

Metropolitan Council's local forecasts to 2050

Todd Graham, Principal Forecaster



June 5, 2024

metro council.org/forecasts/

Discussions of local forecasts with local governments

- June 5, 3:00 – White Bear Lake City Council Chambers
 - June 10, 3:00 – Plymouth Community Center
 - June 13, 2:30 – Virtual/Webinar hosted by MetroCities
 - June 26, 9:00 – Richfield City Council Chambers
-
- Questions/ accommodations: Patrick Boylan
Patrick.Boylan@metc.state.mn.us

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Agenda

1. Why and how we forecast
2. How we forecast: local allocation
3. Preliminary local forecasts, version 1
4. Proposed local forecasts, version 2
5. Participation of cities and the public

Why and how we forecast



Why we forecast



Long-range forecasts of population, jobs

Provide a shared foundation for coordinated planning, systems and services

- Regional systems and services are scaled to meet forecasted demand
- Local plans, infrastructure, services respond to the same forecasts
- Coordination with partner agencies

Maintained, updated to inform planning

Authorized by *MN Statutes* 473.146 and 473.859

How we forecast: models

Models are an attempt to represent real-world systems in a simplified way

- Economic and employment growth
- Real estate market dynamics
- Interactions of land and transportation

We're representing through mathematical representations

- Formulas, parameter settings, time- and place-specific variables



Forecast models toolkit



Regional economic model for macro-level employment and population

Land use model for location of future land use, local households and employment

Travel demand model accounting for connection of places; projects travel patterns and loads

