

Pandemic Migration in Michigan's Upper Peninsula

Report for InvestUP

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INTRODUCTION

In March 2020, the Covid-19 global pandemic dramatically altered the day-to-day routines of most Americans. As the pandemic wore on and Americans internalized the realities of extended, national public health and economic crises, changes in circumstances or priorities (including job loss/departure, remote work, virtual versus in-person schooling, space and outdoor activities at a premium, etc.) inspired or forced many Americans to reconsider their place of residence. Media stories told anecdotal accounts of migration away from city centers towards more rural and natural amenity destinations in response to pandemic realities. **This report describes historical migration patterns in and out of Michigan's Upper Peninsula (UP) and systematically documents change to that historical pattern during the global pandemic in 2020 and through August 2021.** The report then situates those findings in the context of broader literature about migration, focusing on rural America and natural amenity destinations. The report's final section builds on the demographic findings and literature review to provide recommendations for migration-related community and economic development endeavors in the UP.

While some people did move in response to the pandemic, pandemic migration appears to be modest in nature and nuanced. In September 2020, Bloomberg City Lab reported that based on data from moving companies and real estate websites, Americans were moving less in 2020, with some notable exceptions for major cities such as New York City and San Francisco (Patino, 2020). The New York Times (Kolko et al., 2021) and CBRE (Willett & Mowell, 2021) independently published analyses of United States Postal Service (USPS) data, each arriving at the same conclusion: pandemic migration patterns largely matched pre-pandemic patterns, with residents of large, coastal urban metros continuing to move to Sun Belt cities (e.g., Austin), smaller metros (e.g., Boise), or areas considered "destinations" (e.g., Cape Cod) in much the same pattern as 2019. Review of Consumer Credit Panel data similarly shows that while urban neighborhoods saw increased out-migration in 2020, lack of in-migration made a bigger impact on urban centers, suggesting that on the whole Americans were more likely to stay in place in response to Covid-19 than to move (Whitaker, 2021). In a survey study of 300,000 residential and interstate moves over the last three years, Haslag & Weagley (2021) found that while inter-state moves in 2020 were lower than previous years, 15% of movers directly cited the influence of the pandemic in their decision to move; less moved for reasons of employment and more for family or lifestyle (though differences exist among socio economic groupings); and the ability to work remotely factored highly in decision-making. Consistent with others' findings, movers perceived or knew their destinations to have less Covid-19 cases, less pandemic-related restrictions, lower density, and lower rents (Haslag & Weagley, 2021).

Given this, a mass inflow of migrants to Michigan's Upper Peninsula (UP) as a result of the pandemic is unlikely. Still, even a reduction of out-migration or a slight increase of in-migration would signal a noteworthy change to a pattern of primarily out-migration from the region over the last several decades. Migration research (see Appendix A) demonstrates that for those who are not tethered to their geographic location by employment, migration is strongly motivated by quality-of-life factors, such as access to amenities. Michigan's UP is an attractive location, especially relative to pandemic life in an urban environment: low density (19 people per square mile), moderate cost of living, year-round recreation opportunities, and easy access to outdoor amenities such as beaches, forests, lakes, and rivers.

For this report, we analyzed migration trend data in the 20 years prior to the pandemic (1999-2019), the pandemic year itself (2020), and the months since (through August 2021). Our findings show that:

- Over the last fifty years, the UP has generally experienced population loss due to net out-migration, but also and increasingly, due to natural decrease (more deaths than births).
- Outflow from the UP slowed considerably during the pandemic.
- Inflow to the UP also slowed, but not as much as outflow, meaning that between May 2020 and August 2021 there was less net loss from the UP than is typical.
- These patterns vary across space, with some areas attracting/losing more than others in the pandemic year (May 2020-Apr 2021). Alger and Iron counties both saw net positive migration in the pandemic year itself. Marquette, Mackinac, Dickinson, Iron, Houghton, Keweenaw, and Alger counties saw the greatest increase in netflow in the pandemic year relative to the three years prior. The pandemic resulted in little change to migration in Baraga, Luce, Ontonagon, and Schoolcraft counties.

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DATA & OBJECTIVES

This project describes migration and relocation patterns to and from the UP prior to and during the pandemic, documenting changes to established patterns over time and across space in the 15 UP counties of Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon, and Schoolcraft and their related zip codes. We analyzed several data sources that together tell a well-documented story about migration in the UP. Each source has its strengths and weaknesses, offering a piece of the full picture. Therefore, we balance what we learn from each, using strengths in certain sources to make up for weaknesses in others. The table below summarizes these data sources and their caveats.

DATA SOURCE	DATASET CAVEATS
<p><i>U.S. Census Bureau Decennial Census:</i> This data documents county-level population change from 1970-2020.</p>	<p>Counts of population from each decade’s decennial census are the gold standard for population data. These are the best data available on the number of people living in each area. Still, there are times when there are errors that take time to correct.</p> <p>Census 2020 missed counting residents of Newberry Correctional Facility in Luce County, and this error has not yet been corrected. For this reason, we do not report Census 2020 data for Luce County, but rather rely on population estimates from the US Census Bureau’s Population Estimates Program for 2020 in Luce County.</p> <p><i>Note: institutions’ populations, like college students and prisons, are included in census numbers at the location of the institution.</i></p>
<p><i>U.S. Census Bureau Population Estimates Program, vintage 2020:</i> This data includes annual estimates of county-level net migration (in-migrants minus out-migrants) and natural increase/decrease (birth rate minus death rate) for each year 2010-2020.</p>	<p>Population estimates for July 1 of each year are calculated and released annually using the preceding decennial census as the foundation for all ensuing years within the decade. Populations are aged forward in time and adjusted for births, deaths, and migration based on administrative records.</p> <p>Data on births and deaths are sourced from the National Center for Health Statistics (based on birth and death certificates) and Federal-State Cooperative for Population Estimates.</p> <p>Net migration is calculated using multiple data sources, including data sourced from the Internal Revenue Service, Medicare, Social Security Administration, and other Census sources.</p> <p><i>Note: Due to the discrepancy in the Decennial Census 2020 noted above, Luce County population change data for 2020 are sourced from this dataset in lieu of Decennial Census 2020 population change data.</i></p>

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<p><i>County-level estimates of net migration by five-year age group (www.netmigration.wisc.edu):</i></p> <p>This data offers historical context of established net migration patterns and relationships to observed “brain drain” for each UP county in each decade from 1950-2010.</p>	<p>Estimates are generated based on the U.S. Census Bureau’s Decennial Census counts and intercensal birth and death records.</p> <p>Data for each decade (1950s through 2000s) are published at www.netmigration.wisc.edu with interactive mapping and chart building, as well as data download capability.</p>
<p><i>Internal Revenue Service (IRS) changes-of-address for tax filings:</i></p> <p>This data offers annual inflows, outflows and net migration for all U.S. counties through 2019, including origin and destination information.</p>	<p>IRS migration data includes between 95-98% of all tax filings (representing approximately 87% of individuals).</p> <p>The tax-related nature of this dataset means that college students and those at the lowest and highest ends of the income spectrum may be excluded.</p> <p>The most recent county-to-county flow data currently available is tax year 2018-2019, meaning its note yet possible to analyze pandemic migration from this source.</p> <p>To protect confidentiality, the IRS aggregates flows between counties with less than 20 migrants to neighboring counties and sometimes only offers this information at the state level. Because the population of UP counties is relatively small, this means that most data on county-to-county flows is suppressed. Still, we use these data to detect the most common places of origin for migrants to the UP and destination for migrants leaving the UP.</p>
<p><i>United States Postal Service change-of-address forms:</i></p> <p>This data offers temporary and permanent in-, out-, and net-relocation information for every zip code in the United States. Monthly data have been accessible for this project to cover the periods May 2017-August 2021.</p>	<p>For this report, we focus only on permanent changes-of-address forms into and out of Upper Peninsula zip codes from May 2017-Aug 2021. Permanent change-of-address is defined as 6 months or more.</p> <p>We aggregate zip codes to counties, using HUD’s zip code-to-county crosswalk, to analyze patterns at a county level.</p> <p>Data are suppressed if there were less than 10 changes into or out of a zip code that month. We assume suppressed cells are zeros, and thus our flows are <u>underestimations</u> of actual flows.</p> <p>For families, raw data include the number of change-of-address forms processed, rather than the number of people they represent. We assume that each family form represents three individuals, and we impute the number of forms processed under that assumption.</p>

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<p><i>SafeGraph's cell phone users' change in "home" locations:</i></p> <p>Safegraph's <i>Social Distancing Metrics</i> offer an alternative view at the neighborhood scale (i.e., census block groups) between Jan 2019-Apr 2021. SafeGraph is a private company that maintains movement data accessible to vetted academics with a university-signed agreement (which we have in place), allowing for the study of topics related to human mobility.</p>	<p>Safegraph data is generated using a panel of GPS pings from anonymous mobile devices then aggregated by census block groups (CBG).</p> <p>Any CBG with <5 "home" device counts per day are suppressed by day. In the Social Distancing dataset, a device's "home" is the common nighttime location of each mobile device over a 6-week period, where nighttime is 6pm - 7am.</p> <p>We used January 2019 through April 2021 data, pulling data on the 1st and 15th of each month within that timeframe.</p> <p>As of April 2021, SafeGraph no longer updates this data.</p>
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Using the above data sources, we accomplish the following objectives:

Objective 1: Describe and map quantitative patterns of in- and out-migration in UP counties and zip codes as they have changed over time and space, 2000-2021.

We integrated and synthesized datasets to tell a clear, informed story of UP migration over time and across space using maps and charts. Throughout, we aimed to detect changes to established patterns, if any. The analysis allows us to draw conclusions about migration over time, including origins and destinations, whether the pandemic time period saw measurable differences in netflow of people to or from the UP, and where those changes occurred.

Objective 2: Identify key in-migration destination counties within the UP and key origin counties of migrants to the UP.ⁱ

We used IRS migration data to answer the question "Where do in-migrants move from?" and "Where do out-migrants move to?", analyzing the most common origin and destination counties respectively each year, 2000-2019. Because of the relatively low population size and small number of flows, we cannot quantify the size of flows between specific places; instead, we are able to identify the most popular places of origin and destination over time. Knowing from where migrants to the UP originate and to where UP emigrants go will allow InvestUP and their partners to identify key locations for strategic marketing and recruiting.

Objective 3: Contextualize in-migrants' potential motivations for selecting the UP for their move and their likelihood to remain based on the data analyzed in Objectives 1 and 2 and a comprehensive literature review of amenity migration and rural economic development.

Here, we place demographic findings within the broader context of prevailing scholarly research and understanding of amenity migration and rural economic development through a comprehensive literature review. This literature review is presented as narrative and high-level summary statements. It considers migration trends and economic development best practices generally and within locations similar to but beyond the UP.

Objective 4: Based on findings in Objectives 1 through 3, offer recommendations regarding amenity migration as an economic development strategy.

Drawing on the empirical results from Objectives 1 and 2 complemented with the theoretical understanding gained in Objective 3, we provide recommendations regarding amenity migration as connected to economic development endeavors in the UP. These recommendations are offered in a separate report.

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FINDINGS

Overall, findings align with a broad body of research on migration.ⁱⁱ Once migration patterns are well established, they generally do not change on a short time horizon. Instead, migration patterns tend to change incrementally. Migration occurs in currents and counter-currents, with people moving back and forth between specific places as social networks and established patterns are developed. People are more likely to make short distance moves to neighboring counties and urban areas than they are to move far away. And finally, crisis tends to slow both in- and out-migration as people take time to assess the situation.

➤ **Since the 1970s, the Upper Peninsula has experienced moderate population loss.**

As a region, the UP's population has been remarkably stable since 1910. It has generally experienced moderate population loss since its peak in 1920 (Figure 1). The population has declined by almost 5% in the last twenty years from 317,616 residents in 2000 to 311,361 in 2010 and now 302,395 in 2020.

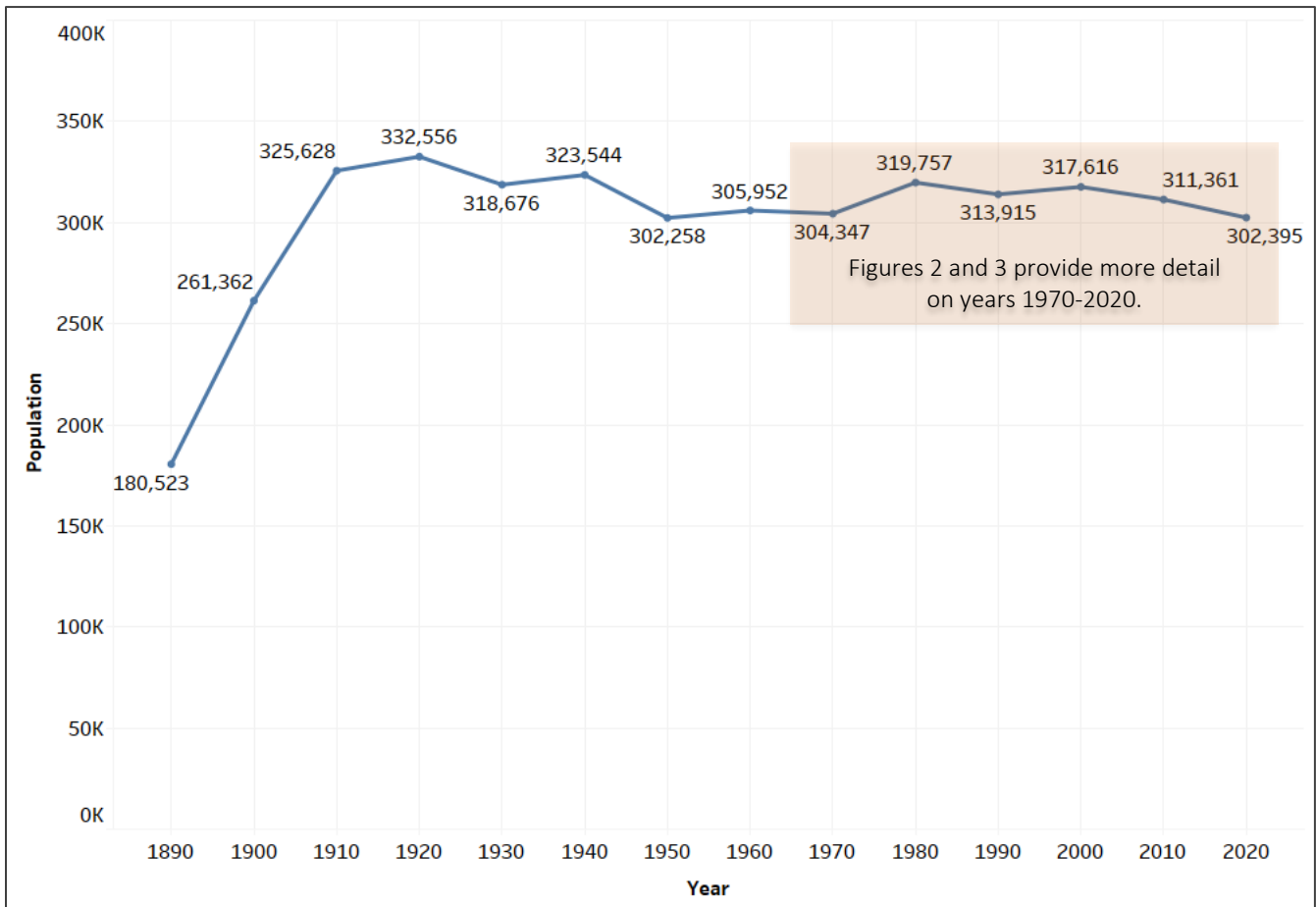


Figure 1: Decadal Population Change All UP, 1890-2020

Source: U.S. Census Bureau, Decennial Censuses 1890-2020.

Source for Luce County Data 2020 Only: U.S. Census Bureau, Population Estimates 2020.

❖ **Over the last fifty years, Marquette, Delta, Ontonagon, Gogebic, and Menominee counties have declined the most, while some other counties have seen modest growth or little change.**

Figure 2 shows population gains and losses by decade for each county. Individual UP counties have at times experienced population gain. For example, Baraga County saw growth in the 1970s, 1990s, and 2000s. Dickinson and Mackinac counties saw growth in the 1970s, 1980s, and 1990s; and Houghton County grew in all decades except the 1980s. Three counties (Gogebic, Iron, and Ontonagon) experienced population losses in every four or five decades between 1970-2020. Across the UP, the last two decades have been characterized by population loss.

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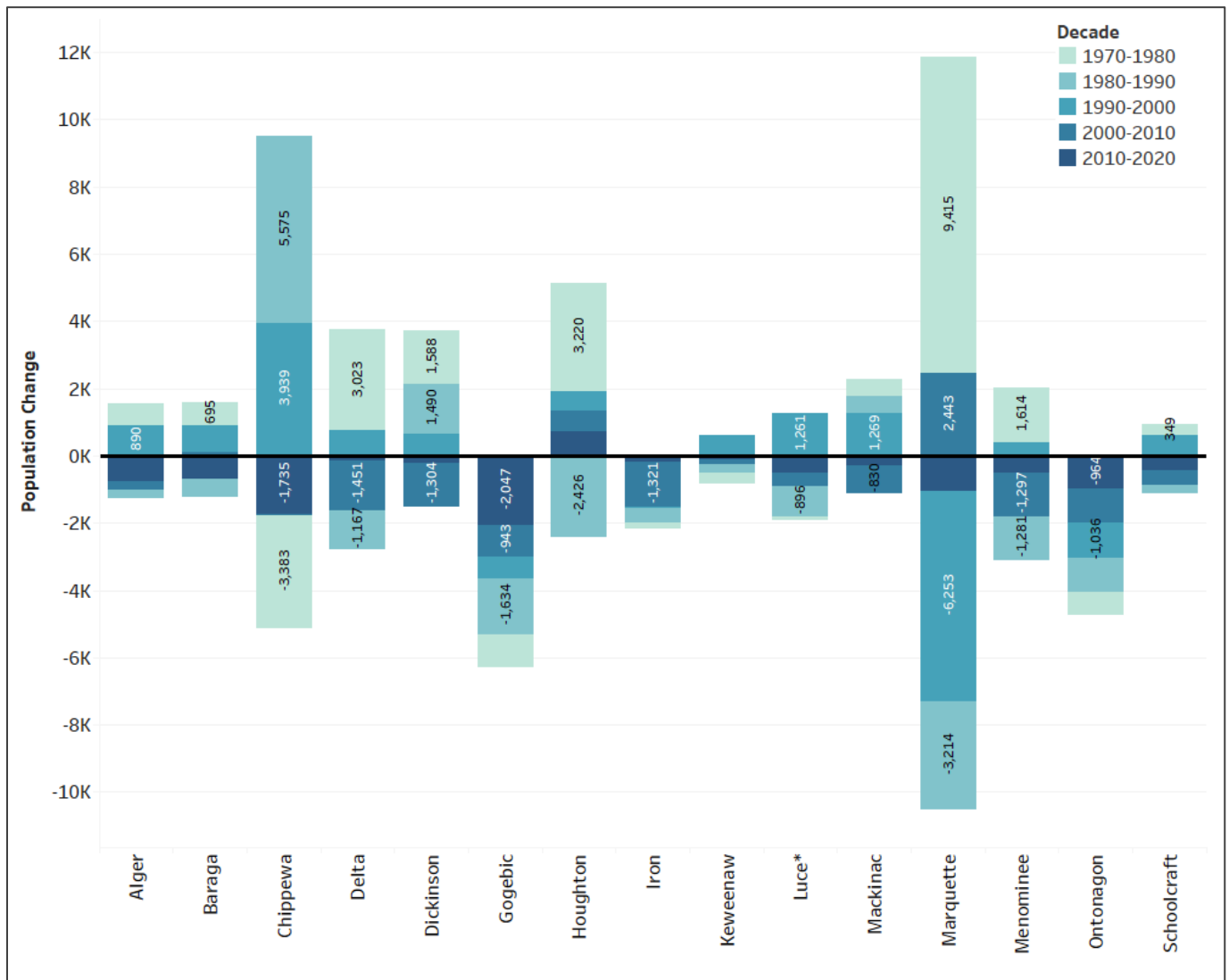


Figure 2: Decadal Population Change by UP County, 1970-2020

Source: U.S. Census Bureau, Decennial Census 1970, 1980, 1990, 2000, 2010, 2020.

*Source: U.S. Census Bureau, Population Estimates 2020.

In terms of total population gains and losses over the last fifty years (1970-2020), eight counties (Marquette, Delta, Ontonagon, Gogebic, Menominee, Chippewa, Houghton, Luce) saw net loss and seven counties (Schoolcraft, Keweenaw, Baraga, Alger, Iron, Dickinson, Mackinac) net gain (Figure 3). The resulting net population change over fifty years is a modest loss for the UP of -1,952 residents. In the last two decades however, all but Baraga, Marquette, and Houghton counties experienced population loss, hinting at a concerning trend.

