

Greater Minnesota Refined & Revisited





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Key Findings

In Part I of this report, we examine the well-being and composition of Minnesota's residents using a four-tiered definition of an area's character—urban, large town, small town, and rural—based on both population size and proximity to other communities. We present demographic and economic characteristics¹ about Minnesotans living in these four geography types, to create a more nuanced portrait of our state, and a better understanding of the differences within those areas often collectively considered "Greater Minnesota." We find:

- More than 7 in 10 Minnesotans lives in an urban area, yet 434,000+ live in (remote) rural areas: About 73% of Minnesota's population, numbering more than 3.9 million people, lives in an urban geography. Eleven percent, or nearly 609,000 people, lives in or nearby large towns with 10,000-49,999 residents. Another 7%, or nearly 390,000 people lives in or nearby small towns with 2,500-9,999 residents, while 8% of Minnesota's population, representing more than 434,000 people, lives in more remote rural areas.
- Racial and cultural diversity differs: The racial composition of the four geography types differs considerably. In urban areas, 79% of residents are White (non-Hispanic), while in small towns and rural areas White residents make up greater than 90% of the population. About three-fourths or slightly more of all residents in rural, small town, or large town areas were born in Minnesota, compared to two-thirds of urban residents. Eighty-nine percent of all immigrants residing in Minnesota live in urban communities.
- Older residents more common in non-urban areas: While 32% of urban Minnesotans are age 50 or above, that rate rises to 38% of large town residents, 41% of small town residents, and 44% of rural Minnesotans— which heralds concern for the future workforce in our state's smaller communities. In addition, residents of rural and small town Minnesota are more than twice as likely to be age 80 or older than residents in urban parts of the state. More than 1 in 20 residents in rural and small town areas are 80+ presently, and given the high shares in the 65-79 age group, these rates and numbers are anticipated to continue rising. It is essential to plan for these older adults' needs, as remote areas face challenges delivering health and other services.
- Non-urban earnings trail urban paychecks: Comparing median annual earnings for all workers who have full-time, year-round employment reveals a large leap for urban residents. Half or more of men working full-time in rural, small town, or large town Minnesota earn less than \$45,300 annually. Half or more of all women working full-time in rural, small town, or large town Minnesota earn less than \$45,300 annually. Half or more of all women working full-time in rural, small town, or large town Minnesota earn less than \$45,000 annually. Urban workers' median earnings, for men and women, are \$10,000 or slightly more higher than all other geography types. This earnings advantage is due in part to more urban employment in higher paying industries. Rural, small town, and large town residents who work full-time are two or more times more likely to live in poverty than urban residents who do so.

In Part II of this report, we examine the basic components of demographic change—births, deaths and migration—at the county level to understand the currents that have contributed to population shifts since 2000. Because of the important role Minnesota counties play in public leadership and service delivery, we introduce a new taxonomy of Minnesota's counties with a sensitivity to the mix of urban, rural, and "in-between"

¹ Data in Part I refer to the average annual characteristics during years 2010-2014. Dollars are in 2014 values.

environments that cross county boundaries. This results in four county types: *Entirely Rural* (14 counties), *Town/Rural Mix* (35 counties), *Urban/Town/Rural Mix* (25 counties), and *Entirely Urban* (13 counties). Using these four county groups, we find:

- Population changes during the past 15 years: Between 2000 and 2015, the Entirely Urban counties accounted for about 80 percent of Minnesota's population growth overall, adding an average of 30,700 residents each year (as a group). By comparison, the Urban/Town/Rural Mix counties added about 7,000 residents per year, while the Rural/Town Mix counties added 800 people each year. The Entirely Rural counties have jointly lost about 550 residents each year during the past 15 years. The rate of population increase in the Entirely Urban counties has gathered speed since 2010, from 1.0% annual growth during the 2000s decade to 1.3% annually during 2010-2015.
- All rural and counties with a rural/town mix see population losses this decade: Entirely Rural counties were the only group of the four to have lost population during the 2000s. However, since 2010 both Entirely Rural and Town/Rural Mix counties—a group which saw modest gains last decade—have experienced population losses. The rate of population decline has accelerated since 2010 in Entirely Rural counties.
- Natural change (births minus deaths) still driving growth in more populous counties, but is tapering: For the three county types that are home to a town and/or urban area, positive natural change has been an important contributor to population growth during this decade and the last, but has diminished since 2010.
- Negative natural change reducing population in entirely rural counties: The Entirely Rural county group has seen the number of deaths to residents outpace the number of births to residents since 2000. These counties have seen negative natural change contribute to winnowing their population by about 200 people each year during the past 15 years, a trend that shows no sign of abating.
- Net migration losses in two groups of non-urban counties: The group of Entirely Rural counties and Town/Rural Mix counties lost more residents than they gained from migration during both 2000-2010, and 2010-2015. Town/Rural Mix counties saw greater migration losses, on average, in the most recent period (an average of about 1,700 net residents leaving each year this decade, compared with net migration loss of about 400 people per year during the 2000s).
- **Migration tally swings from positive to negative for partially urban counties**: The 2000s decade produced 4,500 new residents arriving annually in the Urban/Town/Mix county group. Since 2010, however, about 1,700 have out-migrated (on net) each year.
- Entirely urban counties only group growing from migration since 2010: The Entirely Urban group has added about 11,000 new residents on average from net migration each year since 2010 (up from about 1,800 each year in the 2000s). However these counties' collective migration gains were entirely from *international* arrivals, as domestic migration was a net negative for this group (and all others) in the 2010s.
- **Migration will increasingly drive growth:** Many Minnesota counties are experiencing slowing or negative natural change, and will be more reliant on migration if they are to grow in the future.

Greater Minnesota

Refined & Revisited

Introduction

Greater Minnesota. It's a term recognized by many Minnesotans as referring to the area outside the seven counties of the Twin Cities region that is centered on the state's two largest cities of Minneapolis and St. Paul, or the state's non-urban areas more generally. Many Minnesotans wonder, *How is Greater Minnesota doing?*

Along with its broad shift away from family farms and agricultural dominance during the 1900s, Minnesota has seen its population increasingly tilt toward denser communities. Many Minnesota counties with rural character are losing population share relative to more urban counties, as well as to their earlier selves. Examining population totals from 1950 to the present reveals that 36 of Minnesota's 87 counties peaked in population in the 1950 or 1960 decennial Census count, while 32 other counties achieved their greatest population in the most recent population estimate (2015). An increasingly urban-based population acquires greater political muscle. However, state policymakers must attend to the diverse and sometimes divergent needs in urban areas and Greater Minnesota.

Against this shifting population landscape, residents and leaders in some parts of Greater Minnesota worry about retaining and attracting working-age adults, preserving community vitality, securing a sufficient tax base to offer needed public services, and maintaining a thriving economy. In response, many communities have sought to build upon their strengths—spurring local entrepreneurship, enhancing arts and cultural offerings, and promoting their quality-of-life and natural amenities to attract newcomers.

To better understand how Greater Minnesota is faring, we must first acknowledge that it is not a singular place with a singular fate. It is a patchwork of numerous different communities, regional centers and college towns, agricultural strongholds and recreational gems. Non-urban areas of Minnesota include the Iron Range and the Northwoods, prairies and pines, as well as farmlands and fertile river valleys. And against the backdrop of Minnesota's diverse natural environments, long-term residents and new arrivals alike are enriching these communities.

This report identifies characteristics of "Greater Minnesota" using a more refined method for considering several types of non-urban areas in Minnesota. Working from small geographic units, we examine the well-being and composition of Minnesota's residents using a four-tiered definition of an area's character—urban, small town, large town, and rural areas—based on both population size and proximity to other communities. We present demographic and economic characteristics about Minnesotans living in these geographically unique areas, to create a more nuanced portrait of our state.

In addition, because of the importance of counties to public leadership and service delivery, we also introduce a new taxonomy of Minnesota's counties with a sensitivity to the diverse mix of urban, rural and "in-between" environments that cross county boundaries. We examines the basic components of demographic change births, deaths and migration—at the county level to understand the various currents that have contributed to population shifts since 2000.

The data that follow reveal some salient differences between geographically unique areas of Minnesota, and encourage us to reflect upon key questions as we move into the future, including:

- How will we support the many residents, particularly older adults, who live in remote areas of the state, far from services and supports?
- How will we respond to labor force shortages—which will be even more acute in rural, small town and large town areas—as the Baby Boomers continue to move out of their working years?
- How can we make Minnesota and its various communities more attractive to potential workers, and retain the ones we have, to improve migration flows for our state?
- How can communities with growing racial and cultural diversity create connections, protect human rights, and work to support and integrate newcomers?

The data alone cannot answer these questions, but can inform the dialogue among community members, policymakers, nonprofits, philanthropists, and business leaders across Minnesota. It is our hope that this report provides new and valuable information to aid in these conversations, so that collectively we may better understand Greater Minnesota's conditions and opportunities, to guide our responses. Ultimately, all of Minnesota will be *greater* only insofar as we have strengthened its people, regardless of their address.

What is rural? What is urban?

Understanding how Minnesota's rural areas have been faring has long been hampered by lack of agreement about what constitutes rural. Differing definitions can easily lead to different conclusions about rural communities' well-being and population growth or decline. One universal definition of rural Minnesota would be helpful, but does not exist. We briefly discuss several methods of defining rural areas below.

