

FINAL Regional 2050 Population and Employment Forecasts

Total Transportation Policy Committee

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2024

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MARC is preparing long-range population and employment forecasts needed to update the Connected KC 2050.

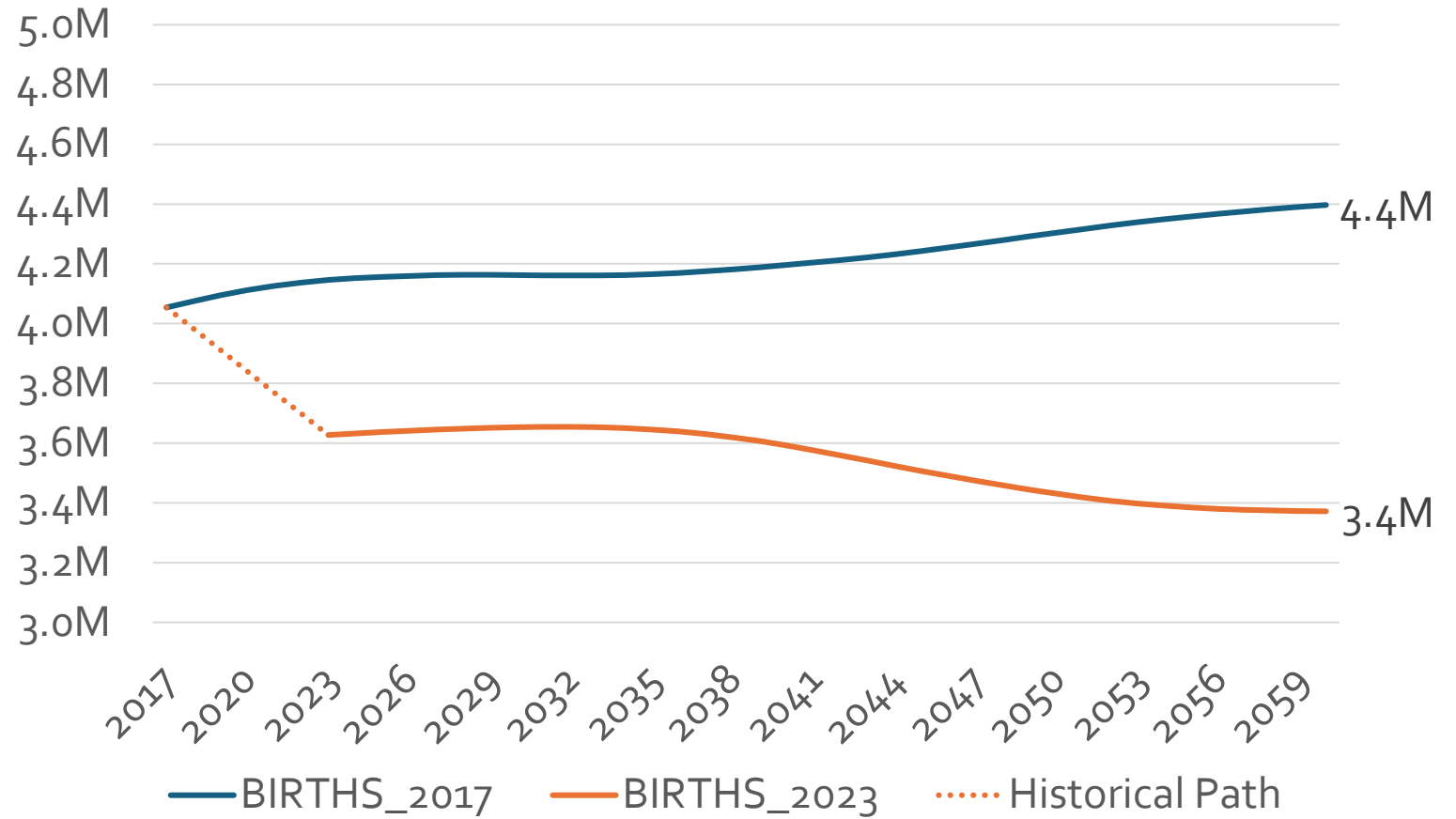
- A two-step process is used:
 1. First forecast how fast the entire region will grow between now and 2050 using the REMI model. This establishes the total number of people and jobs that our future transportation system will need to serve.
 2. Then distribute that growth to communities and neighborhoods using small areas like census tracts and transportation zones using the UrbanSim model
- We lock in the totals first to bound the discussions of how much more each community can be expected grow over the next 25 years.
- Both steps are overseen by the Technical Forecast Committee, comprised mainly of local government planners from around the region.

Control Total Forecasts

- Regional Forecast: REMI
 - From Regional Economic Models, Inc
 - Examines how the regional economy has competed against the rest of the nation for market share at the level of 70 industries
- **This means it requires a national forecast as input into the regional forecast**
 - U.S. Census Bureau for population forecasts
 - U.S. Bureau of Labor Statistics for employment forecasts
- Used by State economic development agencies and MPOs around the country.
 - Model is updated annually
 - MARC has used it since about 1988

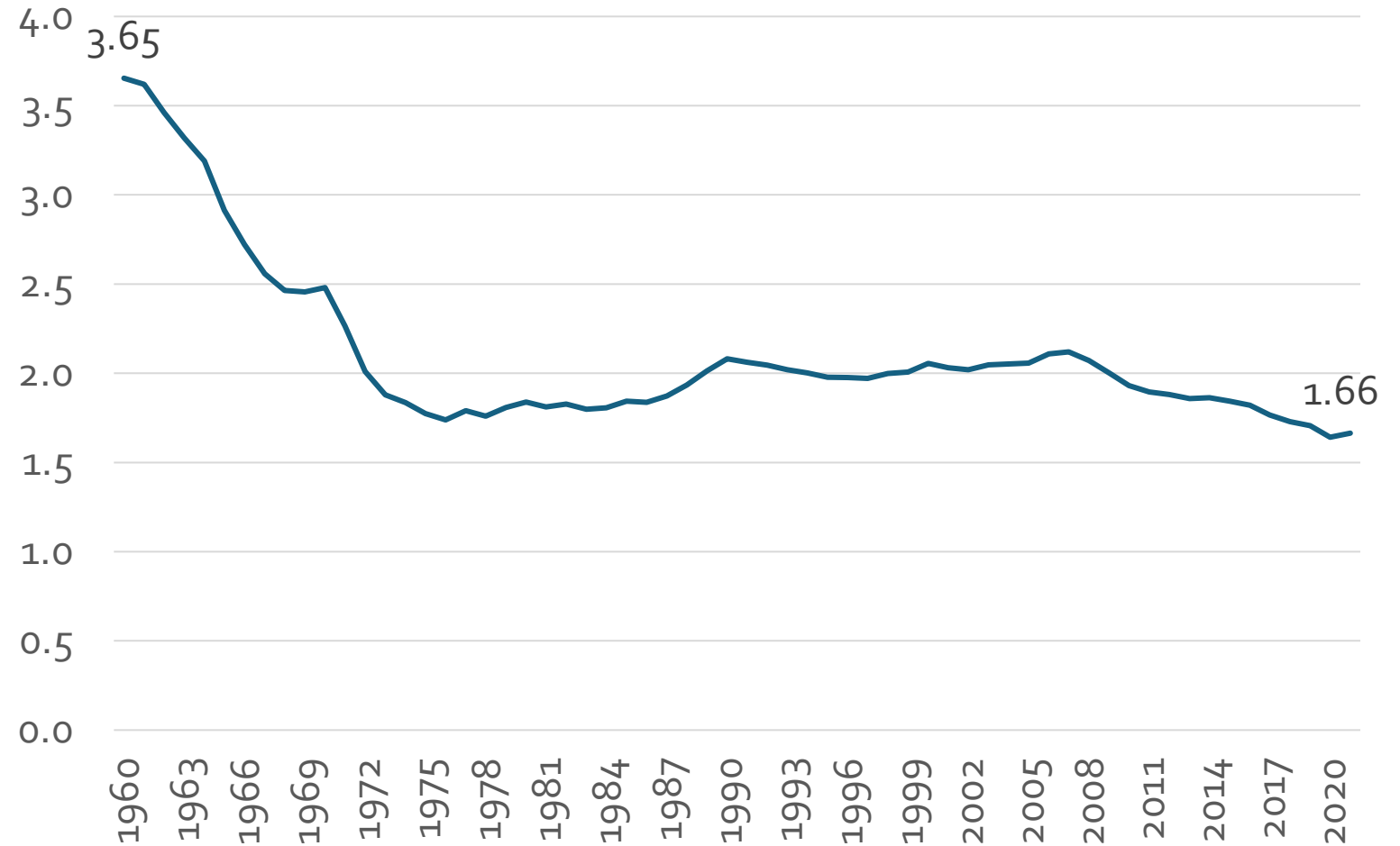
The latest Census Bureau population forecasts significantly lowered forecasts for U.S. population growth