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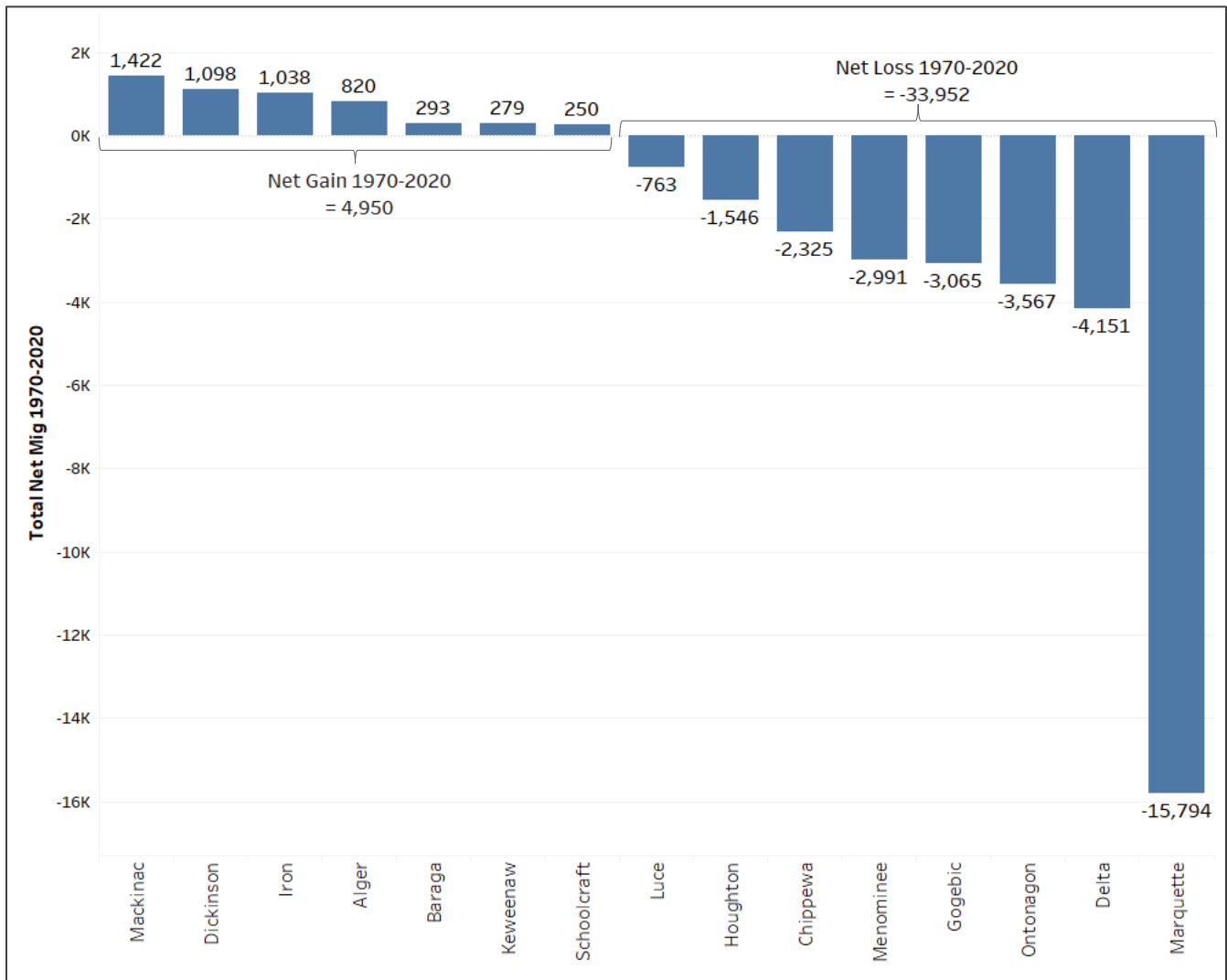


Figure 3: Cumulative Population Change by UP County, 1970-2020

Source: U.S. Census Bureau, Decennial Census 1970, 1980, 1990, 2000, 2010, 2020.

*Source: U.S. Census Bureau, Population Estimates 2020.

In the most recent decade (2010-2020), the UP population has continued to decline overall, while the state of Michigan saw the population rebound 2010-2020 after statewide population loss 2000-2010 (Table 1; Appendix B). Houghton County was the only UP county to experience population growth 2010-2020, while Gogebic and Ontonagon counties (which have long experienced the most extreme population losses in the UP) saw population declines of over 12% (Figure 4).

Upper Peninsula		Michigan	
Total UP 2010	311,361	Total MI 2010	9,883,640
Total UP 2020*	302,395	Total MI 2020	10,078,118
Absolute UP Change	-8,966	Absolute MI Change	194,478
Percent UP Change	-2.88%	Percent MI Change	1.97%

Table 1: UP versus All of Michigan Population Change, 2010-2020*

Source: U.S. Census Bureau, Decennial Census 2010, 2020.

*Source: U.S. Census Bureau, Population Estimates 2020.

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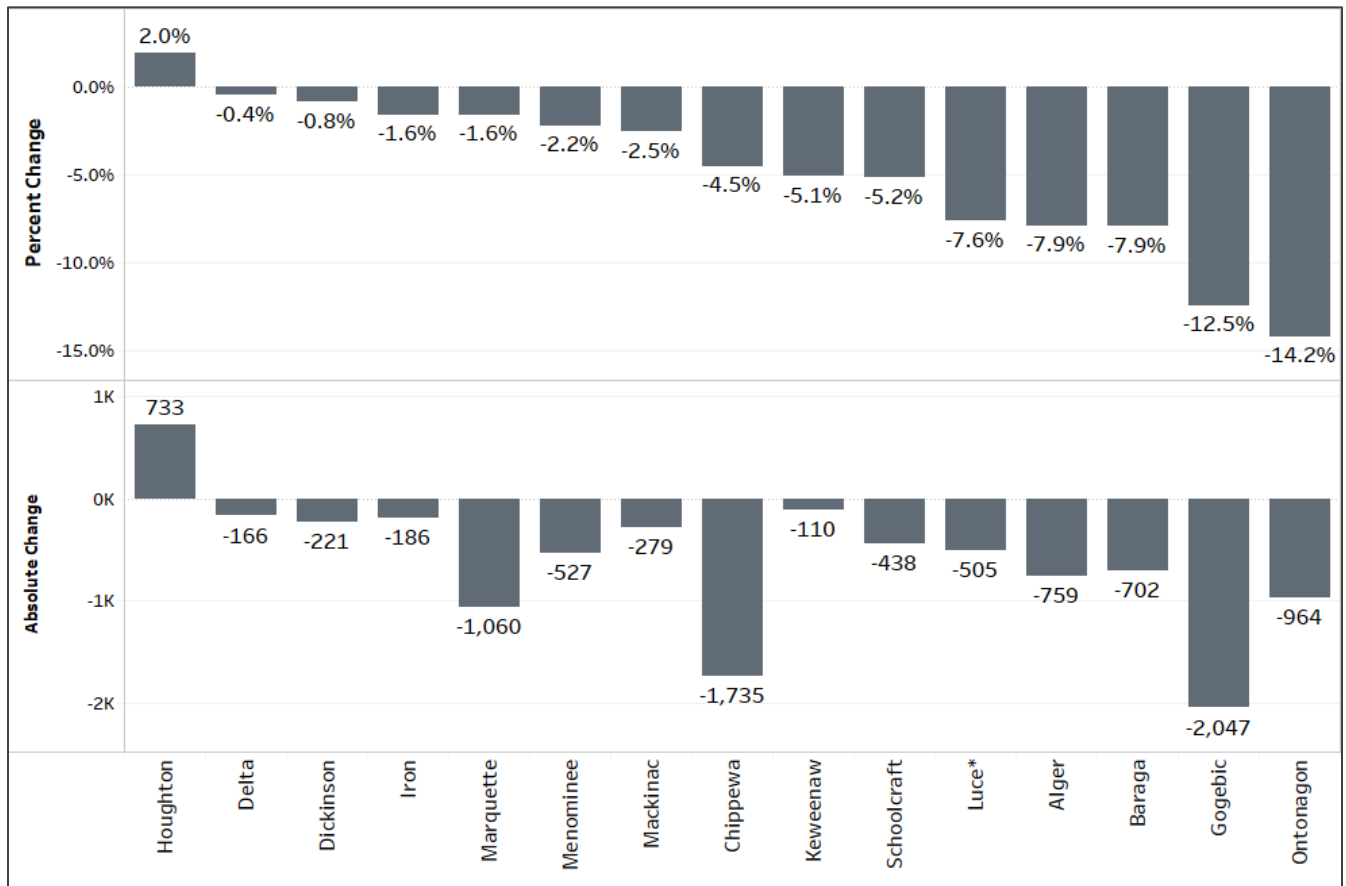


Figure 4: Net Absolute and Percent Population Change by UP County, 2010-2020

Source: U.S. Census Bureau, Decennial Census 2010, 2020.

*Source: U.S. Census Bureau, Population Estimates 2020.

Figure 5 maps population change 2010-2020 for cities and townships. The city of Houghton grew by 682 residents (9%) in the last decade, and some of the surrounding townships also grew. Townships around the city of Marquette experienced growth, as did some of the coastal areas in Chippewa County and surrounding Sault Ste Marie. Most townships experienced little population change in either direction or population loss, especially in Ontonagon and Gogebic counties.

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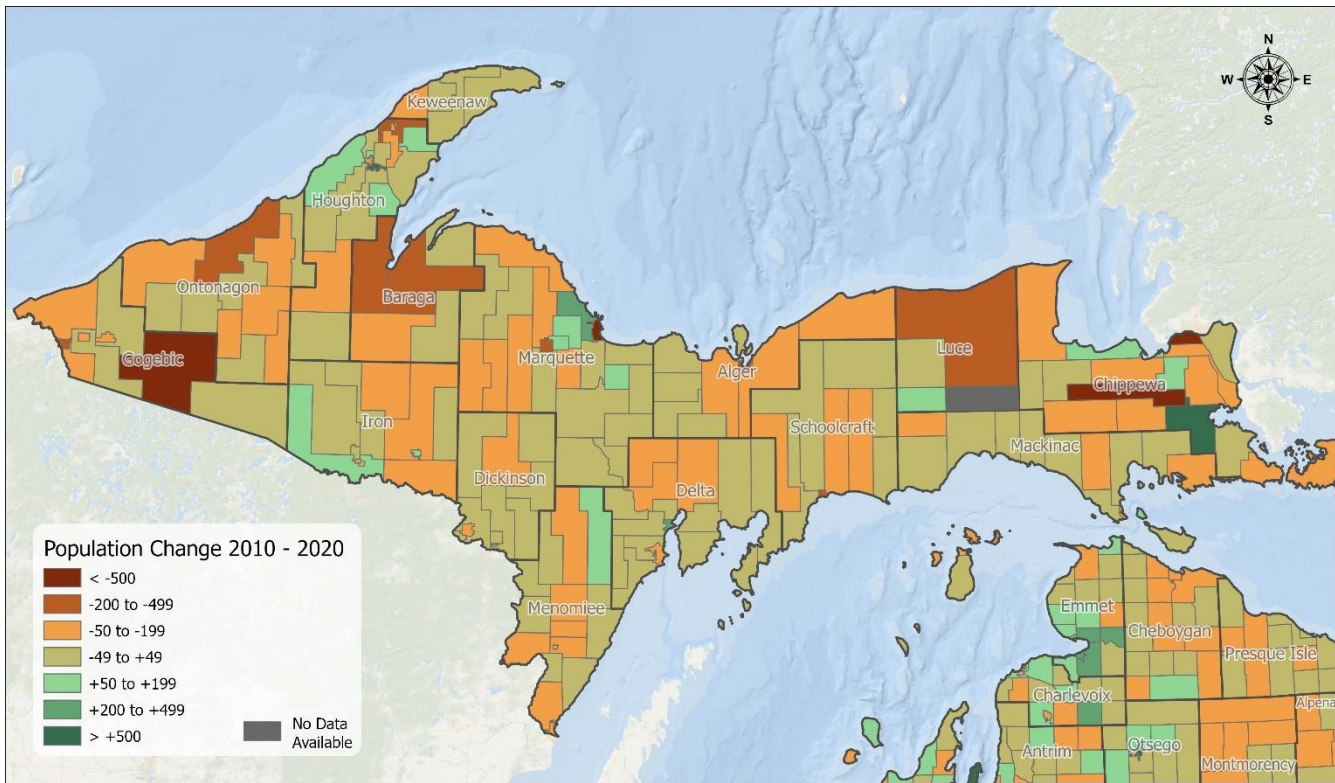


Figure 5: Minor Civil Division Population Change, 2010-2020

Source: U.S. Census Bureau, Decennial Census 2010, 2020.

Cartography by Tim Stone, Geospatial Research Facility, Michigan Technological University

State and national context are important for interpreting the UP's recent population loss. Michigan's population growth (2%) was slower than the nation (7%). Population growth is slowing down across the country, with the 2010-2020 period seeing the slowest population growth since the dip during the Great Depression in the 1930s (Frey, 2021). The slow growth is due to a nationally aging population, declining fertility rates, and reduced immigration nationwide. Even lower levels of national population growth are expected in the coming years. This means that it will be more challenging for the UP to grow its population, as the number of potential in-migrants to the region diminishes.

More than half (53%) of US counties saw population decline 2010-2020 (Mackun et al., 2021). The population of rural America as a whole declined by about 0.5% (Rowlands and Love 2021), while cities and suburbs grew by about 8% (Henderson, 2021). Rural decline was mostly due to net out-migration from rural counties (Gallardo, 2021). Given this context, it isn't surprising that the UP lost population. The overall declines in the UP were not particularly stark, but rather typical of rural America in this decade and especially of rural counties with a relatively white and aging population (like the UP). Population declines at the levels observed in Ontonagon, Gogebic, Luce, Alger and Baraga counties are more extreme, even within this context.

❖ *Population decline is due to both net out-migration and, increasingly, more deaths than births.*

Population loss in the UP comes from both natural increase/decrease (births minus deaths) and net migration. From 2010-2020, about half of UP population loss was due to natural decrease (51%), with just slightly less of the change (49%) due to net out-migration (Figure 6). Figure 7 shows county level data on births, deaths, and natural change, 2010-2020. There were more deaths than births in every county with only one exception, Houghton County. Ontonagon County saw more than three times as many deaths than births, and Iron County saw more than double. Natural decrease was also particularly prevalent in Gogebic, Alger, Baraga, Mackinac, and Schoolcraft counties.

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Figure 6: UP Population Loss due to Net Migration & Natural Change, 2010-2020
 Source: U.S. Census Bureau, Population Estimates, 2020

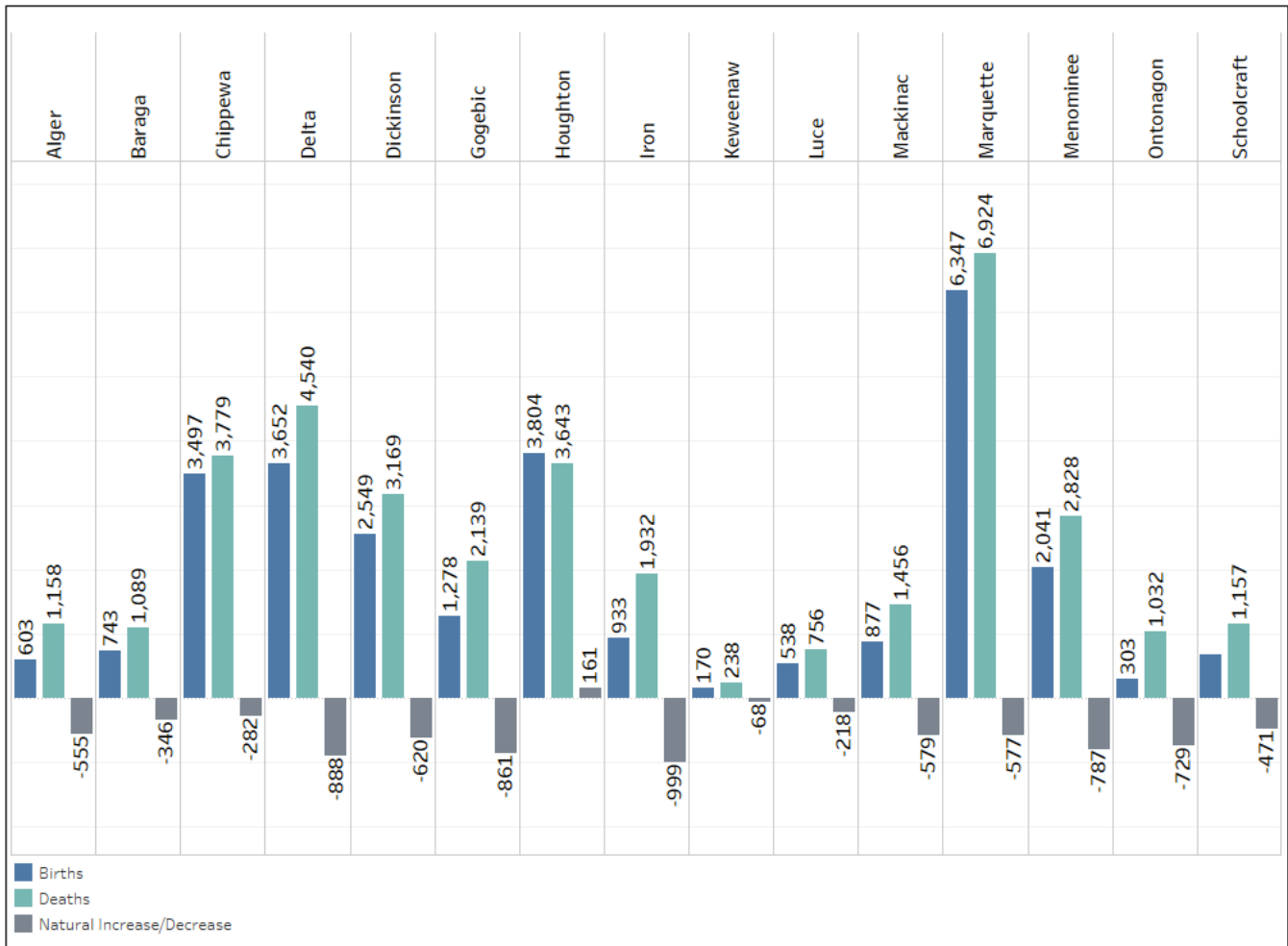
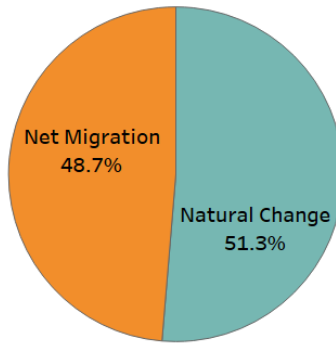


Figure 7: UP County Comparison of Births, Deaths, and Natural Increase/Decrease, 2010-2020
 Source: U.S. Census Bureau, Population Estimates, 2020

Net migration has led to population decline in the UP in each of the last several decades. Losses were particularly severe in the 1950s and 1960s, and to a lesser extent in the 1980s (Appendix C; Figure 8). The 1970s and the 1990s were periods of less net out-migration and gains in several counties. The UP patterns mirror broader migration trends across rural America, where the 1950s and 1960s were characterized by urbanization; the 1970s saw a “nonmetropolitan turnaround” when rural areas grew faster than urban; the 1980s again shifted toward urbanization; and the 1990s saw a “rural rebound” (Johnson et al., 2005).

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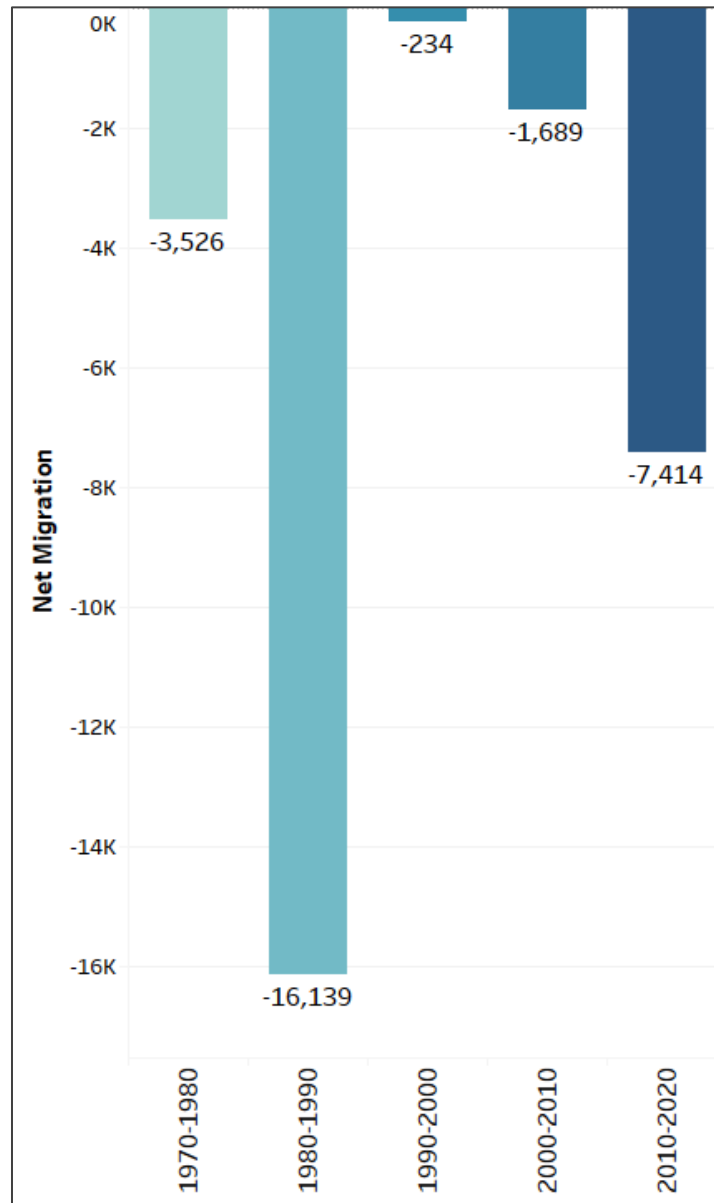


Figure 8: Upper Peninsula Net Migration by Decade, 1970-2020

Source 1970-2010: Age-Specific Net Migration Estimates for US Counties, 1950-2010.

Source 2010-2020: U.S. Census Bureau, Decennial Census, 1970-2020.