The federal Office of Management and Budget defines metropolitan (and micropolitan) statistical areas. A metro area contains an urban core with 50,000 or more residents (regardless of municipal boundaries), while a micro area contains an urban core of 10,000 to 49,999 residents. Each metro or micro area consists of one or more counties and includes the counties containing the core urban area, as well as any bordering counties that have a high degree of social and economic integration based upon commuting patterns with the urban core. Thus, one common method for identifying rural areas is to group all counties that do not belong to a metropolitan or micropolitan statistical area.

Figure 1 shows Minnesota's counties using this assignment of metropolitan and micropolitan counties, and the balance of counties being *rural*. The major shortcoming with this method is that the blunt tool of county boundaries invariably include or exclude areas that most would consider rural due to their remoteness, low population density, lack of major towns, and general character. For example, while St. Louis County is considered metropolitan because it is home to Duluth, which anchors the Duluth, MN-Superior, WI metropolitan statistical area, some areas of St. Louis County bear no resemblance to a humming urban setting.

Similarly, the official metropolitan statistical area centered upon Minnesota's two largest cities of Minneapolis and St. Paul swelled to 16 counties in the redefinition following the 2010 Census,² gaining Mille Lacs, LeSueur, and Sibley counties, which are situated at the outer limits of the metro footprint. While, by definition, more than 25% of these counties' residents commute into the urban core, each county is also home to significant acreage of agricultural land. Thus, the definition that labels these as *metropolitan* counties is unsatisfying to many.

² The U.S. Office of Management and Budget (OMB) released the first post-2010 Census definitions of metropolitan and micropolitan statistical areas in 2013, with a subsequent update in 2015. See: https://www.census.gov/population/metro/data/metrodef.html

FIGURE 1

Map of Minnesota counties by metropolitan, micropolitan statistical areas



METROPOLITAN STATISTICAL AREAS

Grand Forks metro area

- 1. Polk county
- Fargo metro area 2. Clay county
- **Duluth metro area** 3. St. Louis county 4. Carlton county
- St. Cloud metro area 5. Stearns county

6. Benton county

Minneapolis-St.Paul-Bloomington metro area

- 7. Mille Lacs county 8. Sherburne county
- 9. Isanti county
- . 10. Chisago county
- 11. Wright county
- 12. Hennepin county
- Anoka county
 Ramsey county
- 15. Washington county
- 16. Sibley county
- 17. Carver county
- Scott county
 Dakota county
- 20. Le Sueur county

Mankato-North Mankato metro area 21. Nicollet county 22. Blue Earth county

Rochester metro area 23. Dodge county 24. Olmsted county 25. Wabasha county 26. Fillmore county

LaCrosse-Onalaska metro area 27. Houston county

32. Wilkin county Fergus Falls micro area 33. Otter Tail county

Alexandria micro area 34. Douglas county

MICROPOLITAN STATISTICAL AREAS

Bemidji micro area

28. Beltrami county

29. Itasca county

30. Cass county

Brainerd micro area

31. Crow Wing county

Wahpeton micro area

Grand Rapids micro area

Willmar micro area 35. Kandiyohi county

Hutchinson micro area 36. McLeod county

Marshall micro area 37. Lyon county New Ulm micro area 38. Brown county

Faribault-Northfield micro area 39. Rice county

Red Wing micro area 40. Goodhue county

Owatonna micro area 41. Steele county

Winona micro area 42. Winona county

Worthington micro area 43. Nobles county

Fairmont micro area 44. Martin county

Albert Lea micro area 45. Freeborn county

Austin micro area 46. Mower county

Greater Minnesota: Refined & Revisited

The U.S. Census Bureau employs another method of characterizing *rural* areas. In this second scheme—built from low-level patterns of density and population, based upon Census tracts and blocks—*urbanized areas* are defined as areas with 50,000 or more people, while *urban clusters* have, at a minimum, 2,500 people, but fewer than 50,000. In this definition, rural areas are all the areas remaining once one removes the urbanized areas and urban clusters. While this method has the advantage of using smaller geographic units than counties to make more granular groupings, the range of population found in urban clusters (from 2,500 to 49,999 residents) represents very different community sizes. Additionally, the Census Bureau only publishes limited data for its rural areas, urban clusters and urban areas.

Because of these shortcomings in the Census Bureau's definition of rural and urban, we employed an alternate sub-county method³ to reveal and understand differences in Minnesota's non-urban areas. This report characterizes all of Minnesota based upon an assignment scheme known as Rural Urban Commuting Areas, or RUCAs.⁴ RUCAs classify the more than 1,300 census tracts⁵ that blanket the entire state based upon population size and density and, importantly, daily commuting. This last criterion is especially helpful because some communities that might be considered quite rural when viewed on their own are benefiting from proximity to larger communities that provide a greater array of services, health resources, entertainment, amenities, and job opportunities.

For example, in the central Minnesota county of Kandiyohi, tiny New London (home to about 1,300 people in 2015) is situated about 15 miles north of the population hub of Willmar, with just under 20,000 residents. Likewise, the small community of Osakis (about 1,800 residents) is less than 12 miles east of Alexandria, which is home to more than 13,000 residents. Both of these small communities are grouped with "large towns" in the RUCA assignment, because of their proximity and workforce tie to a much more sizeable community. The ability to see the economic and social interdependence of communities that are geographic neighbors, as well as the opposite—small communities that are remote from any sizeable population centers—is an especially helpful addition from the RUCA scheme.

RUCAs are conceptually similar to metropolitan and micropolitan statistical areas (mentioned previously), but employ the smaller geography of census tracts, rather than counties. RUCAs are also related to urbanized areas and urban clusters (population hubs of various sizes), but more precisely describe the degree of the primary, or most common, commuting flows within and between them, if any. Finally, RUCA codes also divide urban clusters into larger and smaller towns, which the Census Bureau does not.

³Additional *county-based* urban-rural taxonomies exist (e.g., Rural-Urban Continuum Codes, Urban Influence Codes), but are not discussed here. For more background, see: https://www.ers.usda.gov/topics/rural-economy-population/rural-classifications/

⁴ RUCAs were developed as a new rural-urban taxonomy in the 1990s by researchers at the U.S. Census Bureau, the U.S. Department of Agriculture's Economic Research Service, the U.S. Department of Health and Human Services' Office of Rural Health Policy, and other demographers and geographers. For more about their development, see: http://depts.washington.edu/uwruca/ruca-about.php

⁵ Census tracts are geographic areas of between 1,200 and 8,000 people, but about 4,000 residents on average. They are developed by the U.S. Census Bureau and revised following each decennial census count. All census tracts nest within county boundaries, and they provide full-state coverage. RUCAs are assigned at the level of census tracts because they are the smallest building block from which commuting flow data are available (from the American Community Survey).

Below is a description of the 10 primary RUCA codes,⁶ grouped into the four broad RUCA-based geography types (referred to as simply *geography types* throughout the remainder of this report):

URBAN:

- 1. Census tract is situated at the metropolitan area's core *and* the primary commuting flow is *within* an urbanized area (50,000 residents or more)
- 2. Census tract is within a metropolitan area *and* has higher primary commuting (30% or more) to an urbanized area (50,000 residents or more)
- 3. Census tract is within a metropolitan area *and* has lower primary commuting (10-30%) to an urbanized area (50,000 residents or more)

LARGE TOWN:

- 4. Census tract is situated at a micropolitan area's core *and* the primary commuting flow is within a larger urban cluster of 10,000 to 49,999 residents
- 5. Census tract is within a micropolitan area *and* has higher primary commuting (30% or more) to a larger urban cluster of 10,000 to 49,999 residents
- 6. Census tract is within a micropolitan area *and* has lower primary commuting (10-30%) to a larger urban cluster of 10,000 to 49,999 residents

SMALL TOWN:

- 7. Census tract has a primary commuting flow *within* a small urban cluster of 2,500 to 9,999 residents
- 8. Census tract has higher primary commuting (30% or more) to a small urban cluster of 2,500 to 9,999 residents
- 9. Census tract has lower primary commuting (10-30%) to a small urban cluster (2,500 to 9,999 residents)

RURAL:

10. Census tract has a primary commuting flow outside of urban areas and urban clusters.

Figure 2 shows all of Minnesota grouped by the 10 primary RUCA codes, while Figure 3 shows these codes collapsed into the four major RUCA groupings—which, for ease of use, we have termed *urban, large town, small town,* and *rural.* Rural, in this definition, implies a degree of distance, not just from a major population center such as Minneapolis, St. Cloud, Mankato or Rochester, but also from the large and small towns that are scattered across Minnesota. While we will simply use the term *rural* to describe these areas throughout the remainder of this report, readers should remember that this definition of rural reflects a degree of isolation that results in less access to services, employment options, and amenities found in larger communities.

⁶ Secondary RUCA codes also exist, but were not employed in this report.

FIGURE 2 Map of Minnesota by 10 primary RUCA codes



FIGURE 3 Map of Minnesota by four RUCA–based geography types



Urban areas in Minnesota, according to the RUCA scheme, include census tracts in and around Duluth, East Grand Forks, Mankato, Moorhead, Rochester, St. Cloud, a large Twin Cities area centered upon the state's two largest cities of Minneapolis and St. Paul, as well as Minnesota areas that border Sioux Falls, South Dakota, and LaCrosse, Wisconsin.

Large town areas include census tracts in and around the communities of Albert Lea, Alexandria, Austin, Bemidji, Brainerd, Cloquet, Detroit Lakes, Fergus Falls, Hibbing, Hutchinson, Marshall, Northfield, Owatonna, Virginia, Willmar, and Worthington (not an exhaustive list). Many large town areas are home to community and technical colleges or universities.

