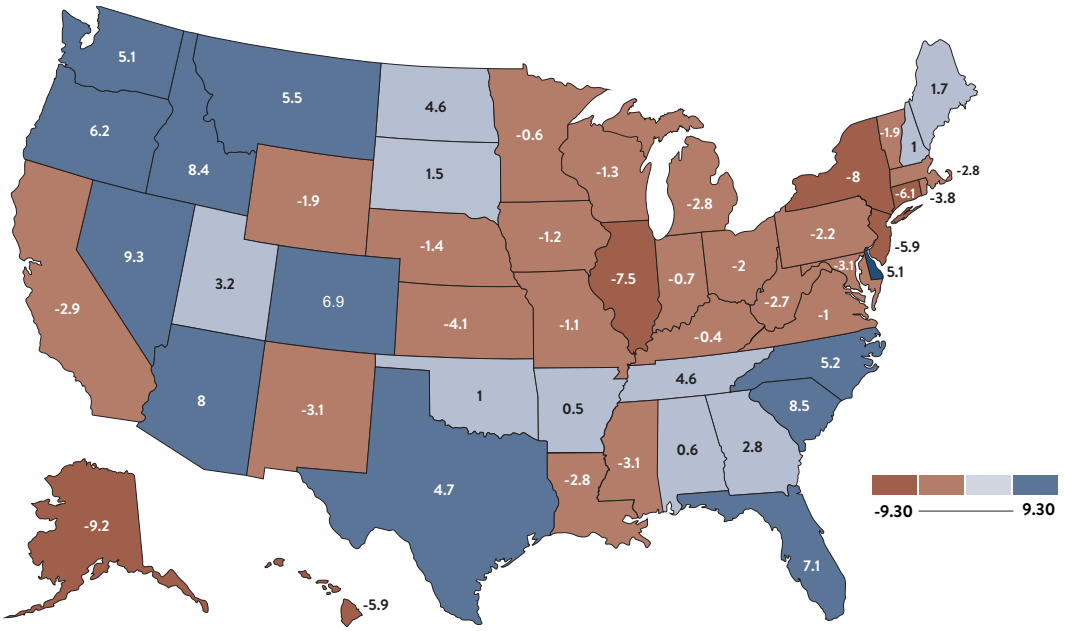
MINNESOTA'S NET DOMESTIC MIGRATION COMPARED TO OTHER U.S. STATES

The outflow of Minnesotans to other states is best understood in the context of the larger U.S. picture of migration. It is not unusual for states in the "Frost Belt" to lose residents to other states on net. In fact, this is a pattern that has been occurring for decades (6). Compared to most states in the Midwest, Minnesota fares well in that its losses are not as large as many of its peer states that are part of the same region. Between 2010 and 2020, the Census Bureau estimates that Minnesota's average net rate of loss due to domestic migration was .6 people per 1,000 Minnesota residents (Figure 5). Wisconsin's average rate of net migration loss during the same period was twice as high as Minnesota's (-1.3). Of note, Illinois' rate of loss was 12 times greater than Minnesota (-7.5). North Dakota and South Dakota both had positive net migration during the 2010s, as economic growth in both states pulled in new workers. North Dakota's gains were driven by the boom in oil extraction from the Bakken Formation; however, these gains turned into losses mid-decade when the price of oil fell.

In contrast to the midwestern and northeastern U.S., states in the southern and western parts of the country tend to gain residents due to domestic migration. Idaho led the nation, gaining an average 9.3 people per 1,000 residents from 2011 to 2020.

FIGURE 5

Average Annual Rate of Domestic Net Migration (Per 1,000 Residents), 2011-2020



Source: U.S. Census Bureau, Population Estimates Program

WHY DO PEOPLE LEAVE MINNESOTA TO GO TO OTHER STATES?

It may be tempting to point to a single policy or feature of Minnesota to explain the consistent pattern of migration losses that the state has experienced over the past 20 years. We have just noted that Minnesota is part of a regional pattern of net losses.

Many people point to Minnesota's cold temperatures and long winters; others point to state and local tax policy that incentivizes people to move to areas with lower taxes. When we carefully consider the data and existing research on migration, a single, simple answer is not forthcoming, in part because of a lack of data available to study the reasons why people move. Instead, the current state of the research offers some clues, but is far from offering an open-and-shut case for a single, all-encompassing explanation.

The U.S. Census Bureau's Current Population Survey (CPS) directly asks people who moved in the past year to give a primary reason for moving. Among U.S. residents who moved from one state to another in the past year, the top reasons for moving in 2022 were job-related (43%), family-related (24%), and housing-related (18%). Unfortunately, the sample size from the CPS is too small to produce reliable information at the state level.

In a recent meta-analysis of the research literature on tax policy and migration, Kleven, et. al characterize the existing as scant (7). From the twelve studies they reviewed, just four were based on U.S. data, of those, three were based on samples with unique characteristics. From all studies examined, Kleven and his colleagues conclude that specific types of people—like millionaires and top inventors—do appear to make migration decisions based on taxes. However, the authors caution that, to-date, there is no systematic evidence that this is the case for the broader population. Further, little is known about how people weigh their tax burden against the availability of amenities and services available in different locations when making the decision to move. Without knowing whether taxes impact the migration behavior of the larger population or how important taxes might be relative to other costs and benefits of moving, the research does not currently support the thesis that tax policy plays a substantial role in the migration patterns for Minnesota overall.

Though the current research literature neither supports nor refutes the idea that tax policy is driving overall migration in a state like Minnesota, understanding more about who migrates can offer additional insights into the types of decisions that migrants make based on where they are in the life course. To that end, this report examines recent migration patterns by the age of people migrating.