U.S. Population Projection Comparison, 2017 vs. 2023
Births



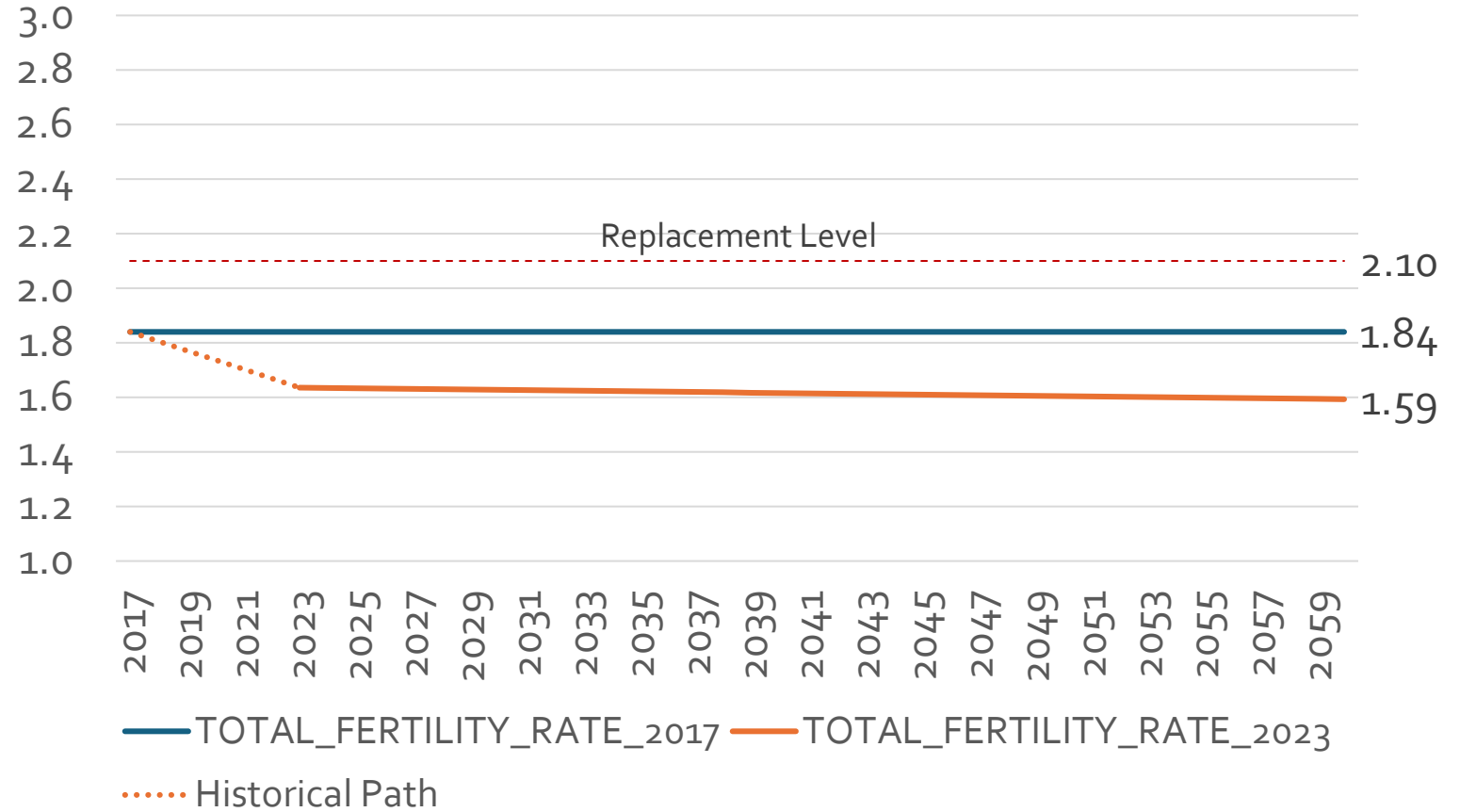
Mainly because of declining fertility. As late as 2007, U.S. fertility rates were at the replacement level. But in 2008, the Great Recession began and fertility rates started to decline. Unexpectedly, they continued to decline even as the economy rebounded.

U.S. Total Fertility Rate



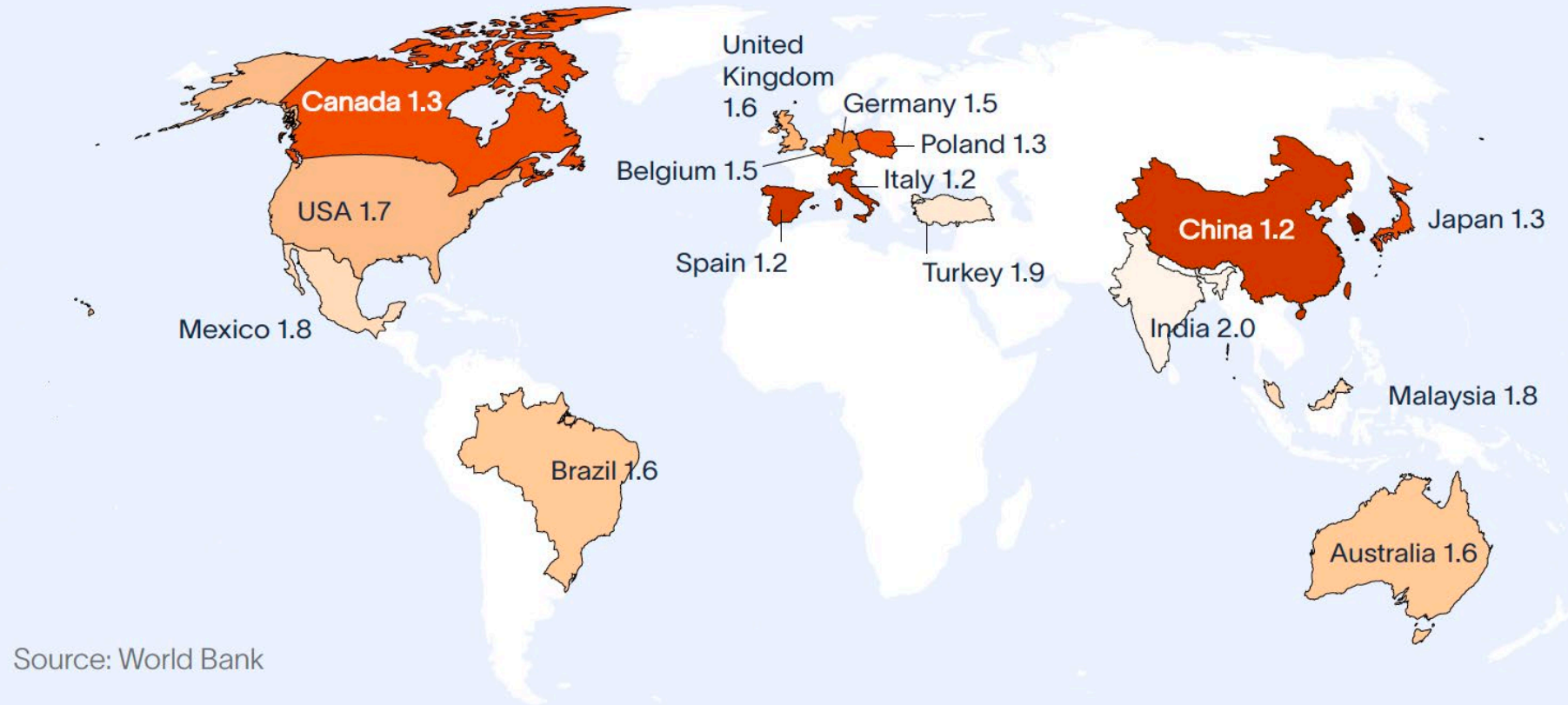
As a result, the 2023 forecast assumes significantly lower total fertility than in 2017. But both are well below the level needed to keep population stable, making population growth increasingly reliant upon immigration.

U.S. Population Projection Comparison, 2017 vs. 2023
Total Fertility Rate (Lifetime births per woman)



Many of the world's biggest economies face below-replacement birth rates.

Birth Rates By Select Countries (Replacement Rate: 2.1)



Source: World Bank

Declining fertility rates are affecting most industrialized nations.

Assumptions
carried into the KC
DRAFT forecast:

- Birth rates: Census Bureau
- Survival Rates: Census Bureau
- International Migration: Congressional Budget Office.
- Employment growth rate: Bureau of Labor Statistics (*0.3% per year*).

These FINAL forecasts take into account:

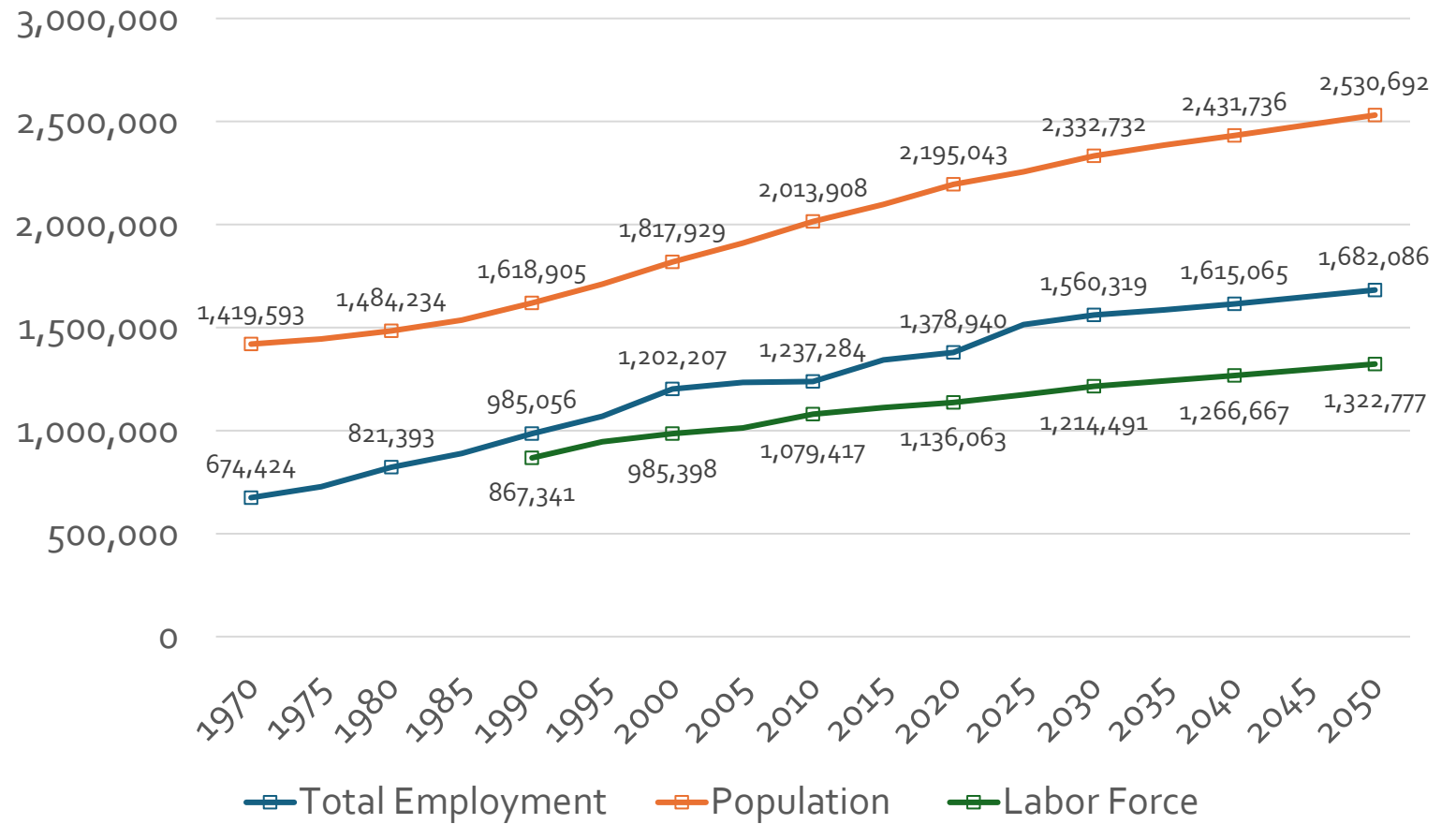
- New national forecasts of population and employment showing a labor-force constrained economy.
- Panasonic plant adds an entirely new manufacturing industry to the region
- Increasing temperatures changes migration patterns with KC modestly benefiting
- On-shoring, or reduced off-shoring, may increase employment in critical manufacturing sectors.
- The conversion of the KC MSA forecast from REMI to a MARC Region forecast for use in MARC's travel demand models.