Small town areas include census tracts in and around the communities of Caledonia, Cannon Falls, Chisholm, Detroit Lakes, Ely, Grand Rapids, International Falls, Litchfield, Little Falls, Milaca, Morris, Montevideo, Park Rapids, Pine City, Pipestone, Princeton, Roseau, Sauk Centre, Staples, Thief River Falls, and Windom, for example (not an exhaustive list).

Rural areas include census tracts outside the other three geography types, including communities or areas with less than 2,500 residents that do not have a high degree of commuting to a nearby larger town, as well as considerable agricultural acreage and farmhouses across Minnesota.

Part I: Characteristics of urban, large town, small town, and rural areas

Population, land area and density

Because the RUCA codes provide full-state coverage and are assigned at the level of the census tract, they can be paired with the rich data offerings also available at the census tract from the U.S. Census Bureau's ongoing American Community Survey (ACS). This section of the report aggregates and summarizes demographic and economic data from the latest ACS⁷ by each of the four geography types. By doing so, the data reveal new insights about the unique attributes of residents living in the three non-urban areas of Minnesota—large towns, small towns, and rural areas—as well as how they differ from, or are similar to Minnesota's urban residents.

As Figure 4 shows, 73% of Minnesota's population (representing 3.95 million people) presently lives in an urban geography. Eleven percent, or nearly 609,000 people, lives in or near large towns (with population between 10,000-49,999 residents). Another 7%, or nearly 390,000 people, lives in or near small towns (with 2,500-9,999 residents), while 8% of Minnesota's population, representing more than 434,000 people, lives in our state's rural areas. Throughout this report, readers should remember that the terms we use refer to constructed boundaries that are broader than official municipal boundaries, and include nearby areas with high levels of commuting—in effect, local economies—when discussing small town, large town, and urban areas.



⁷ The American Community Survey (ACS) data used in this report are the 2010-2014 estimates, which reflect the average annual characteristics observed during those five years. These data were the latest available at the time of this report writing. We employ these same data in this report for all graphs and conclusions in which the four geography types of rural, small town, large town, and urban are referenced.

Minnesota's entire urban geography type comprises only 19% of the state's inhabited land area, while its rural geography represents 45% of the land area. Small and large towns occupy 20% and 16% of Minnesota's land area, respectively.

Examining population density shows the broad range of residential patterning in Minnesota's geography types. Rural Minnesota is characterized by 12 people per square mile. Small town areas have double this density, at 24 people per square mile, while large town areas double this density yet again, to 48 people per square mile. Thus, conflating all three of these geographies into "Greater Minnesota" obscures the considerable differences in how closely our non-urban population resides to its neighbors. Obviously, a more dispersed population has greater challenges in regard to transportation, with fewer opportunities for economies of scale for those businesses and services operating in more remote areas of Minnesota. Of course, residents of less populated areas of the state may appreciate those areas precisely because of wide-open spaces, reduced traffic congestion, and natural amenities with less imprint from development and business activity. Minnesota's urban areas are home to 260 people per square mile, a population density that is more than 21 times greater than rural Minnesota.

Racial and ethnic composition of residents and place of birth

Residents of Minnesota's four geography types encounter differing degrees of racial and ethnic diversity within their communities. As Figure 5 shows, more than 9 in 10 residents of rural and small town Minnesota selfidentify in Census surveys as being a single race of White and also non-Hispanic ethnicity. The percentage in large towns falls to 88%, and stands at 79% (fewer than 8 in 10) among Minnesota's urban residents. As our urban cities have long been gateways for arriving immigrants, leaving patterns that persist in subsequent generations, it is perhaps unsurprising that our urban areas are more racially diverse than non-urban areas. While Minnesota is 82% White (non-Hispanic) overall today, rural and small town areas still reflect a White (non-Hispanic) demographic make-up that was last observed statewide in the mid-1990s.



Most populations of color⁸ in Minnesota are much more likely to be found in urban areas and large towns than in the small towns and rural areas of Minnesota (see Figure 6). Minnesotans who identify as Black represent 8% of all urban residents, but only 1-2% of large town, small town, or rural residents. Almost identically, Asian and Pacific Islanders represent a larger portion of the urban population, at 7%, but only 1-2% elsewhere. The Hispanic population has an equal presence in urban and large town Minnesota (accounting for 5% of the population in each), and only slightly less representation in rural and small town areas (3-4%). Minnesotans who are American Indian do not fit this pattern, however. The largest share of American Indian residents is found in rural Minnesota, reflecting the many living on rural reservation lands. Only 1% of urban residents are American Indians. Table 1 shows the approximate number of each population group by race/ethnicity dwelling in each geographic type.



⁸ In this report, all populations of color (those Minnesotans who identify as a race of American Indian, Asian or Pacific Islander, or Black, or as Hispanic ethnicity) are represented in each category that they used to identify themselves, i.e., the "alone or in combination" method. For example, a person identifying as Black and Hispanic appears in both categories. This was done to provide the greatest degree of representation for multi-racial persons. However, the sum all persons by each race/ethnicity group will slightly exceed the total due to this double-counting. The group for White (non-Hispanic) persons is the only one presented as one race "alone."

TABLE 1

Race/Ethnicity	Rural		Small tow	/n	Large tov	vn	Urban		
White (non-Hispanic)	397,100	91%	358,000	92%	534,400	88%	3,132,300	79%	
Black	4,300	1%	5,000	1%	13,800	2%	328,200	8%	
American Indian	17,400	4%	8,500	2%	19,800	3%	56,400	1%	
Asian/Pacific Islander	4,800	1%	3,500	1%	10,600	2%	257,500	7%	
Hispanic	12,500	3%	16,000	4%	32,500	5%	203,300	5%	

Residents and share of each geography type by race/ethnicity groups

Note: Groups summed will slightly exceed the total because multi-racial persons appear in all race/ethnicity groups with which they identify.

Examining race and ethnicity groups on their own underscores that Asian/Pacific Islander and Black Minnesotans are the groups most likely to be urban-dwelling (see Figure 7). Among both populations, 93 out of 100 people are living in urban settings, while only 1 in 100 Black Minnesotans and 2 in 100 Asian/Pacific Islander Minnesotans live in rural areas of the state. However, Hispanic Minnesotans are more likely to be rural residents, with 5 in 100 (or 1 in 20) living there. Hispanics are also far more likely to dwell in large and small towns across Minnesota than Black or Asian/Pacific Islander residents.

Among White (non-Hispanic) Minnesotans, 71% has an urban address, while 12% live in a large town, 8% in a small town, and 9% in a rural area.

American Indian Minnesotans are the least likely to be residing in an urban setting, with only slightly more than half (55%) doing so. Nearly 19 in 100, however, live in large towns, the largest share of any individual race or ethnicity group. And 17 in 100 American Indian Minnesotans live in rural areas, also the largest share of any group, and almost twice the share by White (non-Hispanic) Minnesotans, the next most common race group living in rural settings. Notably, while American Indians account for just 2% of Minnesota's population overall, they represent 4% of the state's rural population.

Table 2 reveals that approximately 3/4ths of all residents in rural, small town, or large town areas were born in Minnesota, but only about 2/3rds of urban residents. Foreign-born residents represent 2% of the total population in rural areas, 3% in small towns, 4% in large towns, and 9% in Minnesota's urban settings. Eightynine percent of all immigrants residing in Minnesota live in urban communities.

TABLE 2

Residents and share of each geography type by place of birth

Place of birth	Rural	Small tov	vn	Large to	wn	Urban		
Minnesota-born	335,700	77%	297,600	76%	451,100	74%	2,596,800	66%
Born elsewhere in U.S.	90,500	21%	81,300	21%	133,600	22%	993,500	25%
Foreign-born	8,200	2%	10,700	3%	24,000	4%	360,600	9%

FIGURE 7

Of every 100 American Indian Minnesotans, 55 live in urban areas, 19 live in large towns, 8 live in a small town, and 17 live in rural areas.

Of every 100 Black Minnesotans, 93 live in urban areas, 4 live in large towns, 1 lives in a small town, and 1 lives in a rural area.

Of every 100 White (non-Hispanic) Minnesotans, 71 live in urban areas, 12 live in large towns, 8 live in a small town, and 9 live in rural areas.



Rural Small town Large town Urban

Of every 100 Asian or Pacific Islander Minnesotans, 93 live in urban areas, 4 live in large towns, 1 lives in a small town, and 2 live in rural areas.



Of every 100 Hispanic Minnesotans, 77 live in urban areas, 12 live in large towns, 6 live in a small town, and 5 live in rural areas.



Of every 100 Minnesotans, 73 live in urban areas, 11 live in large towns, 7 live in a small town, and 8 live in rural areas.



Note: Numbers do not sum to 100 in some illustrations due to rounding error.

Age distribution and working-age population

Rural-to-urban environments across Minnesota have a differing mix of age groups among their residents. Figure 8 shows the share of the total population that various age bands represent within each geographic type. Notably, all four geography types have a similar share of children as a percentage of their total population, at 23-24% apiece. More salient differences emerge higher up the age ladder. The age 18-24 population—which we have termed *college-age residents* for simplicity, although they may or may not be enrolled in a post-secondary institution—represent 1 in 10 or more of the residents in both large town and urban areas, which is sensible as they are home to many colleges and universities. However, urban areas alone have a commanding lead in the share of its population that is *young career* (age 25-34) or *middle career* (age 35-49)—with a 3 percentage point or more advantage over all other geography types.