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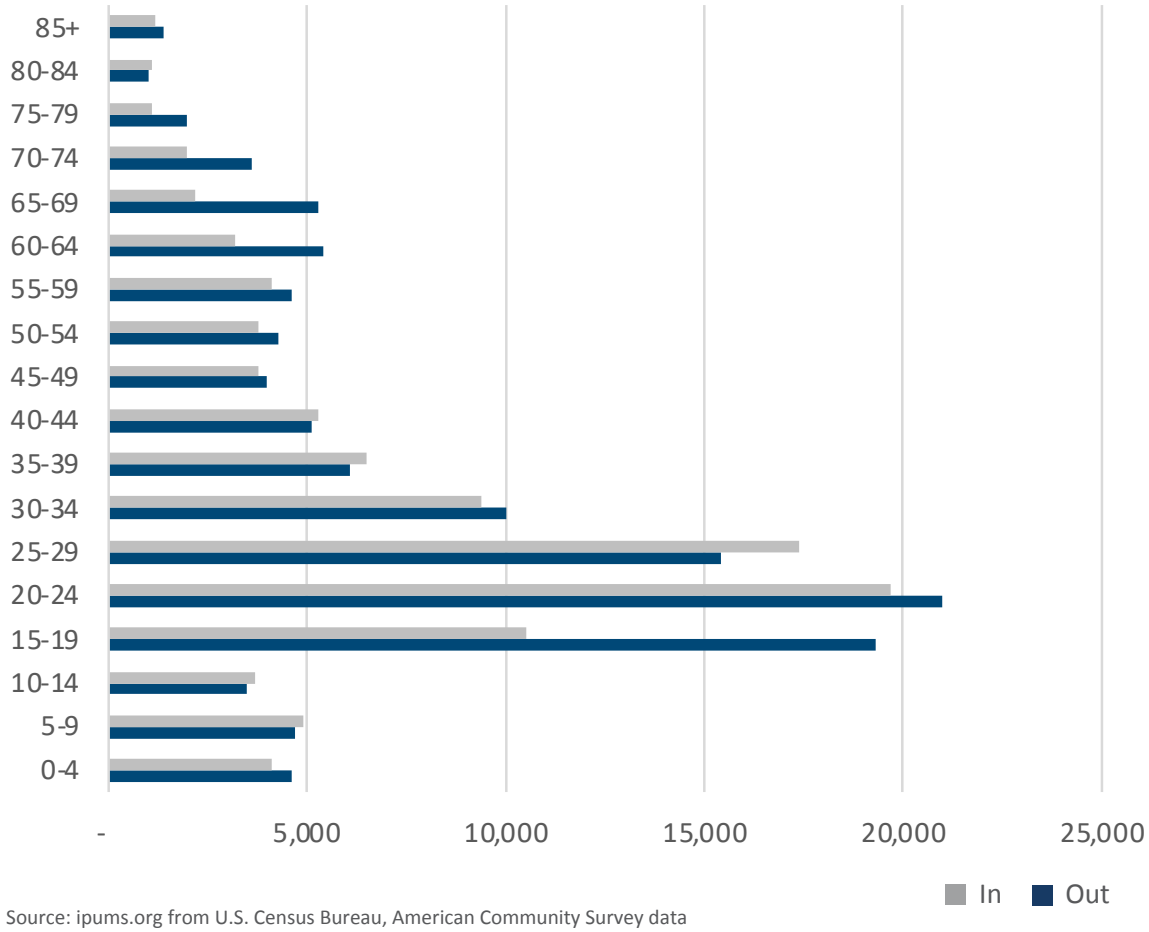
MIGRATION PATTERNS ACROSS THE LIFE COURSE

Figure 6 shows the number of people who moved into and out of Minnesota from another U.S. state in the past year by age group. The data show clearly that young adults make an outsized contribution to the state's migration patterns. Between 2018 and 2022, 46% of all people who moved to Minnesota in the past year were between the ages of 15 and 29 years, and 46% of those leaving the state were in this age group. In addition, the largest average annual loss of any 5-year age group occurred among 15- to 19-year-olds, with a loss of 8,800 people in that age group each year during the 2018 to 2022 period (Figure 7). There are also regular, sizable losses among people of typical retirement age, those in their 60s and 70s. Among those 80 years and older, net migration is very small with just 100 residents in this age group lost each year to other states on average. Additional detail about the migration of young adults (15-29 years), adults in their middle and later working years (30-59 years), and older adults (60 years and older) is also given.

FIGURE 6

Average Annual Inflows and Outflows of Domestic Migrants by Age, Minnesota, 2018-2022



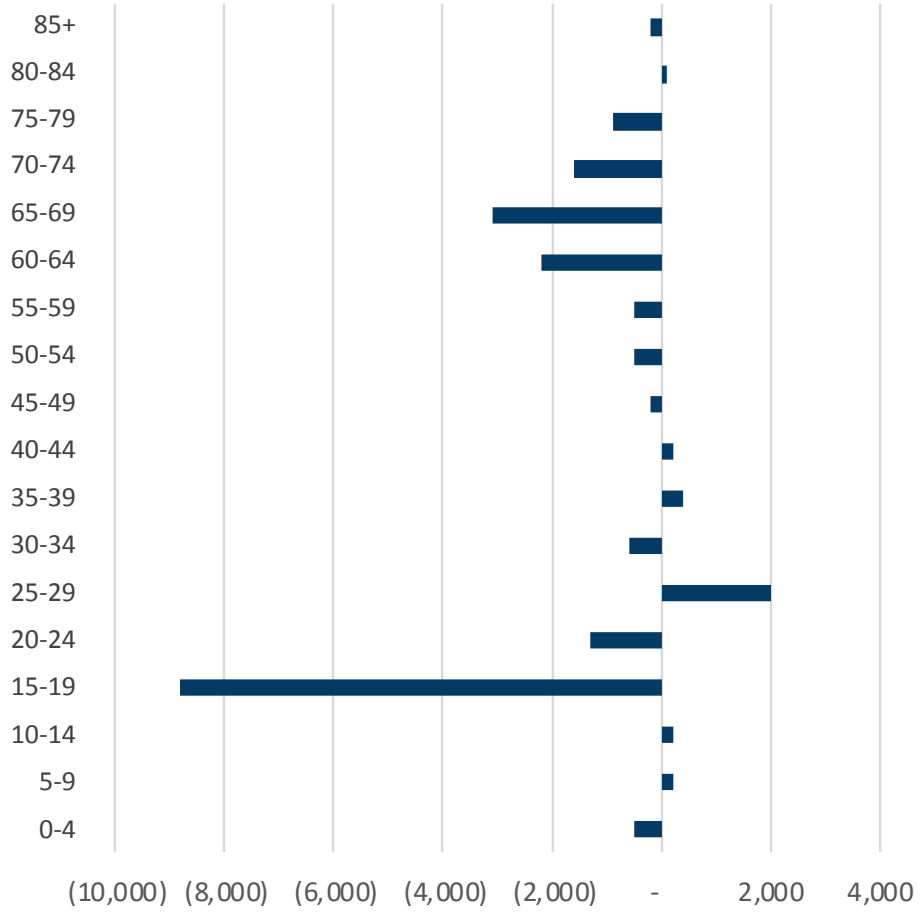
Source: ipums.org from U.S. Census Bureau, American Community Survey data

DOMESTIC MIGRATION OF YOUNG ADULTS (AGES 15-29 YEARS)

Figure 7 shows that Minnesota loses an average of 8,800 15- to 19-year-olds and 1,300 20- to 24-year-olds to other states in the U.S. each year. When patterns like these persist over time, the losses can accumulate quite rapidly. Losses of 8,800 people in a year accumulates to 44,000 in 5 years and 88,000 young people lost over the course of a decade. This pattern is particularly concerning when weighed against the slow labor force growth in Minnesota brought on by the retirement of the Baby Boomers and the long-term trend in declining birth rates.