Forecast results

Employment growth is constrained to be no more than the growth rate of the labor force.

What is driving lower labor force growth?

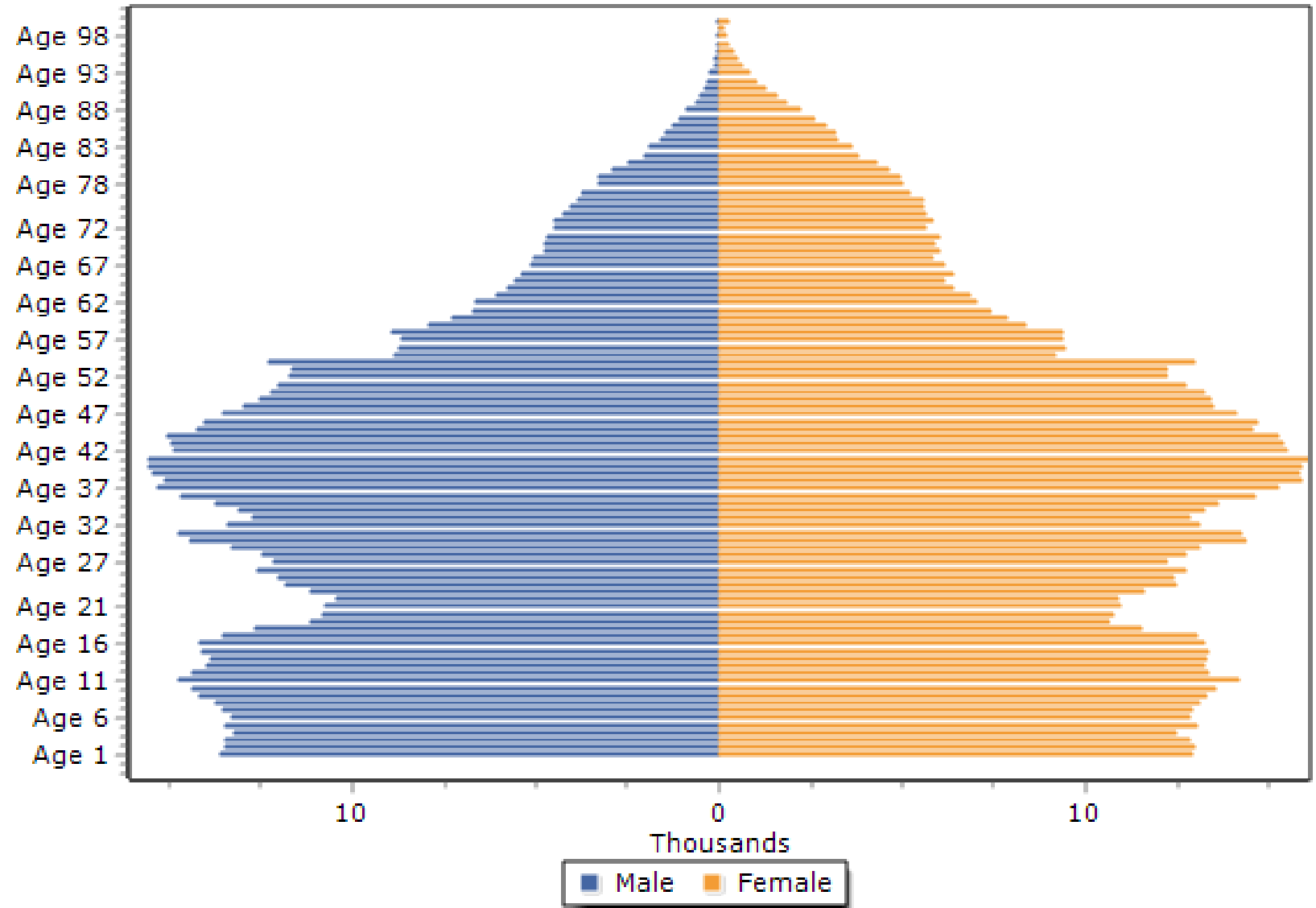
KC MSA Population, Employment, and Labor Force 1970 - 2050



The population is growing older, fast. After the age of 55, labor force participation drops quickly.

2001

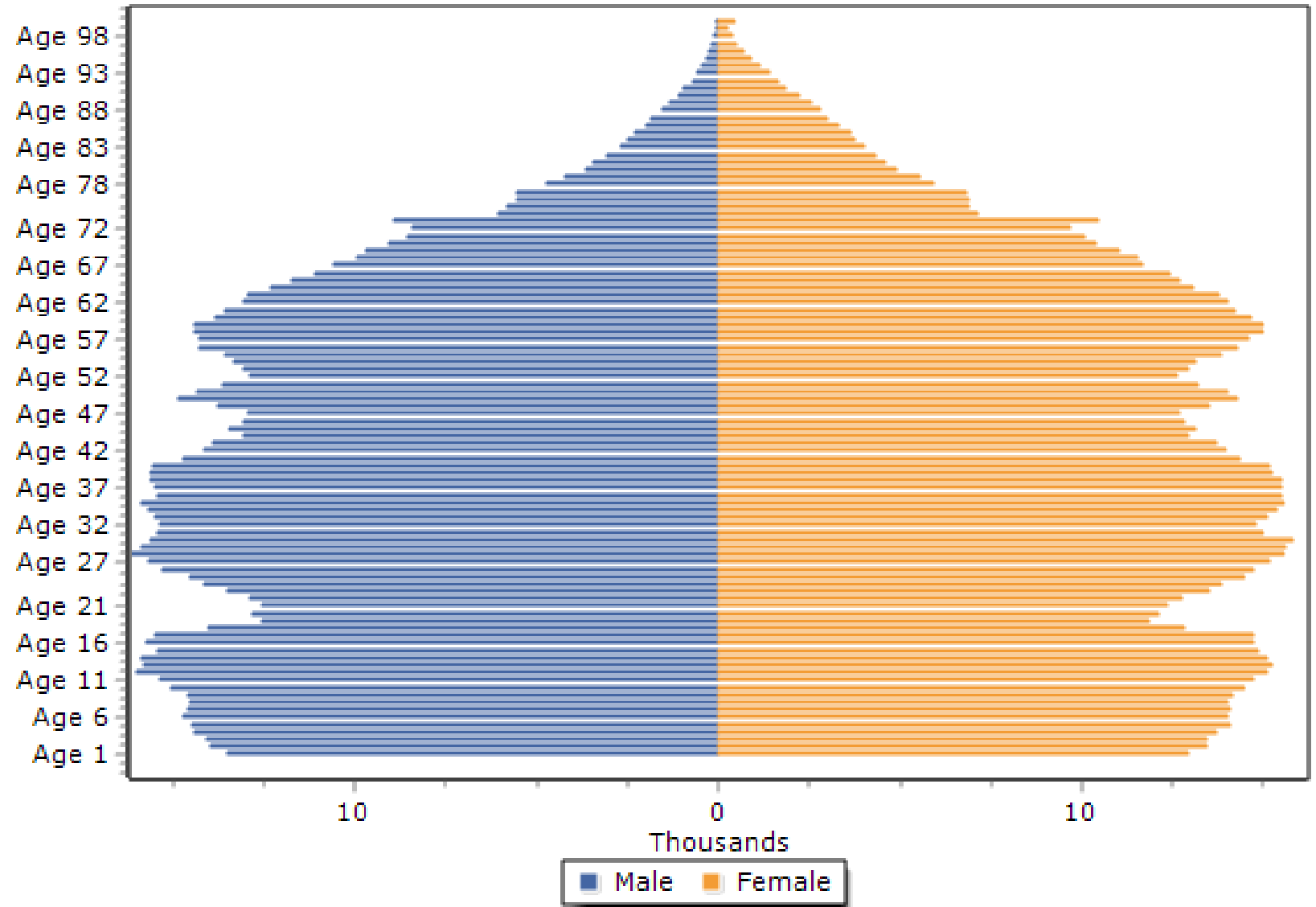
Population 16 and over that is 55+ = 26%



The population is growing older, fast. After the age of 55, labor force participation drops quickly.