FIGURE 8

It is worth noting, however, that small and large towns display a one and two percentage point advantage, respectively, over rural areas in the share of their population that is age 25-34, a promising group of young workers and residents. Of the four geography types, large towns also have the largest share of their population represented by college-age residents, edging out urban areas just slightly. In the years to come, any degree of

improvement in retaining more of this bubble of young adults as they move into the next phase of their lives (when urban areas begin to attract greater shares of the population) will better position large towns to create a more robust labor force—in such communities as Albert Lea, Alexandria, Austin, Bemidji, Brainerd, Detroit Lakes, Grand Rapids, Hibbing, Hutchinson, Marshall, Northfield, Owatonna, Thief River Falls, Willmar, and Worthington.

At age 50 and above, the three non-urban geography types display greater shares compared to urban areas. This has implications for long-term economic vitality and workforce in these areas, as young and middle career workers (in the aggregate) have many more productive years in the labor force, while those 50 or above are either presently retired or likely to retire in the coming one to two decades. In total, 44% of rural Minnesotans are age 50 or above, compared to 41% of small town residents, 38% of large town residents, and only 32% of urban Minnesotans.

Of particular concern for health services and caregiving needs, residents of rural and small town Minnesota are more than twice as likely to be age 80 or older than residents in urban parts of the state. About 27,100 Minnesotans age 80 or older live in rural Minnesota today. More than 1 in 20 residents in rural and small town areas are 80 or above presently. And given the high shares of residents in the next younger age group (65-79), these rates and numbers are anticipated to continue rising. It is essential to plan for the needs of this population, as rural and small town residents are more remote from health care providers and specialists, and due to low population density these areas may face steep challenges to delivering needed services. Employing technological tools and improving coverage and speed of broadband to deliver telemedicine and meet other needs—by conquering distances without being physically present—will be especially valuable. Community leaders should consider how to improve social connections for older adults, many of whom live alone, as strengthened social networks can serve as a bulwark against isolation and related health and mental health concerns.

Figures 9 through 12 show the age distribution of Minnesota's four geography types, in numeric rather than percentage terms, and also show the age groups with finer detail, in equal five- year age bands (except for the age 85+ group). Across all four geography types, the outsized influence of the Baby Boomer generation is obvious in the long bands among the two bars representing residents in their 50s (younger Boomers). As these residents transition out of the labor force over the next two decades, all geographies across Minnesota will feel their loss, but the three non-urban areas will experience it most acutely. In rural, small town and large town Minnesota, the numbers of residents in their 40s and 30s shrink dramatically. There are 12,000 to 16,000 fewer 40-somethings than there are 50-somethings in all three non-urban geographies, and 16,000 to 25,000 fewer 30-somethings than there are 50-somethings in these three geography types. This speaks to a tremendous contraction anticipated in the available labor force for these areas, barring major changes in migration. Urban Minnesota is not immune from this trend, as it has nearly 10,000 fewer 40-somethings, and more than 25,000 fewer 30-somethings than residents in their 50s. However, the contraction represents a far smaller share of urban Minnesota's overall labor force than it does for the other geography types.

FIGURE 9





FIGURE 11



FIGURE 12



Readers should note the change in x-axis scale for the above urban graph versus other three geography types.

While Figures 9-12 combine males and females by age groups, readers should note that rural, small town, and large town areas in Minnesota have a slight sex imbalance in the predominant working-age population of their residents, age 15-64. In this broad age group, rural areas are 52% male, while small and large town areas are 51% male. This may be due to the more traditionally male mix of industries and jobs in these areas, and possibly greater lifestyle preference among males for areas where hunting, fishing, and outdoor recreation is more common. Finally, data indicate women are slightly more likely to enroll in college than men (in predominantly urban or large town settings), which may contribute to the sex differential in rural and small town areas as more women leave these areas to pursue their schooling.

In later years of life, a more pronounced and opposite sex differential emerges across all geography types, due to women's longer life expectancy. Within the age 80+ population, women account for 60% of the population in rural Minnesota, 62% in small town Minnesota, 64% in large town Minnesota, and 63% in urban Minnesota. The female share grows ever-more pronounced at the older ages.

Labor force participation and unemployment

While places of Minnesota along the rural to urban continuum differ in their employment offerings, strong labor force involvement among the age 18-64 population is evident across all geography types (see Figure 13). This also speaks to high demand for child care for parents of young children statewide. Urban areas had a slight edge with 84% labor force participation, while rural and large town areas participated at 82% and small towns at 81%. Individuals do not participate in the labor force for a variety of reasons, including being a full-time caregiver, having health or disability challenges that prevent working, being discouraged by one's work prospects, or being a full-time student.



The unemployment rate, as it is typically calculated, examines only those who are participating in the labor force, and divides that group into workers who are employed and those who are not employed but seeking work. Across the four geography types, the unemployment rate was fairly similar (see Figure 14).⁹ However, small town areas enjoyed the lowest unemployment rate at 5.6%, while large towns had the highest rate at 6.7%, with rural areas (6.0%) and urban areas (6.3%) falling in between. While some places within these broad groups may have had divergent economic fortunes, we do not find salient differences in unemployment rates across the four geographies.



FIGURE 14

Industry mix

One glance at the farm implement dealership on the outskirts of a small town, or a gleaming skyscraper in downtown Minneapolis, serves as a reminder that employment offerings differ greatly across parts of the state. The industries in which residents are employed reveals a great deal about the nature of their work, and potential vulnerability to weakness in a industry brought on by recessions, trade, global competition, or other economic shocks. Figure 15 shows the share of workers within each geography type by 13 broad industry labels. The graph is sorted high-to-low by the industries that employ the greatest percentage of workers in rural Minnesota.



⁹ Readers should note that unemployment rates have declined statewide since the years represented by these data (annual average during 2010-2014, the latest available at the time this report was prepared). However, these somewhat time-lagged data are necessary to compare conditions across the small geographic units of census tracts that we used to build our four geography types for purposes of analysis.



Figure 15 shows rather unsurprisingly, that workers in rural areas are far more likely to be employed in the *agriculture, forestry, fishing and hunting, and mining* industry. Ten percent of all rural residents work within this agricultural and natural resources industry, compared to 5% of workers residing in small towns, 4% in large towns, and just 1% of urban residents.

Yet despite agriculture's large role in rural Minnesota, it is far from the largest industry in terms of employment. The *educational services, and health care and social assistance* industry is the most common among rural workers, employing 23% of rural residents. This industry also employs the largest percentage of workers across all other geography types—covering 25% of small town and urban resident workers, and 27% of large town resident workers. Other industry differences are evident across the four geography types, such as rural residents having the highest representation in the construction industry (8% of workers).

Small and large town workers have the highest representation within the manufacturing industry (16% of total employment for each geography type), which falls to 14% of rural residents' employment share and 13% of urban residents' employment.

Between 10 and 12% of workers living within each geography type is employed in the *retail* industry, and about 8 to 9% in each is employed in the *arts, entertainment, and recreation, and accommodation and food services* industry. Statewide, workers in these two industries report the lowest median (midpoint) annual earnings of all 13 industries, at \$23,100 and \$14,800, respectively. It is important to note that workers across all geography types have a fairly similar likelihood of being employed within these two typically low-paying industries—at about 1/5th of all workers in all areas.

Workers who reside in urban areas have a far greater share in two particular industries— *professional, scientific, and management, and administrative and waste management services* (11% of employment) and *finance and insurance, and real estate and rental and leasing* (8% of employment). Both of these industries have higher annual median wages, at \$44,100 and \$50,000, respectively.

Table 3 shows the number of workers employed in each industry across the four geography types. Understanding the industries that provide the greatest employment can help community leaders and policymakers understand both strengths and vulnerabilities that result from industry-related trends, and work toward diversifying their economy to better weather economic downturns or shocks that fall heavily on any one particular industry.

TABLE 3

Residents of each geography type by industry of employment

Industry	Rural resident employment	Small town resident employment	Large town resident employment	Urban resident employment	Minnesota overall employment
Educational services, and health care and social assistance	46,900	46,600	80,100	516,800	690,400
Manufacturing	28,300	29,900	48,000	271,100	377,300
Retail trade	21,100	21,900	35,500	238,000	316,500
Agriculture, forestry, fishing and hunting, and mining	19,600	9,900	13,100	23,600	66,200
Construction	16,900	12,700	18,300	102,200	150,200
Arts, entertainment, and recreation, and accommodation and food services	16,700	14,900	25,700	174,300	231,600
Transportation and warehousing, and utilities	10,300	9,200	13,000	94,000	126,500
Professional, scientific, and management, and administrative and waste management services	9,800	9,900	17,800	232,400	269,900
Other services, except public administration	9,500	8,700	12,800	94,900	126,000
Finance and insurance, and real estate and rental and leasing	8,400	7,200	14,400	168,600	198,600
Public administration	8,000	7,600	11,600	69,100	96,300
Wholesale trade	5,800	5,400	7,200	62,100	80,500
Information	2,900	2,500	4,400	42,400	52,200

Note: Data have been rounded to the closest 100 people.