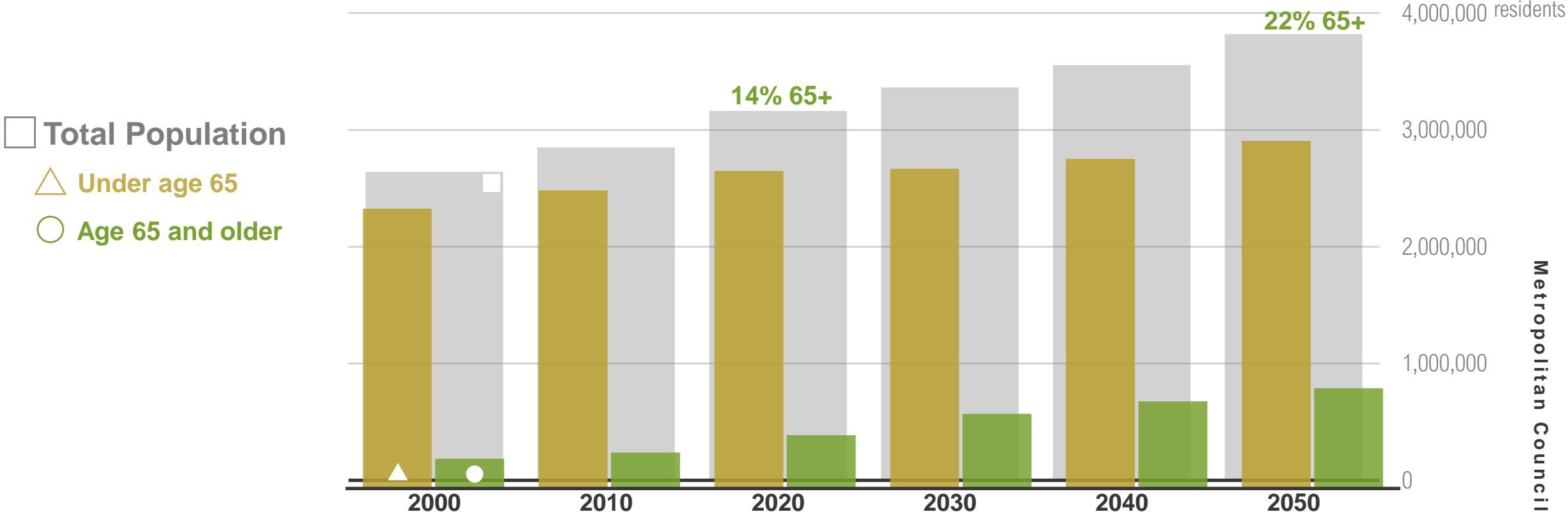
Updated regional forecast to 2050

	2010	2020	2023	2030	2040	2050
Employment	1,541,000	1,581,000	1,763,000	1,802,000	1,895,000	2,074,000
Households	1,118,000	1,240,000	1,288,000	1,350,000	1,450,000	1,564,000
Average HH size	2.50	2.50	2.46	2.44	2.40	2.39
Population	2,850,000	3,163,000	3,222,000	3,364,000	3,555,000	3,820,000
Population Growth	207,000	313,000	—	201,000	191,000	265,000

Source: 2010 – 2023: US Bureau of Labor Statistics (BLS), US Census Bureau, Metropolitan Council;
2024 – 2050: Metropolitan Council's regional forecast (2023)

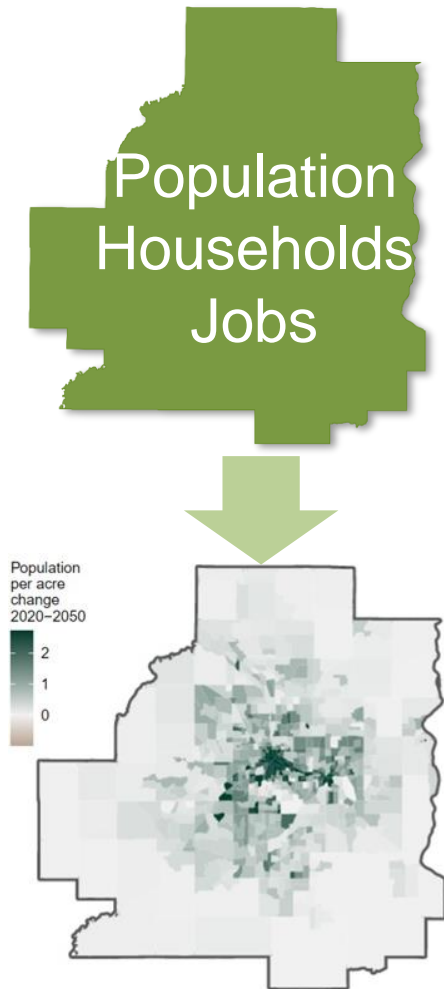
Aging of the Population

Share of population over age 65 nearly doubles in 2050



Source: 2000-2010 population from Census Bureau; 2020-2050 from Metropolitan Council regional forecast (2023)