Figure 9 shows county-level net migration by decade, 1970-2020. Certain counties saw particularly high net in- or out-migration in specific decades. Marquette County saw the greatest net losses in the 1980s and 1990s, associated with the closure of the KI Sawyer Air Force base, but experienced significant net gains in the 1970s and in the 2000s. Chippewa County saw great net loss in the 1970s, but experienced substantial net gains in the 1980s and 1990s, when new prisons were built and the economy began a rebound from recession. Note that several state prisons are in rural UP counties, such that prisoners make up a significant portion of the population counted in the census data and the net migration data included in this report. Thus, gain in Chippewa County in the 1980s and 1990s was at least partially due to the opening of prisons (and the subsequent “migration” of prisoners into the county from primarily downstate). Similar net migration increases associated with prisons are seen in Alger, Baraga, and Luce counties in the 1990s when new prisons were built.

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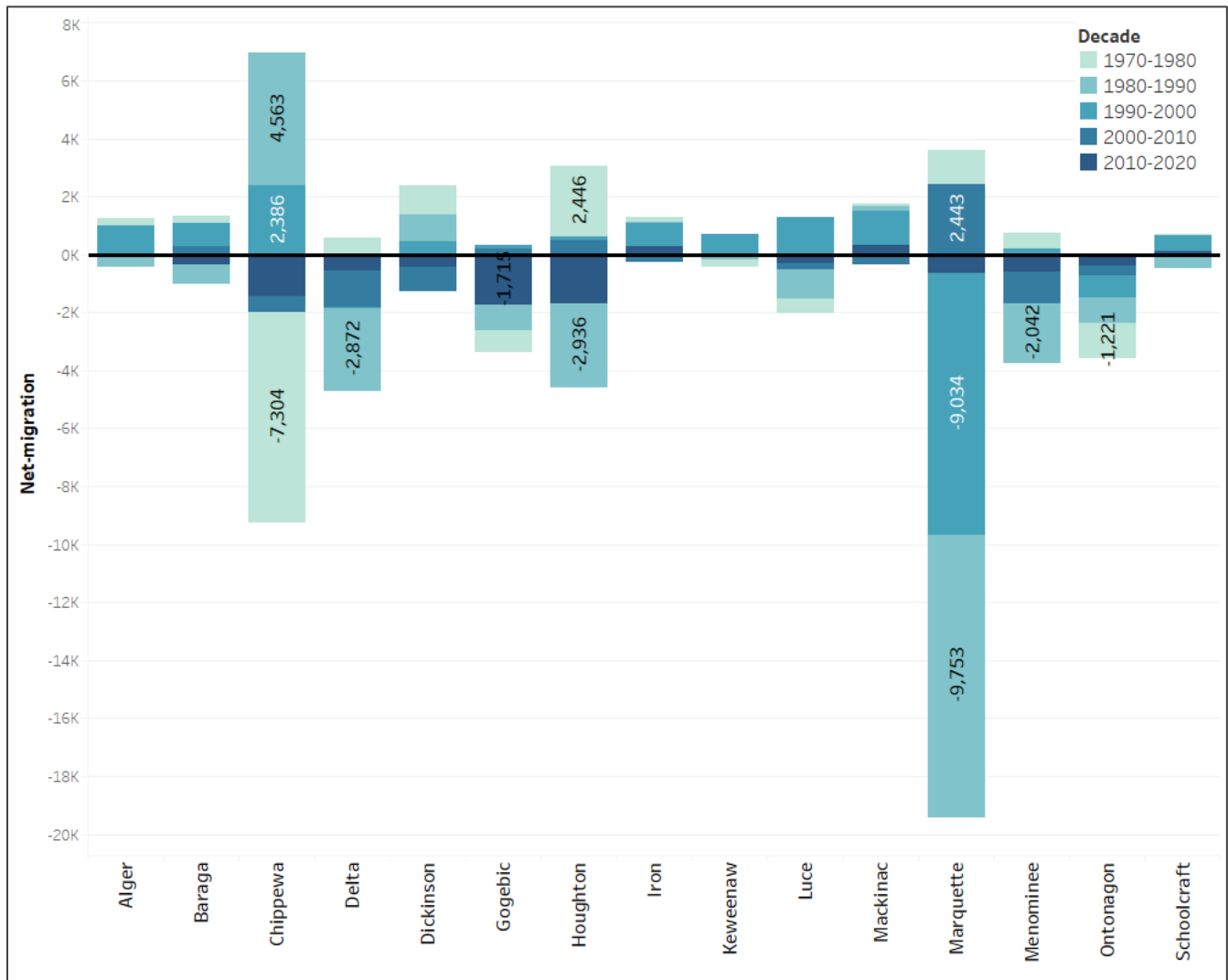


Figure 9: Decadal Net Migration by UP County, 1970-2020

Source: U.S. Census Bureau, Decennial Census 1970, 1980, 1990, 2000, 2010.

Source: U.S. Census Bureau, Population Estimates 2020.

Figure 10 provides a cumulative view of net migration from 1970-2020, demonstrating that losses (-33,952) far exceed the gains (4,950), for a total net migration of -29,002 over fifty years. Marquette and Delta counties dominate those losses, making up 59% of net migration loss from 1970-2020.

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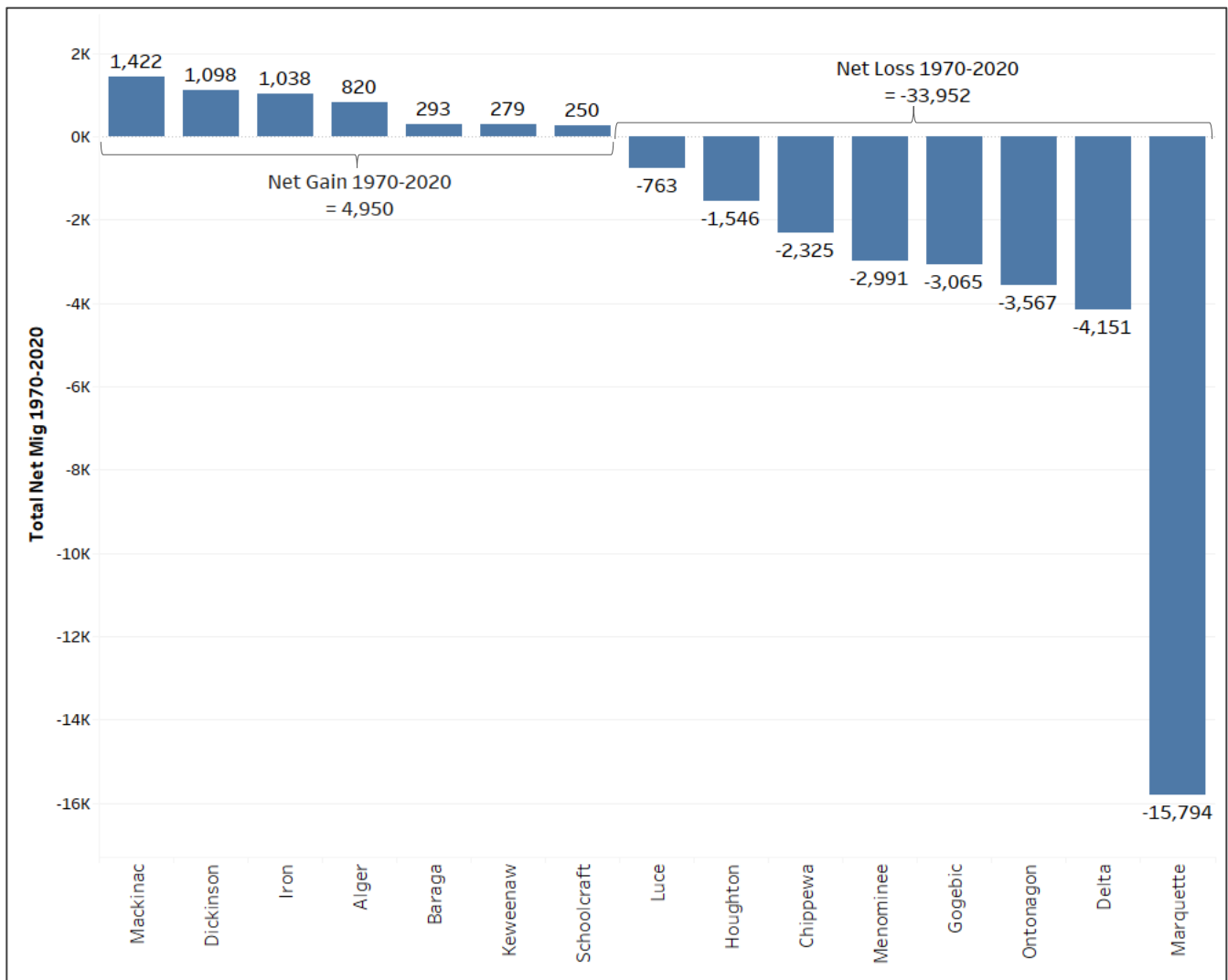


Figure 10: Total Net Migration by UP County, 1970-2020

Source: U.S. Census Bureau, Decennial Census 1970, 1980, 1990, 2000, 2010.

Source: U.S. Census Bureau, Population Estimates 2020.

❖ *Out-migration of young adults drives migration losses.*

Figure 11 shows the total number (across all UP counties) of estimated net migrants by age in each decade from the 1950s to the 2000s. In the 1950s and 1960s the region experienced net out-migration at almost every age group. Since the 1970s, the region has generally experienced net gains among traditional college age (15-19 and 20-24). This is associated with the fact that UP universities attract students from out of the region. Post-graduation, those students and other young adults (age 25-34) tend to leave the region with a net out-migration in most recent decades of about 6,000 young adults. The region then attracts a retirement age population (55-74). Together, these migration patterns—losing young adults and attracting older adults—accumulate over time and shift the age structure of the UP population.

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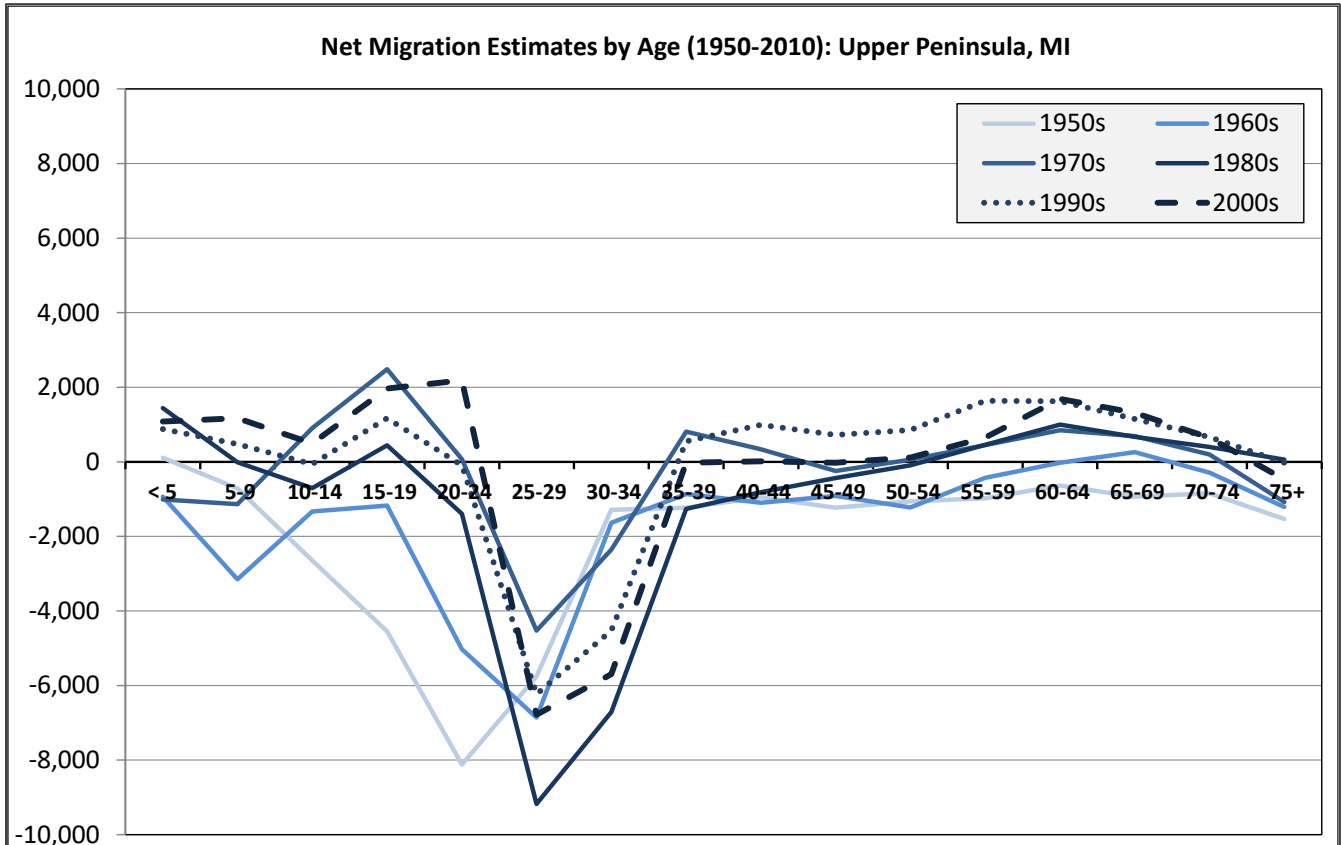


Figure 11: Net Migration Estimates by Age for the Upper Peninsula

Source: Winkler, Richelle, Kenneth M. Johnson, Cheng Cheng, Jim Beaudoin, Paul R. Voss, and Katherine J. Curtis. Age-Specific Net Migration Estimates for US Counties, 1950-2010. Applied Population Laboratory, University of Wisconsin - Madison, 2013.

The longstanding pattern of population loss described herein will prove challenging to reverse, even considering the region's amenities. The following sections provide information that could inform planning efforts to promote less population loss and more gain. The next section offers information on the age structure of the population and how that impacts population change. We then focus on migration origins and destinations, key considerations for marketing and recruitment. We follow with analysis of changes to the established migration pattern in response to the global pandemic. Altogether, this information informs strategic decision-making in terms of scenario planning and policy action. Connecting those trends to a broader body of knowledge pertaining to urban-rural amenity migration and paradigm-shifting rural economic development (see *Implications & Literature Review* in this report and *Recommendations* in a follow-on report) helps to avoid potential pitfalls of amenity migration and effectively plan for future growth that is informed, equitable, and ecologically sustainable.

➤ **Population in the UP is aging quickly, which makes for natural decrease.**

Even more than the broader demographics of the United States, the Upper Peninsula's population is characterized by aging. Aging is both the result of decades of out-migration of young adults and the cause of population decline: as such, the UP will most likely continue to experience more deaths than births. By 2040, current population projections show a further 2.94% drop in population. The UP population is also projected to continue to age dramatically, with the population age 75 and over projected to increase by almost 50%, while the population at most younger ages is projected to decline or remain stable (Figure 12).

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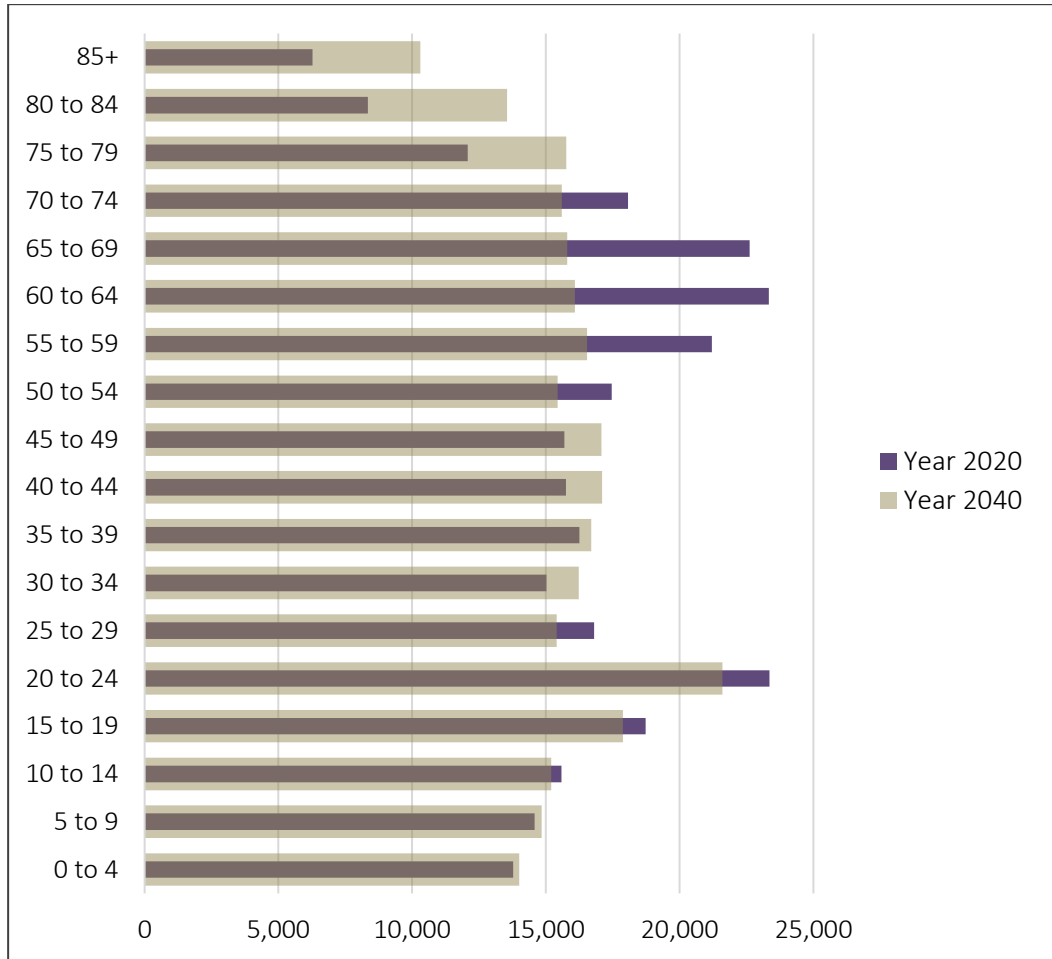


Figure 12: Upper Peninsula Projected Age Structure, 2020 & 2040

Source: Michigan Bureau of Labor Market Information and Strategic Initiatives, Population Projections, 2018

As the population ages, we can expect further natural decrease (more deaths than births). This has broad implications for the Upper Peninsula economy, its social support and medical systems, and its relevance in a broader national setting (Iadarola, 2007). In the context of economic development, this cannot be ignored: an aging population results in scarcity in capital (as the population taps their savings) and in labor. With less capital to reinvest in local economies and less labor supply to attract capital from the outside, the catch-22 that results can mean a further loss of working age adults and families with children. As the UP ages faster than the rest of the United States (24.6% UP residents age 65+ by 2040 versus 20.4% US residents by 2040), considering this demographic reality is critical to future planning (Urban Institute, n.d.).

“Population aging will have dramatic effects on local, regional, and global economies. Most significantly, financial expenditures, labor supply, and total savings will be affected” (Iadarola, 2007 p. 24).

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- **Most UP migrants move within the UP. The most common external locations of origin for incoming migrants and destinations for outgoing migrants are: the Detroit Metro Area, Northeast Wisconsin (including Green Bay and the Fox Valley), Grand Rapids (MI), Milwaukee (WI), and Chicago (IL).**

We rely on data from the Internal Revenue Service (IRS) to determine the origins of migrants to UP counties and the destinations of those moving away from UP counties. The data are based on administrative records, noting change-of-address between one tax filing year and the next by matching social security numbers. The dataset includes approximately 87% of all U.S. moves (95% of all primary tax filers) but does tend to miss very low-income migrants who do not file taxes; very high-income migrants who may file in places where they do not live; prisoners and others in group quarters; and university students who are often claimed by their parents. Flows less than 20 migrants between any county pair are suppressed, though they are included in the state total. This means that we have relatively little data for the lowest population counties, and that the number of total moves is grossly underestimated in the county-level data (though captured in the state level data). The data are, however, of sufficiently high quality and coverage to determine the most common origin and destination counties for UP migration.

Reviewing annual data over the last twenty years (1999-2019), the majority (60%) of UP in-migrants came from a different state (mostly Wisconsin). Similarly, most UP out-migrants (65%) moved to a destination in a different state (again mostly Wisconsin) (Figure 13). Inflow and outflow from beyond the state are primarily from the Midwest (48% and 43% respectively). There was somewhat greater outflow to the South than inflow from the South to the UP (Figure 14).

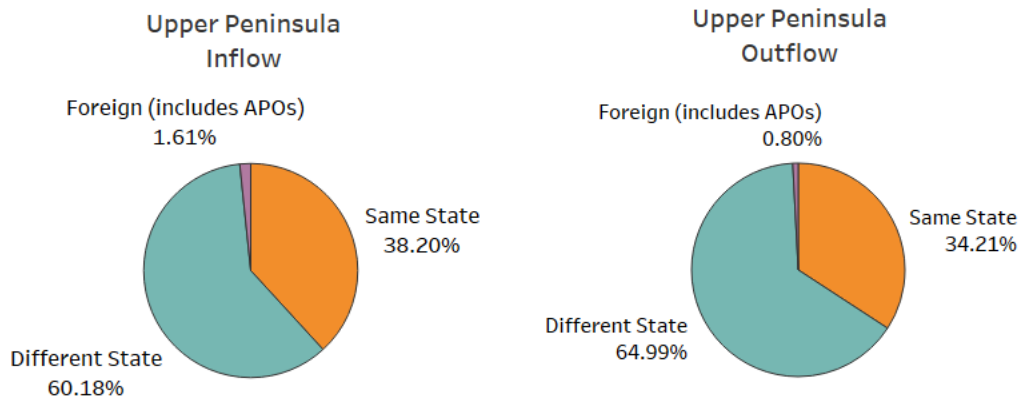


Figure 13: Origin and Destination by Same State, Different State, Foreign
Source: 1999-2019 IRS Migration Data

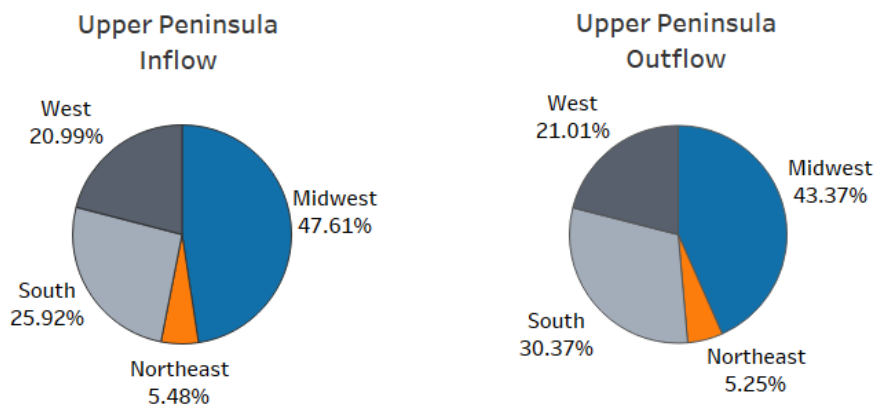


Figure 14: Origin and Destination by Region
Source: 1999-2019 IRS Migration Data

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It is typical for migration flows to and from specific places to endure once they are established.ⁱⁱⁱ Focusing on out-of-state migration (1999-2019), the top three origin and destination counties were all in Wisconsin— Marinette, Brown, and Florence (Figure 15).