2020

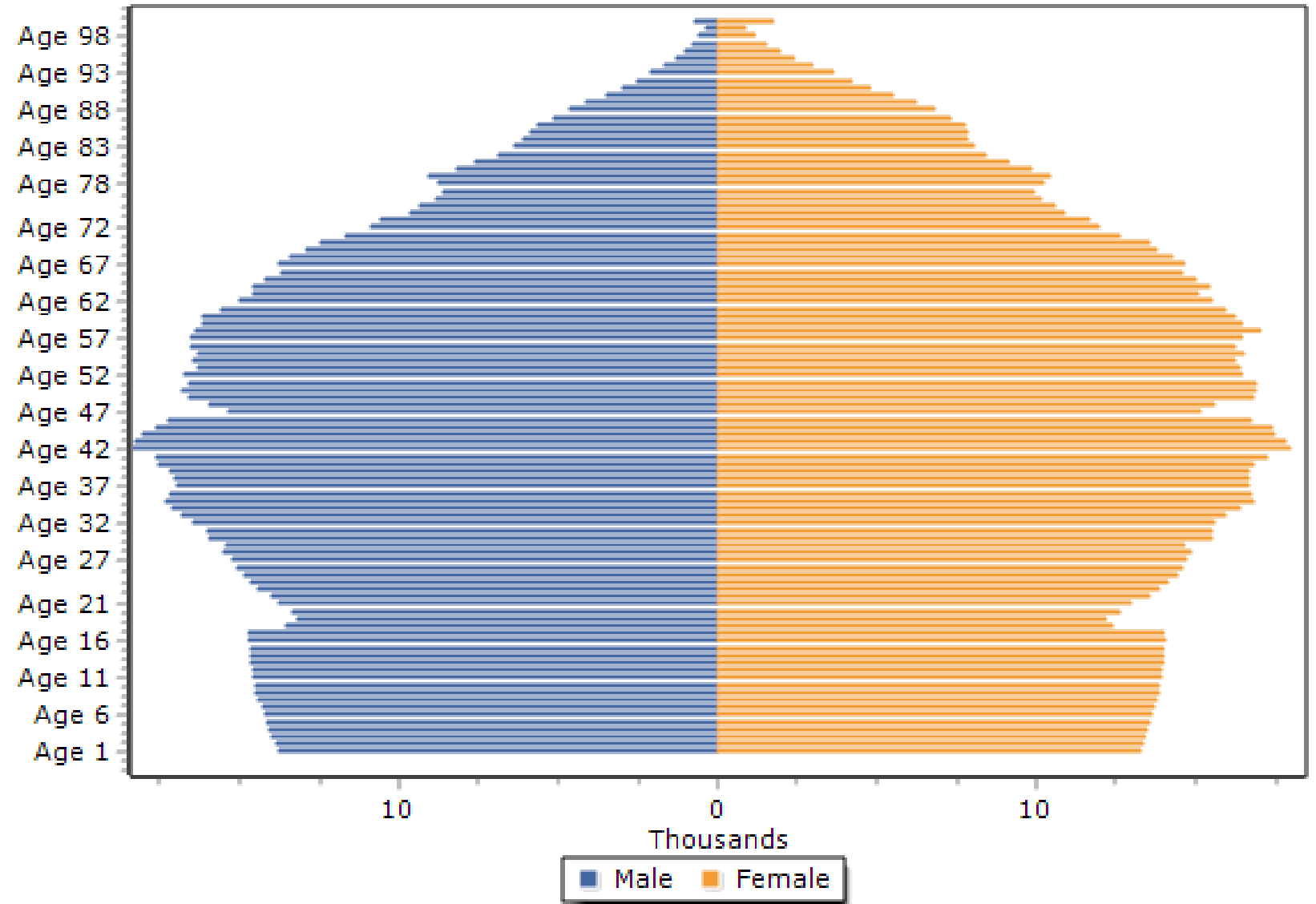
Population 15 and over that is 55+ = 35%



The population is growing older, fast. After the age of 55, labor force participation drops quickly.

2050

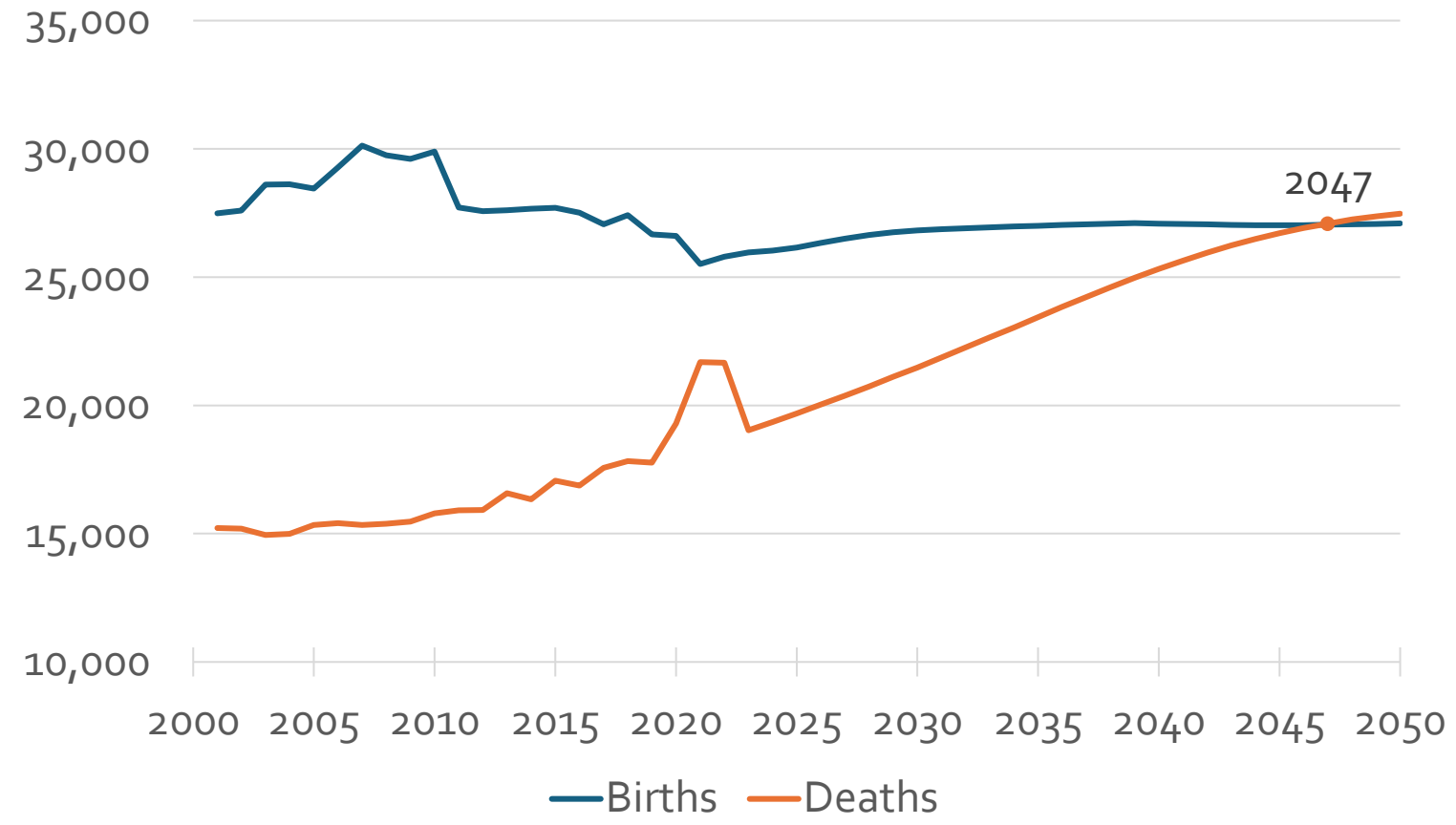
Population 15 and over that is 55+ = 40%



Births remain stable, but deaths do not due to aging of the population.