FIGURE 7

Average Annual Net Domestic Migration by Age, Minnesota, 2018-2022

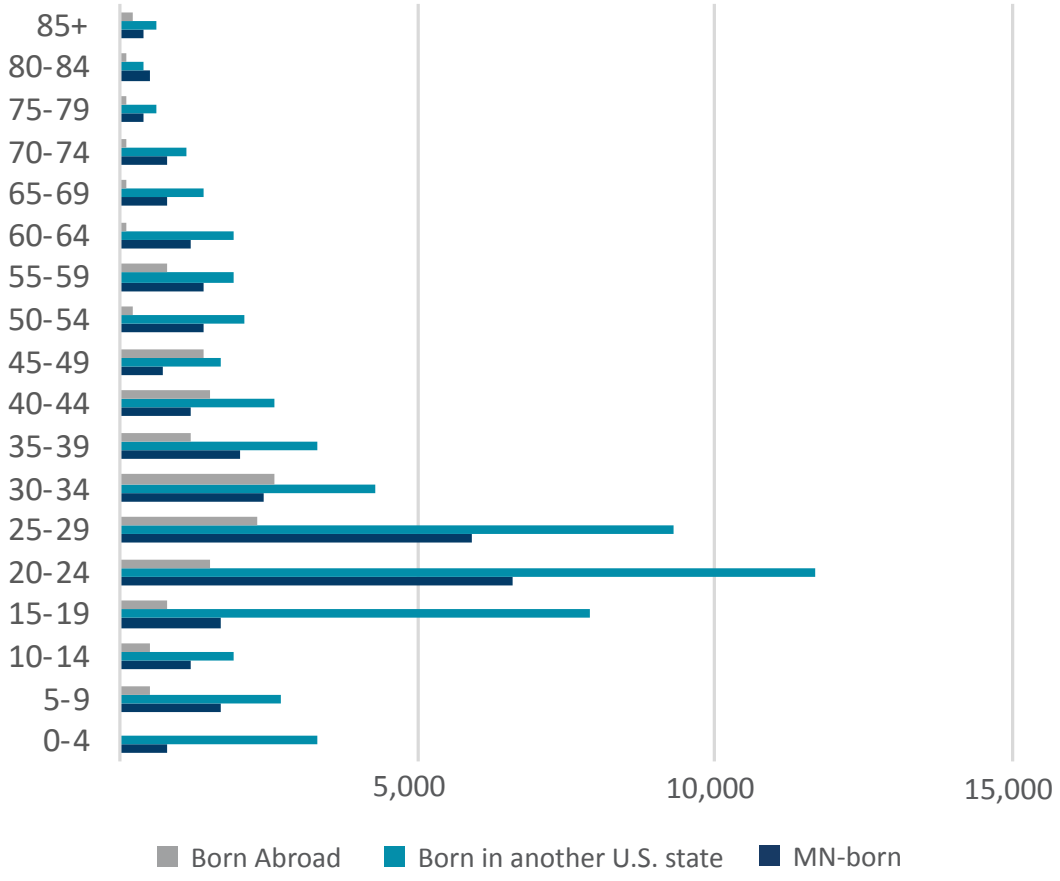


Source: ipums.org from Census Bureau, 2018-2022 American Community Survey data

Some, but not all, of the young adults who leave Minnesota in their late teens and early 20s will return to the state in subsequent years. Figure 8 shows the return migration of Minnesota-born individuals in the past year. While Minnesota-born residents return to the state at all ages, the largest number return when they are in their 20s. An average of 6,600 Minnesota-born residents between the ages of 20 to 24 move back to Minnesota from another state each year, as do an additional 5,900 between the ages of 25 and 29. In older age groups there is a sizable return of Minnesota-born residents but to a much lesser degree. Figure 9 also gives the number of domestic in-migrants who were born in other states and born abroad. A large number of 15- to 19-year-olds who were born in other states migrate into the state (7,900), many of whom migrate to attend college in Minnesota, but larger numbers of those born in other states migrate to Minnesota in their early and late 20s. Among those born in another country, the move to Minnesota from another U.S. state appears to happen a bit later in life; with the largest number moving to the state in their early 30s.

FIGURE 8

Average Annual Domestic In-Migrants by Age and Birthplace, Minnesota, 2018-2022



Source: ipums.org from Census Bureau, 2018-2022 American Community Survey data

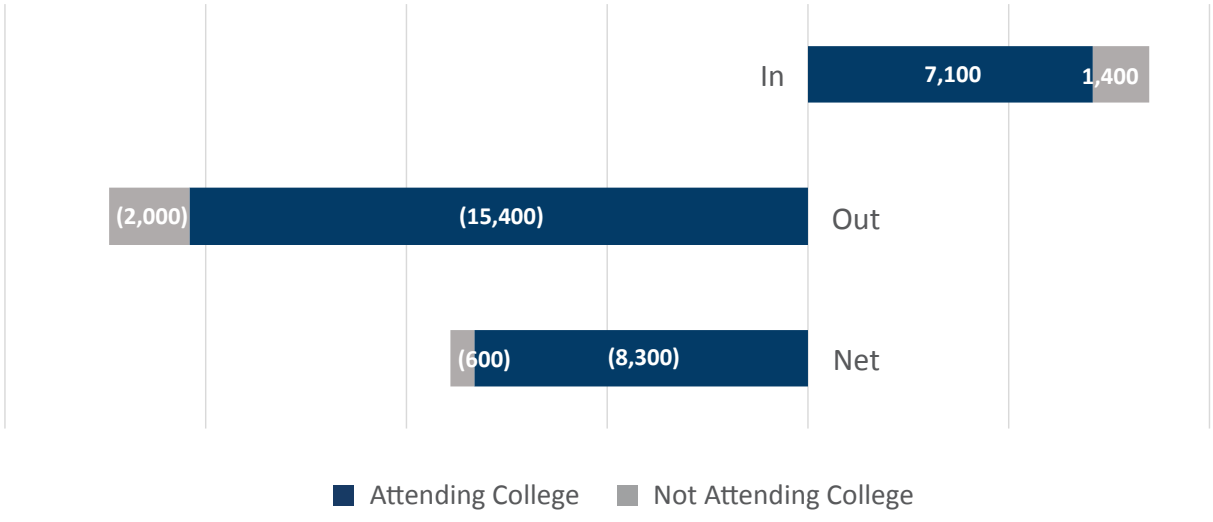
In the exchange of college students between Minnesota and other states, Minnesota loses an average of 8,300 college students on net each year. As we have seen some, but not all, will return to Minnesota after they complete college.

ACS data also show that most migrants in the highest mobility 5-year age group of 15 to 19 years old, move when they are either 18 or 19 years; of those, most are moving out of state to attend college. In fact, 89 percent of 18- and 19-year-olds who moved away from Minnesota in the past year, and 84 percent of the 18- and 19-year-olds moving to Minnesota in the past year did so to attend college (Figure 9). In the exchange of college students between Minnesota and other states, Minnesota loses an average of 8,300 college students on net each year. As we have seen some, but not all, will return to Minnesota after they complete college.