Median earnings for full-time, year-round workers

When we compare the median annual earnings for all workers who have a full-time (35+ hours per week) and year-round schedule, we see few differences across the three non-urban geography types, but a large leap in median earnings for urban residents (see Figures 16 and 17). Half or more of all men working a full-time schedule in rural, small town, or large town Minnesota earn less than about \$45,000. Half or more of all women working a full-time schedule in rural, small town, or large town Minnesota earn less than about \$45,000. Half or more of all women workers' median earnings are about \$10,000 or slightly more higher than all other geography types. This earnings advantage by urban dwellers holds for both men and women, and is due to in part to a greater percentage of urban workers finding employment in higher paying industries (as seen previously). Male workers' median earnings are about \$10,000 or more greater than female workers' earnings, regardless of geography type.



FIGURE 17



2

Economic security and poverty for workers and residents

As discussed above, residents of the four geography types currently experience a different mix of jobs opportunities, and median earnings differ for workers across these areas, with urban-residing workers overall earning a premium for their full-time, year-round work relative to workers living in non-urban areas.¹⁰ This earnings differential also appears in workers' relative likelihood of experiencing poverty despite significant work effort. We found that rural, small town, and large town residents who work a full-time schedule are two or more times more likely to live in poverty than urban residents who do so. Figure 18 details these differences. Residents of rural Minnesota are the least likely to be rescued from poverty by full-time, year-round work, with 1 in 20 such workers living in poverty (5%). Small and large town residents working a full-time job schedule fare only slightly better, with 1 in 25 of these workers (and their families, if they have them) also living below the official poverty line.¹¹

Among those who work part-time and/or part-year (a variegated mix of work schedules), rural areas are the least likely to live in poverty, with just over 3 in 10 doing so. A higher likelihood of about 4 in 10 small town and urban residents who work part-time live in poverty. Large town residents working part-time have the highest poverty rate, at 44%. This may be picking up some of the significant college-student presence in these communities, as many work part-time work schedules and do not have earnings sufficient to lift them above the poverty line (despite access to their parent(s)'s economic resources, in many cases).





¹⁰ These data do not speak to the geography where the workers are employed, only the residence of the worker. There are multiple factors that may be contributing to these earnings differences, including educational and skills requirements for the available jobs, overall job and industry mix, supply of labor, cost-of-living differences, etc., but we do not discuss these factors in this report.

¹¹ The annual federal poverty thresholds vary by household size and composition. In 2014 (the year on which these data are based), the poverty threshold (line) for 2 parents and 2 children was about \$24,000 of annual income. For more thresholds by household types, see: http://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html

Across all age groups,¹² urban Minnesotans are less likely to live in poverty than their non-urban counterparts. Figures 19 through 21 show the percentage of children (under age 18), adults age 25-64, and older adults (age 65+) who live below the official poverty line, as well as up to twice the poverty line¹³ (which many researchers consider to be still experiencing economic hardship). Between 17 and 18% of all children in rural, small town and large town Minnesota live in poverty, compared to 14% of children living in urban settings. Non-urban children are also between 5 and 9 percentage points more likely to live above the poverty line but below twice the poverty line, than urban children.

Adults age 25-64 have lower poverty rates than children across all geography types in Minnesota. Eight percent of urban-dwelling adults in this age band live in poverty, which rises to 10% for rural and large town residents, and 11% for small town residents.

Poverty rates for older adults (age 65+) in Minnesota appear to exist on a gradient that rises as population density falls, with 7% of urban, 8% of large town, 9% of small town, and 10% of rural older adults living in poverty. Whereas these poverty rates for older adults are mostly similar to the rates for younger adults (age 25-64) across the four geography types, older adults are much more likely to be living below twice poverty than adults below age 65. Roughly one-quarter of adults 65+ who live in rural, small town, and large town Minnesota live on annual incomes that fall between the poverty line and twice the poverty line. In urban areas, this likelihood is closer to one-fifth. In 2014, the poverty line for an older adult living alone was about \$11,400 in annual income, thus making the threshold for twice the poverty line, \$22,800. For two older adults living together, the comparable figures were about \$14,300, and \$28,600, respectively.

While a higher percentage of residents of rural, small town, and large town areas of Minnesota live in poverty (across all age groups) when compared to urban residents, this *does not* translate to a larger number of people who are poor in these places compared to urban areas. Due to the fact that 73% of all Minnesotans live in urban areas, the resulting number of people living in poverty in urban areas is far greater than even all non-urban areas combined. Table 4 shows the number of children (age 0-17), working-age adults (age 25-64), and older adults (65+) who have family incomes below the official poverty line, up to twice the poverty line ("low-income"), and more than twice the poverty line—across all four geography types.

Readers should note that the poverty calculation considers pretax, cash income and does not take into account non-cash public benefits received (that can alleviate economic hardship), nor out-of-pocket expenses that fall differently on some individuals and families, such as health care and child care. Furthermore, the official poverty rate does not reflect differences in the cost-of-living between various areas of the state. Thus, the purchasing power of residents' income across these four geography types is not equal. In general, urban areas typically have higher housing, child care and other costs.¹⁴

¹² Poverty rates are not calculated for persons age 18-24 in this report due to the difficulty of interpreting the economic situation of this group overall because of the inclusion of some, but not all college students. While college students who live in group settings (i.e., dorms) are excluded from the poverty universe, those who live off-campus are not. Many of these off-campus students have incomes below the poverty line (despite access to their parent(s)'s economic resources, in many cases). For this reason, we also did not calculate an overall poverty rate across the four geographic types. For more on this topic, see: http://blogs.census.gov/2013/07/29/when-off-campus-college-students-are-excluded-poverty-rates-fall-in-many-college-towns/

¹³ In 2014 (the year on which these data are based), twice the poverty threshold (line) for 2 parents and 2 children was about \$48,000 of annual income.

¹⁴ For a data-informed look at regional and county-level differences in cost-of-living across Minnesota, see the tool prepared by the MN Department of Employment and Economic Development at: https://mn.gov/deed/data/data-tools/col/

FIGURE 19



FIGURE 20





TABLE 4

Residents of each geography type by poverty status, by age groups

		Children (age 0-17)									
Geography type	Children (under age 18)	Children below poverty line	Children in low- income families (100- 199% poverty)	Children who are better off (more than twice, or 200%+ poverty)							
Rural	97,000	16,300	25,100	55,500							
Small town	86,600	15,400	21,300	50,000							
Large town	134,500	23,900	29,700	80,900							
Urban	943,000	131,000	160,600	651,500							
Minnesota overall	1,261,100	186,600	236,700	837,900							
Working-age adults (age 25-64)											
Geography type	Population age 25-64	Age 25-64 below poverty line	Age 25-64 who are Iow-income (100-199% poverty)	Age 25-64 who are better off (more than twice, or 200%+ poverty)							
Rural	215,000	20,800	34,800	159,400							
Small town	194,800	21,500	31,900	141,300							
Large town	299,700	30,800	44,700	224,100							
Urban	2,139,000	177,900	240,300	1,720,900							
Minnesota overall	2,848,500	251,100	351,700	2,245,800							
	Olc	ler adults (age 65 and abo	ove)								
Geography type	Population age 65+	Age 65+ below poverty line	Age 65+ who are low-income (100-199% poverty)	Age 65+ who are better off (more than twice, or 200%+ poverty)							
Rural	85,800	8,300	21,700	55,800							
Small town	69,800	6,100	18,700	45,000							
Large town	96,400	8,100	22,900	65,300							
Urban	448,200	32,200	81,500	334,500							
Minnesota overall	700,200	54,800	144,800	500,600							

Part II: A new Minnesota county taxonomy based on underlying RUCAs

This section of the report examines groups of counties to put another lens on rural, urban and in-between environments across Minnesota. We do so to answer the most common demographic question regarding differing areas of the state: *Which areas are growing (or declining) in population, and why?*

While examining these population shifts at the finer geography of census tracts would no doubt yield additional insights, we present these data at the county level because counties are the lowest geography for which we can examine the *components of change* (i.e., births, deaths, and net migration) that are responsible for declining or increasing population totals.

Counties are also important geographies in Minnesota, due to numerous county-delivered human services, public health activities, and other governmental functions that serve county residents. Despite this, many counties defy easy classification regarding their rural and urban character. While few would argue that Traverse County, the state's least populous, is *rural*, or that behemoth Hennepin, home to 22% of the entire state's population, is *urban*, many other counties display a curious mix of rural, small town, large town, and urban areas—as defined earlier by our four RUCA-based geography types.

Of particular note are Mille Lacs, Sibley, and LeSueur counties, which are now part of the official 16-county Minneapolis-St. Paul-Bloomington, MN-WI metropolitan statistical area. In Mille Lacs County—which is perched like a tall block-letter T on top of Sherburne County— the southern part has both urban and small town features, while the northern portion is rural and more isolated (based on RUCA codes). Similarly, Sibley County (adjacent to Carver on its southwest boundary) has high urban commuting and connectedness on its eastern end, but gives way to considerable rural acreage as one travels westward. Southeast of Sibley (and south of Scott county) lies LeSueur County, home also to a blend of urban, town, and rural areas, by our RUCA-based definition. Compositionally, these three counties differ immensely from Hennepin, and it is these *urban fringe* counties for whom the definition of metropolitan is a poor fit (see Figures 1 and 2).

Outside of the more obvious urban areas in our state, rural Minnesota appears like a vast body of water, which is dotted by small and large towns like fishing boats. Counties that area home to a small and/or large town (i.e., communities with 2,500-49,999 residents) also differ immensely from those counties that have neither.