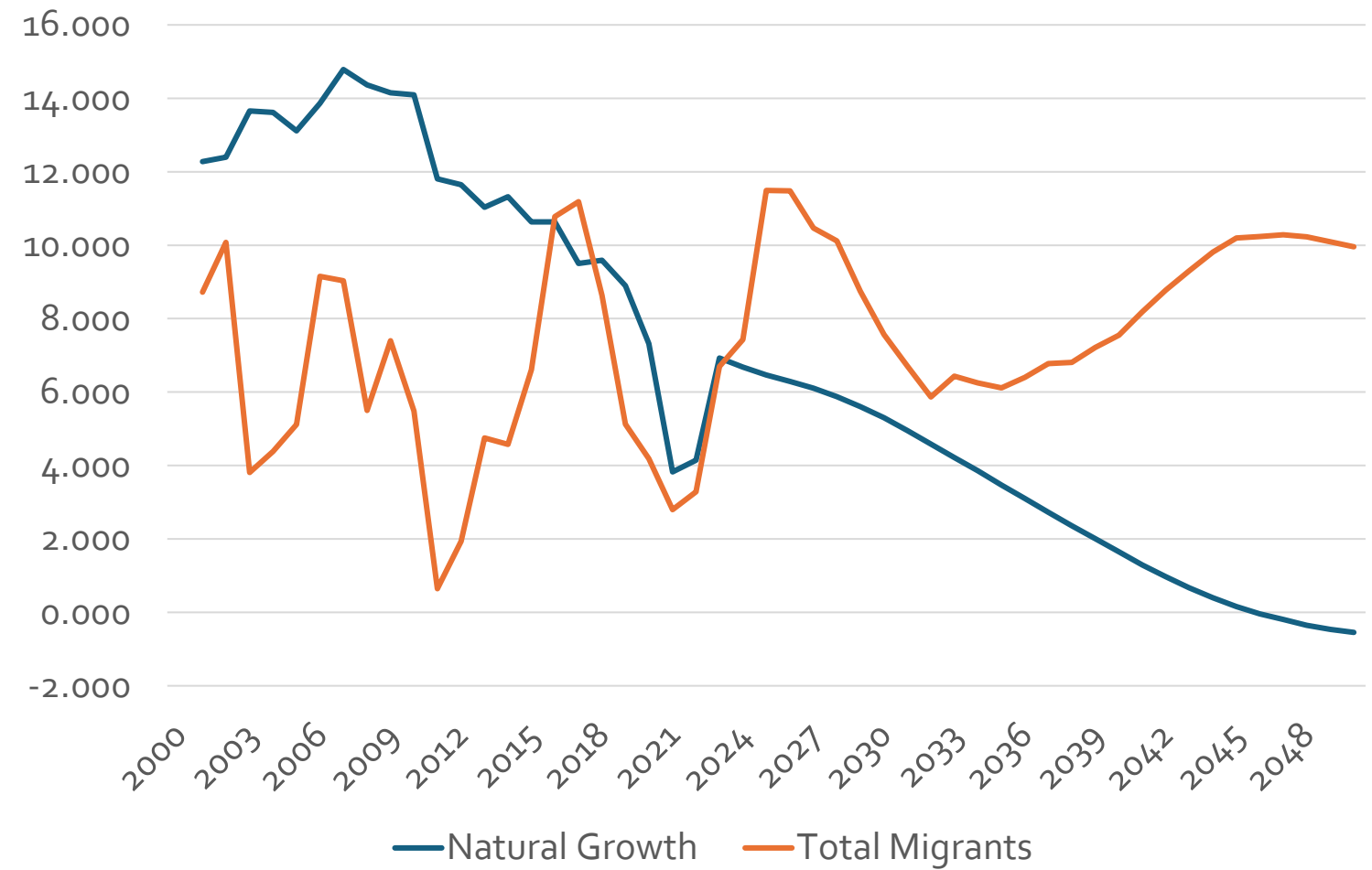
The large but temporary spike in deaths between 2020 and 2022 above what would be expected from trends is the 7,000 to 10,000 excess deaths caused during the COVID-19 pandemic.

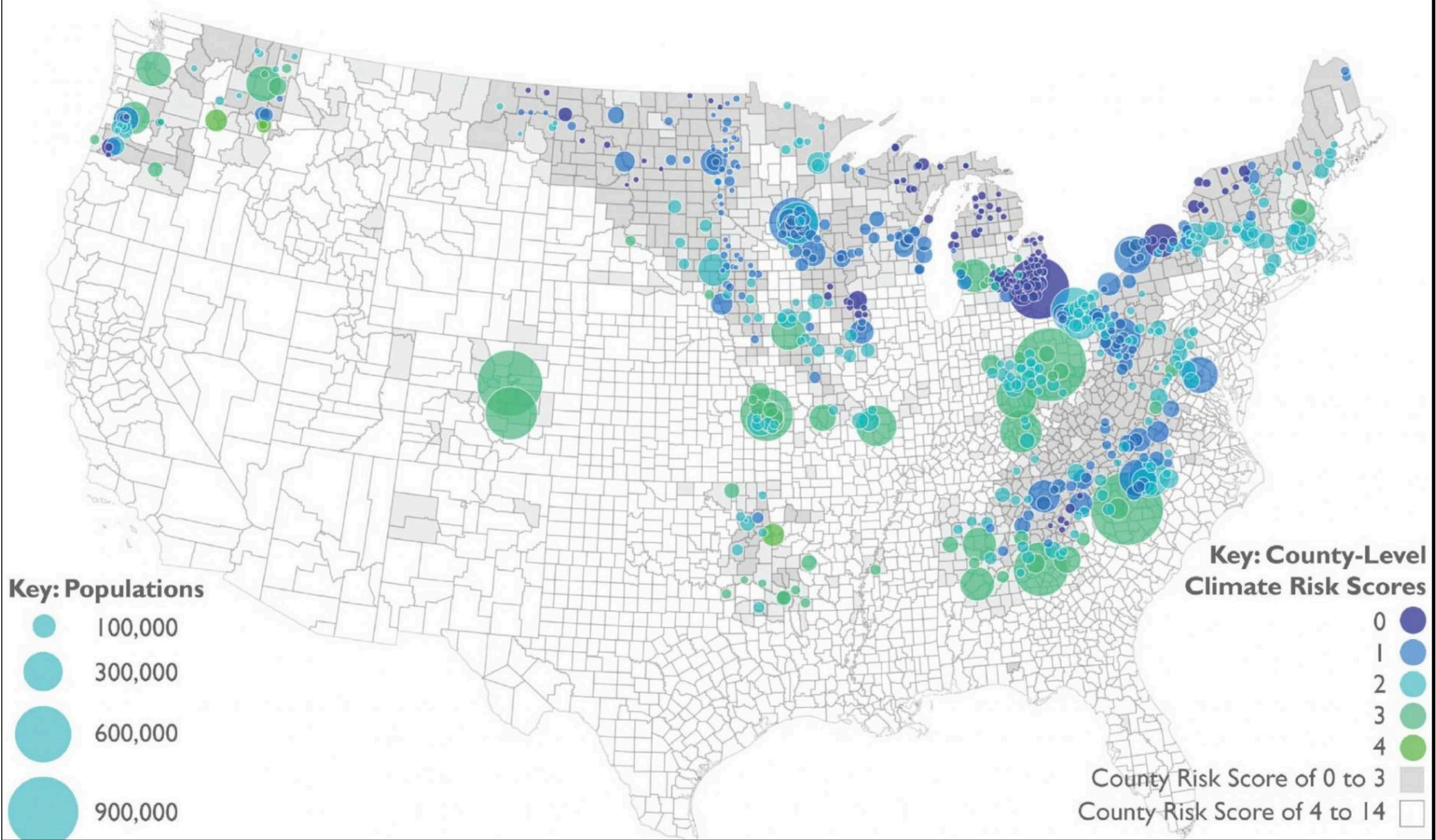
KC MSA Births and Deaths 2001-2050



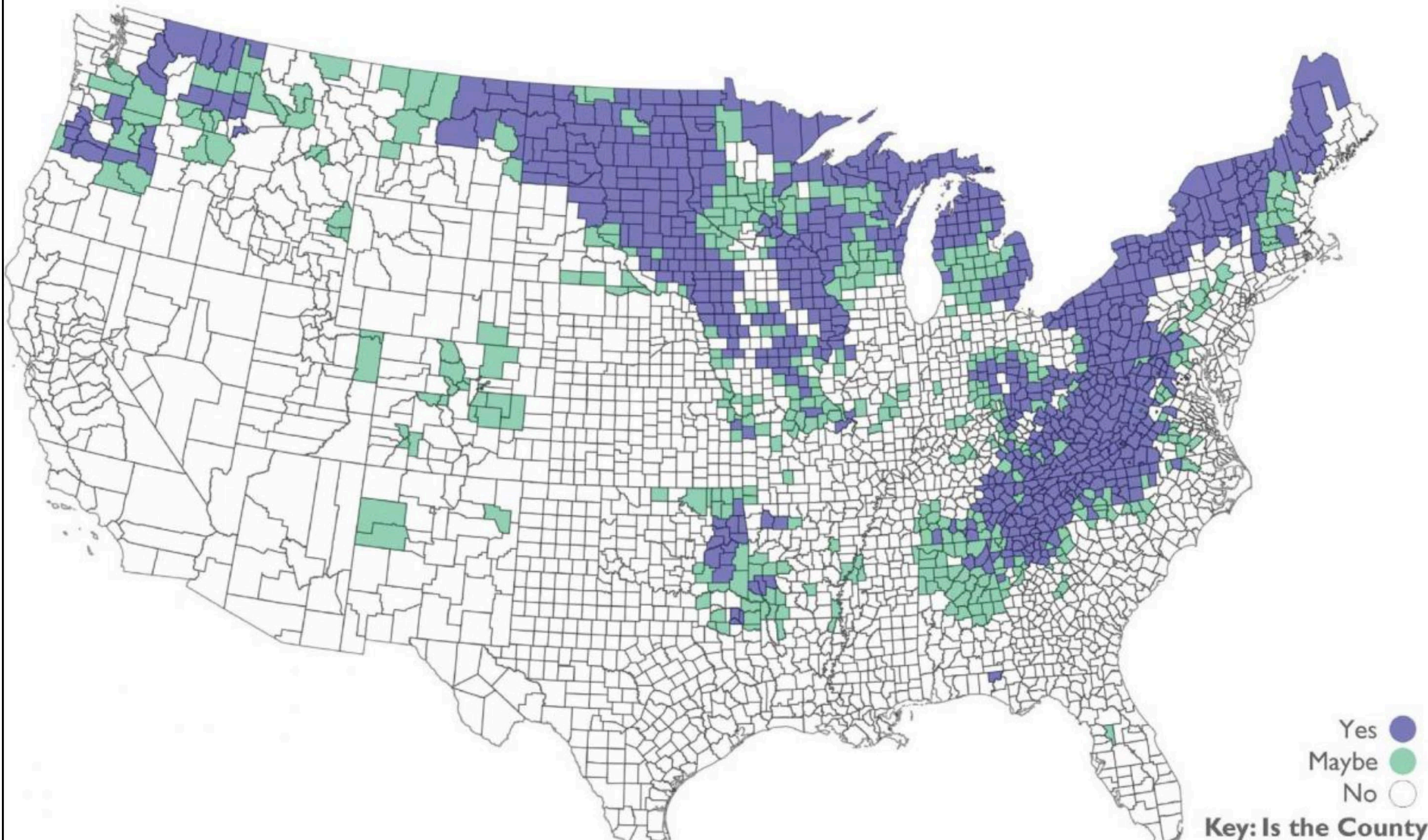
Net migration accounts for most of the population growth in the last half of the forecast period

Sources of Population Growth





Climate receiver places in the US. Source: Place Initiative.