From macro-level to local



Regional totals from the macro model are allocated to specific places

- The local forecasts serve to accommodate the growth expected by the larger region
- All jobs, households and people are situated somewhere

How we forecast: local allocation



From macro-level to local: Our local land use model



Regional totals from the macro model are allocated to specific places

UrbanSim model

- Analyzes, represents, and projects where growth will happen
- This future projection involves extrapolation of behaviors, trends, patterns
- Accounts for the competition between places

Specifically, UrbanSim simulates real estate dynamics, with submodels that handle the projection of

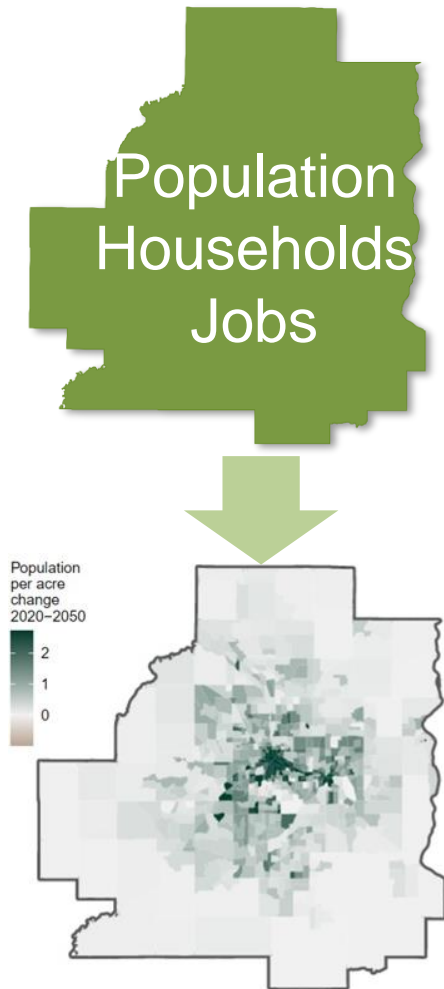
- Real estate supply (new development)
- Location choice behavior