The Minnesota Statewide Longitudinal Education Data System (SLEDS) provides additional information about the relocation decisions of young people who leave the state to go to college. According to the SLEDS data, 31% (11,300) of the 2022 high-school graduates who enrolled in college the fall after their graduation were enrolled in a state outside of Minnesota. The states most likely to receive Minnesota high school graduates were the states that share borders with Minnesota—Wisconsin, North Dakota, Iowa, and South Dakota. Sixty-four percent of those who left Minnesota to attend college in 2022 attended school in one of these bordering states, with some taking advantage

FIGURE 9

Average Annual In- and Out-Migrants (Ages 18 and 19 Years) by College Attendance, Minnesota, 2018-2022



Source: ipums.org from U.S. Census Bureau, American Community Survey data

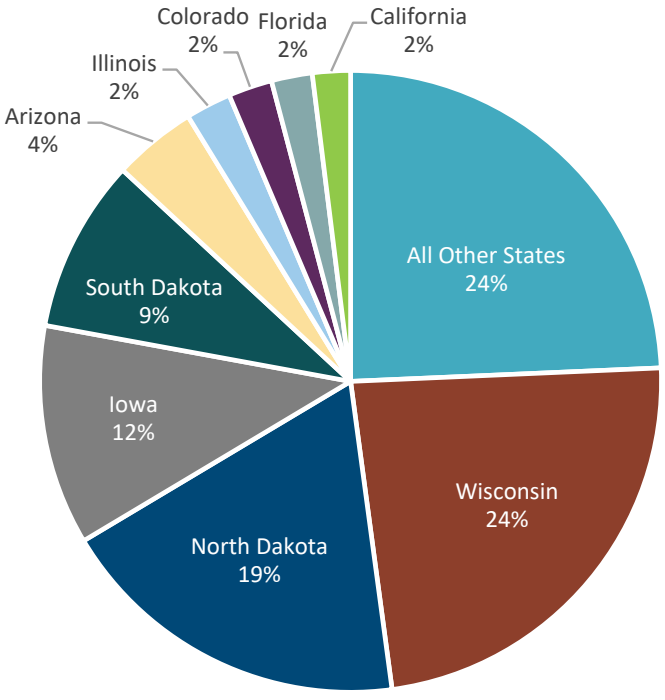
of the tuition reciprocity agreements that Minnesota has with Wisconsin, North Dakota, and South Dakota (Figure 10).

The Census Bureau's ACS provides additional insights into the migration of college students between Minnesota and neighboring states. In comparing college students gained and lost on net to other bordering states, Minnesota loses about 2,000 students on net each year to Wisconsin; 2,800 to North Dakota; 700 to South Dakota and 1,500 to Iowa. All told, most college student losses occur as the result of migration with bordering states.

It is not possible to measure the migration of recent college graduates with the ACS data, because most are no longer enrolled in school and cannot be distinguished from other interstate migrants. Using data from the Minnesota Office of Higher Education, the Census Bureau's Post-Secondary Employer Outcomes (PSEO) database provides a detailed picture of where post-secondary students move after they graduate from college. While the database is somewhat incomplete, it does cover about 74% of graduates from public and private colleges and universities. Notably, the PSEO data provide the most detailed view of the migration of young people

FIGURE 10

Receiving States for Minnesota High School Graduates Attending College in Another State, 2022

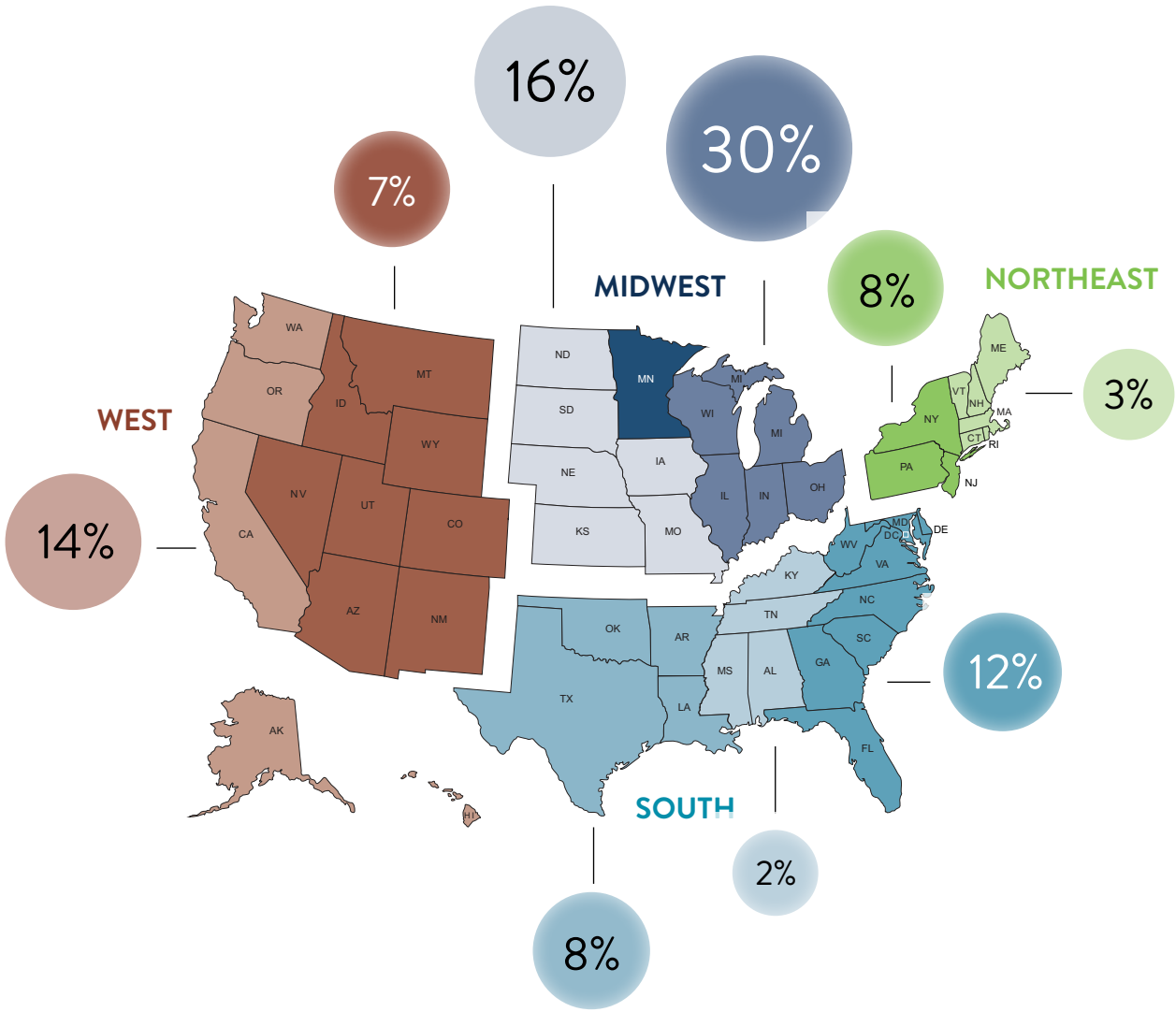


Source: Minnesota Statewide Longitudinal Education Data System

immediately after college graduation, which as we have seen, is one of the most crucial periods of mobility. Seventy-six percent of those graduating from a Minnesota college or university between 2016 and 2018 remained in Minnesota one year after graduation (Figure 11). Among the recent graduates who did not remain in Minnesota, the largest proportion of out-migrants moved to the East Central Region (30%)—a region which includes Wisconsin, followed by the balance of the West North Central Region which includes the Dakotas and Iowa (16%).