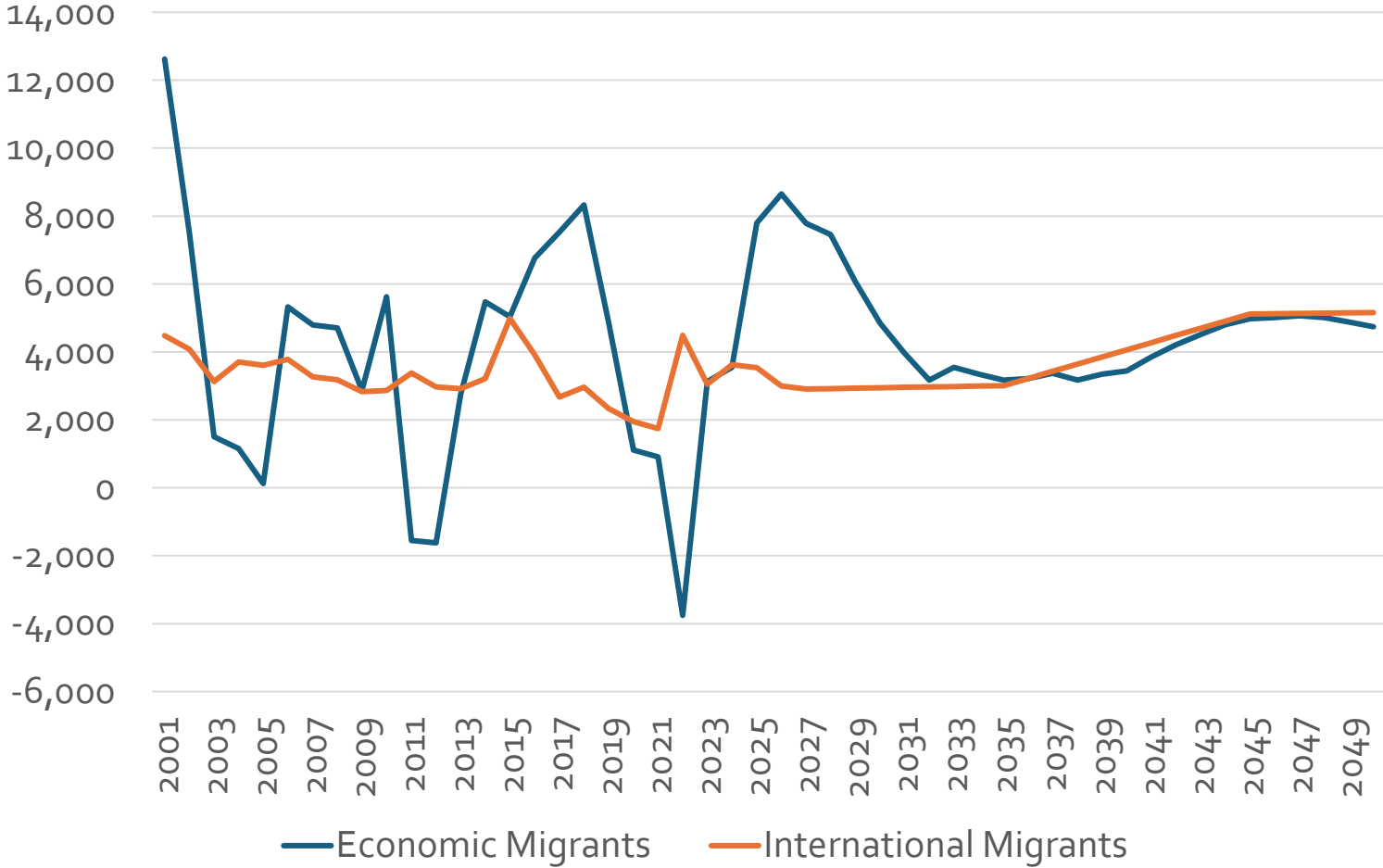


Climate receiver counties. Source: Place Initiative.

Key: Is the County
Receiving Geography?

Net Migration increases in the last half of the projection period as outmigration to the sunbelt slows.

Economic and International Net Migration

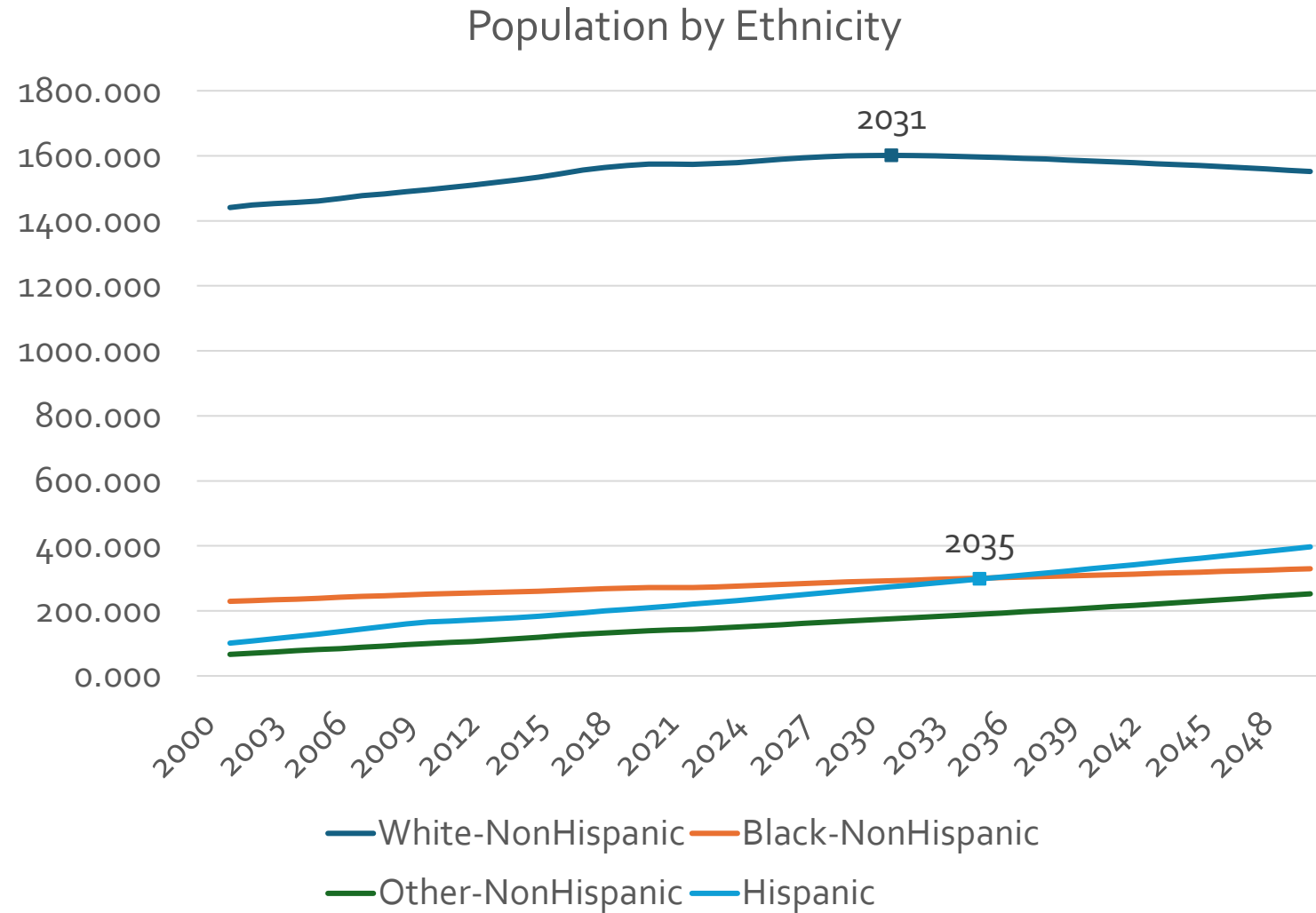


Conversion to MARC Region Population and Households

- Convert MSA population by age and race/ethnicity to households using household headship rate forecasts from Harvard's Joint Center for Housing Studies
- Assume all 14-county MSA population and household growth occurs within the 9-county MARC Region.
 - The rural counties have historically grown little overall, experiencing periods of decline and growth with little net change
- Assume group quarters populations remain constant.
- Calculate household population as total population minus group quarters population