Why might the currents between the UP and Wisconsin flow so strongly? Likely explanations include shared land border (Marinette, Florence, Forest, Vilas, and Iron counties); similar socio-cultural and environmental settings; strong interstate family ties; nearest large city (Brown County's Green Bay, pop. 107,395); and active recruitment of college-age youth by specific regions, such as the Fox Cities of Appleton, Kaukauna, Menasha, Neenah, and Oshkosh (primarily Outagamie County) (Figure 16).

Out-of-State Origin & Destination Counties			
Origin County	UP Inflow	Destination County	UP Outflow
Marinette County, WI	6,653	Marinette County, WI	7,166
Brown County, WI	2,594	Brown County, WI	4,633
Florence County, WI	1,389	Florence County, WI	1,358
Cook County, IL	777	Outagamie County, WI	770
Milwaukee County, WI	297	Cook County, IL	737
Outagamie County, WI	237	Maricopa County, AZ	706
Maricopa County, AZ	211	Hennepin County, MN	561
Miami-Dade County, FL	185	Milwaukee County, WI	424
Vilas County, WI	173	Dane County, WI	355
Lake County, IL	133	Miami-Dade County, FL	247
Kings County, NY	86	Winnebago County, WI	182
Hennepin County, MN	51	St. Louis County, MN	107
Dane County, WI	34	Webb County, TX	88
San Diego County, CA	34	Vilas County, WI	86
Dakota County, MN	29	Clark County, WA	60
Oconto County, WI	28	Oconto County, WI	59
St. Louis County, MN	18	Sheboygan County, WI	58
Ramsey County, MN	17	Upshur County	58
Ashland County, WI	16	Kings County, NY	55
		Ramsey County, MN	54
		King County, WA	52
		Bartholomew County, IN	50
		Prince George's County, MD	40
		Los Angeles County, CA	36
		San Diego County, CA	31
		Stark County, ND	28
		Cabarrus County, NC	27
		Anoka County, MN	22
		Douglas County, WI	20
		Dodge County, WI	19
		Collier County, FL	14
		Dakota County, MN	14
		Waukesha County, WI	14
		Du Page County, IL	13
		Pima County, AZ	13

Figure 15: UP Inflow from and Outflow to Out-of-State
Source: 1999-2019 IRS Migration Data

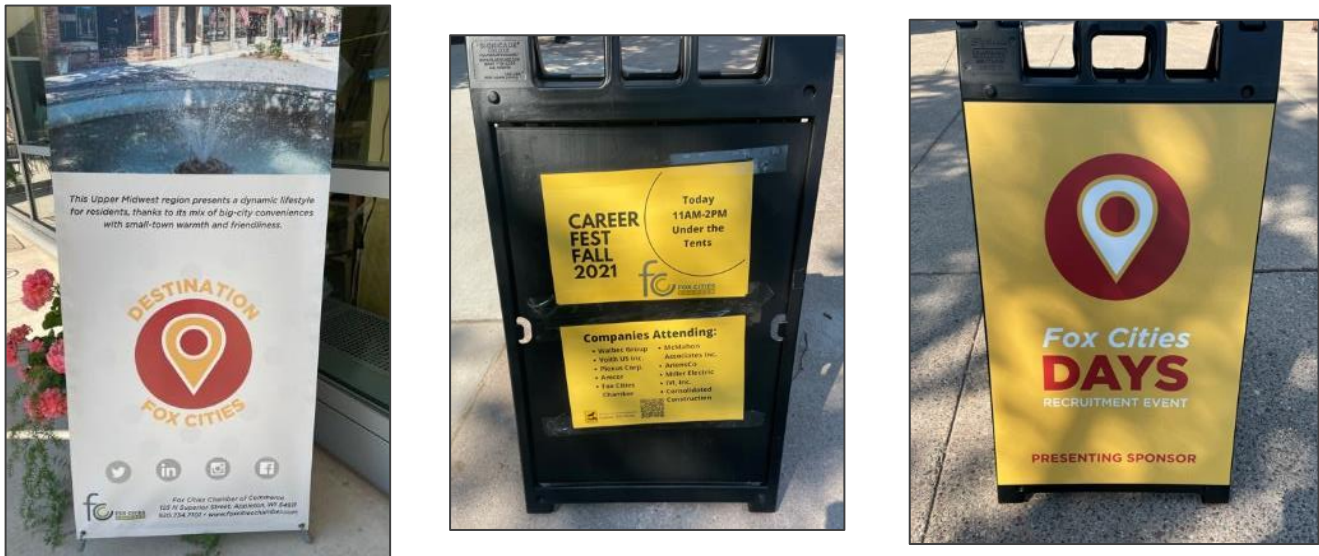


Figure 16: Fox Cities recruitment day signs on Michigan Tech's campus (September 9, 2021).

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Lower Michigan Origin & Destination Counties			
Origin County	UP Inflow	Destination County	UP Outflow
Oakland County	2,453	Oakland County	2,382
Wayne County	1,552	Kent County	2,124
Kent County	1,494	Wayne County	1,309
Ingham County	874	Ingham County	1,068
Macomb County	754	Grand Traverse County	794
Cheboygan County	726	Cheboygan County	718
Genesee County	704	Washtenaw County	716
Emmet County	491	Emmet County	635
Grand Traverse County	414	Macomb County	582
Livingston County	341	Kalamazoo County	371
Washtenaw County	340	Genesee County	293
Ottawa County	163	Ottawa County	229
Kalamazoo County	115	Isabella County	196
St. Clair County	74	Livingston County	176
Isabella County	64	Eaton County	78
Alpena County	60	Otsego County	34
Charlevoix County	56	Gratiot County	25
Jackson County	56	Alpena County	16
Saginaw County	35		
Otsego County	33		
Montcalm County	22		
Muskegon County	20		
Calhoun County	19		

Figure 17: UP Inflow from and Outflows to Lower Michigan

Source: 1999-2019 IRS Migration Data

In-state migration between the Upper and Lower Peninsula shows similarly consistent currents between specific counties. Figure 17 shows inflow and outflow currents from the downstate counties that had a flow of at least 20 migrants in any year. The data are summed over the twenty-year period but a review of changes over time (not shown here) indicates there has been little change in these patterns since 1999.

Oakland, Wayne, Kent, and Ingham counties stand out as the most common places of origin and the most common destinations. The Oakland-UP and Wayne-UP currents show a net inflow to the UP (net migration = +71 and +243, respectively), while the Kent-UP and Ingham-UP migration current is a net outflow for the UP (net migration = -630 and -194 respectively). Grand Traverse County is another population destination for UP out-migrants.

Much migration to and from UP counties comes from other UP counties. Of the in-state flow (Figure 18):

- About ¾ in-state inflow originated within the UP (i.e., moved from one UP county to a different UP county) and ¼ originated downstate
- About ¾ of in-state outflow (i.e., remained within the UP but shifted to a different UP county) and ¼ went downstate
- The most urban UP counties (Marquette, Delta, Houghton, and Dickinson) experienced the most intra-UP flow, and had positive netflow with more coming in from than going out to elsewhere in the UP.
- The more rural counties, generally saw net loss, with people moving to more urban UP destinations. This was especially true for Ontonagon, Alger, Gogebic, Luce, Baraga, Mackinac, and Schoolcraft counties.

Intra-UP Origin & Destination Counties			
Origin County	Inflow	Destination County	Outflow
Marquette County	8,119	Marquette County	9,659
Delta County	5,666	Delta County	5,774
Houghton County	3,892	Houghton County	4,306
Dickinson County	3,373	Dickinson County	3,711
Menominee County	3,171	Menominee County	3,280
Chippewa County	2,547	Chippewa County	2,617
Iron County	2,501	Iron County	2,547
Mackinac County	2,325	Mackinac County	2,011
Alger County	2,045	Alger County	1,770
Baraga County	1,968	Baraga County	1,709
Ontonagon County	1,004	Keweenaw County	1,047
Keweenaw County	939	Schoolcraft County	803
Luce County	901	Gogebic County	620
Schoolcraft County	843	Ontonagon County	530
Gogebic County	788	Luce County	510

Figure 18: UP Counties Internal Inflow and Outflow

Source: 1999-2019 IRS Migration Data

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Table 2 lists the Top 12 overall origin and destination counties for the UP.

Table 2: UP Migration by Top 12 Inflow and Outflow Counties, including UP counties.

Source: 1999-2019 IRS Migration Data

	ORIGINS OF UP INFLOW	# OF IN-MIGRANTS	DESTINATIONS OF UP OUTFLOW	# OF OUT-MIGRANTS
TOP 12 COUNTIES	Marquette County, MI	8119	Marquette County, MI	9659
	Marinette County, WI	6663	Marinette County, WI	7166
	Delta County, MI	5666	Delta County, MI	5774
	Houghton County, MI	3892	Brown County, WI	4633
	Dickinson County, MI	3373	Houghton County, MI	4306
	Menominee County, MI	3171	Dickinson County, MI	3711
	Brown County, WI	2594	Menominee County, MI	3280
	Chippewa County, MI	2547	Chippewa County, MI	2617
	Iron County, MI	2501	Iron County, MI	2547
	Oakland County, MI	2453	Oakland County, MI	2382
	Mackinac County, MI	2325	Kent County, MI	2124
	Alger County, MI	2045	Mackinac County, MI	2011

- **In the months impacted by the pandemic, migration out of the UP slowed considerably. Migration into the UP also slowed, but less. This likely resulted in less population loss than in typical years.**

Data on change-of-address records from the US Postal Service (available monthly from May 2017-August 2021) allows us to compare how change-of-address filings into and out of the UP vary in the months impacted by the pandemic relative to the years immediately prior. The data, available by zip code, provide an administrative log of filings both temporary and permanent, though we have only included analysis of permanent relocations here. Data are suppressed for zip codes where there were 10 or less filings in the month. This means that there are many zip code months that have no viable records included, but where there were likely a small number of in- and/or outflow. This means that both in- and outflow are underestimated in the results shown here, and there is some possibility that if full records were available, results would be different.

To best estimate the number of people associated with each permanent change of address form, we had to make assumptions about the number of people per family and the proportion of all permanent forms for individuals, families, and businesses. In short, we assume that each family change-of-address form represents three individuals. For all of these reasons, the data should be interpreted with caution, and they should not be expected to estimate the real number of in- or out-migrants. Rather, the data are useful for relative comparisons between in- and out-migration and for comparing trends pre- versus post-pandemic.

Figure 19 sums these records for UP zip codes into annual in-, out-, and netflows (change-of-addresses coming into a UP zip code minus change of addresses going out of a UP zip code). It includes three years (a year is defined here as May-April) leading up to the pandemic year (May 2020-April 2021), followed by a quarter of a year (May 2021-Aug 2021). In each of the years prior to the pandemic, these data show a net outflow of approximately 6,000. This dropped by more than 50% in the pandemic year. This finding suggests that the UP lost fewer people to out-migration during the pandemic than was typical in the years prior.

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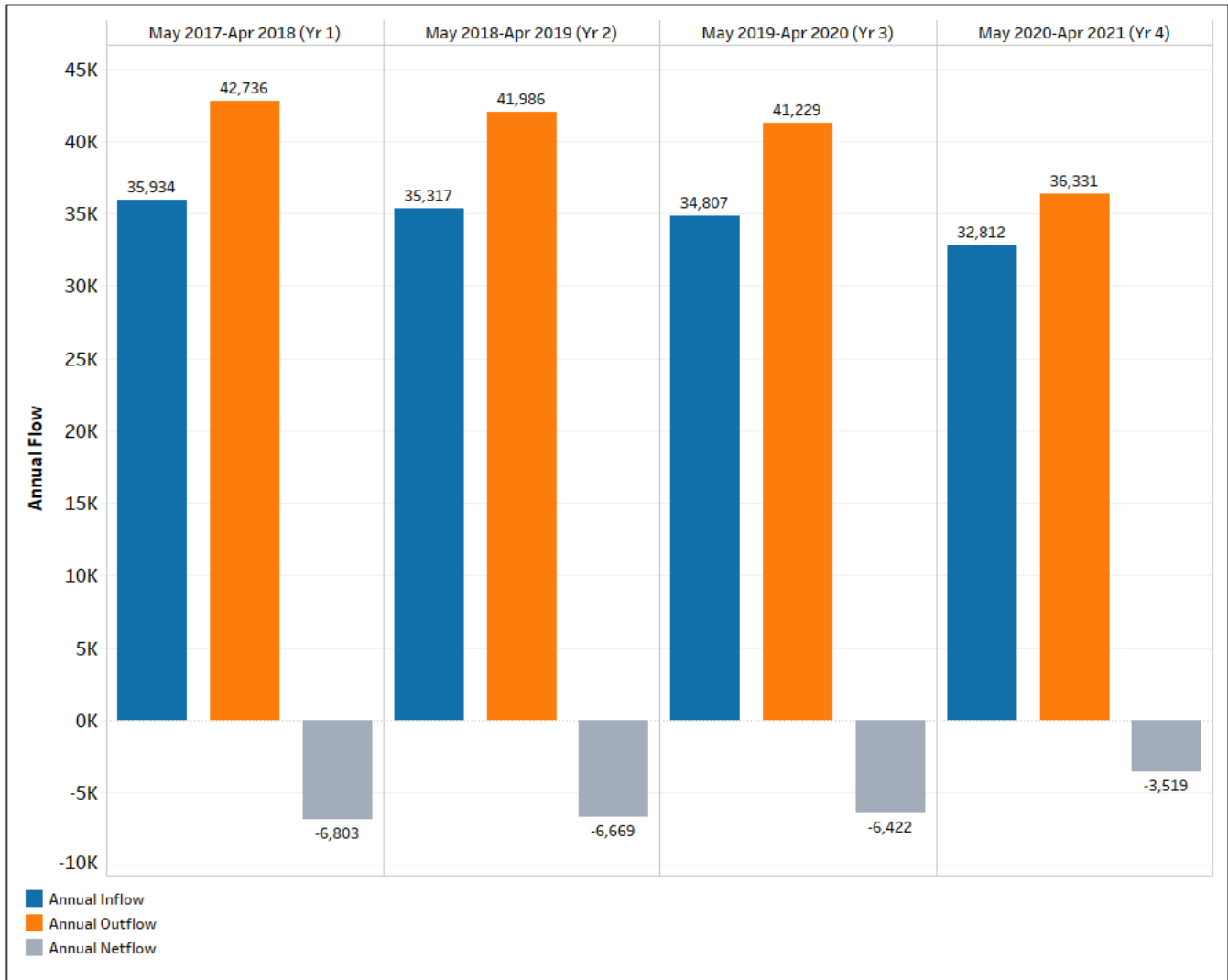


Figure 19: Annual Flow (in net) in Upper Peninsula
May 2017-Aug 2021

Source: May 2017-Aug 2021 USPS Change-of-Address Data

Figure 20 shows a similar comparison, except that it shows only data for summer months (June-August) for five years, 3 prior to the pandemic (2017, 2018, and 2019) and two during (2020 and 2021). Summer 2020 saw almost no net outflow, and summer 2021 saw substantially less net outflow than pre-pandemic years. The data provide good evidence that the pandemic reduced the prior pattern of net migration out of the UP.

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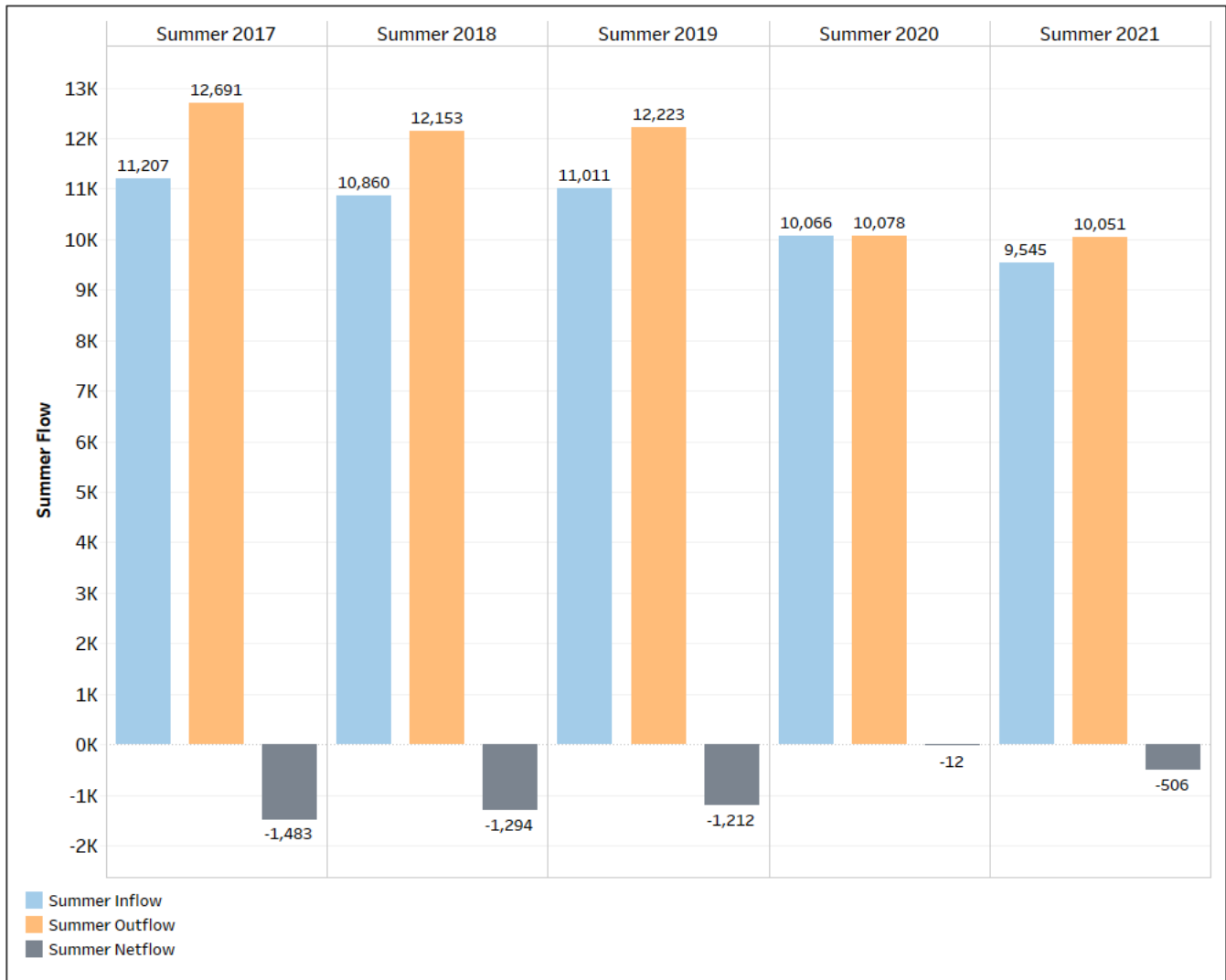


Figure 20: Summer Flow (in net) in Upper Peninsula,
June-Aug 2017, 2018, 2019, 2020, 2021
Source: May 2017-Aug 2021 USPS Change-of-Address Data

Figure 21 demonstrates this pattern at a county level. All 15 UP counties experienced positive netflow in year 4 (May 2020-April 2021) relative to the average of the three prior years (the gray bars). Alger and Iron counties both saw net inflow in the pandemic year (year 4), while they had seen net outflow in the years prior. Marquette, Mackinac, Dickinson, Iron, Houghton, Keweenaw, and Alger counties saw the largest shifts in pandemic year netflow in comparison to the average of the three years prior. The pandemic resulted in little change to the flows in Baraga, Luce, Ontonagon, and Schoolcraft counties.