FIGURE 11

Receiving Regions for Minnesota High School Graduates Attending College in Another State, 2022



Source: U.S. Census Bureau, Post-secondary Employment Outcomes Database

Earlier cohorts have similar rates of out-migration one year after graduation, and their movements can be tracked for longer periods of time. Among Minnesota graduates earning a bachelor's between 2007 and 2009, 68% of Minnesota graduates remained in Minnesota 5 years after graduation, and 65% percent of Minnesota graduates were still living in the state 10 years after graduation. These findings are consistent with the pattern of high geographic mobility in the late teens and early 20s, followed by declining mobility as graduates age.

The migration of young adults—particularly college students—then, is key to understanding the overall migration patterns of the state. Their migration choices carry significance for the state across multiple dimensions. Firstly, as prospective workers with many years of employment ahead, their presence or absence in the labor force will have enduring implications. Secondly, when young adults leave the state, it affects future birth rates, thereby shaping demographic trends in the long term. When considering policies to attract or retain residents, state leaders should consider young adults as the target demographic for such policies.

TABLE 1

Average Annual In-Migration and Out-Migration of College Students, Minnesota and Neighboring States, 2018-2022

State	College Students Moving to Minnesota	College Students Moving Away from Minnesota	Net
Wisconsin	2,200	4,200	(2,000)
North Dakota	400	3,200	(2,800)
South Dakota	300	1,000	(700)
Iowa	200	1,700	(1,500)
All Other States	4,000	5,400	(1,400)
All States	**7,100**	**15,400**	**(8,300)**

Source: ipums.org from U.S. Census Bureau, American Community Survey data

The migration of young adults—particularly college students—is key to understanding the overall migration patterns of the state. When considering policies to attract or retain residents, state leaders should consider young adults as the target demographic for such policies.

DOMESTIC MIGRATION OF ADULTS IN THE MIDDLE AND LATER WORKING YEARS (AGES 30 TO 59 YEARS)

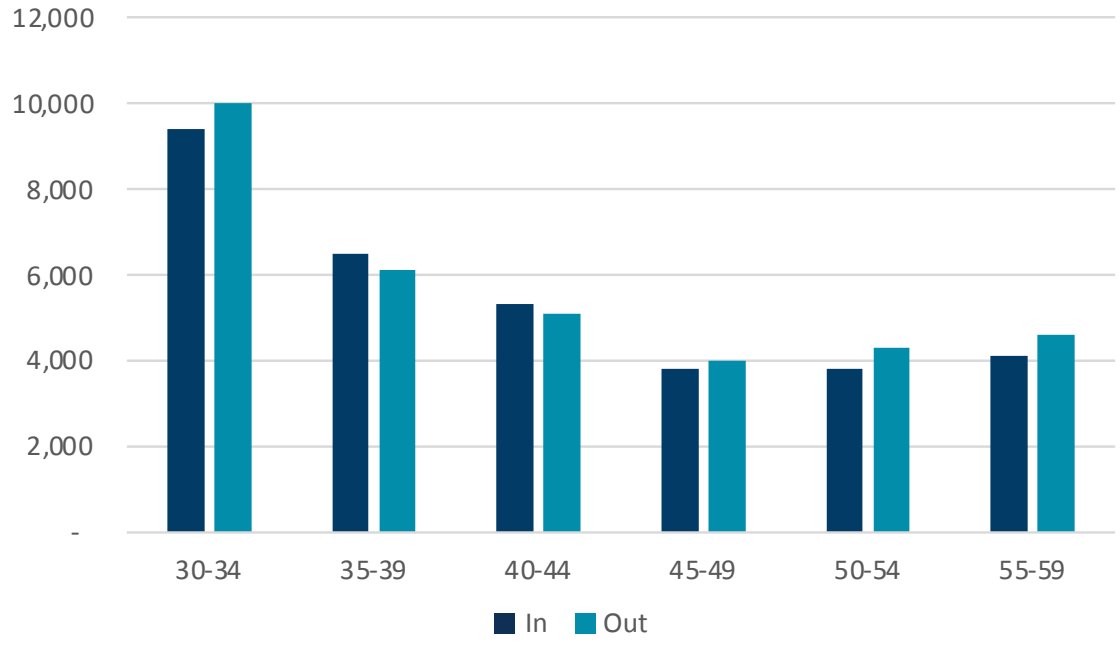
Among adults in their middle to late working years (30 to 59 years) the average number of people lost or gained on net because of domestic migration is relatively small. Unlike the large net losses in the late teen years and in early adulthood, net losses during middle and late adulthood play a much smaller role in net pattern of domestic losses (Figure 12). During 2018 to 2022, the state lost just 1,200 people on net between the ages of 30 and 59.

As young adults age into later life course phases, they take on new roles and responsibilities that anchor them more securely to their current locations. Owning a home and having children in school can tip the decision scales toward remaining in place rather than making a move. In addition, many people in this middle phase of life do not have the same high mobility expectations of younger adults. The vast majority of 30- to 50-year-olds are not considering the prospect of a move, let alone actually making a move. In this phase of life, mobility is constrained by individuals' own norms and expectations of low mobility, and the decision about where to move is not even considered.

Like the sending and receiving states for younger adults, for 30- to 59-year-olds, Wisconsin is

FIGURE 12

Average Annual In-Migration and Out-Migration of 30 to 59 Year Olds, Minnesota, 2018-2022



Source: ipums.org from U.S. Census Bureau, American Community Survey data

the state that trades the most residents with Minnesota. The other border states are also well-represented in the top sending and receiving states each year. Additionally, the most populous states also make the list of top sending and receiving states—California, Florida, and Texas all send and receive consistently large numbers to and from Minnesota each year.

