

## Falling Behind

Migration Changes \& State Workforce Dale Knapp, Director of Research \& Analytics

## Executive Summary Migration Changes \& State Workforce

With unemployment at record lows, Wisconsin businesses are facing a worker shortage that could persist for decades. The reason? The state does not have a enough young people to replace retiring baby boomers over the next 10 to 15 years and migration patterns have not shifted for the better.

The ability of a state to naturally grow its workforce over time can be measured by comparing the number of residents under 16 years of age to the number who are 50 to 64 years of age. Many in this older group will likely leave the workforce over the ensuing 15 years and be replaced by those in the younger group. The larger the ratio, the greater the state's ability to grow the labor force.

For example, Wisconsin had 1.75 residents under 16 for each resident 50 to 64 years of age in 1990, and the state's workforce expanded almost $17 \%$ over the next 15 years. By 2000 , this ratio had fallen to 1.42 young people per resident near retirement, and the labor force expanded just 4.1\% during 2000-2015. At 0.87 in 2017, this long-term indicator points to a shrinking labor pool over the next 15 years.

To grow its labor force, Wisconsin will need to attract workers from other states. However, the state has not fared well in attracting key population groups since 2010. In fact, the state's migration patterns began shifting after 2000 and have only worsened among key age groups since.

Since at least 1990, Wisconsin has lost young people as they age from their early twenties into their late twenties. That pattern continued during 2010-2015 with the state losing almost 30,000 of these young people, many recent college graduates.

The state has typically recouped those losses by attracting people in their thirties, forties, and even fifties. For example, during 2000-2005, the state experienced a net outflow of about 25,000 young adults, but added over 40,000 residents in the older groups. However, during 2010-2015, the state not only lost 30,000 young adults to other states, it also lost population among those in the older groups. This partly explains the state's current labor shortage.

The recent net loss of residents in their "family formation" years creates a second, long-term problem for the state. Those moving into the state who are in their late twenties to early fifties often bring with them children, who will be part of the future workforce. Indeed, during both 2000-2005 and 20052010, the state added more than 40,000 children from migration.

However, during 2010-2015, net migration of children to the state totaled fewer than 10,000. This large drop in the net migration of children portends trouble for long term workforce growth in Wisconsin.

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Wisconsin is facing an economic "good news, bad news" situation. On the positive front, nearly everyone in the state who wants a job has one. In 2018, the state's unemployment rate averaged $3.0 \%$, the lowest rate in at least 40 years.

The bad news is that historically low unemployment is a challenge for growing companies that need an ever-expanding supply of workers. With so few out of work, there is not a labor supply for these companies to draw upon.

Barring a major recession, the situation is not likely to change anytime soon. As the Wisconsin Taxpayers Alliance explained in both 2004 and 2014, retirement of the state's baby boomers combined with declining birth rates will stall labor force growth over the next 20 years. Without the ability to "naturally" increase the workforce, growth must come from one of two sources: higher labor force participation or migration of workers from other states.

In this report, we examine Wisconsin's success, or lack of success, in both of these possible labor sources. First, we briefly outline the state's workforce challenge.

## A DEMOGRAPHIC ROADBLOCK

The labor force consists of residents 16 or older who are either working or looking for work. Its size is affected by a variety of factors. For Wisconsin and most other states, the main driver over the past 40 years has been a growing population. In particular, the size of generations entering the workforce has generally been larger than those exiting. That is now changing.

## Insufficient Replacements

Between 1950 and 2017, Wisconsin's birth rate fell from 23.9 births per 1,000 residents to 11.2 per 1,000 . This meant that at some point, there would be fewer people entering the workforce than leaving it. That has been the case for the past decade.

This phenomenon is illustrated by comparing the under 15 population to those ages 50 to 64 . Over 15 years, many in the older group will likely retire and be replaced in the workforce by those in the younger group, who become working age during that time. With declining birth rates, the younger group becomes too small to fully replace the older group.

In 1990, Wisconsin had 630,000 residents ages 50 to 64 , many who would have retired by 2005 . They were replaced in the workforce largely by the 1.1 million residents who were under 15 in

Figure 1: Workforce Replacement Rate Falling Ratio of Under 15 to 50-64 Year Old Population

1990. With more than enough replacements (1.75 young people for every 1 person near retirement, see Figure 1 on page 3), the state's labor force was able to grow almost $17 \%$ during 1990-2005. Positive migration rates also contributed to this growth.