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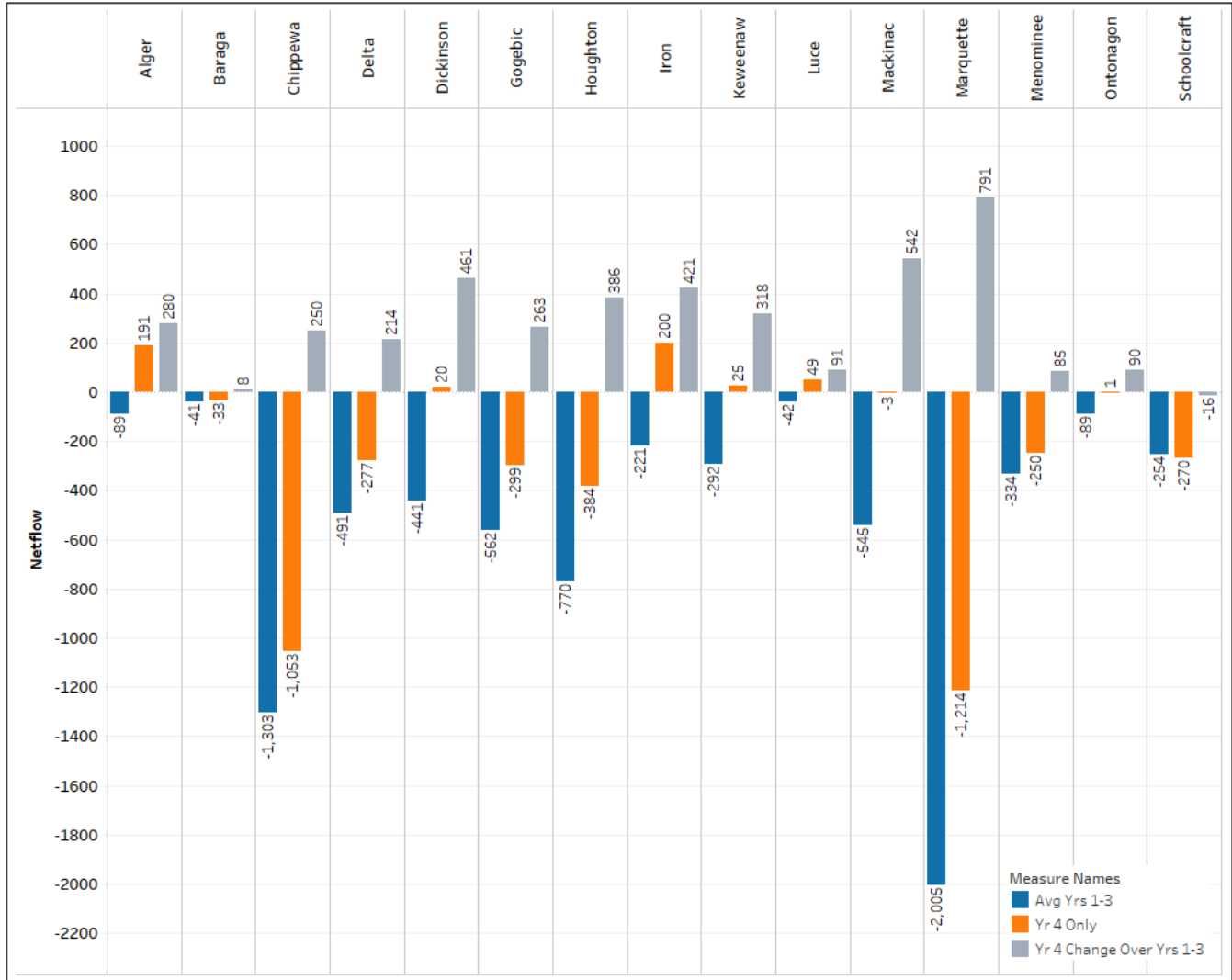


Figure 21: Netflow by County, Year 4 compared to Years 1-3 Average

Source: May 2017-Aug 2021 USPS Change-of-Address Data

Figure 22 shifts perspective to a zip code level, offering spatial perspective of increases/decreases in year 4 (May 2020-April 2021) netflow relative to the average netflow of years 1-3 (May-April 2017-2020). Here we can see gains throughout Iron County, much of Marquette County, and zip codes in and around Houghton.

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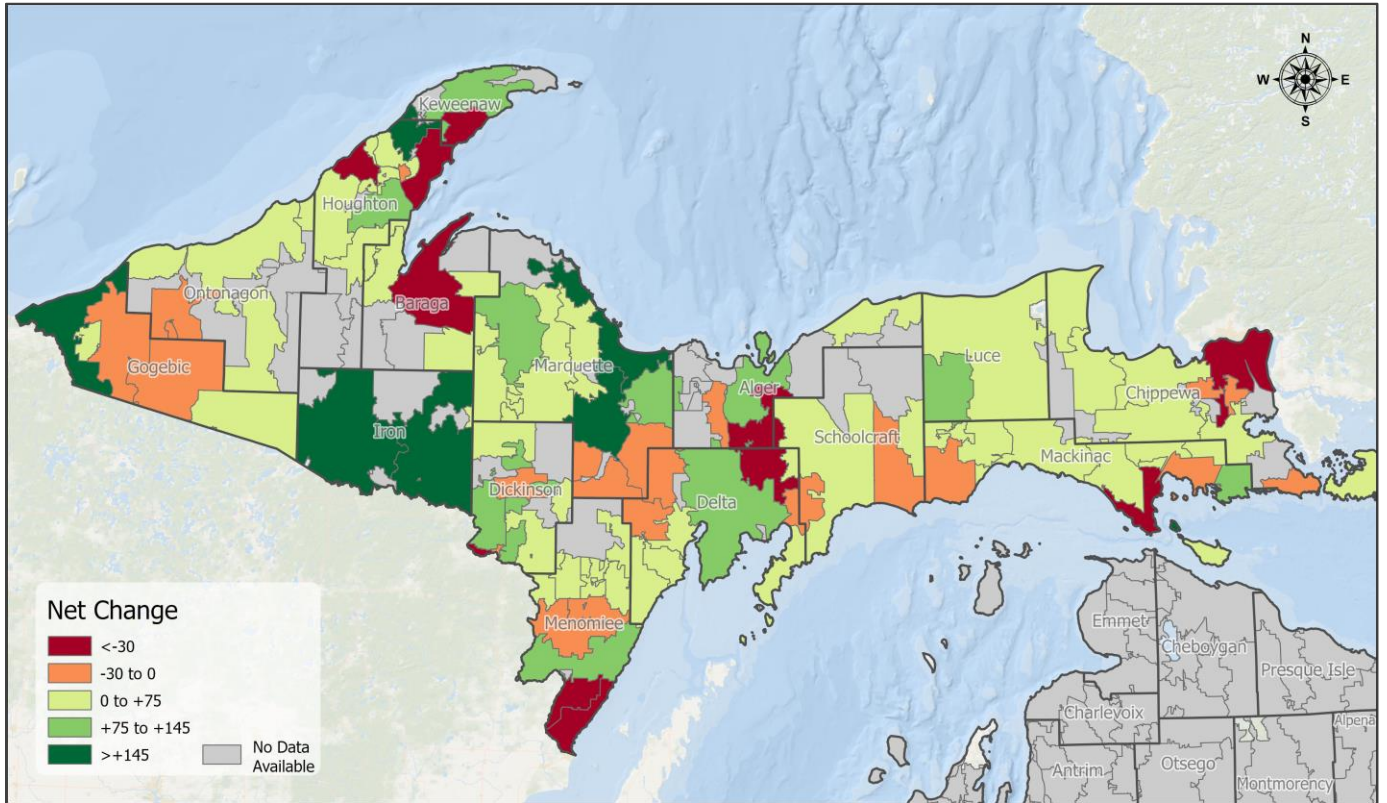


Figure 22: Netflow by Zip Code, Year 4 compared to Years 1-3 Average

Source: May 2017-Aug 2021 USPS Change-of-Address Data

Cartography by Tim Stone, Geospatial Research Facility, Michigan Technological University

Figure 23 compares year 4 netflow at the level of zip code to the prior 3 years' average to provide the net difference inflow. Overall, most zip codes saw positive netflow in this year relative to the years prior. Zip codes with the greatest positive change in the pandemic year include: Ironwood, Iron River, Marquette, Crystal Falls, Mackinac Island, Calumet, and Gwinn. In terms of net loss, Sault Ste. Marie was an outlier at -112.

Figures 24 and 25 are similar to the prior but show summers 2020 and 2021 (June-August) in comparison to the average for summers 2017-2019. In both, more places in the UP continue to see a more positive netflow in summer 2021 in comparison to pre-pandemic summers. Places that stand out as having increased netflow in both 2020 and summer 2021 in comparison to the pre-pandemic years include: Marquette, Mackinac Island, Escanaba, Norway, Houghton, Chassell, Iron River, Crystal Falls, Calumet, Gwinn, and Gladstone. A strong rebound in Sault Ste Marie in both summer 2020 and 2021 is evident as well. On the other hand, Menominee, St Ignace, Wakefield, Dafer, and Atlantic Mine stand out as zip codes that saw even more net outflow in 2020 and in summer 2021 than they were seeing in pre-pandemic years.

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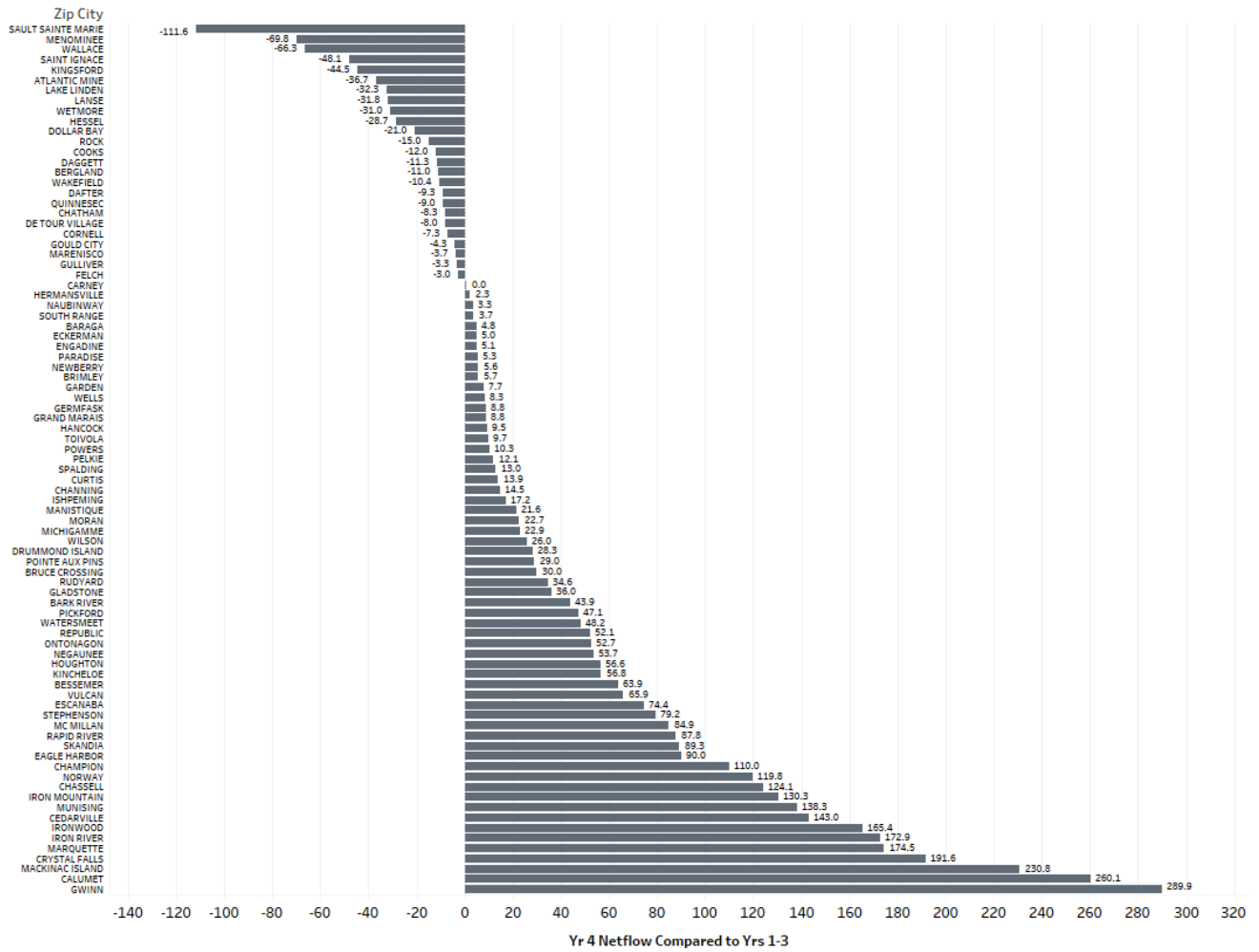


Figure 23: Netflow Comparison by Zip Code, Year 4 compared to Years 1-3 Average

Source: May 2017-Aug 2021 USPS Change-of-Address Data

PANDEMIC MIGRATION IN MICHIGAN'S UPPER PENINSULA

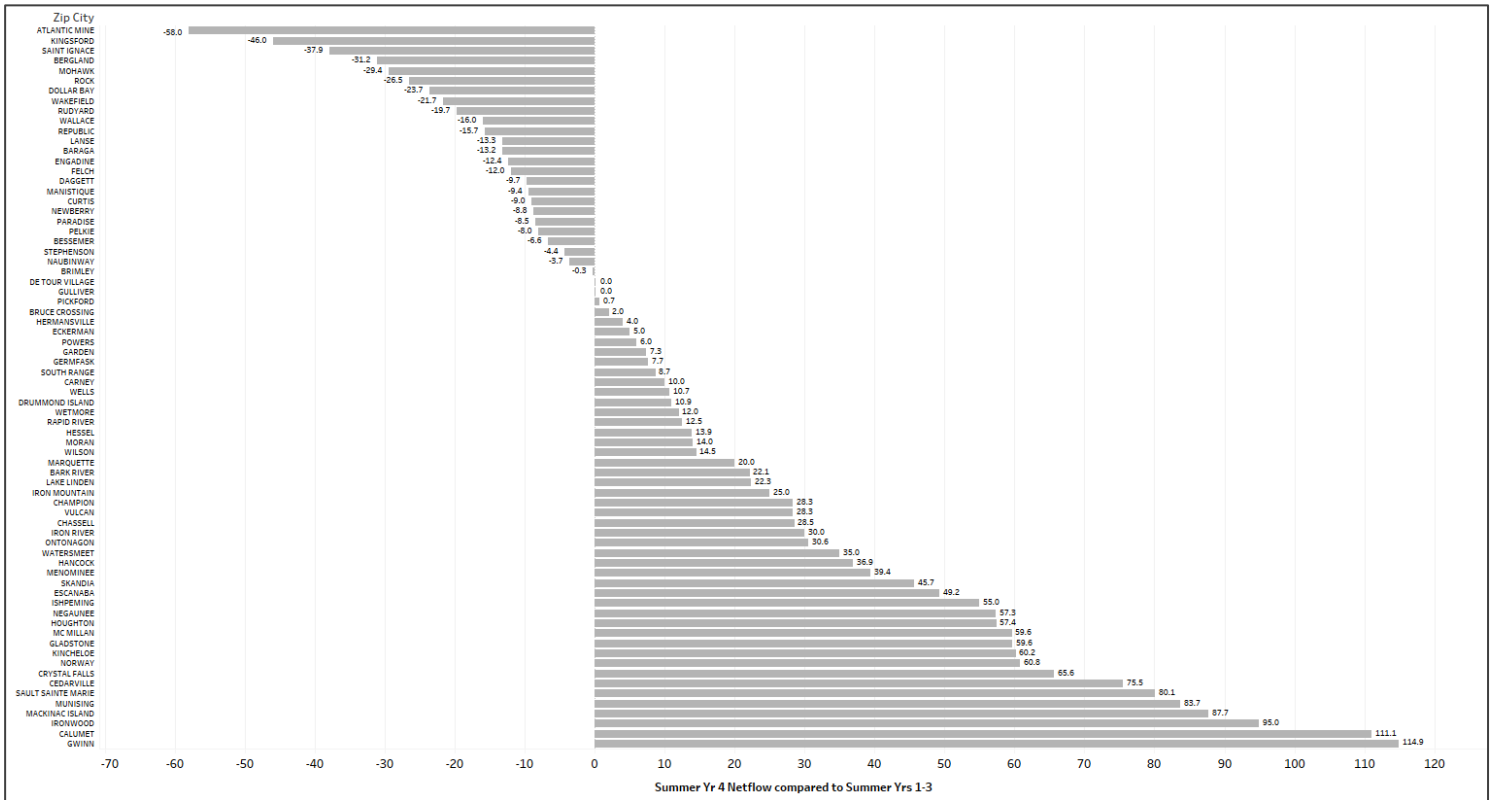


Figure 24: Netflow Comparison by Zip Code, Summer 2020 compared to Summer 2017-19 Average

Source: May 2017-Aug 2021 USPS Change-of-Address Data

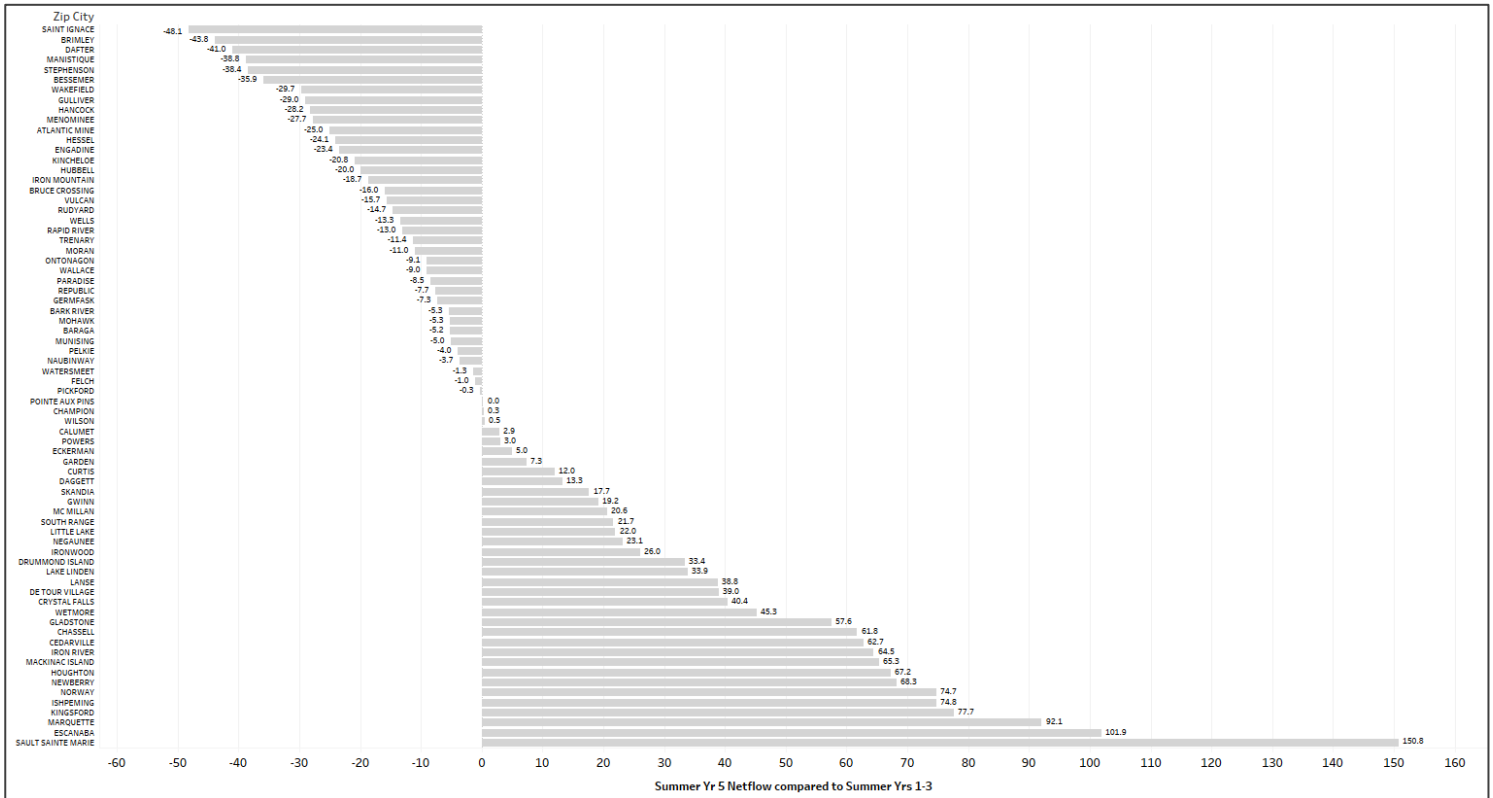


Figure 25: Netflow Comparison by Zip Code, Summer 2021 compared to Summer 2017-19 Average

Source: May 2017-Aug 2021 USPS Change-of-Address Data

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Both the annual comparison and the summer comparison of pandemic to pre-pandemic times offer some hope in terms of movement trends. In both instances, both inflow and outflow slowed during the pandemic. Although there are many anecdotal stories of in-relocation to the UP during the pandemic, an overall slowdown in migration is expected in such a time of crisis. The interesting finding is that netflow (inflow minus outflow), was more positive in the pandemic year, and in both the summers of 2020 and 2021, relative to pre-pandemic. This is because outflow declined even more than inflow.

The net effect of the pandemic on UP relocation appears to be a pause and potential stabilization in the flow of people into and out of the UP. Ultimately, the post-pandemic years may bring about reconsideration of UP residents’ movement to other, more populous locations, or may inspire moves to more rural areas like the UP from populous locations (i.e., amenity migration). Surely, the ubiquitous nature of remote work and education opportunities resulting from the pandemic will factor heavily into individual decisions. The next decade may therefore look different from the prior decade. What we do know is that the time is now to take advantage of this pause to net-loss of population to consider the future of the Upper Peninsula.

➤ **Analysis of SafeGraph cell phone data from January 2019 through April 2021 demonstrates the impact of the pandemic on circulation of individuals, with a notable decrease likely due to the reduction in seasonal migrants (e.g., “snowbirds”) and college students.**

SafeGraph’s dataset measures the presence of people (i.e., cell phones that spend at least 6 weeks in the same overnight location) within the Upper Peninsula. Due to privacy protections, the SafeGraph social distancing dataset only offers anonymized, absolute numbers of “home device counts” on each day in the dataset’s collection period (Jan 2019-April 2021) and suppresses counts of <5 on a given day. We analyzed all UP “home” locations on the first and fifteenth of each month in the dataset, and visually depict the findings below.