Minnesota's mix of sending and receiving states align with the logic of migration flows that have been observed nationally. Generally, people are more likely to make shorter moves rather than longer ones—making Wisconsin, North and South Dakota, and Iowa top sending and receiving states for Minnesota. In addition, the "gravity model" of migration suggests that more populous states have larger flows of migrants because they have a stronger "pull" across longer distances than less populous states. This occurs because larger states have more jobs, a greater communications presence at the national level, and have larger mix of goods and services than less populous states. It makes sense then, that Minnesota's "trade partner" states for migrants would include both midwestern border states alongside with the largest states in the nation.

TABLE 2

Average Annual In-Migrants and Out-Migrants Ages 30 to 59 Years by Sending and Receiving States, Minnesota 2018-2022

	In-Migrants by State	Annual Average		Out-Migrants by State	Annual Average
1	Wisconsin	3,800	1	Wisconsin	5,300
2	California	2,200	2	Florida	3,200
3	North Dakota	2,100	3	Texas	2,700
4	Florida	2,100	4	California	2,200
5	Washington	2,000	5	Arizona	1,900
6	Illinois	2,000	6	North Dakota	1,600
7	Texas	1,700	7	Colorado	1,500
8	Colorado	1,600	8	South Dakota	1,400
9	Iowa	1,300	9	Iowa	1,200
10	Arizona	1,100	10	North Carolina	800
–	All Other States	13,000	–	All Other States	12,300
	All In-Migrants	32,900		All Out-Migrants	34,100

Source: ipums.org from U.S. Census Bureau, 2018-2022 American Community Survey data

DOMESTIC MIGRATION OF OLDER ADULTS (AGES 60 YEARS AND OLDER)

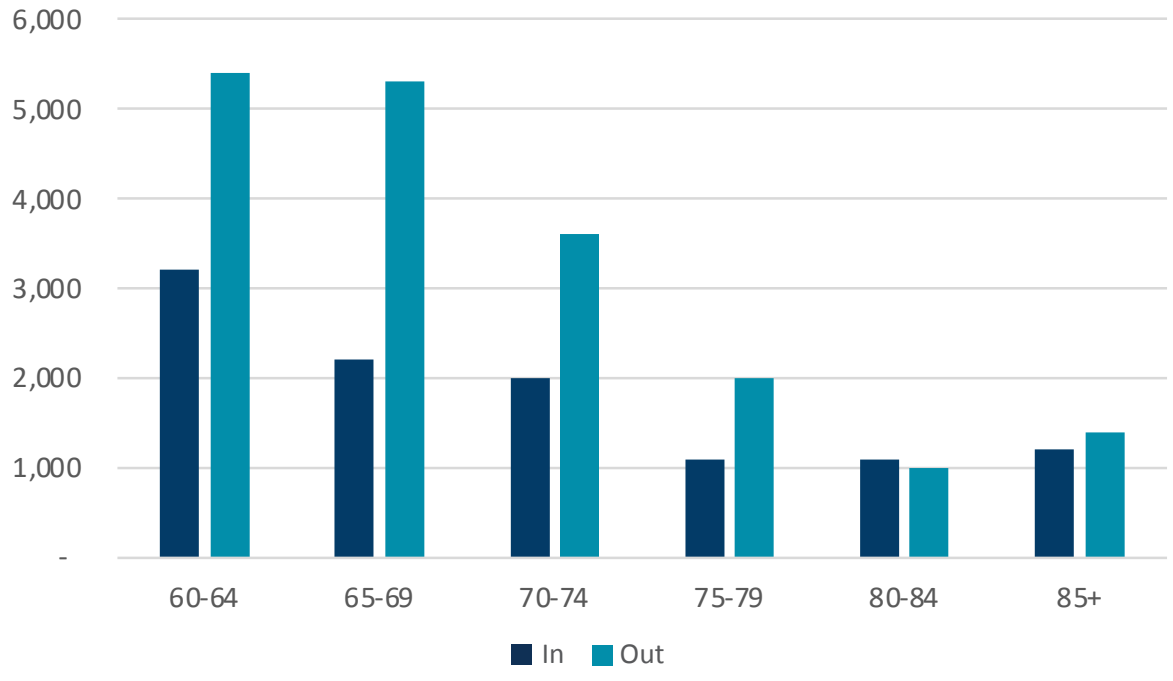
Minnesota sees a consistent pattern of net losses of those in their 60s and 70s (Figure 13). Among people in their 80s the inflows and outflows of people are quite small and cancel each other. The losses of those in their older ages are much smaller than those in their late teens and early 20s; however, when the losses for all older adults are added together the net losses do reach a sizable number—an average of about 7,800 residents lost on net each year.

Because many older adults in this age group have already retired, the out-migration of older adults has smaller impact on the growth of Minnesota's workforce compared to younger out-migrants. Additionally, because this cohort is well past the ages in which they will have children, their out-migration from Minnesota will not have significant long-term consequences for population growth either.

Figure 14 shows that 66% of out-migrants ages 60 to 64 years are still in the labor force, but the share of older adult out-migrants in the labor force drops very rapidly after age 64. Just 24 percent of out-migrants ages 65 to 69 years are in the labor force;

FIGURE 13

Average Annual In-Migration and Out-Migration of Older Adults (60 Years and Older), Minnesota, 2018-2022



Source: ipums.org from U.S. Census Bureau, American Community Survey data

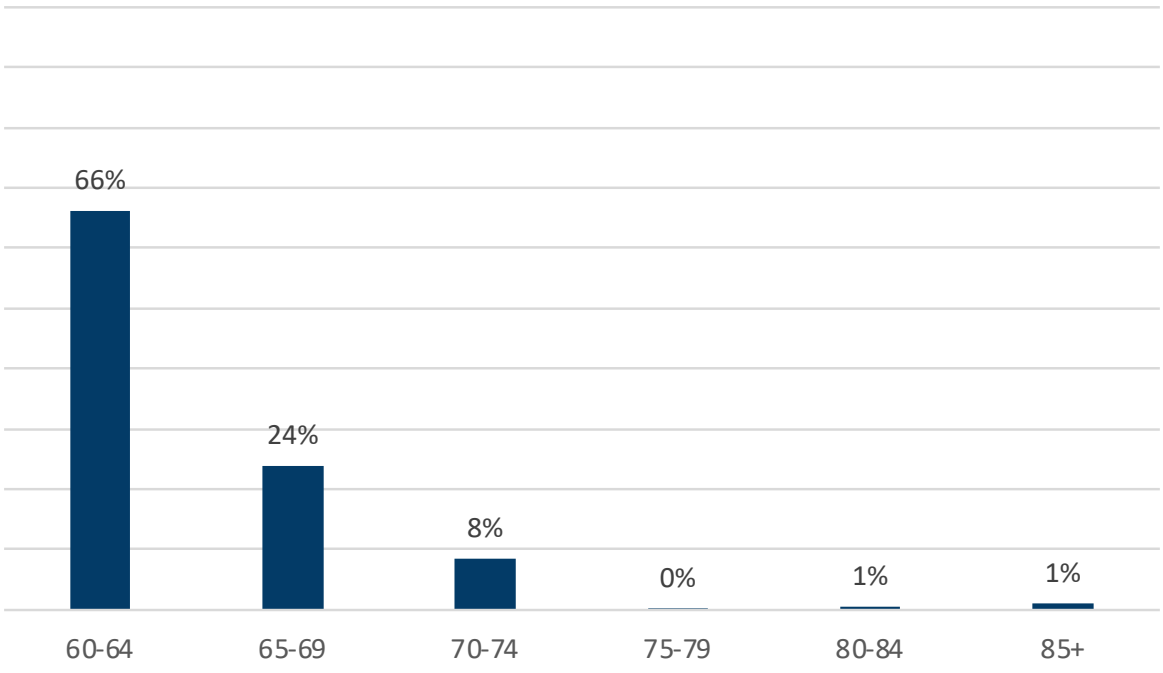
8 percent ages 70 to 74; and by 75 years and older, just about 1 percent are in the labor force.