By 2000, this "worker replacement rate" had fallen from 1.75 to 1.42 ( 1.1 million residents under 15 compared to 790,000 people ages 50 to $64)$. During the ensuing 15 years (2000-2015), the state's workforce expanded just $4.1 \%$.

By 2010, Wisconsin's long-term demographic roadblock was clear. The state had fewer young people than residents nearing retirement: 1.10 million people under 15 and 1.14 million residents between 50 and 64 . With a worker replacement ratio of 0.97 , the only way for the workforce to grow during 2010-2025 was increased workforce participation or migration from other states. Since then, the situation has deteriorated further. In 2017, Wisconsin's worker replacement rate stood at 0.87 .

## Declining Participation

With too few young residents to replace future retirees, Wisconsin might look to higher labor force participation rates (LFPR) to grow its workforce. In fact, rising labor force participation, particularly among women, contributed to workforce growth during the 1970s, 1980s, and 1990s.

Figure 2: Workforce Participation Falling \% 16 Or Older in Labor Force, 1977 to 2017


Table 1: Workforce Participation by Age
2000 \& 2015, Population and Labor Force (Millions)

| Age | 2000 |  |  | 2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pop. | Labor <br> Force | Rate | Pop. | Labor Force | Rate |
| 16 to 19 | 315 | 210 | 66.5 | 309 | 159 | 51.4 |
| 20 to 24 | 344 | 298 | 86.5 | 419 | 334 | 79.6 |
| 25 to 34 | 681 | 602 | 88.4 | 715 | 623 | 87.1 |
| 35 to 44 | 891 | 817 | 91.7 | 649 | 578 | 89.0 |
| 45 to 54 | 717 | 628 | 87.5 | 818 | 706 | 86.3 |
| 55 to 64 | 462 | 291 | 63.0 | 792 | 550 | 69.4 |
| 65+ | 620 | 89 | 14.4 | 851 | 140 | 16.4 |
| Total | 4,030 | 2,935 | 72.8 | 4,553 | 3,090 | 67.9 |

However, Wisconsin's participation rate has been declining since the late-1990s (see Figure 2). Since 1997, participation has dropped from almost $75 \%$ of the working-age population to under $69 \%$, near its 1982 level. Over the past several years, the rate has ticked up slightly, something to be expected in a labor-shortage environment.

Can that uptick last? Understanding the reasons for the decline helps answer that question.

Two factors explain the drop. The first is a general decline in workforce participation at all ages under 55. As Table 1 shows, participation rates fell among most age groups during 20002015. This broad decline accounted for about one percentage point of the 4.9 percentage point drop during these years.

A larger factor was the aging of baby boomers. In 2000, this generation was roughly 35 to 54 years of age and totaled more than 1.6 million residents, almost $40 \%$ of the working-age population. At these ages, participation rates approach or exceed $90 \%$. By 2015 , baby boomers were 50 to 69 years of age and their participation in the workforce dropped significantly-under $70 \%$ for those 55 to 64 and about $15 \%$ for those 65 or older.

The shift of a large segment of the population from high to low participation affects the overall rate. In fact, change in the sizes of all age groups, each with a different participation rate, accounted for more than $60 \%$ of the overall decline in Wisconsin's LFPR.

While greater workforce participation can be part of the solution to Wisconsin's workforce dilemma, achieving that will be difficult. Even if
rates for each age group returned to 2000 levels and Wisconsin's population evolved according to recent state forecasts, the state's LFPR would fall about four percentage points by 2025. If rates remained near current levels, the decline would be greater.

With too few young people to replace future retirees and a likely struggle to increase workforce participation, Wisconsin must turn to migration to grow its labor pool.

## ATTRACTION AND RETENTION

Census Bureau population estimates by age can be used to examine Wisconsin's ability to attract and retain those of working age. The estimates are comprised of five-year age groups, allowing the tracking of relatively small cohorts over five year periods.