For all of these reasons, we sought to reclassify Minnesota's 87 counties into a new taxonomy based upon their underlying RUCA-based geography types. In doing so, we found that 14 counties are *Entirely Rural*, while 13 counties are *Entirely Urban*. Another 35 counties comprise a mix of rural and town geographies (or entirely towns and surrounding area, as in the case of Douglas, Koochiching, Pennington, Stevens and Wilkin counties), but none of these 35 counties possess any census tracts deemed *urban*. These 35 counties we have classified as *Rural/Town Mix* counties. Finally, the 25 remaining counties are the most diverse in terms of density and population distribution. These counties are classified as *Urban/Town/Rural Mix* counties, due to the presence of at least some urban geographies within each of them, but also town and/or rural elements. Mille Lacs, Sibley, and LeSueur counties each fall into this grouping, as do other hard-to-define counties such as St. Louis, with its broad land area that is home both to Duluth, Hibbing, Virginia, Ely, and wilderness areas. Figure 22 shows Minnesota's counties, based upon this new RUCA-informed taxonomy.

FIGURE 22 Map of Minnesota by county types



This county taxonomy gives us a new language to understand and talk about the population shifts that have been occurring recently across Minnesota, especially which types of counties are on similar trajectories. It allows us to see that similar counties are experiencing different patterns of growth and decline this decade than last, and helps us anticipate the future for which we must plan.

Population changes since 2000

Between 2000 and 2015, the state of Minnesota grew by nearly 570,000 people—an average of 38,000 people each year during that time period. Table 5 shows that the vast majority of Minnesota's growth occurred in the group of 13 Entirely Urban counties. These counties jointly added about 460,800 people between 2000 and 2015—about 80% of the states' growth during that period. However, among our four county types, only the Entirely Rural counties lost population during the 15-year time span, resulting in about 8,400 fewer people living in those 14 counties in 2015 than in 2000. Urban/Town/Rural Mix counties added about 105,400 people between 2000 and 2015, and Town/Rural Mix counties grew by about 12,200 residents.

Table 5

Total and average annual population change by county group, 2000-2015

County group (number in this group)	Total population change	Average annual change (in people)	Average annual percentage change
Entirely Rural (14)	-8,400	-600	-0.6%
Town/Rural Mix (35)	12,200	800	0.1%
Urban/Town/Rural Mix (25)	105,400	7,000	0.7%
Entirely Urban (13)	460,800	30,700	1.0%
Minnesota overall (87)	570,000	38,000	0.8%

However parsing these 15 years of data into two time periods—the full 2000s decade and the first half of the 2010s decade—reveals that population patterns have shifted in many regards for these county groups (see Figures 23 and 24). Notably, the rate of growth in the Entirely Urban counties has gathered speed since 2010, while partially urban counties' growth has flagged. Between 2000 and 2010 the Entirely Urban counties grew (jointly) at a rate of 1.0%, a rate equaled by the Urban/Town/Rural Mix counties that decade. But between 2010 and 2015, Entirely Urban counties have accelerated to 1.3% average annual growth, while the Urban/Town/Rural Mix counties have fallen to just 0.3% annual growth. For the Urban/Town/Rural Mix county group, this translates into about 2,400 people added annually this decade compared to 9,400 last decade.

Entirely Rural counties were the only group of the four to have lost population during the 2000s, but since 2010 both Entirely Rural and Town/Rural Mix counties (in the aggregate) have experienced population losses, seeing attrition of about 600 and 400 people per year, respectively. Furthermore, the rate of population decline has accelerated since 2010 in Entirely Rural counties overall. Among Town/Rural Mix counties, the very modest growth in the 2000s has changed course thus far this decade, resulting in a slight decline since 2010. Whereas Town/Rural Mix counties were adding about 1,400 people per year during the 2000s, since 2010, this group has averaged losses of 400 people per year.





Figure 24



Natural change

To gain insight into what is driving these population changes—and to anticipate future changes—we examined the underlying components of population change. *Natural change* is the growth or decline that occurs in a population as a result of all births and deaths. When the number of births surpass the number of deaths, population growth is bolstered. Conversely, when there are more deaths than births, natural change draws down the population. Populations and communities that are older on balance will naturally experience a relatively larger share of deaths and a smaller share of births than populations with more young adults (especially women in child-bearing ages).

Looking ahead at Minnesota's demographic future, we project that natural change—which is currently responsible for the lion's share of our state's population growth—will diminish markedly over the next 25 years. This is a consequence of the large Baby Boomer generation reaching the later years of their lives, and birthrates of the younger generations remaining relatively low. By 2040, we project that the Minnesota will first experience *natural decrease*, as the number of deaths will then eclipse births (see Figure 25). If not for the positive migration we anticipate will occur, Minnesota would decline in population around that time.



Figure 25

Comparing both recent time periods (2000-2010 and 2010-2015) reveals that we have already begun to see the dwindling influence of natural change across all areas of the state. Figure 26 shows that for the three county types that are home to a town and/or urban area, natural change has been an important contributor to population growth, but that its contribution has diminished for all three groups since 2010.

However, *negative* natural change has been evident both during the 2000s decade and the current one to date for the Entirely Rural counties. Minnesota's rural areas are considerably older, on average. Consequently, our state's group of Entirely Rural counties has seen the number of deaths to residents outpace the number of births to residents since 2000. Negative natural change has subtracted about 200 people each year during the past 15 years across all Entirely Rural counties in Minnesota, a trend that shows no sign of abating.



Migration flows

The other component of population change is migration. Net migration is the total number of people gained or lost as a result of all the migration flows into and out of an area in a specified period of time. Figure 27 shows that the group of Entirely Rural counties and Town/Rural Mix counties lost more residents than they gained from migration during both time periods, 2000-2010 and 2010-2015.

Town/Rural Mix counties saw swifter migration losses, on average, in the most recent period—an average of about 1,700 residents leaving each year this decade (on net), compared with about 400 people leaving per year during the 2000s decade.

Notably, the group of 25 Urban/Town/Rural Mix counties have seen a reversal in regard to migration in the latest decade compared to the 2000s, when it experienced positive net migration. The years 2000 to 2010 produced about 4,500 new residents arriving annually in this county group (on net). Since 2010, however, about 1,700 annually have out-migrated (on net) for this county group.

Readers should note that Wright County—situated between the counties that are home to St. Cloud and Minneapolis, and home to large towns such as Buffalo, Monticello, Otsego, and St. Michael—has had a large influence on the changing migration storyline for the Urban/Town/Rural Mix county group, of which it is a part. Wright County alone gained about 21,600 total residents due to positive migration during the 2000s decade (second highest among all counties behind Scott), but it has gained only 600 total residents from migration during 2010-2015 (see Figures 44 and 47, or Table 6 in the Appendix for additional details.) Entirely Urban counties are the only county group of the four to experience growth due to more people arriving than leaving since 2010. Notably, the annual average net migration for Entirely Urban counties has resulted in nearly 6 times more arrivals annually thus far this decade compared to last—adding about 11,000 new residents from migration each year since 2010, up from an average of 1,800 new arrivals (net) each year in the 2000s.



Recent population gains attributable to migration are due exclusively to the contribution of *international* immigration (see Figure 28). Since 2010, all four groups of Minnesota counties along the rural-urban continuum lost more residents to other places in the U.S. (and/or elsewhere in Minnesota) than they gained. In other words, *domestic* migration has been a net negative across all county types so far this decade. The Entirely Urban county group's gains from migration (an average of 11,000 new residents per year since 2010) were due exclusively to gains from *international* migration, and the overall losses from migration would have been greater among the other three county types this decade, if not for the modest number of arrivals of people from international destinations.¹⁵



¹⁵ International migration is movement from outside the U.S. to a U.S. destination. It includes arrivals of immigrants of all types, including legal permanent residents, refugees, undocumented persons, foreign students, those with work visas, etc. International migration also includes formerly deployed members of the armed services returning to the U.S. Domestic migration is movement within or between U.S. destinations. Domestic migrants may not be U.S.-born, e.g., secondary migration of immigrants.



There is much more that could be said on the topic of how migration patterns among Minnesota counties differ by various age cohorts—often spurred by life transitions such as college entrance or exit, new employment opportunities, or retirement relocation. However, we have chosen not to detail those patterns in this report, focusing instead on the resulting total population change, and its key drivers, and utilizing the latest population data available through 2015. Typically, demographers examine age-based migration trends between two decennial census years (those ending in "-0"), as these population counts by age provide the most superior data for this topic.¹⁶ Readers should note that Minnesota counties that have experienced overall population losses may experience net migration gains in certain age groups, and conversely, those that have experienced overall gains may still see migration losses among various cohorts.¹⁷ Net migration summed across all age groups and paired with the result of natural change gives us a picture of how our counties are growing or declining on the whole, but we acknowledge that this may obscure important sub-currents of change that can help communities plan their response to population changes.

If we put all of the components of change (the sum of births and deaths, and net migration) back together into a single picture for the first half of the current decade (see Figure 29), we see that growth in Minnesota since 2010 has been driven primarily by natural change—particularly by the births advantage occurring in the Entirely Urban counties. Population losses in the group of Entirely Rural counties come as the result of both negative natural change and losses due to migration. Among Town/Rural Mix counties, total negative net migration has erased would-be gains from natural change in recent years, resulting in modest population declines between 2010 and 2015. Finally, for Urban/Town/Rural Mix counties, net migration diminished growth, but did not fully outpace gains from natural change; thus, the population in this group of counties experienced modest growth.