Location choice: We value place options, and places, to varying degree



- Location choice probabilities derived from observed data on choices
- Factors that go into those choices
 - If one group especially values place characteristics, more likely to locate accordingly → *differentiation*
 - If **all** groups value a cumulative package of characteristics, then rents or prices rise in locations which have that → *market valuation*
- What matters in location choice
 - Place value and amenities
 - Access to destinations: everyone values this
 - Employment presence in neighborhood: differentiation in who values

Where will the metro's next 324,000 households choose to live?



Local forecast results determined by both predictive modeling *and* policies

UrbanSim is allocating with behavior-based, utility-maximizing logic
It does so bounded or limited by policies within the model
Policies establish an envelope of what's possible

- From local governments: Allowed land uses, allowed densities
 - These determine the capacity of places – these are posed as limits
- From Met Council: 2050 wastewater service area (MUSA), 2050 high-frequency transit, and accessibility enabled by future highways and arterials network
 - At this time, the model treats these as attracting characteristics, not as limits

Preliminary local forecasts, version 1



Preliminary local forecasts set (version 1), January 2024

About the product set

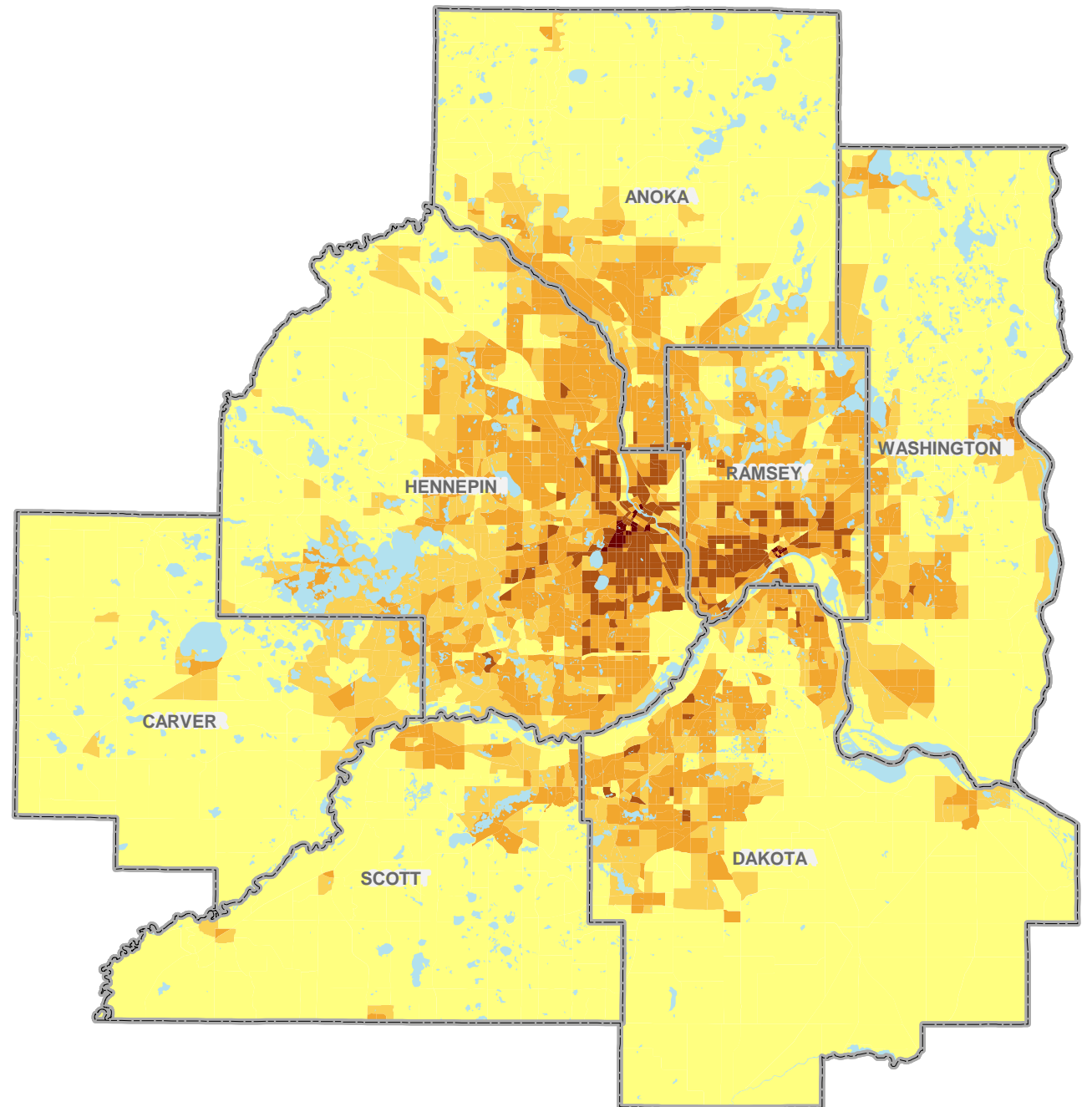
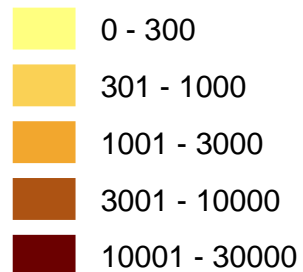
- City- and township-level results
 - Subcity, zonal results come later
- Excel workbook format
- Also an interactive webmap