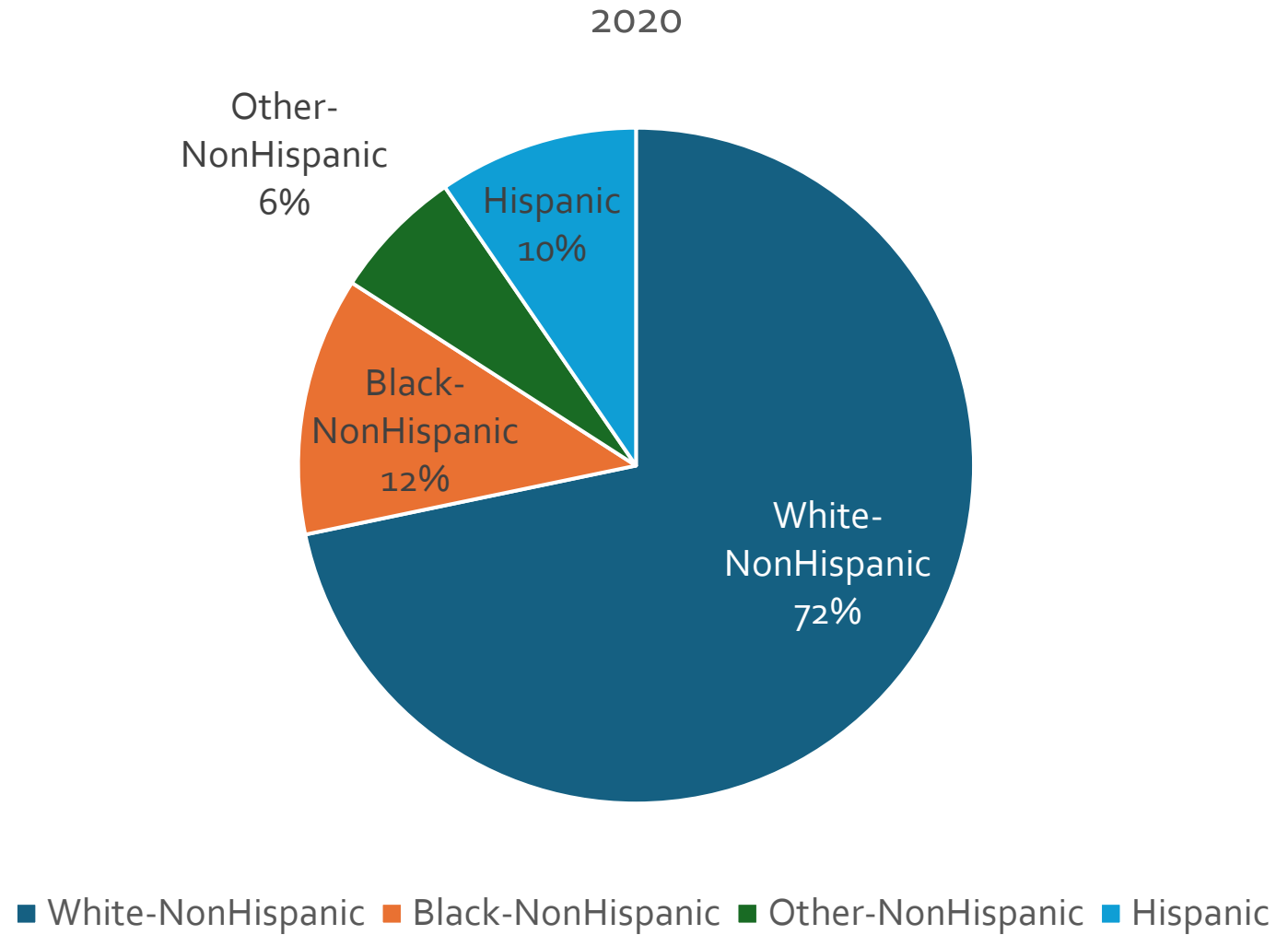
We also will have a more diverse population

Population trends, 2001-2050, by race/ethnicity



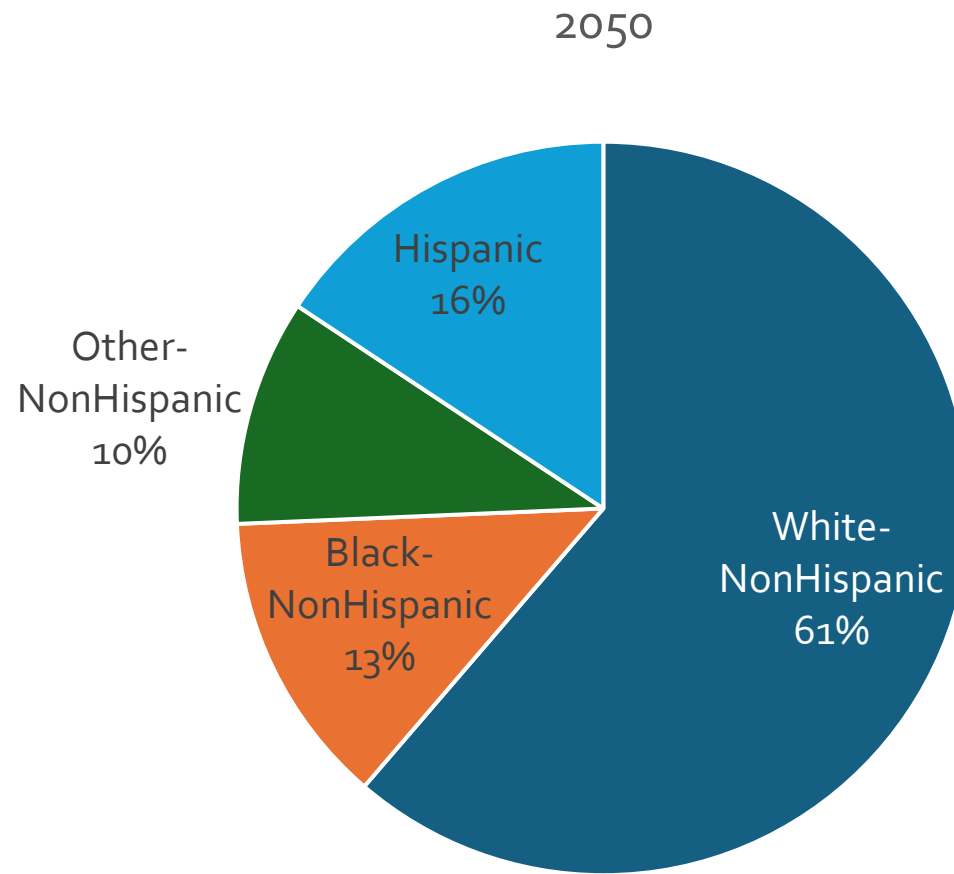
We also will have a more diverse population

2020 Population Distribution by race/ethnicity



We also will have a more diverse population

2050 Population Distribution by race/ethnicity



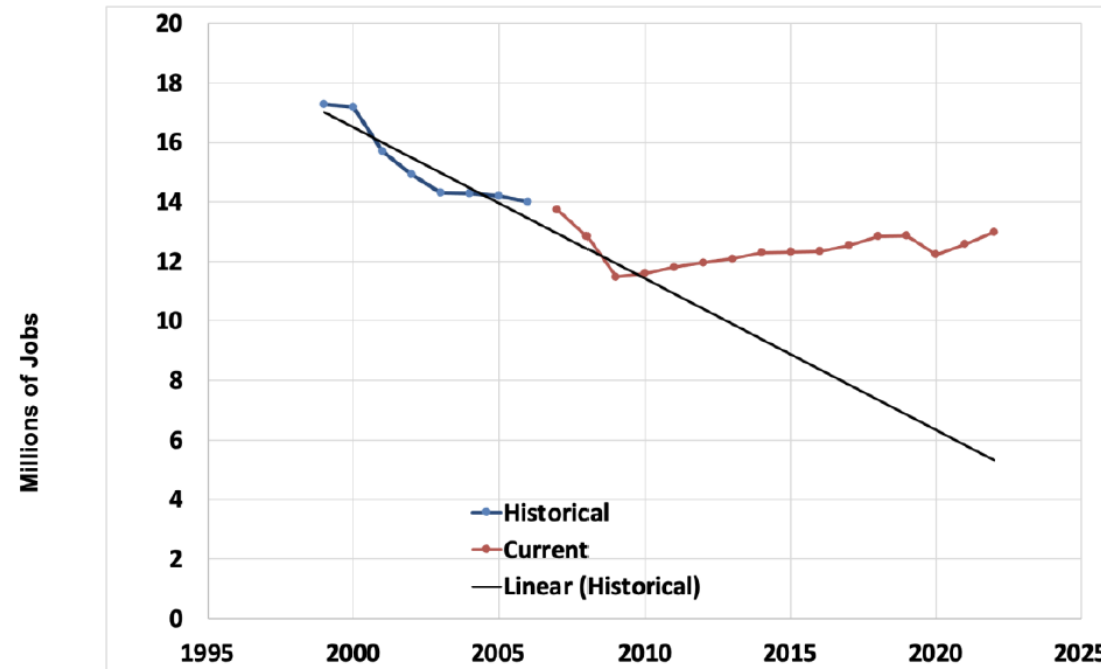
■ White-NonHispanic ■ Black-NonHispanic ■ Other-NonHispanic ■ Hispanic

MARC Region Population and Households Forecast

That household size declines means areas where housing units remain stable will see slight population decreases.

MARC 9-County Region	2020 Census	2030	2040	2050	Change, 2020-2050
Total Population	2,103,419	2,244,005	2,348,648	2,453,637	350,218
GQ Population	31,107	31,107	31,107	31,107	0
Household Population	2,072,312	2,212,898	2,317,541	2,422,530	350,218
Households	833,443	922,780	989,622	1,040,303	206,860
Persons per household	2.49	2.40	2.34	2.33	-0.16

BLS Manufacturing Employment



Source: BLS end-of-year data, Reshoring Initiative calculation

Reshoring Initiative | www.reshorenow.org | 847 867 1144 | info@reshorenow.org

Reshoring assumption

- Manufacturing employment was showing a decline post-2030.
- This is not consistent with recent trends and policy actions
- Input into REMI as a modest, 0.25% per year increase in its baseline growth rate for industries in this sector.