¹⁶ For interactive maps and charts showing county-based net migration patterns by age groups, from each decade between 1950 and 2010, see Net Migration Patterns for U.S. Counties, prepared by the Applied Population Laboratory (APL) at the University of Wisconsin Madison, online at: http://www.netmigration.wisc.edu/

APL's related September 2016 brief, "How Migration Impacts Rural America" is also a helpful primer on the topic, and is available at: http://w3001.apl.wisc.edu/b03_16

¹⁷ For example, research from the University of Minnesota Extension's Center for Community Vitality has documented that some Minnesota counties deemed Entirely Rural and Rural/Town Mix (by our taxonomy) experienced positive net migration between 1990 and 2000, and between 2000 and 2010, in the 30-49 age cohort, despite losses among those age 18-25.For more background on this research about net migration by age through the 2010 Census, see: http://www.extension.umn.edu/community/brain-gain/



While this four-type taxonomy of counties is helpful for seeing broad trends, we acknowledge that considerable variation exists yet within these four county types—and in some cases, individual counties may have experienced population trajectories opposite to the experience of the county group within which it falls. Readers may also wish to compare the experiences of different aggregations of counties. For these reasons, we also present total population change and changes resulting due to natural change and net migration for each individual county in the Appendix, organized by county type. Data for the 2000s decade are presented first, followed by the present decade's data thus far. Finally, we acknowledge that observed patterns do not dictate the future, only detail where we have been to date.

Conclusion

This report has revealed some salient differences between geographically unique areas of Minnesota. It encourages leaders to consider the varying demographic, social, and economic environments that residents of urban, large town, small town and rural areas are experiencing—to shape more tailored responses to challenges and opportunities in these areas. This report also reveals that many Minnesota counties are on the cusp of a new era of slowing or negative natural change, and will be more reliant on migration if they are to grow in the future. Future migration patterns, however, are more challenging to anticipate than natural change, as they are dependent on numerous variable factors—federal immigration policy, local and state economic conditions, changes in how and where workers work, and personal lifestyle preferences. The data presented in this report can inform the ongoing dialogue among community members, policymakers, nonprofits, philanthropists, and business leaders about how best to strengthen all of the areas of our state. Leaders across Minnesota can help prepare for and navigate these unfolding demographic trends.

APPENDIX



Note: Data have been rounded to the closest 50 people.



Note: Data have been rounded to the closest 50 people.



Note: Data have been rounded to the closest 50 people.





Note: Data have been rounded to the closest 50 people.



Note: Data have been rounded to the closest 50 people.









FIGURE 40

Change from natural change (births-deaths) during 2010-2015, Town/Rural Mix counties



FIGURE 41









FIGURE 45



FIGURE 46







Note: Data have been rounded to the closest 50 people.



Note: Data have been rounded to the closest 50 people.



Note: Data have been rounded to the closest 50 people.



Note: Data have been rounded to the closest 50 people.



Note: Data have been rounded to the closest 50 people.



TABLE 6

Population and components of change for Minnesota counties, April 1, 2000 to April 1, 2010, and April 1, 2010 to July 1, 2015

County	County type	April 1, 2000 popula- tion	Gains from births 2000-2010	Losses from deaths 2000-2010	Natural change 2000-2010	Net migra- tion 2000- 2010	Total change 2000-2010	April 1, 2010 popula- tion	Gains from births 2010-2015	Losses from deaths 2010-2015	Natural change 2010-2015	Net migra- tion	Total change* 2010-2015	July 1, 2015 popula- tion
Aitkin	Entirely rural	15,221	1,482	-1,847	-365	1,346	981	16,202	612	-1,066	-454	3	-451	15,702
Anoka	Entirely urban	298,164	43,761	-14,681	29,080	3,600	32,680	330,844	21,756	-9,539	12,217	1,337	13,554	344,151
Becker	Urban/town/rural mix	30,006	4,153	-3,251	902	1,596	2,498	32,504	2,206	-1,769	437	486	923	33,386
Beltrami	Town/rural mix	39,638	6,634	-3,380	3,254	1,550	4,804	44,442	3,687	-2,126	1,561	-324	1,237	45,672
Benton	Urban/town/rural mix	34,242	5,861	-3,096	2,765	1,444	4,209	38,451	2,940	-1,678	1,262	-23	1,239	39,710
Big Stone	Entirely rural	5,816	572	-827	-255	-292	-547	5,269	293	-380	-87	-161	-248	5,040
Blue Earth	Entirely urban	55,931	7,254	-4,347	2,907	5,175	8,082	64,013	3,910	-2,418	1,492	287	1,779	65,787
Brown	Town/rural mix	26,916	2,950	-2,755	195	-1,218	-1,023	25,893	1,410	-1,565	-155	-452	-607	25,313
Carlton	Urban/town/rural mix	31,705	4,029	-3,366	663	3,018	3,681	35,386	1,941	-1,899	42	112	154	35,569
Carver	Entirely urban	70,243	12,113	-3,457	8,656	12,143	20,799	91,042	5,998	-2,343	3,655	3,942	7,597	98,704
Cass	Town/rural mix	27,148	3,485	-2,926	559	860	1,419	28,567	1,790	-1,580	210	-5	205	28,706
Chippewa	Town/rural mix	12,937	1,511	-1,468	43	-539	-496	12,441	823	-766	57	-371	-314	12,109
Chisago	Entirely urban	41,116	6,836	-3,201	3,635	9,136	12,771	53,887	2,866	-1,939	927	-582	345	54,293
Clay	Entirely urban	51,227	6,732	-3,852	2,880	4,892	7,772	58,999	4,235	-2,354	1,881	1,411	3,292	62,324
Clearwater	Town/rural mix	8,432	1,159	-966	193	70	263	8,695	571	-497	74	48	122	8,803
Cook	Entirely rural	5,164	446	-473	-27	39	12	5,176	229	-234	-5	38	33	5,194
Cotton-wood	Town/rural mix	12,190	1,390	-1,535	-145	-358	-503	11,687	804	-717	87	-233	-146	11,549
Crow Wing	Town/rural mix	54,985	7,534	-5,378	2,156	5,359	7,515	62,500	3,822	-3,302	520	423	943	63,428
Dakota	Entirely urban	355,923	54,424	-18,325	36,099	6,530	42,629	398,552	27,336	-11,955	15,381	376	15,757	414,686
Dodge	Entirely urban	17,735	2,789	-1,255	1,534	818	2,352	20,087	1,317	-677	640	-333	307	20,364
Douglas	Town/rural mix	32,808	3,992	-3,356	636	2,565	3,201	36,009	2,110	-2,024	86	877	963	37,075
Faribault	Town/rural mix	16,180	1,613	-2,007	-394	-1,233	-1,627	14,553	745	-989	-244	-259	-503	14,050
Fillmore	Urban/town/rural mix	21,113	2,744	-2,377	367	-614	-247	20,866	1,326	-1,204	122	-180	-58	20,834
Freeborn	Town/rural mix	32,584	3,753	-3,591	162	-1,491	-1,329	31,255	1,835	-1,868	-33	-562	-595	30,613
Goodhue	Urban/town/rural mix	44,139	5,584	-4,340	1,244	800	2,044	46,183	2,712	-2,477	235	-108	127	46,435
Grant	Entirely rural	6,286	669	-837	-168	-100	-268	6,018	368	-372	-4	-88	-92	5,903
Hennepin	Entirely urban	1,116,162	164,919	-77,111	87,808	-51,545	36,263	1,152,425	86,095	-41,923	44,172	28,081	72,253	1,223,186
Houston	Urban/town/rural mix	19,725	2,160	-1,819	341	-1,039	-698	19,027	995	-882	113	-386	-273	18,773
Hubbard	Town/rural mix	18,314	2,132	-1,719	413	1,701	2,114	20,428	1,159	-1,033	126	136	262	20,655
Isanti	Urban/town/rural mix	31,280	4,684	-2,466	2,218	4,318	6,536	37,816	2,371	-1,528	843	-304	539	38,429
Itasca	Town/rural mix	43,909	4,774	-4,653	121	1,028	1,149	45,058	2,424	-2,657	-233	700	467	45,435
Jackson	Town/rural mix	11,242	1,107	-1,179	-72	-904	-976	10,266	585	-563	22	-197	-175	10,079
Kanabec	Urban/town/rural mix	14,987	1,824	-1,294	530	722	1,252	16,239	791	-761	30	-386	-356	15,837
Kandiyohi	Town/rural mix	41,193	5,760	-3,588	2,172	-1,126	1,046	42,239	3,019	-1,993	1,026	-683	343	42,542
Kittson	Entirely rural	5,279	428	-718	-290	-437	-727	4,552	266	-350	-84	-32	-116	4,424
Koochiching	Town/rural mix	14,351	1,253	-1,571	-318	-722	-1,040	13,311	579	-778	-199	-256	-455	12,841
Lac Qui Parle	Entirely rural	8,073	695	-1,023	-328	-486	-814	7,259	354	-470	-116	-293	-409	6,856
Lake	Town/rural mix	11,053	1,036	-1,368	-332	145	-187	10,866	570	-723	-153	-81	-234	10,631
Lake of the Woods	Entirely rural	4,508	401	-454	-53	-410	-463	4,045	175	-241	-66	-46	-112	3,923
Le Sueur	Urban/town/rural mix	25,416	3,473	-2,102	1,371	916	2,287	27,703	1,641	-1,092	549	-526	23	27,663
Lincoln	Entirely rural	6,425	682	-941	-259	-270	-529	5,896	358	-406	-48	-104	-152	5,771