Visit <https://metro council.org/forecasts>

Households in 2020

- 1,239,500 households in 2020
- 3,163,100 population
- A full range of community types
- More suburban in composition than most peer major metros

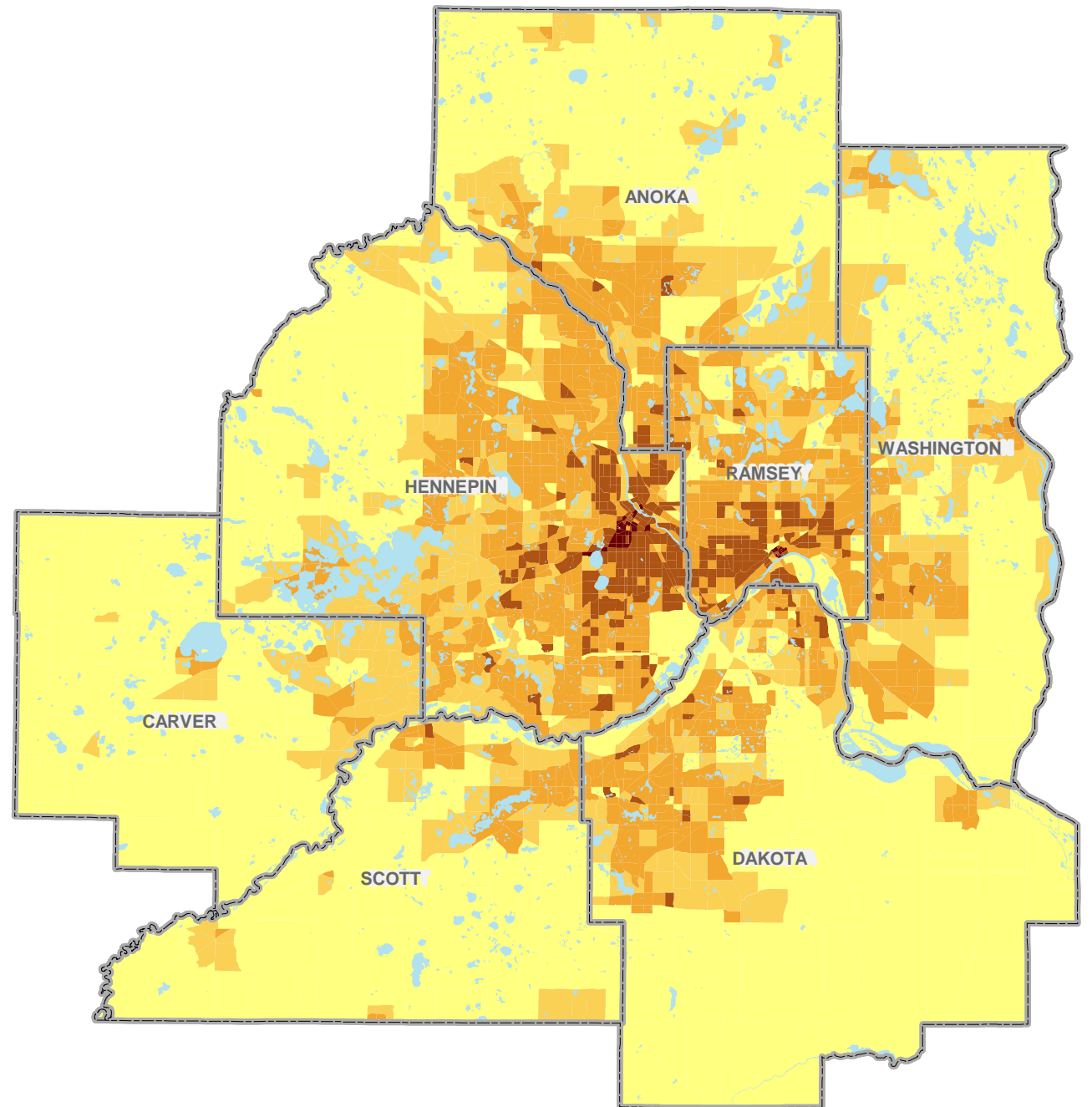
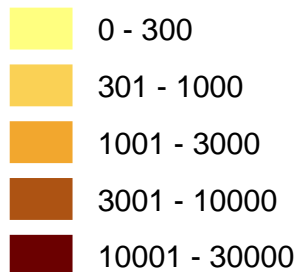
total_households / Square_Miles



Households in 2050

- Metro region to add +324,000 households by 2050
- Outward growth around the suburban edges
- Existing suburbs are filling in
- Substantial intensification and redevelopment in urban centers
 - Map graphic from v1