Figure 26 demonstrates the change over time in home device counts, with the month of the pandemic’s onset (Jan 2020) indicated by a red dot. The data show a considerable decline in the UP device count in November 2019, which then remained fairly stable through April 2021. Given the relatively low number of devices Jan 1, 2019 and Nov/Dec 2019 (pre-Covid) we expect that it is normal for device counts to be lower in the winter (when seasonal movers, i.e., “snowbirds,” are away).

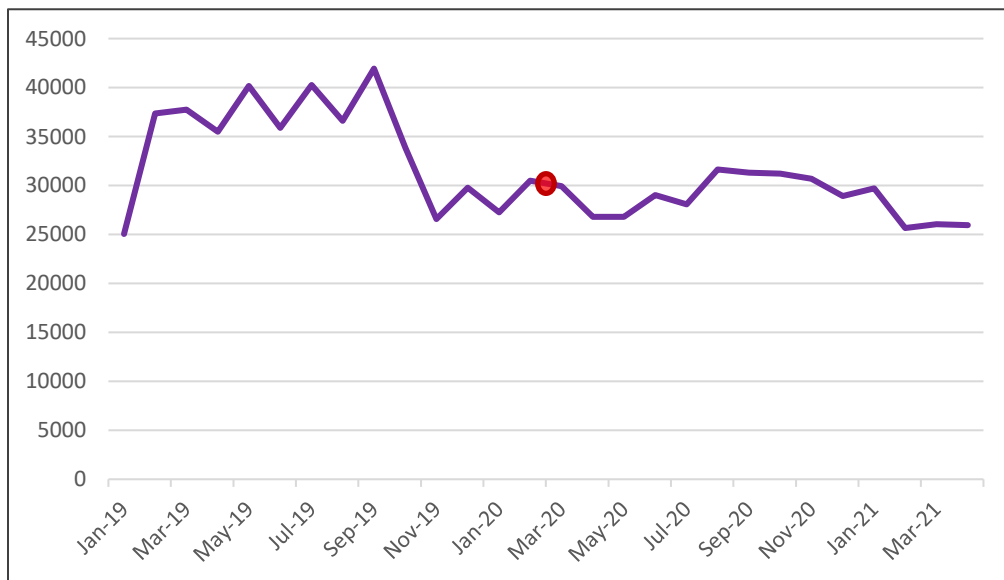


Figure 26: Upper Peninsula “Home” Device Counts, Over Time
Jan 2019-Apr 2021

SafeGraph Social Distancing Metrics Dataset

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Figure 27 layers 2019, 2020, and the start of 2021 (through April) on top of one another, most clearly visualizing the decline in presence of home devices overall because of the pandemic's onset. In 2019, device counts increased in February/March and then increased again in May, generally remaining high through the summer and early fall (May-Oct 2019). The pattern for 2020 looks quite different, remaining low through the summer. We expect this change may have been because many people who typically winter outside the UP remained in place in their alternate locations when the pandemic struck. This could mean that snowbirds generally stayed out of the UP through April 2021. April 2021 also coincides with widespread roll-outs of vaccinations, which might have impacted the situation. Unfortunately, April is the last month for which this dataset is available.

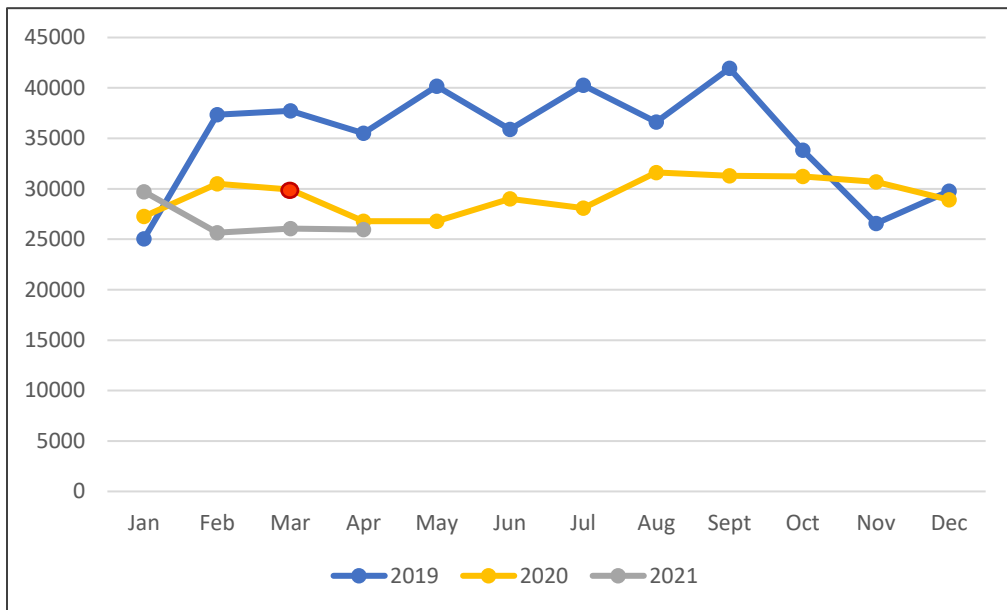


Figure 27: Upper Peninsula "Home" Device Counts, by Year & Month
Jan 2019-Apr 2021
SafeGraph Social Distancing Metrics Dataset

IMPLICATIONS & LITERATURE REVIEW

The results of this deep dive into the Upper Peninsula's migration patterns over time and the pandemic's impact on them are relevant to current and future InvestUP endeavors in multiple ways:

1. **Natural decrease is a challenging phenomenon to reverse, especially considering the UP's aging population.** Reducing out-migration and increasing in-migration of young adult populations is key.
2. **Migration is a critical consideration in economic development strategy.** Efforts to recruit or retain migrants to the UP should start in those locations where we know there are established inflows and outflows with the UP.
3. **Amenity-led economic development may be an impactful means of stabilizing and growing the population.** There are many benefits and cautions to consider in pursuing this approach.
4. **Planning should begin now for sustainable and inclusive growth in the UP.** Slowed net out-migration during the pandemic provides a pause and opportunity for InvestUP to work with UP stakeholders on this planning process.

To further these implications, we review the broader context and academic literature regarding rural economic development, amenity migration, and the crossover of the two. This review establishes a foundation for the recommendations that follow. We hope that together these will inspire conversation within and strategic decision-making by InvestUP and its stakeholders and partners.

➤ Economic & Social Restructuring in Rural America

For decades, rural communities have faced significant, global economic headwinds that have resulted in sector departure, job loss, population decline, and stressed social and ecological systems. Together, these have led to a shift in the perceived value of rural America and decreased public investment in rural communities.

Broadly speaking, America's rural areas have been hardest hit by the transition away from production-based economies. Technological advances improving efficiency of production and reducing absolute numbers of living wage, low barrier-to-entry jobs have brought about major shifts in the resource extraction (e.g., timber, mining) and agriculture work once so prevalent in rural America. Sources of rural income have subsequently decreased, been displaced, or disappeared. As rural areas are impacted by these global economic patterns of mechanization (and to a lesser extent, overseas relocation), their governmental, ecological, and social systems are also strained (Albrecht, 2020). Eroding tax bases stress small local governments and can lead to short-sighted decision-making that further compromises local economies and ecologies.

Rural communities that have historically depended on natural resource extraction are particularly hard hit. Known as the "natural resource curse," when commoditized resource industries leave a rural area, financial wealth goes along with them. The community quickly underperforms economically, especially where infrastructure investments have been primarily industry versus community focused. This "curse" is a consistent pattern across nations, states, and regions, and demonstrates the drawbacks of an industry-at-all-costs economic development approach (Van der Ploeg and Venables, 2012; Weinstein and Partridge, 2014; as cited in Albrecht, 2020).

Global economic restructuring has in the past two to three decades brought about a rural reckoning, one in which the longstanding social contract between rural and urban America has been compromised. Considered the frontier of opportunity in the 19th century and America's "storehouse" for agricultural and natural resources in the 20th, our rural environments have defined much of America's cultural narrative. But as suburban populations have grown into a majority of voters, and rural America's breadbasket and resource provider functions have declined, the social contract between urban/suburban and rural America has been questioned. As a result: "One of the reasons suburbanites don't want to make public investments in rural (or innercity) America is because they

"One of the reasons suburbanites don't want to make public investments in rural (or innercity) America is because they don't believe the investments make a difference" (Stauber 2001, p. 15).

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don't believe the investments make a difference" (Stauber 2001, p. 15). This lack of broader state and national investment stresses rural social, economic, and ecological systems further.

Parallel to economic restructuring at the macro-level, social restructuring adds complexity: America's rural areas are characterized by declining population, a growing share of female-headed households, increasing ethnic diversity, and many "aging in place" elderly (Rowlands and Love, 2021; Stauber, 2001). Doing more of what we have always done will not keep pace with the simultaneous and dynamic nature of economic and social change facing rural America. The forces impacting rural communities require a paradigm-shift in approach to rural economic development, from one that is led by a single-entity focused solely on economy and jobs, to a partnership-based, community-linked, and prosperity-focused all-hands-on-deck revitalization endeavor (Albrecht, 2020; Ratner, 2019; Grisham, 2010).

➤ **Paradigm-shift in Rural Economic Development**

Rural economic development is most successful when leaders partner with regional organizations, build social capital to tackle poverty drivers, consider wealth beyond only financial, take a broadly inclusive stance, and work together to redefine success.

Throughout the literature on rural economic development, a strong theme emerges: pursuing economic development within a vacuum does not and will not work for rural American communities. One entity leading with industry recruitment and job creation is not enough to address global restructuring, decades of population loss, and complex social change. Economic development in rural communities shifting to a paradigm that is partnership-based, community-linked, and prosperity-focused is essential to revitalizing communities (Albrecht, 2020; Ratner, 2019; Grisham, 2010). Important components shown to bring about change include:

(1) Shift to a regional perspective and partnership approach: Rural government, private sector, and non-profit leaders must adjust perspective and expand partnerships to effectively tackle the challenges facing rural people and places. Foremost, at the strategic level of development, effective partnerships start first by shifting geographic scope from local to regional to proactively address interwoven economic, social, and environmental factors across regional communities (Stokowski, 1996; Park et al., 2018). Rural towns and cities are challenged in their governmental capacity to bring long-term solutions to major problems in a sustainable and robust way, facing a daily reality of reacting to short-term, pressing issues that take precedence over big picture progress. A regional economic and community development approach is necessary to address shared, large-scale social challenges across communities (e.g., poverty); establish regional differentiation to increase regional competitiveness; connect rural to urban markets through marketing/delivery of products and services that achieve economies of scale for rural producers; and establish a shared vision of prosperity based on more than only employment and income (Grisham, 2010; Stauber, 2001).

(2) Rethink the underlying assumptions regarding poverty drivers: Economic improvement and growth alone are not enough to rejuvenate rural America, though they are essential in the equation. Communities that successfully revitalize invest in building the social and human capital of institutions and people (Stauber, 2001). These communities start this building process with deep consideration of the drivers of poverty in their region, working to reduce the "isolation" factors that perpetuate the endemic nature of poverty (Ratner, 2019; Grisham 1999, 2010). Though poverty drivers vary across communities, common isolation factors at the micro-level include insufficient transportation, limited broadband access, lack of affordable childcare, declining educational opportunities (worsened by population loss), and poor quality and/or unaffordable housing stock. Meso- and macro-level isolators include local political boundaries that reinforce ad hoc, piecemeal problem solving; disenfranchisement of low-income individuals through policy-making exclusion; lack of connection to other regional and urban economies; and powerful advocacy for ongoing sector/industry subsidy despite limited benefit to individuals living in poverty (Stauber, 2001; Grisham 1999, 2010). Put simply, a rural region cannot thrive economically with intense poverty, and a focus on job creation alone will not alter the poverty reality for rural communities. Economic and community development leaders' collaborative efforts are essential in addressing underlying, regional drivers of isolation and poverty.

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(3) Broaden conceptions of wealth beyond only financial: The isolating factors that drive poverty are compounded by and compound further the impacts of global restructuring on rural communities. A job creation-only approach is not enough to reduce systemic poverty, nor is it enough to ensure health and well-being of those not living in poverty (Power, 1996; Ratner, 2019). Instead, a focus on building multiple types of “wealth” above and beyond (but including) financial wealth takes a more holistic—and realistic—approach that addresses isolation-inducing poverty and brings about broader net benefit to rural regions.

A wealth-based approach takes a community perspective on the collective stocks and flows of nine types of capital including financial: intellectual, creative, individual, social, political, natural, built, and cultural (Ratner, 2019). “A wealth creation approach to development asks, what are the investments in multiple stocks of wealth that are required to create and maintain sustainable livelihoods in particular places?” and how and to whom do these types of wealth flow (Ratner, 2019 p. 18). In this model, only opportunities that provide adequate wages and add to the stock of other types of wealth are pursued by economic development organizations and stakeholders, as these lead to community growth and development beyond only economic (Ratner, 2019; Grisham 1999, 2010).

(4) Include stakeholders with diverse perspectives: A regional, poverty-reducing, and wealth-enhancing economic development approach can only work with many stakeholders with diverse perspectives at the table. Meaningful community engagement includes local and regional government, non-profit organizations, private sector businesses, and private citizens ready to work together, through differences of opinion and experience, to realize regional prosperity. Vaughn Grisham's multi-decade examination of poor, rural communities is a good example of how rural communities and regions that successfully revitalized had the sustained involvement and commitment of catalytic local and regional leaders (both official representatives *and* voluntary citizens) willing to target early success without expectation of short-term fixes (Grisham 1999, 2010). No one entity or group of homogenous stakeholders can accomplish enduring change in the face of complex local and global challenges: proactive engagement to include diverse perspectives is essential.

(5) Redefine “success:” Regional community leaders and citizens must come together to define “success” for the region. “Government support of development based on cheap commodities and labor is shortsighted and unlikely to produce broad-based public benefits” (Stauber, 2001 p. 26). Bringing together a diverse group of stakeholders (representing a broad swath of interests and including local citizens) through a tiered outreach approach will result in a more robust vision of prosperity that works for more people. Beginning with the understanding that success must be defined in “ways that are specific to rural communities” (Ratner, 2019; Stauber, 2001 p. 10), reduction of poverty, affordable housing, opportunities for middle class growth, and maintenance and/or improvement of the natural environment are likely to feature in this shared vision. As Power notes, “The true sources of well-being are all only distantly associated with material flows” (Power 1996, p. 253). While a shared vision of prosperity will most definitely involve critical economic components such as living wage jobs, jobs are likely to be a means to an end, versus the end in itself.

“The true sources of well-being are all only distantly associated with material flows” (Power 1996, p. 253).

➤ **Amenity-led Economic Development: The Benefits for Rural America**

Amenity migration, the movement of people for quality of life versus purely economic reasons, can prove an advantageous and energy-infusing form of economic development for rural areas, assuming caution, strategy, and proactive public policy are employed in advance of migrants' arrivals.

Amenity-led development intends to secure, promote, and grow the nonmarket qualities of a place that make it attractive for living, working, and doing business (Power, 1996). Amenities provide benefits to people through direct consumption of land, natural resources, and human activities (Green, 2001; OECD, 1994), and are valued for their very existence alone. One means of capturing this value is through amenity migration, defined here as urban-to-rural migration for the purpose of access to the natural, social, or cultural amenities offered (Gosnell and Abrams, 2011). Amenity migrants may be those who return to a rural area of their childhood due to the qualities of the place, newcomers seeking the rural idyll, or retirees looking for a place that meets their

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retirement needs. In all instances, these amenity migrants place access to and consumption of rural environmental or cultural amenities ahead of or equivalent to economic opportunities (McGranahan et al., 2010).

Amenity-endowed regions have exhibited the highest non-metro rates of in-migration (Golding, 2014), and rural counties with resource amenities grew at more than double the rates of manufacturing, farming, or mining counties (Park et al., 2018). When combined with a strong entrepreneurial context, outdoor amenities maintain and draw in a creative class ready and willing to stand up new establishments and grow jobs (McGranahan et al., 2010), resulting in net gains for the community. Dozens, if not hundreds, of studies show that rural counties' economic growth is tied to their amenities. A good example: a study by Deller et al. (2001) in which they study 2,243 rural US counties to assess how amenities not quantified by the market (e.g., trees as nature versus trees as a resource to be extracted at a set price) matter to regional economic performance. Combining 54 separate amenity indicators into five indices (i.e., climate conditions, land resources, water resources, winter recreation opportunities, and developed recreational infrastructure), they show that all five indices were positively related to growth in population, employment, or per capita income. Of the five indices, winter recreational activities show the strongest positive relationship to all three growth types. This is good news for high-amenity, rural America's growth potential (and especially for the UP).

Amenity in-migrants can bring various assets to rural communities. They tend to be highly educated and politically active people who can mobilize capital, infuse civic arenas and local government with human capital, and bring fresh energy and ideas that create renewed possibilities (Gosnell and Abrams, 2011). Community satisfaction is known to be higher among residents of areas most affected by amenity migration (Krannich et al., 2006) and destination counties show economic advantages that help them weather population loss relative to other rural counties (Golding, 2014). These positives frame urban-rural migration as a process that reduces inequality between cities and rural communities, offering hope to those who have been most negatively impacted by global restructuring of local economies (Golding, 2014). That said, amenity migration can also bring with it serious social, economic, and environmental drawbacks and deleterious consequences for rural communities that are best considered and mitigated in advance of migrants' arrivals.

➤ **Amenity-led Economic Development: Drawbacks & Cautions for Rural America**

Amenity migration can come with serious economic, social, and ecological impacts that may undermine the very appeal of the rural communities to which amenity migrants move and adversely impact the health and well-being of rural people and places.

Many factors align to make communities in present day rural America vulnerable to the unmitigated drawbacks of amenity-led development. Small, rural governments with eroding tax bases are strained in their planning efforts and resources. In this environment, rural governments and economic development authorities may find the benefits of amenity migration appealing enough to adopt policies that encourage it. Before embarking on a journey to encourage amenity migration however, knowledge acquisition, thoughtful strategic planning, and an eyes-wide-open approach are required to avoid and/or mitigate shortcomings.

Amenity-led development is not a silver bullet for a declining economy and shrinking population. For example, local governments in recreation dependent counties generally collect more revenue yet spend more relative to their local income base than other counties. They experience higher than normal costs for infrastructure and personnel. They are hardest hit by economic recessions, and are known for short-term employment variability (i.e., seasonal employment) that affects income, housing, and other employers in the region. Most notably, they are characterized by greater economic, political, and social inequality (Abrams et al, 2012; Green 2001).

Amenity Migration & Economic, Political, & Social Inequality

Amenity migration tends to come with increasing economic inequality. While amenity migrants bring wealth, the stability of economic independence from rural activities, and more "urban" consumer habits (Gosnell and Abrams, 2011), they impact social and ecological systems in both positive and negative ways. This impact is made more extreme when communities and their governments are unprepared for the effects of in-migration, especially if it is rapid. If in-migration and subsequent built environment growth occurs quickly, it is a strong predictor of attitudes toward both local development and natural resource preservation initiatives of long-term

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residents *and* newcomers, with both groups expressing concern about and opposition to their perceived negative aspects of development (Park et al., 2018).

Local governments often experience these varying perspectives of long sought-after growth as bewildering. Because long-term residents and newcomers, especially urban amenity migrants, have varying interests, motivations, and values, conflict can arise between the two groups (Park et al., 2018; Gosnell and Abrams, 2011). Power dynamics cannot be ignored: amenity migrants are a powerful group due to their relative affluence (both wealth and health), and long-term residents maintain their power through knowledge of local norms and strong social networks (Benson and Osbaldiston, 2014). Newcomers can strongly influence the local social context when in-migration is associated with rapid development and population growth; when their influence or numbers change the balance of local political power; and/or where they control large tracts of land (Yung and Belsky, 2007; Gosnell and Abrams, 2011).

In the instance of the latter, private property access is one of the most cited “flashpoints” between newcomers and long-term residents, with newcomers typically stricter with property rights than locals, and often viewing land through a preservation lens underpinned by their perspective of the rural idyll (Brown 1995; Yung and Belsky 2007; Jagnow et al. 2006; Hurley et al. 2008; all as cited in Gosnell and Abrams, 2011 p. 310). This results in more “No Trespassing” signs and reduction of access where there previously was plenty. As Yung and Belsky note, “...an increasingly diverse set of private landowners must negotiate mutually beneficial boundary practices that meet both existing and emerging community and conservation needs (Yung and Belsky, 2007 p. 689). Navigating the conflicts that inevitably occur between long-term and new residents has an administrative cost that plays out in local government systems, especially if unprepared for the likely areas of discontent and disagreement that amenity migration can bring.

The complexities brought about by changes in perspectives of land ownership and use are complemented and exacerbated by the housing challenges that result from an influx of amenity migrants, especially when newcomers come from large, urban areas. As wealth generated in metropolitan economies flows into rural areas via these migrants, previously homogenous rural communities become microcosms of broader inequities common in major cities. Amenity migrants bring with them urban consumer expectations, cultural visions of a rural idyll, and possession of capital that provides easy access to relatively low-cost housing. Their consumer power causes an escalation in property values, housing prices, and then taxes (Golding, 2014). This gentrification of rural communities displaces low-income residents, severing essential social networks, livelihood opportunities and recreation (Glorioso and Moss, 2007). Especially in rural areas (as opposed to urban), it deters low-income prospective homebuyers (Yagley et al., 2005), which can adversely impact future in-migration. This pattern is worsened by an influx of investors and developers willing—and often incentivized by local government policies—to capitalize on cheap land and rural governments’ eagerness to expand decades of dwindling property tax income. The community’s overall housing affordability is reduced, and through the departure of lower income residents (and with time, middle income), the community’s demographic makeup is altered (Yagley et al., 2005).

