## Regional 2050 Population and Employment Forecasts: A First DRAFT

MARC Board of Directors
April 23, 2024

## MARC is at the beginning of making long-range population and employment forecasts needed to update the Connected KC 2050. We are seeking your input.

- A two-step process is used:

1. First forecast how fast the entire region will grow between now and 2050. 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 (TAZs)

- 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.


## Who else uses

 these forecasts?Short answer:
Anyone investing for the long term.

- Utilities
- School Districts
- Businesses
- Consultants
- Local governments

Two different models used for the two different types of 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.
- MARC has used it since about 1988

Later this year we will present the distribution of the the regional totals to communities and neighborhoods using a model called UrbanSim.

- Like REMI, UrbanSim is used by many MPOs around the country, including Chicago, Seattle, Boston, San Diego, Albuquerque, Detroit.
- It models the demand to live or work in a location based on the attractiveness of each area based on things like its level of access to jobs and services, the price of housing, and the income characteristics of the neighborhood.
- Demand is constrained to operate within supply constraints set by future land use/zoning and availability of sewers. This is how we ensure MARC's forecast is consistent with local plans.
- We are currently soliciting this land use data, along with known economic development projects, from the Technical Forecast Committee.

Planned Schedule

- April 2024: First draft regional forecasts
- June 2024: Final regional forecasts
- July 2024: First draft small-area forecasts
- January 2025: Final small-area forecasts
- June 2025: Forecasts adopted with MTP adoption


## DRAFT 2050 Population and Employment Forecasts

## U.S. Input:

New Census Bureau Population Forecasts
2017 vintage vs. 2023 vintage

> By the end of the projection period (2060), U.S. population growth is running about 1.2M per year less in the 2023 projection vs. the 2017 projections, according to the Census Bureau.
U.S. Population Projection Comparison, 2017 vs. 2023 Population Change

$\left.\begin{array}{lll}\text { U.S. Population Projection Comparison, } 2017 \mathrm{vs} .2023 \\ \text { Births }\end{array}\right]$

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)
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0


As a result, the natural increase in population (i.e., Births minus Deaths) is about 1.1M less in the 2023 projection than in the 2017 projection by the end of the period. Natural increase turns negative nationwide in 2038. After this point, U.S. population would begin to decline without immigration.
U.S. Population Projection Comparison, 2017 vs. 2023 Natural Increase


So , what is projected for immigration levels?

Both the Census Bureau and the Congressional Budget Office see the current high rates of immigration as reverting to something approaching historical levels. But which historical period?
U.S. Population Projection Comparison, 2017 vs. 2023 Net Immigration


CBO uses a long-term average. The Census Bureau appears to use the average during the Trump administration.

This highlights that the level of immigration is a policy choice. The demand to move to the US far exceeds historical levels.
U.S. Population Projection Comparison, 2017 vs. 2023 Net Immigration


2017 vs. 2023 US Population Projections Difference in Sum over 30 years

80\% of the difference in the forecasts is due to differences in the natural increase, not the immigration assumption.


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).

Applying these assumptions yields the following draft regional forecast.

DRAFT Total Population and Employment Forecast (in thousands)



Population by Age 2001

Population by Age 2020


Population by Age 2050

Aging population produces declining labor force participation, limiting the growth of the workforce. Labor supply constraints limit overall employment growth, ensuring continuing labor shortages

Labor Force Age Population vs. in Labor Force


Lower labor force growth limits employment growth. Employment growth spikes between 2020 and 2025 reflecting the rebound from the 2020 recession, but grows < 5,000 jobs per year thereafter.

Historical and DRAFT Forecast 5-yr Employment Change


## CURRENTLY ADOPTED FORECAST (2020-2050)



$$
\begin{array}{ll}
\checkmark & 480,000 \text { more people } \\
\checkmark & 230,000 \text { more households } \\
\checkmark & 225,000 \text { more jobs }
\end{array}
$$


$\square$



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## These DRAFT

 forecasts are based on maintaining our share of of the national economy, which is slowing due to labor constraints. But could KC modestly outperform the nation?- Panasonic plant adds an entirely new manufacturing industry to the region
- Increasing geopolitical tensions increase demand for security-related assets
- Ft. Leavenworth
- Biosecurity/biodefense/biomanufacturing
- National Security Campus managed by Honeywell
- Cybersecurity cluster
- Others?
- These are the kinds of things the Technical Forecast Committee will be looking at.


## Discussion

- As you think about the likely growth of the entire region, what other consideration do you think we should factor into our projections?
- Are there particular scenarios you think we should consider?
- As we begin to take the next step - allocating the regional totals to communities and neighborhoods - what else should we consider?


## Questions?

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