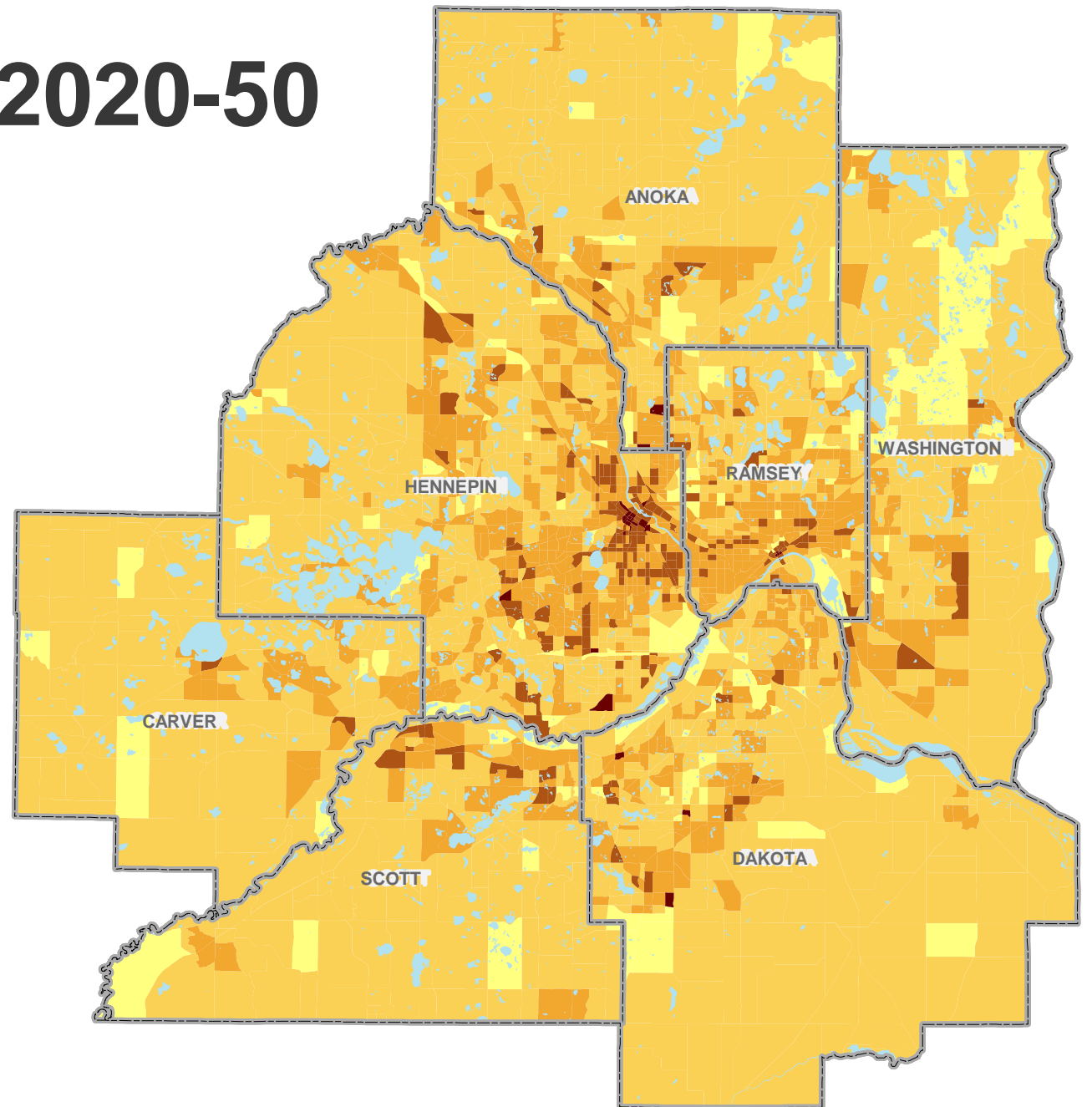
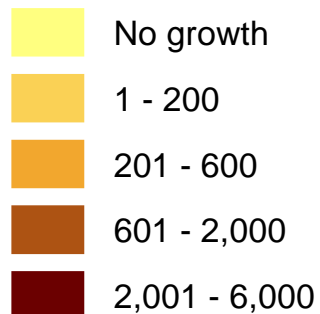
total_households / Square_Miles



Households growth, 2020-50

- Metro region to add +324,000 households by 2050
- Outward growth around the suburban edges
- Existing suburbs are filling in
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total_households / sq_miles



Local forecast summary: households



Growth happens in local, specific places

Adding 324,000 households over 30 years – where?