The result: a rural residential landscape increasingly segregated by wealth and age, as young adults are pushed out by both rising costs *and* social and political support increasingly in favor of elite and retiree interests (Golding, 2014; Winkler, 2013). This redistribution and out-migration trend may remain hidden behind early indicators of rising average income and increased equality, causing community leaders to champion the initial economic benefits of amenity migration. In reality, data improvements on income are driven by out-migration of lower income individuals due to rural gentrification (Golding, 2014, 2015). Likewise, in-migration of amenity migrants into rural destination counties hides a loss of young, working age adults (i.e., those who provide long-term productive capacity and stability in a local economy) relative to other types of counties (Winkler et al., 2011; Golding 2015). In this way, rural destinations may repel young adults. Though amenity migration brings population inflow, out-migration of lower income individuals and young adults will prevail in communities unprepared for these dynamics (Winkler et al. 2011; McGranahan et al., 2010).

These dynamics naturally lead to further socio-economic effects for the entire community. As the rural landscape changes with the arrival of migrants to amenity-rich areas, new opportunities arise in response, many in the service industry. Consumer habits of the amenity migrant population coupled with the growing recreation sector common in amenity areas provide jobs that pay lower, provide fewer benefits, and are seasonal in nature (Gosnell and Abrams, 2011). These factors combined with the limitations in and high cost of housing mean that

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workers in this new economy are faced with lagging wages, displaced housing, and longer, more costly commutes. Racial divisions in rural communities are compounded by the economic marginality already experienced by minorities who work in service industries, culturally and spatially segregating them further (Golding, 2014). As rural communities cleave, these divisions are shown to reduce inter-class interactions and suppress social mobility in small towns, with newcomers shifting community priorities away from a focal point on family, community, and schools, and toward services and infrastructure (Salamon, 2007). This phenomenon is experienced by long-term residents as "loss of community" or "diminishing quality of life" even as the community's economic data appears to improve (Glorioso and Moss, 2007 p. 140).

Amenity Migration & Ecological Impacts

Along with the socio-economic impacts of amenity migration, inflow of amenity migrants can lead to adverse ecological impacts. In a study of rural mountain communities in Colorado, authors Glorioso and Moss find that the primary characteristic of amenity migration to date has been the "...degrading of mountain ecologies" with benefits that could be greater "if this phenomenon was understood and managed for ecological sustainability" (2007 p. 137). Although amenity migration may bring about a pro-environmental shift in rural values (Gosnell and Abrams, 2011), there are adverse and often unintended ecological consequences, such as:

1. **Rapid development of the built environment:** Limited/low quality rural housing stock, property tax dollars that generate new revenue for local governments, and hope for economic growth that alleviates rural poverty and reverses population decline align to reinforce or incentivize local policy that promotes rapid, unexamined development of the built environment. As low-density rural housing sprawl requires further infrastructure (e.g., roads, sewers, energy systems, shopping) to support it and its inhabitants, this development fragments and degrades the landscape (e.g., habitat destruction, impermeable surface increases, etc.) in irreversible ways that are often unintended and irreversible (Abrams et al., 2012; Glorioso and Moss, 2007; Marcoullier et al., 2002).
2. **Newcomer management of private property:** Private property shifting into the management of newcomers may result in loss of institutional knowledge of land management and cross-boundary issues such as those related to fire, invasive species, water use, and habitat degradation (Abrams et al., 2012).
3. **Local governments unable to accommodate or afford the impacts of development:** Local governments are often understaffed or limited in speed or capability to prepare for and manage the environmental consequences of amenity migration, especially in small, rural communities (Abrams et al., 2012). For example, in a Gurran et. al study of coastal Australian amenity towns, they found that "...communities are struggling to accommodate growing numbers of people with urban tastes and rural dreams in areas with governance structures and physical infrastructure designed for occasional tourists" (2007 p. 444).
4. **On the whole, amenity migrants have been found to consume more than they conserve:** Consumer habits and recreation demands place pressure on local ecosystems as amenity migrants join current residents in enjoying natural recreation opportunities (Glorioso and Moss, 2007). This can increase soil, water, air, and noise pollution and require alteration of natural ecosystems for the consumption of migrants (e.g., golf courses, recreational trails) (Marcoullier et al., 2002). Amenity migrants are assumed to have a greater stake in the conservation of their environment. This is not the rule, but the exception: though they have been observed to lead their communities in conservation, amenity migrants are more often resource consumers than resource conservers (Glorioso and Moss, 2007).
5. **Displacement of environmental impacts because of rural gentrification (defined above).** Growth as a result of amenity migration can bring about second and third order effects, for example: (1) commutes become longer as rural gentrification pushes lower income individuals out of rural towns and cities (Abrams et al., 2012); (2) the environmental effects of less-than-idyllic productivist activities (e.g., resource extraction, agriculture) are pushed elsewhere as amenity migrants flex their "congregation power" and oppose these activities (Glorioso and Moss, 2007 p. 140); and (3) further environmental harms and benefits are displaced across and outside of the community (e.g., impacts of flooding downstream due to increased impermeable surfaces upstream) (Abrams et al., 2012).

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➤ **Summary: Amenity-led Economic Development Strategy in the Upper Peninsula**

As rural areas like Michigan's UP face decades of challenging economic conditions brought on by global economic restructuring, those areas that are "destination-worthy" understandably seek to attract migrants to reverse net migration loss and/or boost local economies. This is a valid and potentially beneficial economic development strategy—especially in light of population loss—when combined with other, strategic economic and community development endeavors. Yet, shortcomings, pitfalls, and significant drawbacks accompany those benefits.

The economic, social, and ecological consequences of amenity migration impart community and environment-altering impacts. Economic developers and government leaders pursuing amenity-led economic development should proceed with caution and a proactive policy mindset. Because the ability to migrate for amenities is closely related to income, if migrants arrive in any substantive number to the UP, receiving communities will feel their presence—not always for better. While amenity migrants bring ideas, capital, and a readiness to invest, this comes with drawbacks that are best considered and navigated in advance of their arrival.

RECOMMENDATIONS

The UP population is generally declining, and because of its older age structure the region can expect to continue to see more deaths than births in the coming decades. Migration is one means of shoring up the population, but this is a challenging prospect. Reducing out-migration of young adults, including current UP college students, and attracting potential return migrants in their late 20s and 30s, is key. Recruiting in communities where there are established migration currents to/from the UP also holds promise. Amenity-led economic development goes a step further in specifically cultivating regional and local amenities to entice migrants. This approach is best pursued with caution and planning, and as part of a broader paradigm shift toward partnership-based, community-linked, and prosperity-focused revitalization of rural communities.

When considering UP demographics and the possibilities of amenity-led economic development, it is important to reflect on assumptions: Why must we grow the population of the UP? Is growing the population a means to an end or the end in itself? The recommendations below are grounded in the assumption that population stabilization and growth are both a by-product of successful revitalization and a means to an end of healthy, prosperous UP communities. With the goal of growing sustainable livelihoods and securing social and ecological well-being for UP residents, we put forward these recommendations as a path to population growth and community revitalization in Michigan’s best peninsula.

1. Commit to a multi-definitional perspective of wealth, prioritizing investments in intellectual, individual, and social capital of UP residents.

The commitment to wealth goes above and beyond the acquisition of financial capital. Instead, financial capital, in this model, is viewed as an essential means to a broader end of growing and balancing human, social, natural, political, built (infrastructure), and cultural capitals (Ratner, 2019; Flora et al. 2016). It is ultimately the stocks and flows of these broader capitals that characterize the Upper Peninsula’s communities and peoples. Community leaders and citizens come together to evaluate flows of these capitals and systematically address assets and limitations in their stocks, reinvesting stocks of plenty into lagging stocks to improve overall wealth, as “wealth, not just income, is the foundation of prosperity” (Ratner, 2019 p. 5).

Intellectual capital: stock of creativity and inventiveness, and the sharing of it within the community

Individual capital: stock of skills plus mental and physical health of individuals

Social capital: stock of trust, relationships, and networks that support the community

Beginning first with investments in intellectual, individual, and social capitals builds a foundation for broader wealth accumulation (Ratner, 2019). This initial focus benefits all residents and allows for a more effective approach to poverty alleviation, reducing poverty’s root cause of isolation through investment in education, creative outlets, skills development, mental and physical health, and in “bridging and bonding” social networks within and between communities (Ratner, 2019 p. 10). Focusing here positions economic development work as *first* about creating space for learning, creativity, and entrepreneurship and *then* about job creation and recruitment. Investments in communities’ intellectual, individual, and social capital stocks develop a labor force high in intellect, skills, health, and social networks and strengthen entrepreneurial climates, which together attract external investment.

Programs and projects that take advantage of existing assets to invigorate and reinvest in these three primary types of wealth are key in retaining young adults and building a resilient working age population. This can look like: place-based educational opportunities for K-12 youth; community leadership opportunities for young adults; incentivizing and sharing art and innovation; entrepreneurship incubators, networking, and small business support for local, long-term residents and newcomers; part-time job-plus-skills-advancement opportunities for working parents; or opportunities for elderly UP residents to invest their estates in community foundations that build these types of capital. Economic developers leveraging the UP’s demographic realities through a lens of reinvestment—of time, talent, or funding—into beyond-financial types of wealth ensures that varied types of capital are created and sustained across larger and more diverse portions of the UP’s population.

2. Engage stakeholders and build partnerships focused on the UP's future.

Participatory planning and decision-making are key to genuine buy-in. Such approaches may take pride in the past, but they encourage forward momentum toward a determined rather than deterministic future. To do so, leaders work to understand the perspectives of the present *and* future population, taking care not to overweigh the voice of the already committed stakeholder or average resident. While the current population is aging and predominately white, the future population may look different, be younger, and have perspectives that vary from those of current residents.

This future variety implies proactive engagement now with high school youth and young adults, working families, residents of color, those beyond our UP borders who may consider a move (especially if living in already established migration currents), and those who have chosen to leave the UP. Understanding the current perspective of those opting in and opting out of the UP is key: asking questions such as “What will keep you here?”, “Why do you stay?”, and “What made you leave?” will uncover hidden factors (e.g., lack of investment in small businesses, limited culture or arts opportunities, etc.) that economic development leaders can strategically leverage or major weaknesses (e.g., lack of diversity, transportation challenges, etc.) that they can address to stabilize or reverse population loss.

Beyond these questions and the actions that result from their answers, participatory decision-making structures would involve a variety of community leaders and private citizens to determine the social, economic, and environmental “end game” for the UP and for each UP region. Engagement processes should identify, reinforce, and further develop stocks of individual, intellectual, and social capital, recognizing existing strengths (assets to build on) and weaknesses (areas to strategically address). From here, partnerships built on shared understanding, collective strategy, stakeholder capacity-building, and collective participatory decision-making structures set the foundation for sustaining communities’ stocks and flows of wealth.

"The challenges for rural and community planning and sound natural resource management are considerable but not insurmountable given adequate planning resources, applied research, educational programming, and participatory decision-making structures"
(Marcouiller et al., 2002 p. 519).

3. Strengthen the UP's regional planning organizations for sustainable growth and development and build capacity for this planning locally.

Regional planning (focused on the UP as a whole and its sub-regions) ensures that conversations go beyond local governments to a broader geographic area and prevents the decisions of one community from adversely impacting another in the region. Coordination, rather than competition, is key. Collaborative asset mapping is the place to start, working with existing regional development organizations—the *Western U.P. Planning and Development Region*, *Central Upper Peninsula Planning and Development Regional Commission*, and *Eastern Upper Peninsula Regional Planning and Development Commission*—to map the regional planning capacities and endeavors of past, present, and future. Are all UP localities represented and participating within those organizations and their efforts? What assets can be linked within and across regions to increase intellectual, individual, and social capital? Are there gaps, shortcomings, or inefficiencies across the organizations? How can InvestUP partner to convene, complement, support, and/or advocate for robust regional planning organizations across the UP? Collective asset mapping is a start toward further collaboration, including: 1) advocating for impactful regional planning and development organizations by sharing capabilities, addressing shortcomings, and strengthening combined efforts; 2) coordinating diverse stakeholder engagement within and across the UP's regions; 3) establishing a shared vision of the UP's future, 4) addressing systemic challenges shared across the UP, such as poverty, and from there 5) determining economic directions for each UP region, focusing on areas where the UP has a strategic advantage, such as natural amenities.

Regional governance *does not* mean that local governments give up power. It *does* mean that when regions collectively determine their vision, they better coordinate their efforts across involved local entities’ staff and stakeholders to ensure complementary endeavors; achieve economies of scale by working collaboratively; and conduct conversations about impacts of local decisions *before* those decisions are made. Regional planning, when done well, prioritizes social well-being, economic opportunity, and preservation of the environment to the

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maximum *regional* extent possible, thereby benefiting broader swaths of the population. These factors are a must for retaining the current population, drawing in new population (both economic and amenity migrants), and attracting tourists. The impacts of these newcomers to rural regions, in turn, are best considered at a regional level to prevent the drawbacks and share in the benefits of their presence (Rijnks et al., 2016).

Regional planning can be difficult, in part because local governments are often tempted to only consider local interests and enhance local revenue. Two specific measures can help:

(1) *Maintain a balance between the benefits of regional planning and rural community empowerment.* Rural communities are more likely to encourage growth *and* equity when the emphasis is on local wealth creation through community control of local land, labor, and capital (Bloomquist et al., 2002), but with coordination at the regional level.

(2) *Invest in rural, local governments, their planning staffs, citizen committees, and elected officials, especially in a way that builds capacity for:* (a) understanding and implementing sustainable growth and development principles in their communities, (b) conducting public engagement on and communicating about growth and development issues to diverse stakeholders (e.g., newcomers, long-time residents), and (c) participating in regional planning, including exposure to models of success elsewhere via site visits, planning conference attendance, and literature.

These measures are especially critical when amenity-led economic development is a core part of a population growth strategy. Regional efforts alongside empowered local communities can combat some of the challenges that amenity-led development can bring, including rural gentrification (increasing housing costs), growth that compromises environmental quality or limits public access, and balancing the interests and values of long-time residents, seasonal residents, and newcomers. InvestUP convening, partnering with, and advocating for the UP's three regional development entities is a key step in ensuring that the UP's assets are both leveraged toward *and* protected for a prosperous future.

4. Plan for sustainable and inclusive growth—even when growth is not happening—to avoid disproportionate or negative impact on low income or marginalized populations.

Effective economic development means that sustainable livelihoods are built toward a shared, inclusive vision facilitated in a partnership context. As part of this effort, a primary goal should be to maintain housing affordability and keep existing people in communities (Golding, 2014). As described in earlier sections, this is challenging. Therefore, local (and regional) governments and community and economic development organizations must plan and prepare for growth even when that growth seems unlikely. Scenario planning for multiple futures is an effective way to start. Amenity migrants bring new and more diversified economic activity, labor surplus, and pools of capital for investment. However, they are fickle and tend to leave if they find that the characteristics that attracted them to the place change, whether from affordable to unaffordable, spacious to crowded, or natural amenity rich to ecologically degraded (Glorioso and Moss, 2007). In the meantime, current residents also experience these changes negatively, and they too may leave. Proactively planning for growth is the key ingredient to ensuring that development not only happens at a manageable pace, but that policies and incentives are aligned to reinforce livable, vibrant communities rather than undermine them.

It is critical that we acknowledge here the lack of the diversity of the Upper Peninsula overall, both in reality and perception. The UP is 89% non-Hispanic white, with nine counties greater than 90% non-Hispanic white, three counties (Alger, Luce, Schoolcraft) at 75-89%, and three counties (Baraga, Chippewa, Mackinac) at 70-74% (U.S. Census Bureau, 2020). In the UP's three most diverse counties—Baraga, Chippewa, and Mackinac—18%-21% of people identify as American Indian (U.S. Census Bureau, 2020). The limited diversity of UP residents makes population attraction and retention among specific demographic groups (e.g., college age students (especially students of color), urban families seeking a rural idyll but with a more representative population, and retirees of color) a greater challenge than it would otherwise be. Lack of diversity also harms business recruitment, as many businesses are rightfully seeking diverse workforces that provide diverse perspectives, and will not consider relocating to homogenous geographic areas.

America's voting population is more diverse than ever. The less the Upper Peninsula looks like the rest of the country, the more challenging it is to garner support from a broader electorate for the prosperity of its people. Placing an emphasis on community building and growth across race, ethnicity, and income levels; investing in

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civic dialogue and engagement among youth via the schools; and ensuring that the Upper Peninsula is a welcoming, inclusive environment for anyone who wishes to visit or live goes beyond strategy. An inclusive culture is imperative if Upper Peninsula stakeholders and residents ever hope to both increase population through in-migration and experience broader community prosperity.

5. Make the case for state-wide investment in the UP by articulating why the broader public should care about the Upper Peninsula, and what the rest of the state will receive in return.

What is the value proposition of a rural place like the Upper Peninsula of Michigan? Historically, the UP's primary value proposition has been its prized role as the natural resource engine of an industrializing America. Yet global economic restructuring has mostly changed this position. The average United States voter is suburban or urban, and their knowledge of or belief in rural America's value proposition has declined as they prioritize urban and suburban needs (Parker et al., 2018; Stauber, 2001). In Michigan, as of 2017, 82% of residents reside in urban or suburban counties classified as metropolitan statistical areas, none of which are in the UP (Mack, 2018). UP residents constitute only 3% of the state's population in 2020 (U.S. Census Bureau, 2020). These demographic trends, along with lower peninsula and UP geographic separation, likely result in reduced state-level voter and legislative investment in UP issues and infrastructure, further challenging UP population growth.

The UP's capability to attract and recruit economic opportunities from the outside and grow entrepreneurship from the inside is improved with a clear, concise, and consistent value proposition for the peninsula. Marketing this value proposition downstate, making it easy for tourists to experience firsthand, and offering support and connection to those considering investment—via a start-up or relocation of home, business, or both—are all critical efforts for rebuilding the social contract and connection between the UP and the bulk of Michigan's population. Understanding tourists' perspectives of the UP's value proposition is key, as growth in tourism exposes downstate tourists (i.e., voters) to the uniqueness of the peninsula and can lead to amenity migration. In terms of retaining and attracting investment, initiatives that speak to specific aspects of the UP's value proposition and make connections among affinity groups (e.g., *Remote Workforce Keweenaw*, young professionals' networks, etc.) encourage retention and in-migration, and make continued or new investment in the UP's value proposition a safer bet for individuals and businesses.

Establishing the UP's rural-to-urban/suburban value proposition is not only essential to securing the public's investment via their vote, but is also critical to preserving what is treasured via proactive policies. For example, realizing the preservation value of the Upper Peninsula's extensive natural resources as *the* primary value proposition to the broader public now and into the future would mean creating economic development policies that protect, restore, and preserve natural amenities while stimulating the economy. This is tricky to do, but strong partnerships and collaborative regional planning can increase the chances of success. Just as the UP for decades guaranteed the populace the raw goods for industry, guaranteeing supply of what is now scarce in the United States (i.e., open space and wilderness, environmental amenities, outdoor recreation) ensures ongoing demand that not only generates jobs, but reinforces sustainable livelihoods, reinvests in the natural capital of the Upper Peninsula, and stabilizes and grows the UP population toward prosperous ends.

ENDNOTES

ⁱ We had originally proposed to use Twitter data to discover more recent county-to-county migration patterns 2013-2020. However, upon further investigation, this data proved unwieldy in both its construction and its limitations relative to the task at hand. A change in Twitter policy in 2015 (i.e., geolocation "off" as the default setting on mobile devices) coupled with the small population size of the Upper Peninsula made the dataset unreliable. Nevertheless, the IRS dataset exceeded our expectations in terms of volume and quality of data, and we feel confident that the origin and destination trends identified are solid.

ⁱⁱ Overall, our findings align with known laws of migration established by E.G. Ravenstein in 1885 and 1889 and reaffirmed often through the migration research of subsequent decades. Population trajectories are challenging to shift, especially on short time horizons, and they tend to change incrementally in one direction or another. Migration occurs in currents and counter-currents, the latter of which are often weaker than the former. People move to neighboring counties and urban areas in greater volume than they move far away. And finally, crisis brings about a slowing down of both in- and out-migration as people take time to assess the situation.

ⁱⁱⁱ See note ii above.

➤ **Urban-rural Amenity Migration**

As Americans increasingly migrated to rural areas (especially the American West) in the 1980s, amenity migration gained traction in scholarly investigation. When viewed through a macro-structure lens, this migration is increasingly connected to massive changes in the flow of global capital (Gosnell & Abrams, 2011). As domestic food/fiber production and forest/mineral extraction declined, rural economies suffered, populations shifted away from rural areas, and political power moved to suburbia (Stauber 2001), disenfranchising rural populations. Within this vacuum, amenity-rich rural spaces have been increasingly consumed in new ways by new peoples not for their resource potential, but for the lifestyle, the land, and the natural access those places afford.

AMENITY MIGRATION DEFINITION:
Urban-to-rural area migration for the purpose of access to the natural, social, or cultural amenities offered (Gosnell and Abrams, 2011).

At the other end of the scholarly spectrum, a humanist approach listens closely to individual migration accounts in which amenity migrants indicate high degrees of choice in their personal migration narratives. This approach positions these migrants as acting with full agency. Migrants eschew economic motivations, driven to own rural land by lifestyle concerns more so than economic returns (Kendra & Hull, 2005). They are pushed out by the ills of the city or the “stifling effects of suburbia” (Phillips 2004, as cited in Gosnell & Abrams, 2011; p. 308). They are drawn to an “idealized rural lifestyle” that they want to possess (Gosnell & Abrams, 2011; p. 309).

Benson and Osbaldiston (2016), in their comprehensive literature review of lifestyle migration, advise caution in overemphasizing individualized explanations, as choice does not arise without structures that privilege and constrain. “Simply put, recognizing the contexts and conditions within which individualized action and experience take place provides us with insights that contradict this presentation of lifestyle migrants as ideal, individualized subjects” (p. 413). Hoey (2005) informs this notion in an approach balancing the macro- and micro-perspectives of amenity migration, placing the middle-class migrant between “...expectations preserved in the prevailing notion of an American dream that promises upward mobility in exchange for hard work, on the one hand, and the present economic reality and uncertainties of restructuring and deindustrialization, on the other” (p. 588).