Minnesota receives the largest number of older adults from Wisconsin, followed by Florida and California. Many in-migrants to Minnesota in these older age groups are Minnesota-born (Figure 9), thus many in-migrants are making a return move to Minnesota after a span of time spent living in another state. The American Community Survey asks respondents whether they moved in the last year and where they lived 1 year ago, but it doesn't ask specifically about whether the move was seasonal or whether it involved a change in a permanent, primary address. Because of this, it isn't possible to distinguish between those two types of situations. Instead, both types of migration can be included, making the picture of migration in the older years more difficult to interpret.

Among states receiving older adult out-migrants from Minnesota, Arizona and Florida top the list (Table 3). Wisconsin ranks third on the list of states receiving Minnesota older adults, followed by two more warm weather states—Texas and California.

FIGURE 14

Percent of Older Adult Out-Migrants in the Labor Force, Minnesota, 2018-2022



Source: ipums.org from U.S. Census Bureau, American Community Survey data

TABLE 3

Average Annual In-Migrants and Out-Migrants Ages 60 Years and Older by Sending and Receiving States, Minnesota 2018-2022

	In-Migrants by State	Annual Average		Out-Migrants by State	Annual Average
1	Wisconsin	1,500	1	Arizona	5,300
2	Florida	1,100	2	Florida	3,200
3	California	900	3	Wisconsin	2,700
4	Arizona	800	4	Texas	2,200
5	North Dakota	700	5	California	1,900
6	Colorado	500	6	Virginia	1,600
7	Illinois	500	7	North Dakota	1,500
8	Nebraska	500	8	Ohio	1,400
9	Texas	400	9	Iowa	1,200
10	Washington	300	10	Illinois	800
–	All Other States	3,700	–	All Other States	5,000
	All In-Migrants	10,900		All Out-Migrants	18,700

Source: ipums.org from U.S. Census Bureau, 2018-2022 American Community Survey data

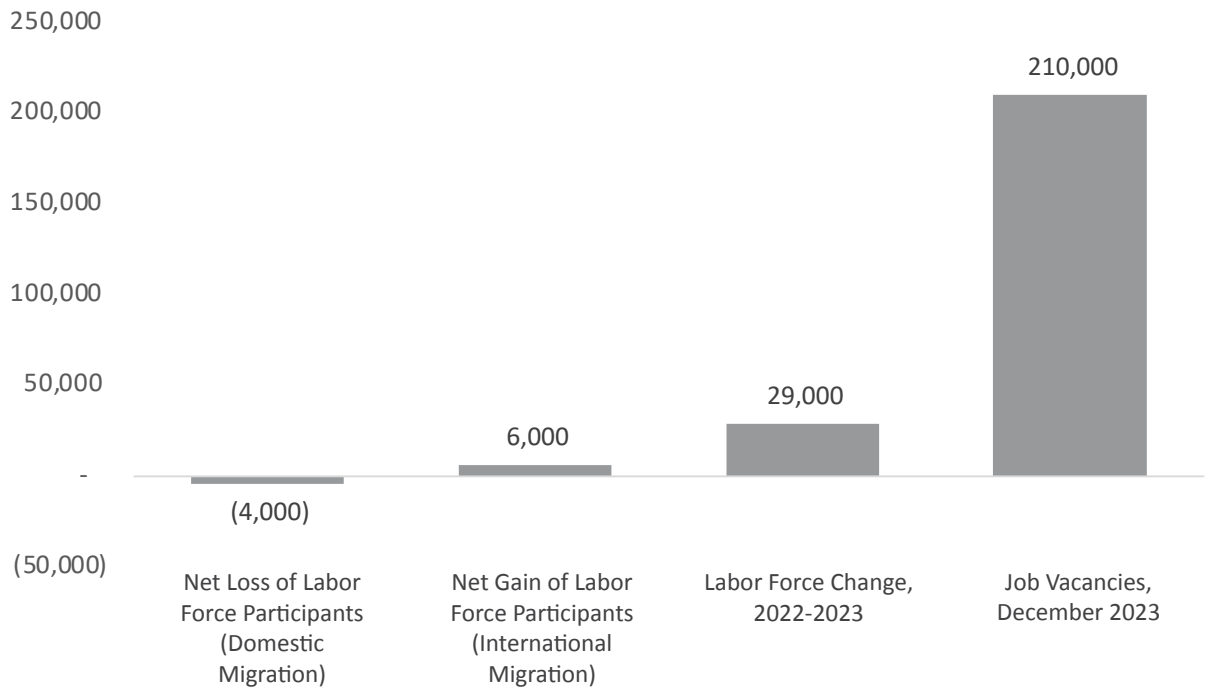
THE SCALE OF MINNESOTA'S DOMESTIC MIGRATION

An immediate concern of ongoing net out-migration is its potential impact on the labor force. Viewing migration estimates alongside recent labor force measures can help provide a sense of scale and help us interpret what Minnesota's migration patterns mean.

Earlier we considered the inflow and outflow of all domestic migrants and we saw that Minnesota typically loses less than 5,000 people each year due to domestic migration. When we look at the migration of those who are in the labor force, a similar picture emerges. Figure 15 shows that Minnesota typically experiences a small net outflow of labor force participants to other states, losing about 4,000 labor force participants annually. Countering those losses is a small net inflow of about 6,000 labor force participants from other countries. Together, this net gain of about 2,000 labor force participants makes up a small proportion of the overall change in the labor force each year. Migration has the potential to play a much

FIGURE 15

Average Annual Net Migration of Labor Force Participants, Labor Force Change, and Job Vacancies



Source: Average annual domestic loss from 2011-2022 ipums.org from U.S. Census Bureau, American Community Survey. Average annual international gain from U.S. Census Bureau 2023 Population Estimates Program and 2011-2022 ipums.org from U.S. Census Bureau, American Community Survey. Labor force change from Minnesota Local Area Unemployment Statistics (LAUS) data. Job Vacancies from the U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey (JOLTS), December 2023.