For example, those 30 to 34 in 2010 were 35 to 39 in 2015. ${ }^{1}$ If, after accounting for deaths, the population of the 2015 group was greater than the 2010 group, then Wisconsin experienced net in-migration among this age cohort. If the reverse was true, there was net out-migration.

This approach identifies age groups comprised of individuals who find Wisconsin relatively attractive, and groups that find other states more attractive. It does not provide information on where residents moved to or where new residents came from.

## Overview

Before delving into the narrow age groups, it is helpful to take a broad look at the migration of those who were 15 to 59 years old in 2010, compared to those of similar ages in prior years. In 2010, Wisconsin had 3.49 million residents who were 15 to 59 years of age. Five years later, it had 3.41 million residents ages 20 to 64 . In other words, the size of this critical workforce cohort declined by 78,571 people. There were approximately 47,618 deaths among this group. The remaining decline of 30,953 people was a net out-migration of residents (see Figure 3).

This decline is similar to 2005-2010, but is a major shift from 20 years earlier. During 1990-1995,

1 Decennial census years $(1990,2000,2010)$ have the most accurate population figures. Intervening years are estimates. The desire to include census years limits our analysis through the 2010-15 period.
Wisconsin's demographic makeup will make it difficult to increase labor force participation over the next decade.
a similarly-aged cohort grew by 91,850 due to net in-migration from other states or countries. During 2000-2005, the state also added to this group, though the number was less than 17,000.

## A Shifting Age Pattern

Throughout the 1990s and during 2000-2005, migration to and from the state followed a distinct pattern. The state lost young people after they graduated from high school and during their twenties. Wisconsin made up for these losses by attracting young families-essentially adults in their late twenties through their forties, and sometimes fifties.

That pattern is illustrated in Figure 4 on page 6. During 2000-2005, Wisconsin lost, on net, a little more than 32,000 young people as they aged from 15-24 years of age to 20-29 years of age. However, the state had sufficient in-migration

FIGURE 3: Wis. Losing Working-Age Population Net Migration as 15-59 Year Olds Age to 20-64


FIGURE 4: Wisconsin Gained Among Most Population Groups During Early 2000s Net Migration Among Various Age Cohorts, 2000-2005

among each of the seven older age groups to compensate for the loss of young people.

This pattern of losing young people and gaining those in their thirties and forties continued during 2005-2010, with a twist. The state lost more young people than during the previous five years and added fewer "families." The result was the net loss shown in Figure 3 on page 5.

During 2010-2015, Wisconsin's migration pattern shifted in several ways. First, the state gained among recent high school graduates, adding more than 10,000 of these young people as they aged into their college years (see Figure 5), reversing a 20 -year pattern of net out-migration.

Second, while Wisconsin added among those in their late twenties and early thirties, the gains were minimal. Net in-migration totalled just 197 in the former group and 2,463 in the latter group.

Third, the state experienced net out-migration among each of the five older age groups studied.

This is a reversal of a long-term pattern of adding to these age cohorts. The end result was a net loss among the 15-59 year old working age group.

A closer examination of key age groups highlights some troubling patterns.

College-Age Young People
A growing workforce begins with attracting and retaining as many young people as possible. Historically, the state has struggled keeping residents as they aged from their early twenties into their late twenties, many recent college graduates.

That pattern continued during 2010-2015. During those five years, the state lost, on net, nearly $30,000(7.7 \%)$ of these young people, more than six times the loss of any other age group studied. The drop was slightly worse than in the 20002005 and 2005-2010 periods; declines in both were about 25,000 people (see Figure 6).

Both the 2005-2010 and 2010-2015 cohorts are part of the millennial generation, while the 2000-

FIGURE 5: Wisconsin Losing Among Most Population Groups
Net Migration Among Various Age Cohorts, 2010-2015


FIGURE 6: Recent College Grads Leaving Net Migration as 20 to 24 Year Olds Age to 25-29

| $90-95$ | $95-00$ | $00-05$ | $05-10$ | $10-15$ |
| :---: | :---: | :---: | :---: | :---: |
| -153 | $-9,006$ |  |  |  |
|  |  |  |  |  |
|  |  | $-24,981$ | $-24,547$ |  |
|  |  |  | $-29,771$ |  |

2005 group is the youngest of Generation X. By 2025 , these three cohorts plus the youngest millennials, many who were still in college in 2015, will comprise more than $40 \%$ of the workforce. Attracting and retaining them is critical, and it appears Wisconsin has significant work to do on this front.