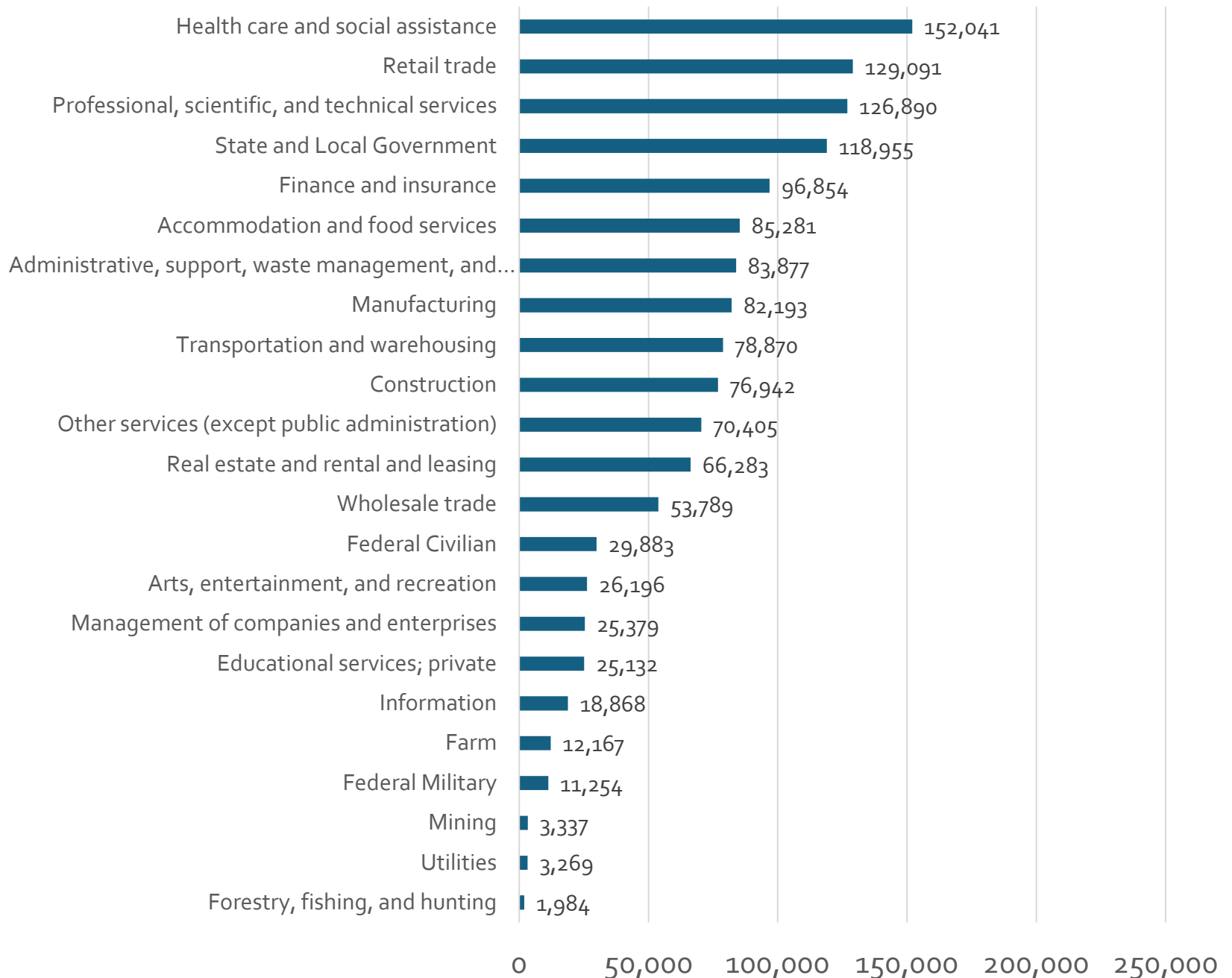
Reshoring assumption impact

	Manufacturing Employment Comparison				
	2020	2030	2040	2050	2030-2050
Prior version	82,193	94,892	93,882	94,438	-454
w/reshoring	82,193	96,106	96,730	98,926	2,819
Difference	0	1,214	2,848	4,488	3,273

Additionally, assumed Panasonic plant adds 4,000 jobs in 2025, expanding to 8,000 by 2030.

Current industry distribution of employment

2020 Employment by Industry



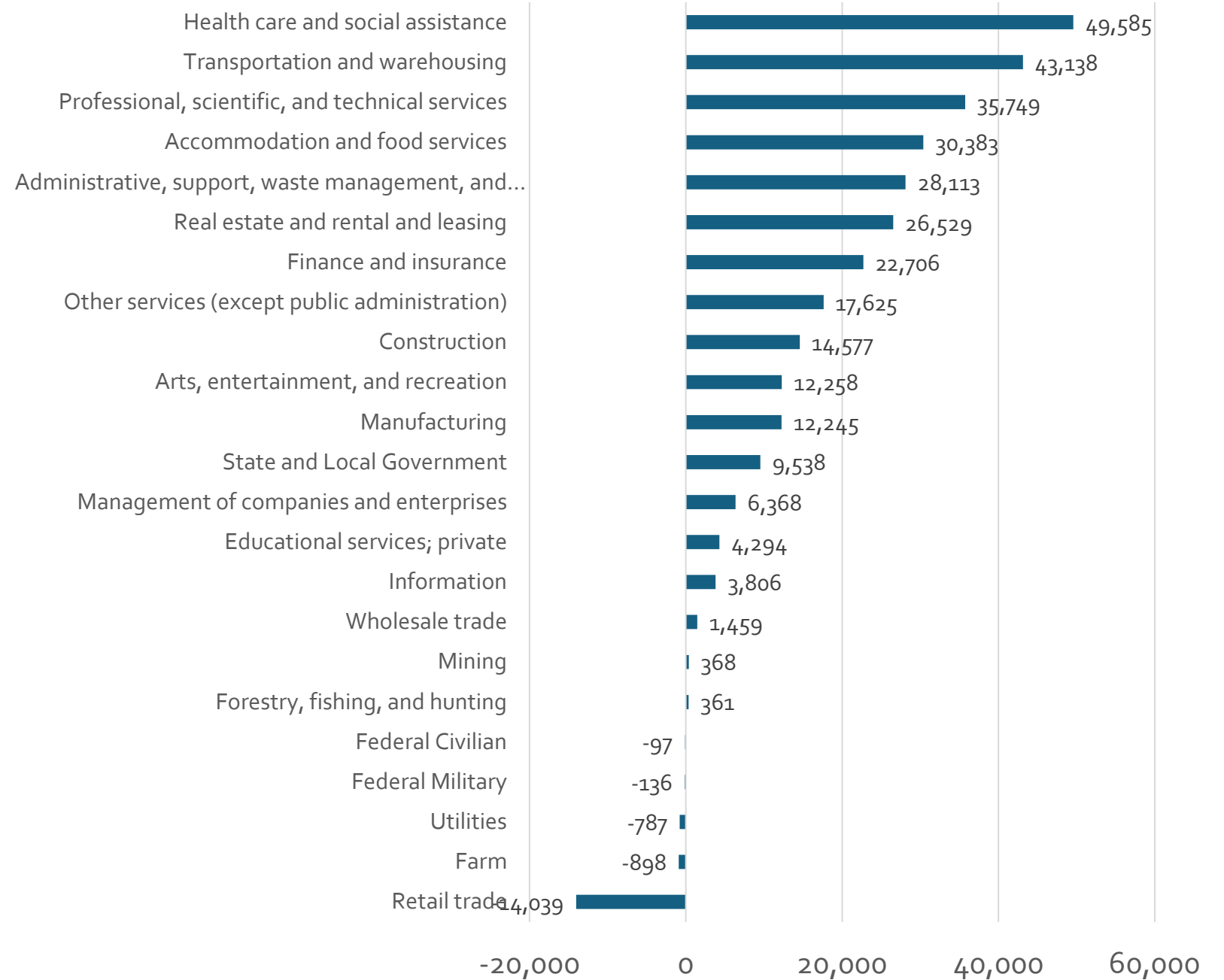
By 2050, retail employment drops in ranking while warehousing rises

2050 Employment by Industry



Between 2020 and 2050, transportation and warehousing gains the 2nd most jobs after health care, while retail loses jobs.

2020-2050 Employment Change by Industry



Conversion to MARC Region Employment

- The REMI model uses employment data from the Bureau of Economic Analysis, which includes the self-employed.
- Our travel models are calibrated using the Longitudinal Employer-Households Dynamics data set, which does not.
 - The LEHD data is available at the block level, which can then be aggregated to TAZ. The BEA data is at the county level
 - The self-employed data is by place-of-residence, not place-of-work.
- To make the employment forecast consistent with LEHD, we apply the rates of change at the level of five aggregate industries from the REMI model to a 2020 LEHD base.

MARC Region Employment Forecast

	2020	2030	2040	2050	Change, 2020-2050
Government and Management	62,753	64,852	66,404	68,388	5,635
Basic Industry	137,840	156,136	158,157	162,819	24,979
Transportation and Communications	105,550	125,769	131,911	138,715	33,165
Retail	175,683	192,348	189,988	190,190	14,507
Finance, Insurance and Real Estate Services	75,597	88,921	93,014	98,745	23,148
	454,859	526,723	561,305	596,057	141,198
Total	1,012,282	1,154,750	1,200,778	1,254,914	242,632

Summary of Recommended Forecasts

MARC 9-County Region	2020	2030	2040	2050	Change, 2020-2050
Total Population	2,103,419	2,244,005	2,348,648	2,453,637	350,218
Total Households	833,443	922,780	989,622	1,040,303	206,860
Total Employment	1,012,282	1,154,750	1,200,778	1,254,914	242,632

PREVIOUSLY ADOPTED FORECAST (2020-2050)



- ✓ 480,000 more people
- ✓ 230,000 more households
- ✓ 225,000 more jobs

NEW MARC REGION FINAL CONTROL TOTALS (2020-2050)



- ✓ 350,000 more people
 - 73% of prior forecast
- ✓ 207,000 more households
 - 90% of prior forecast
(difference due to smaller household sizes)
- ✓ 243,000 more jobs
 - Slightly more than prior forecast
 - The current forecast starts from actual 2020, the low point of the Covid recession, not projected 2020.
 - Nearly 40% of increase is simply rebound as only 150,000 jobs added from 2024

Recommendation

- The Technical Forecast Committee and the Total Transportation Policy Committee have reviewed these forecasts for 2050 total population, households and employment in the MARC Region
- They recommend they be adopted by the MARC Board for use in the update of Connected KC 2050.
- Discussion? Questions?