Minnesota's migration patterns cannot be fully explained by Minnesota itself. While its policies, college opportunities, and overall quality of life may contribute to some decisions to stay or to move, there is no single explanation that captures the complexity of migration patterns statewide.

larger role in bolstering labor force growth. Small increases in the inflow of labor force participants and small reductions in outflows could play a substantial role in future labor force growth. With birth rates falling and the ongoing retirement of the baby boomers, migration will remain a critical source of labor force growth into the foreseeable future.

Of course, the migration of people who are not currently in the labor force also plays a role in labor force growth, albeit one that cannot be directly measured in the survey data. We saw earlier that Minnesota loses college students to other states, on net, each year. When labor force nonparticipants move out of state to attend college or for other reasons, they are taking themselves out of the potential pool of workers; a decision that may impact the state's labor force growth for a few years or for an entire lifetime.

In recent years the state has experienced persistent labor force shortages, sometimes measured by a growing number of job openings. The most recent data on job vacancies show that there are currently 210,000 job openings in Minnesota across all industries and occupations. Recent net domestic migration for Minnesota does not come close to matching this number, at least in the short term. While migration patterns could change, we have seen that the levels tend to be quite stable over the decades. To meet employers' current demand for labor, changes to migration would need to be quite drastic and sustained; a deviation that seems unlikely given the stability of the trend over time.

CONCLUSION AND A LOOK AHEAD

This report has documented a stable net outflow of Minnesota residents to other states. This outflow is a small, but enduring feature of Minnesota's population dynamics over the past 20 years. Minnesota is not alone; the majority of midwestern and northeastern states in the "Frost Belt" experience net outflows of people, and many states experience much higher levels of net out-migration than Minnesota does.

Minnesota's regular inflows and outflows of migrants should serve as a reminder that there is not a single explanation that captures why Minnesota experiences ongoing net losses due to migration. Any single explanation would fail to fully reflect the diverse situations of the more than 200,000 people who move into and out of Minnesota each year. That a stable pattern of net losses holds for the Midwest overall suggests that individual choices may be shaped by larger forces, with or without the full knowledge of potential migrants. A person may not consider a move at all if a move would be costly, if they lacked information about the new state, or if they had few social connections or job prospects there. In other words, Minnesota's migration patterns cannot be fully explained by Minnesota itself. While its policies, college opportunities, and overall quality of life may contribute to some decisions to stay or to move, there is no single explanation that captures the complexity of migration patterns statewide.

In the future, changes to federal immigration policy may increase or decrease the number of people with the opportunity to move to Minnesota from abroad. These changes in international migration could either relieve or intensify the pressure on domestic migration to support ongoing population growth.

Climate change will likely alter the longstanding patterns of domestic migration in the U.S. as its multiple dire impacts continue to unfold. States in southwestern U.S. and along the coasts that have traditionally seen large inflows of migrants will face a range of challenges that could permanently alter migration flows nationally. While the number of in-migrants to Minnesota may increase in the future due to climate change, this is little consolation. Massive disruptions to peoples' lives would accompany this change. We only raise here to note that domestic migration in the future may look very different from the past.

State leaders wishing to turn the tide of Minnesota's net outflows in the shorter-term should note that only a small proportion of residents move in any given year. Many young adults, and recent high school graduates in particular, are already oriented toward the idea of an interstate move. Policies designed to reach young adults as they make important migration decisions could make a greater impact than policies taking a more blanketed approach to all possible movers. Further, many of the people moving into and out of Minnesota each year are coming from midwestern states that share a border with Minnesota. Viewing migration as a regional phenomenon rather than a national one, may help more effectively reach those who are most likely to move to the state.

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APPENDIX A. DATA SOURCES

Most data in this report come from programs and surveys conducted by the U.S. Census Bureau, including:

Decennial Census: The decennial census is a full count of the U.S. population that occurs every decade in the year ending in "0." Estimates of net migration can be calculated from census counts and administrative records by subtracting the total natural change (births minus deaths) from the overall change in population between the two censuses. In other words, population change not from births and deaths must be attributed to migration. This method creates an estimate of net migration only; inflows and outflows of people are not collected by recent decennial censuses. This report uses net migration estimates produced by the Applied Population Library at the University of Wisconsin-Madison.

American Community Survey (ACS): The ACS is the nation's largest household survey with about 1.9 million U.S. households interviewed each year. In Minnesota, 62,000 households are surveyed annually. The ACS asks respondents about their residence one year ago, yielding data on migrants' previous residences. By comparing previous and current residences, the Census Bureau provides an estimate of the number of people who moved across state lines in the past year. Characteristics about these individuals are also provided by the ACS. Importantly, respondents are surveyed on an on-going basis throughout the year. The data therefore reflect moves that occurred throughout the calendar year. When possible, we report data from a single survey year; however, for some tabulations we use data combined from 5 years of the ACS to increase the stability of the estimate. Because the ACS migration estimates from a sample rather than a full count of the population, there are margins of error associated with the estimates which can be quite large for rare events and characteristics like migration. This report uses individual-level, publicly available ACS data from IPUMS-USA at the University of Minnesota (https://usa.ipums.org/).

The **Population Estimates Program (PEP)** produces annual estimates of net domestic migrants at the state-level using a blend of administrative sources including tax return data from the IRS, Medicare data, and data from the Social Security Administration. Like data from the decennial census, inflows and outflows are not available. This report uses PEP data to show annual net migration changes since the last census.

Current Population Survey (CPS) is a monthly survey conducted by the U.S. Census Bureau on behalf of the U.S. Bureau of Labor Statistics. Questions about migration are included for a period of three months (February through April) each year during the Annual Social and Economic (ASEC) supplement. The CPS-ASEC is much smaller than the ACS, with just 75,000 households surveyed nationwide. Because of the much smaller sample size, the CPS-ASEC doesn't produce reliable estimates of migrants at the state level. This report uses individual-level, publicly available CPS data from IPUMS-CPS at the University of Minnesota to tabulate the reasons for interstate moves nationwide (https://cps.ipums.org/cps/).

Data about college student migration come from two related data sources:

Minnesota's **Statewide Longitudinal Education System (SLEDS)** provides administrative data on the migration of high-school graduates. The SLEDS project is managed jointly by the Minnesota Office of Higher Education (OHE), Minnesota Department of Education (MDE) and the MN Department of Employment and Economic Development (DEED).

The Census Bureau's database of **Post Secondary Employment Outcomes (PSEO)** includes data from the Minnesota SLEDS and from similar projects in other states. Among other data, the PSEO includes data on the migration of college graduates. This report uses migration data on graduates with a bachelor's degree at 1, 5, and 10 years after graduation from participating Minnesota post-secondary institutions. Not all Minnesota post-secondary graduates are included in the PSEO data; the database includes about 74% of those graduating.