Knowing the influence of structural macro-forces on and the micro-level motivations of amenity migrants helps us to conceptualize this form of migration in terms of economic and community development impacts. Golding (2014) highlights that we cannot assume migrants’ origins are without sociocultural and environmental “push” factors. And when considering the “pull” of rural destinations, the presence of natural amenities and quality of life attributes in these locations connect closely to rural economic development potential. Indeed, as formerly robust economic development activities tied to resource extraction decline and reliance upon the service sector for growth increases, rural economic development and amenity migration are more intertwined.

➤ **Remote Work and Its Implications for Amenity Migration**

The capability to work remotely and the substantial increase in doing so during the pandemic, especially among the affluent white-collar workforce, impacts migration into rural, amenity-rich areas. Via a nationally representative survey conducted early in the pandemic, Brynjolfsson et al. (2020) found that 50% of employed people were working from home, and of those 35.2% were previously commuting. In a recent study of 4,502 US urban, suburban, and rural locations, Delventhal and Parkhomenko (2021) demonstrate weakening importance of distance between employers and employees coupled with increasing demand for residential real estate during the pandemic, especially in less dense suburban and rural locations. And Hoey et al. (2021) find that levels of remote work have permanently changed because of the pandemic, with workers expecting to triple their time working from home as compared to pre-pandemic levels. Predicted impacts of this change include increased productivity, widening inequality, and migration farther from the urban core. From the perspective of employers, Althoff et al. (2020) highlight the potential for firms to move out of high-cost urban environments should they find that post-pandemic world cities hold less productive capacity due to their employees’ abilities to work remotely. Together, employee and firm may bring about significant changes to where and how large numbers of Americans work. For those with income and flexibility, the decision of where to live thus becomes untethered to place of employment, potentially resulting in amenity migration.

APPENDIX B

2010-2020 POPULATION CHANGE*

BY MICHIGAN COUNTY

[WITH UP COUNTIES HIGHLIGHTED IN RED]

Source: U.S. Census Bureau, Decennial Census 2010, 2020

County	Percent Change	Absolute Change
Ottawa	12.28%	32,399
Grand Traverse	9.49%	8,252
Kent	9.19%	55,352
Allegan	8.16%	9,094
Washtenaw	7.97%	27,467
Livingston	7.13%	12,899
Oakland	5.99%	72,033
Barry	5.49%	3,250
Montcalm	5.17%	3,272
Clinton	4.97%	3,746
Lake	4.83%	557
Macomb	4.78%	40,239
Kalkaska	4.58%	786
Ionia	4.54%	2,899
Kalamazoo	4.53%	11,339
Emmet	4.34%	1,418
Otsego	3.84%	927
Newaygo	3.13%	1,518
Wexford	2.87%	938
Leelanau	2.73%	593
Benzie	2.54%	445
Muskegon	2.11%	3,636
Houghton	2.00%	733
Monroe	1.83%	2,788
Ingham	1.43%	4,005
Missaukee	1.37%	203
Eaton	1.31%	1,416
Manistee	1.21%	299
Mason	1.21%	347
Charlevoix	0.40%	105
Lapeer	0.34%	300
Oceana	0.33%	89
Jackson	0.07%	118

> 0%
Population
Change

County	Percent Change	Absolute Change
Midland	-0.16%	-135
Clare	-0.23%	-70
Delta	-0.45%	-166
Lenawee	-0.47%	-469
St. Joseph	-0.58%	-356
Antrim	-0.63%	-149
Dickinson	-0.84%	-221
Branch	-0.85%	-386
Van Buren	-0.88%	-671
Gladwin	-1.19%	-306
Cass	-1.35%	-704
Calhoun	-1.35%	-1,836
Wayne	-1.48%	-27,023
Iron	-1.57%	-186
Marquette	-1.58%	-1,060
Berrien	-1.59%	-2,497
St. Clair	-1.63%	-2,657
Gratiot	-1.68%	-715
Hillsdale	-2.02%	-942
Cheboygan	-2.19%	-573
Menominee	-2.19%	-527
Alpena	-2.33%	-691
Mackinac	-2.51%	-279
Iosco	-2.51%	-650
Osceola	-2.71%	-637
Presque Isle	-2.95%	-394
Shiawassee	-3.62%	-2,554
Bay	-3.63%	-3,915
Roscommon	-4.05%	-990
Ogemaw	-4.28%	-929
Tuscola	-4.32%	-2,406
Chippewa	-4.50%	-1,735
Genesee	-4.60%	-19,579
Oscoda	-4.87%	-421
Saginaw	-5.02%	-10,045
Keweenaw	-5.10%	-110
Schoolcraft	-5.16%	-438
Huron	-5.17%	-1,711
Arenac	-5.64%	-897
Sanilac	-5.81%	-2,503
Montmorency	-6.27%	-612
Alcona	-7.08%	-775
Mecosta	-7.21%	-3,084
Luce*	-7.62%	-505
Crawford	-7.72%	-1,086
Alger	-7.91%	-759
Baraga	-7.92%	-702
Isabella	-8.42%	-5,917
Gogebic	-12.46%	-2,047
Ontonagon	-14.22%	-964

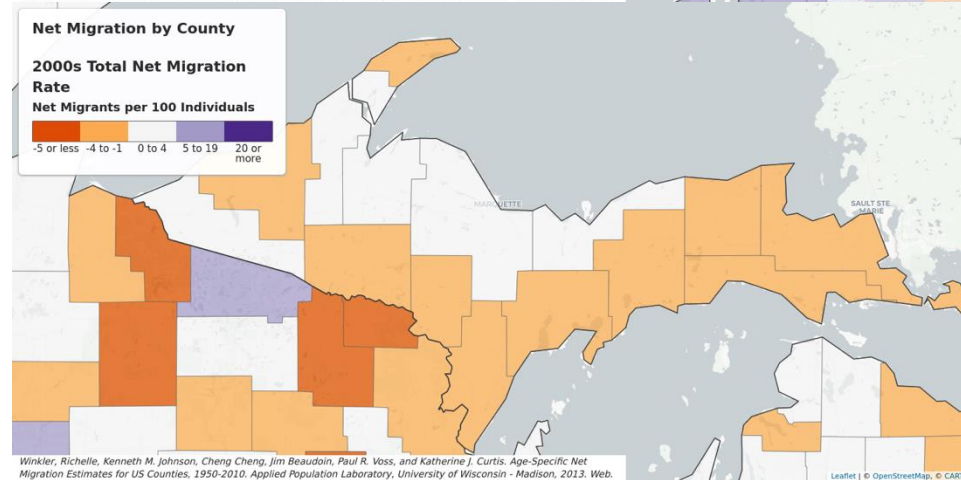
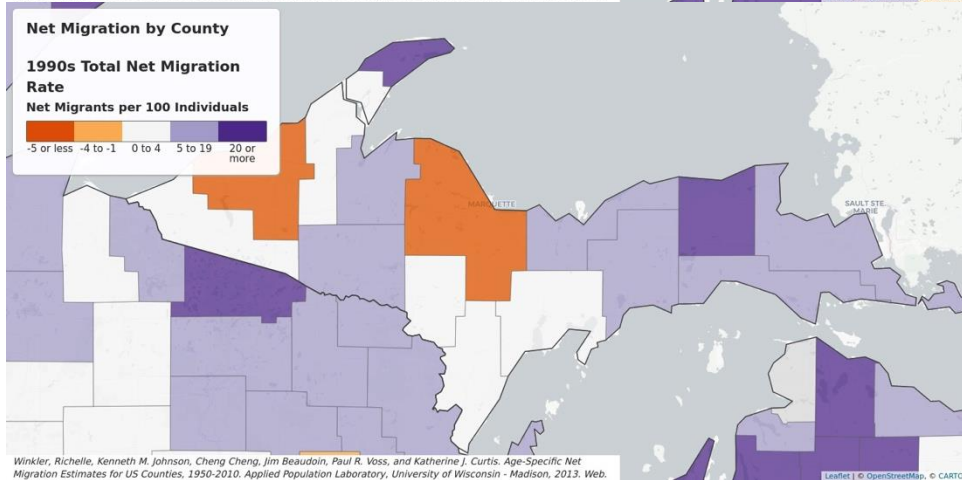
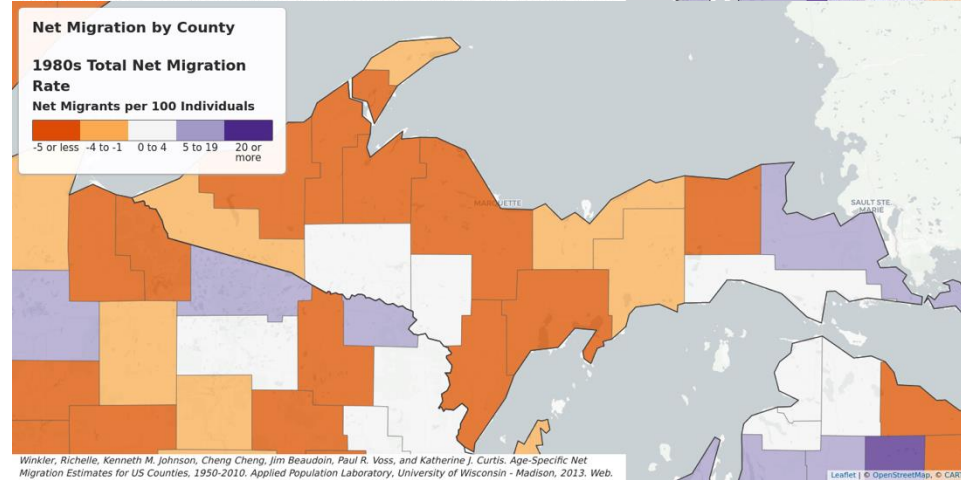
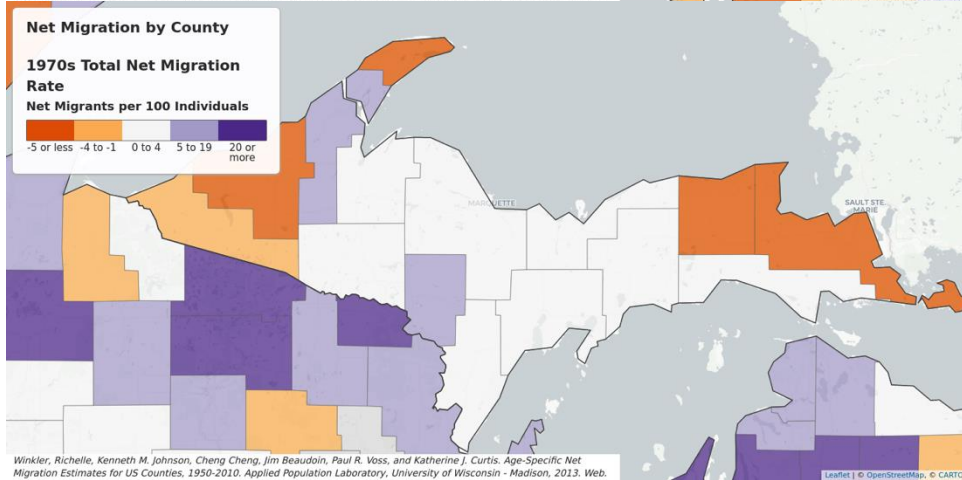
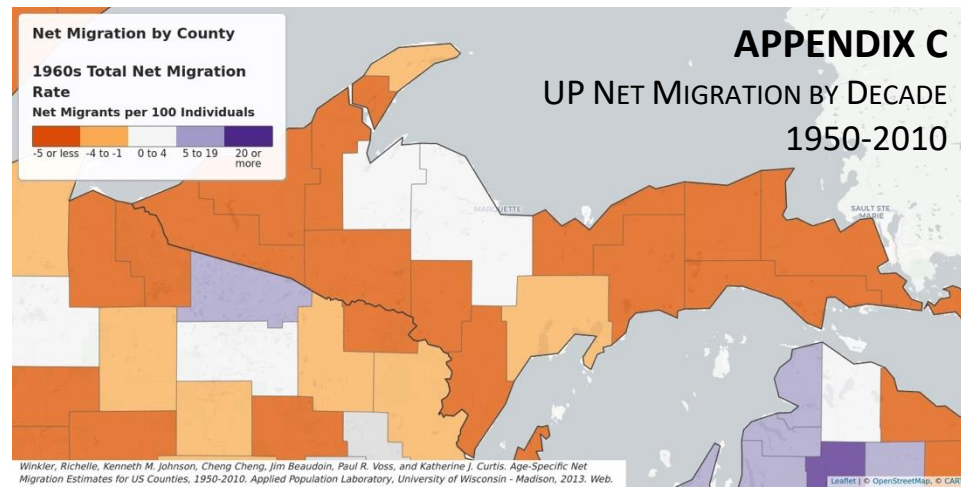
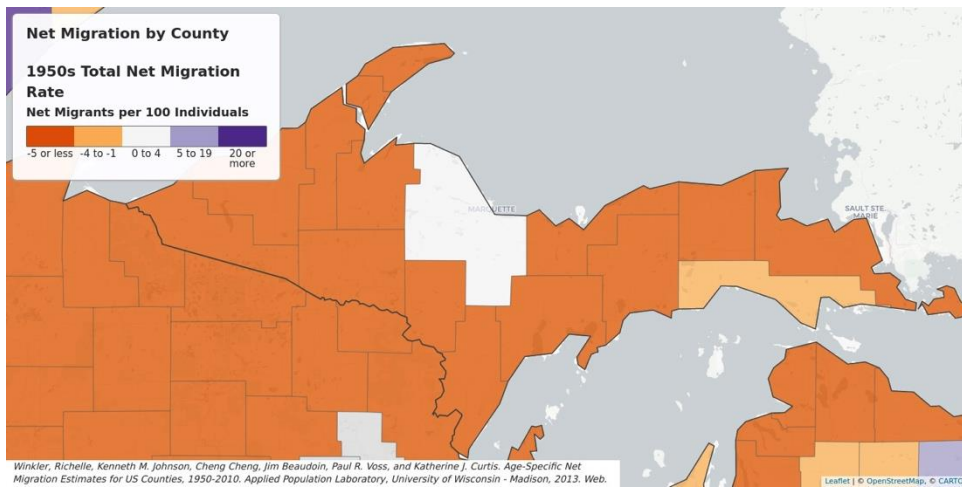
< 0%
Population
Change

*Census 2020 missed counting residents of Newberry Correctional Facility in Luce County, and this error has not yet been corrected. For this reason, we do not report Decennial Census 2020 data for Luce County, but rather rely on population estimates from the U.S. Census Bureau's Population Estimates Program for 2020 for Luce County only.

APPENDIX C

UP NET MIGRATION BY DECADE

1950-2010

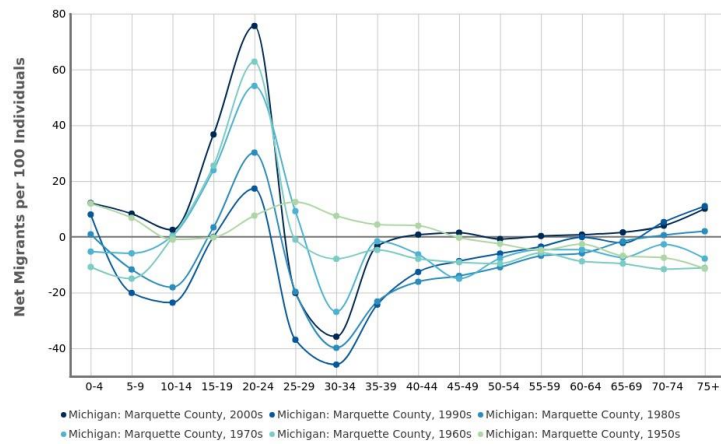


APPENDIX D

NET MIGRATION BY AGE FOR THE UPPER PENINSULA'S FIVE MOST-POPULOUS COUNTIES 1950-2010

Marquette County

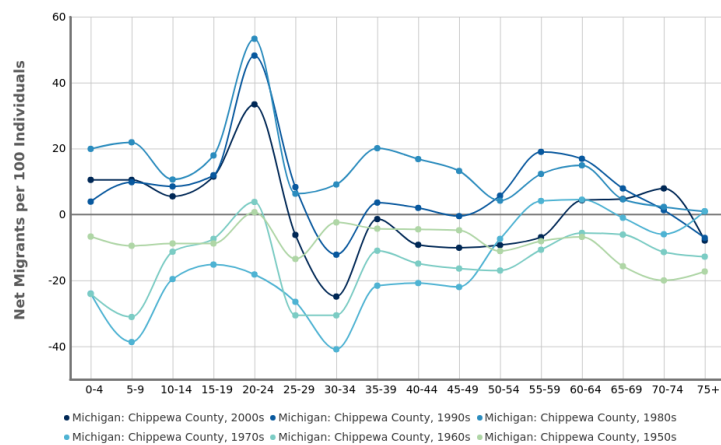
Net Migration by Age



Winkler, Richelle, Kenneth M. Johnson, Cheng Cheng, Jim Beaudoin, Paul R. Voss, and Katherine J. Curtis. Age-Specific Net Migration Estimates for US Counties, 1950-2010. Applied Population Laboratory, University of Wisconsin - Madison, 2013. Web.

Chippewa County

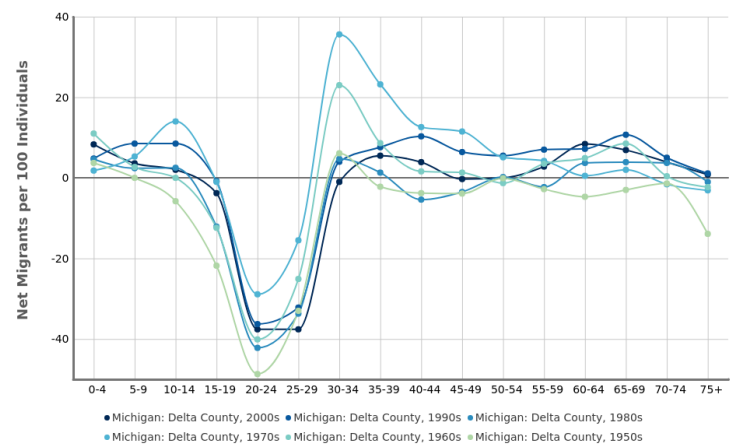
Net Migration by Age



Winkler, Richelle, Kenneth M. Johnson, Cheng Cheng, Jim Beaudoin, Paul R. Voss, and Katherine J. Curtis. Age-Specific Net Migration Estimates for US Counties, 1950-2010. Applied Population Laboratory, University of Wisconsin - Madison, 2013. Web.

Delta County

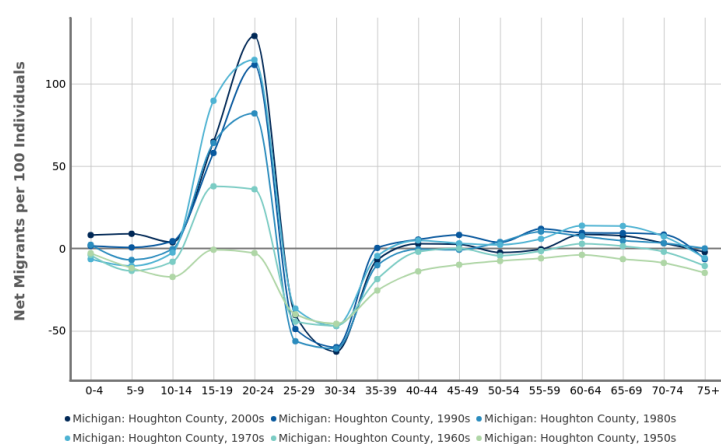
Net Migration by Age



Winkler, Richelle, Kenneth M. Johnson, Cheng Cheng, Jim Beaudoin, Paul R. Voss, and Katherine J. Curtis. Age-Specific Net Migration Estimates for US Counties, 1950-2010. Applied Population Laboratory, University of Wisconsin - Madison, 2013. Web.

Houghton County

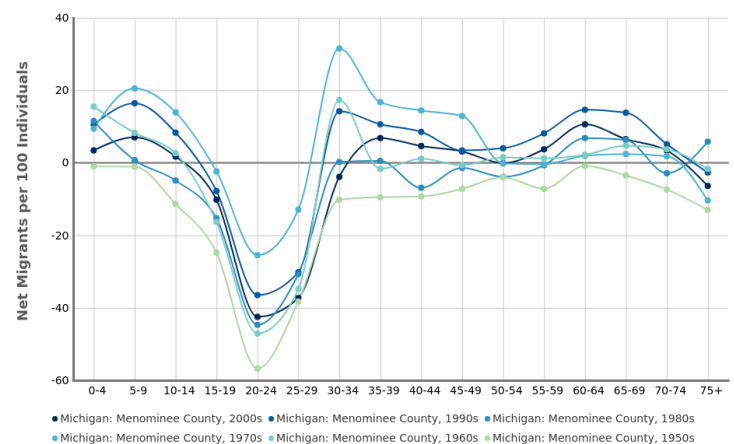
Net Migration by Age



Winkler, Richelle, Kenneth M. Johnson, Cheng Cheng, Jim Beaudoin, Paul R. Voss, and Katherine J. Curtis. Age-Specific Net Migration Estimates for US Counties, 1950-2010. Applied Population Laboratory, University of Wisconsin - Madison, 2013. Web.

Menominee County

Net Migration by Age



Winkler, Richelle, Kenneth M. Johnson, Cheng Cheng, Jim Beaudoin, Paul R. Voss, and Katherine J. Curtis. Age-Specific Net Migration Estimates for US Counties, 1950-2010. Applied Population Laboratory, University of Wisconsin - Madison, 2013. Web.

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