## Young Families

By age 25 , post-secondary education is completed for most young people and they are beginning careers. Some are, or will soon be, starting a family. Both career and family considerations affect movement of those ages 25 to 34 and those 35 to 49.

Attracting and retaining residents of this age is important for two reasons. First, adding young families immediately adds one and sometimes two individuals to the workforce. Second, these families often bring to the state children, or have

FIGURE 7: Gains Slowing Among Young Families Net Migration as 25-34 Year Olds Age to 30-39

children after arrival. The children of today will comprise a significant part of tomorrow's workforce.

Historically, Wisconsin has been successful at attracting people 25 to 34 years of age. During 1990-1995, Wisconsin had net in-migration of more than 45,000 in this cohort. Over the ensuing five years, the gain approached 34,000 (see Figure 7).

Net in-migration among this important group declined during 2000-2010. During the latter half of that decade, it was less than half what was seen in 1990-1995.

Over the most recent five years studied, Wisconsin experienced a net in-migration of fewer than 3,000 among this group.

A similar downward trend has occurred with those 35 to 49 years of age, many of whom are also working and raising families. Significant in-migration in the early 1990s turned to fewer gains during both 2000-2005 and 2005-2010 (see Figure 8).

However, while Wisconsin continued to add to the 25 to 34 year old cohort during 2010-2015, it lost to other states or countries more than 12,000 of those who were 35 to 49 years of age in 2010.

The short-term impact of the changing migration patterns of these two groups is obvious. The state currently has fewer residents of working age than if prior patterns had continued. This is part of the explanation of the tight labor market Wisconsin is now experiencing.

FIGURE 8: Migration of "Family-Aged" Turns Net Migration as 35-49 Year Olds Age to 40-54


Fewer than 10,000 children migrated to Wisconsin during 2010-2015, down from 43,000 in each of the two prior fiveyear periods.

However, as mentioned, there is a long-term impact as well. These are the ages at which families are started and children are raised. Net in-migration of these young people can also mean a net in-migration of children, who are the state's future workforce.

In the 1990s, net migration added between 54,000 and 70,000 children to the state (see Figure 9). During both 2000-2005 and 2005-2010, net in-migration of children was about 42,000 .

With the state adding fewer than 3,000 of those 25 to 34 years of age and losing more than 12,000 of those 35 to 49 during 2010-2015, the number of children added from migration dropped below 10,000 . Fewer children moving here today negatively impacts our future workforce.

## Nearing Retirement

Those 50 to 59 years of age are well into their careers, with some nearing retirement. Many have

FIGURE 9: Net In-Migration of Children Falling Net Migration as Those Under 16 Age to 5-19


FIGURE 10: Wis. Losing Experienced Workers Net Migration as 50-59 Year Olds Age to 55-64

been working for more than 30 years and bring significant "human capital" to the workforce. Usually, they are in their peak earning years. Wisconsin's success in retaining and attracting this cohort has been mixed.

Gains during 1990-1995 and 2000-2005 were offset by losses during the second half of each decade. During 2010-2015, Wisconsin lost just under 1,700 of these experienced workers.

## IN SUM

Wisconsin is at a critical juncture in terms of its workforce. Unemployment is at record lows and the populous baby boom generation is retiring. The pool of current residents who will be replacing them is insufficient to grow the labor force over the next 15 years or more.

Shifting migration patterns during 2010-2015 raise concerns about future workforce growth. Wisconsin continues to lose young people as they age from their early twenties to late twenties. Historically, these losses have been overcome by gains in families headed by those 25 to 49 years of age. However, during 2010-2015, the state was a net loser of residents in this age group.

Moreover, the decline in young families translated to smaller gains in the number of children added to the state's population rolls. Historically, Wisconsin has gained significant numbers of children through migration. During 1990-2010, increases averaged about 50,000 in each five-year period. During 2010-2015, the state added fewer than 10,000 children. These are the workers of the future, and Wisconsin needs more of them.


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