County	County type	April 1, 2000 popula- tion	Gains from births 2000-2010	Losses from deaths 2000-2010	Natural change 2000-2010	Net migra- tion 2000- 2010	Total change 2000-2010	April 1, 2010 popula- tion	Gains from births 2010-2015	Losses from deaths 2010-2015	Natural change 2010-2015	Net migra- tion	Total change* 2010-2015	July 1, 2015 popula- tion
Lyon	Town/rural mix	25,437	3,455	-2,275	1,180	-760	420	25,857	1,892	-1,117	775	-970	-195	25,673
Mahnomen	Entirely rural	5,190	881	-553	328	-105	223	5,413	555	-294	261	-240	21	5,457
Marshall	Urban/town/rural mix	10,147	1,056	-893	163	-871	-708	9,439	570	-393	177	-156	21	9,423
Martin	Town/rural mix	21,807	2,332	-2,406	-74	-893	-967	20,840	1,151	-1,290	-139	-628	-767	20,022
McLeod	Urban/town/rural mix	34,906	5,113	-2,893	2,220	-475	1,745	36,651	2,231	-1,706	525	-1,334	-809	35,932
Meeker	Town/rural mix	22,636	3,082	-2,241	841	-177	664	23,300	1,457	-1,113	344	-549	-205	23,102
Mille Lacs	Urban/town/rural mix	22,304	3,403	-2,506	897	2,896	3,793	26,097	1,705	-1,484	221	-529	-308	25,788
Morrison	Town/rural mix	31,743	4,310	-3,030	1,280	175	1,455	33,198	1,999	-1,635	364	-736	-372	32,775
Mower	Urban/town/rural mix	38,604	5,525	-3,908	1,617	-1,058	559	39,163	2,631	-1,919	712	-762	-50	39,116
Murray	Entirely rural	9,169	919	-986	-67	-377	-444	8,725	436	-524	-88	-241	-329	8,413
Nicollet	Urban/town/rural mix	29,780	3,958	-1,954	2,004	943	2,947	32,727	2,049	-1,111	938	-317	621	33,347
Nobles	Town/rural mix	20,832	3,314	-1,817	1,497	-951	546	21,378	1,901	-953	948	-501	447	21,770
Norman	Entirely rural	7,442	741	-991	-250	-340	-590	6,852	362	-476	-114	-57	-171	6,678
Olmsted	Entirely urban	124,287	21,293	-8,187	13,106	6,855	19,961	144,248	11,389	-4,968	6,421	553	6,974	151,424
Otter Tail	Town/rural mix	57,083	6,053	-6,313	-260	480	220	57,303	3,296	-3,529	-233	721	488	57,716
Pennington	Town/rural mix	13,590	1,803	-1,385	418	-78	340	13,930	961	-696	265	29	294	14,219
Pine	Urban/town/rural mix	26,429	3,214	-2,445	769	2,552	3,321	29,750	1,562	-1,363	199	-806	-607	29,069
Pipestone	Town/rural mix	9,898	1,252	-1,264	-12	-290	-302	9,596	631	-553	78	-404	-326	9,271
Polk	Urban/town/rural mix	31,370	3,718	-3,556	162	68	230	31,600	2,088	-1,769	319	-377	-58	31,533
Роре	Town/rural mix	11,222	1,198	-1,426	-228	1	-227	10,995	661	-657	4	59	63	11,041
Ramsey	Entirely urban	511,272	74,852	-38,327	36,525	-39,157	-2,632	508,640	40,535	-20,636	19,899	10,306	30,205	538,133
Red Lake	Entirely rural	4,300	510	-430	80	-291	-211	4,089	294	-203	91	-140	-49	4,055
Redwood	Town/rural mix	16,813	2,015	-2,000	15	-769	-754	16,059	970	-966	4	-619	-615	15,471
Renville	Entirely rural	17,147	1,935	-2,045	-110	-1,307	-1,417	15,730	930	-995	-65	-770	-835	14,892
Rice	Urban/town/rural mix	56,663	7,600	-4,301	3,299	4,180	7,479	64,142	3,756	-2,396	1,360	-185	1,175	65,398
Rock	Urban/town/rural mix	9,720	1,290	-1,259	31	-64	-33	9,687	580	-632	-52	-68	-120	9,600
Roseau	Town/rural mix	16,343	2,054	-1,313	741	-1,455	-714	15,629	1,066	-707	359	-228	131	15,770
Scott	Entirely urban	89,510	20,123	-4,570	15,553	24,865	40,418	129,928	10,047	-2,949	7,098	4,574	11,672	141,660
Sherburne	Entirely urban	64,472	12,627	-4,011	8,616	15,411	24,027	88,499	6,143	-2,449	3,694	-532	3,162	91,705
Sibley	Urban/town/rural mix	15,361	1,988	-1,409	579	-714	-135	15,226	918	-735	183	-528	-345	14,875
St. Louis	Urban/town/rural mix	200,586	20,903	-21,047	-144	-216	-360	200,226	10,768	-10,787	-19	623	604	200,431
Stearns	Urban/town/rural mix	133,199	18,783	-7,970	10,813	6,630	17,443	150,642	10,204	-4,936	5,268	-1,048	4,220	154,708
Steele	Town/rural mix	33,684	5,157	-2,706	2,451	441	2,892	36,576	2,508	-1,547	961	-852	109	36,755
Stevens	Town/rural mix	10,053	1,103	-829	274	-601	-327	9,726	623	-442	181	-81	100	9,796
Swift	Town/rural mix	11,967	1,142	-1,186	-44	-2,140	-2,184	9,783	571	-543	28	-449	-421	9,340
Todd	Town/rural mix	24,402	3,069	-2,183	886	-393	493	24,895	1,690	-1,058	632	-1,264	-632	24,257
Traverse	Entirely rural	4,137	365	-535	-170	-409	-579	3,558	166	-266	-100	-48	-148	3,401
Wabasha	Urban/town/rural mix	21,610	2,630	-1,833	797	-731	66	21,676	1,240	-925	315	-726	-411	21,251
Wadena	Town/rural mix	13,730	1,773	-1,878	-105	218	113	13,843	951	-981	-30	63	33	13,875
Waseca	Urban/town/rural mix	19,536	2,464	-1,649	815	-1,215	-400	19,136	1,127	-818	309	-463	-154	18,989
Washington	Entirely urban	201,214	28,686	-11,144	17,542	19,380	36,922	238,136	14,986	-7,328	7,658	5,523	13,181	251,599
Watonwan	Town/rural mix	11,882	1,574	-1,211	363	-1,034	-671	11,211	771	-626	145	-397	-252	10,952
Wilkin	Town/rural mix	7,135	743	-762	-19	-540	-559	6,576	365	-390	-25	-166	-191	6,396
Winona	Urban/town/rural mix	49,996	5,301	-4,020	1,281	184	1,465	51,461	2,488	-2,057	431	-1,013	-582	50,885
Wright	Urban/town/rural mix	90,022	18,924	-5,834	13,090	21,588	34,678	124,700	9,603	-3,715	5,888	610	6,498	131,311
Yellow Medicine	Town/rural mix	11,235	1,267	-1,253	14	-811	-797	10,438	582	-623	-41	-508	-549	9,875

* "Total change 2010-2015" refers to the sum of the components of change for those years. Summing "Total change 2010-2015" and "April 1, 2010 population" will not precisely equal the "July 1, 2015 population" due to a small "residual," or change which is not attributable to any given component. The residual appears in the estimate for 2015, but not for 2010, because the latter year's data resulted from a decennial count of the entire population, not an estimate.

PURPOSE

The Minnesota Commissioner of Administration, as part of strategic planning responsibilities set forth in state statutes, is to issue an annual report to the Governor and chairs and ranking minority members of the State Senate and House of Representatives committees with jurisdiction on state government finance. The report is designed to provide demographic and related information to assist with long-term management decisions.

This report, prepared by the Minnesota State Demographic Center, presents newly tabulated data about the demographic, economic, and social characteristics of residents in urban, rural, and small and large town areas of Minnesota. This report also provides new details about trends in population change at the county level, from 2000 through 2015. Its aim is to help policymakers and community members understand differences and similarities among state residents based upon finer geographic areas than the commonly invoked Twin Cities/Greater Minnesota or urban/Greater Minnesota dichotomy. This report fulfills the expectations of Minnesota State Statutes 4A.01 Subd. 3 and 4A.02. The cost of producing this report was estimated to be \$23,000.

TECHNICAL NOTES

All data within Part I of this report were tabulated from the U.S. Census Bureau's published 2010–2014 American Community Survey five-year estimates, the latest available at the time of writing this report. The data reflect average annual characteristics during those five years. Data were aggregated to RUCA codes based upon census tract assignments provided by the U.S. Department of Agriculture, Economic Research Service: https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes/

Data within Part II of this report come from the U.S. Census Bureau's decennial census for 2000 and 2010, and the U.S. Census Bureau's vintage 2015 population estimates. Net migration data were calculated by the authors for the 2000-2010 span, after subtracting natural change. Data on births and deaths were obtained from the MN Department of Health. Data for all components of change for 2010-2015 were obtained from the vintage 2015 population estimates.

Throughout this report, data have been commonly rounded to the nearest 100 or 50 people, or whole percentage point. Readers are cautioned that error margins around data exist, but are not shown.

This report was prepared by Andi Egbert, Assistant Director, and Susan Brower, State Demographer, of the Minnesota State Demographic Center. Please direct all questions to demography.helpline@state.mn.us.