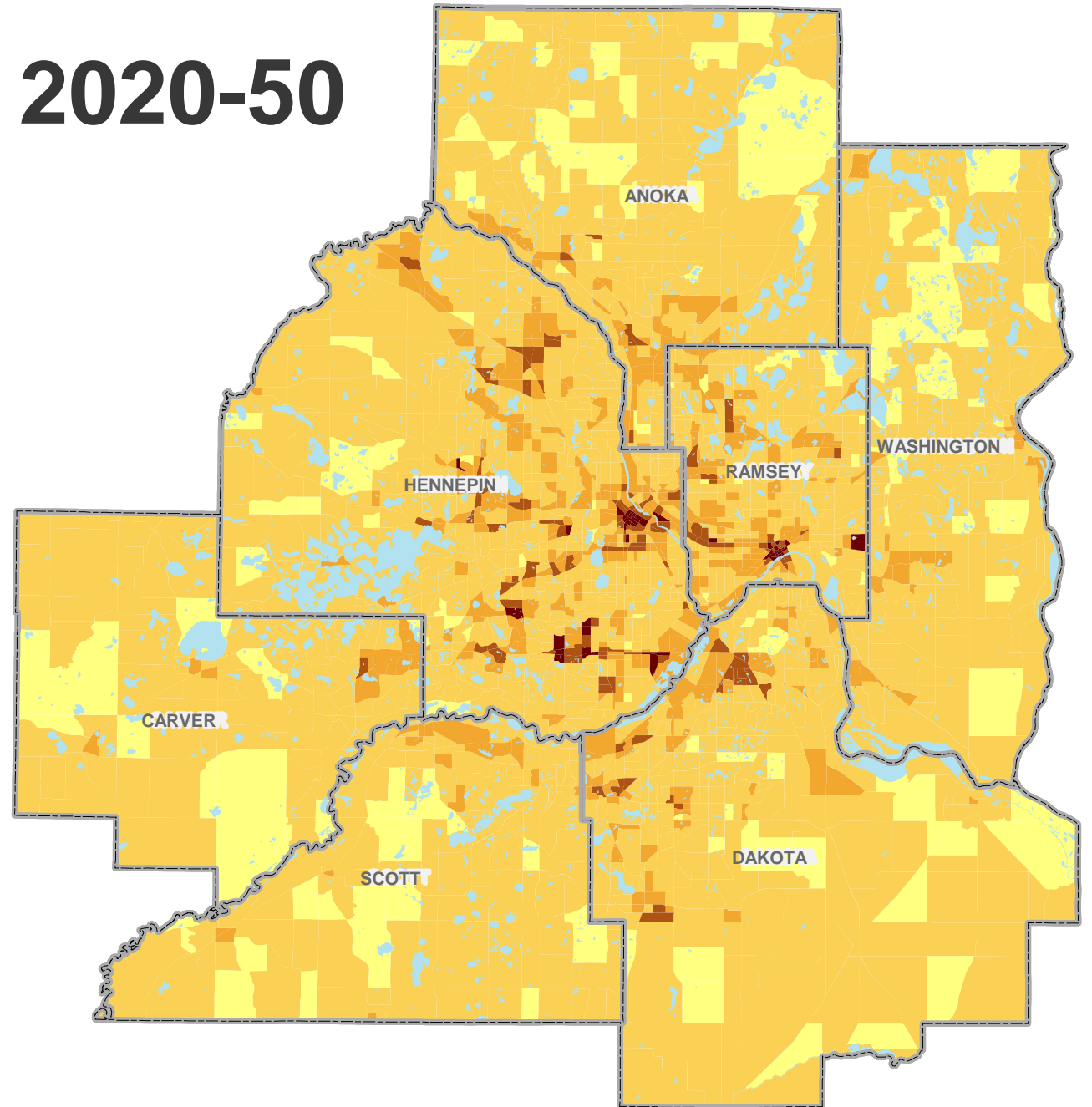
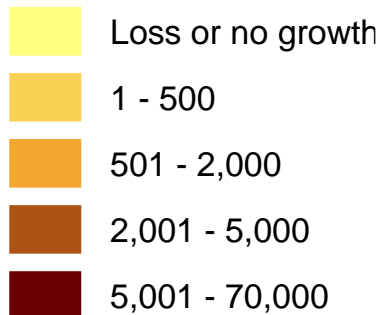
Our model is designed to produce a probable, middle-of-the-road answer

- 31% of the net growth in urban centers and urban communities
- 43% in suburban and suburban edge
- 19% in emerging suburban edge
- 7% in rural communities
- This pattern is +3 points more urban and -3 points less rural than current (Thrive MSP 2040) forecast

Employment growth, 2020-50

- 1,581,000 jobs in 2020
- 1,754,000 jobs in 2023
- 2,074,000 jobs forecasted, 2050
- Concentrates in places that have been employment centers
- And along transportation corridors
- Where office/ commercial/ industrial uses are allowed

total_jobs / sq_miles



Local forecast summary: employment



Growth happens in local, specific places

1,581,000 jobs in 2020, at the pandemic low-point

1,754,000 jobs in 2023

2,074,000 jobs forecasted, 2050

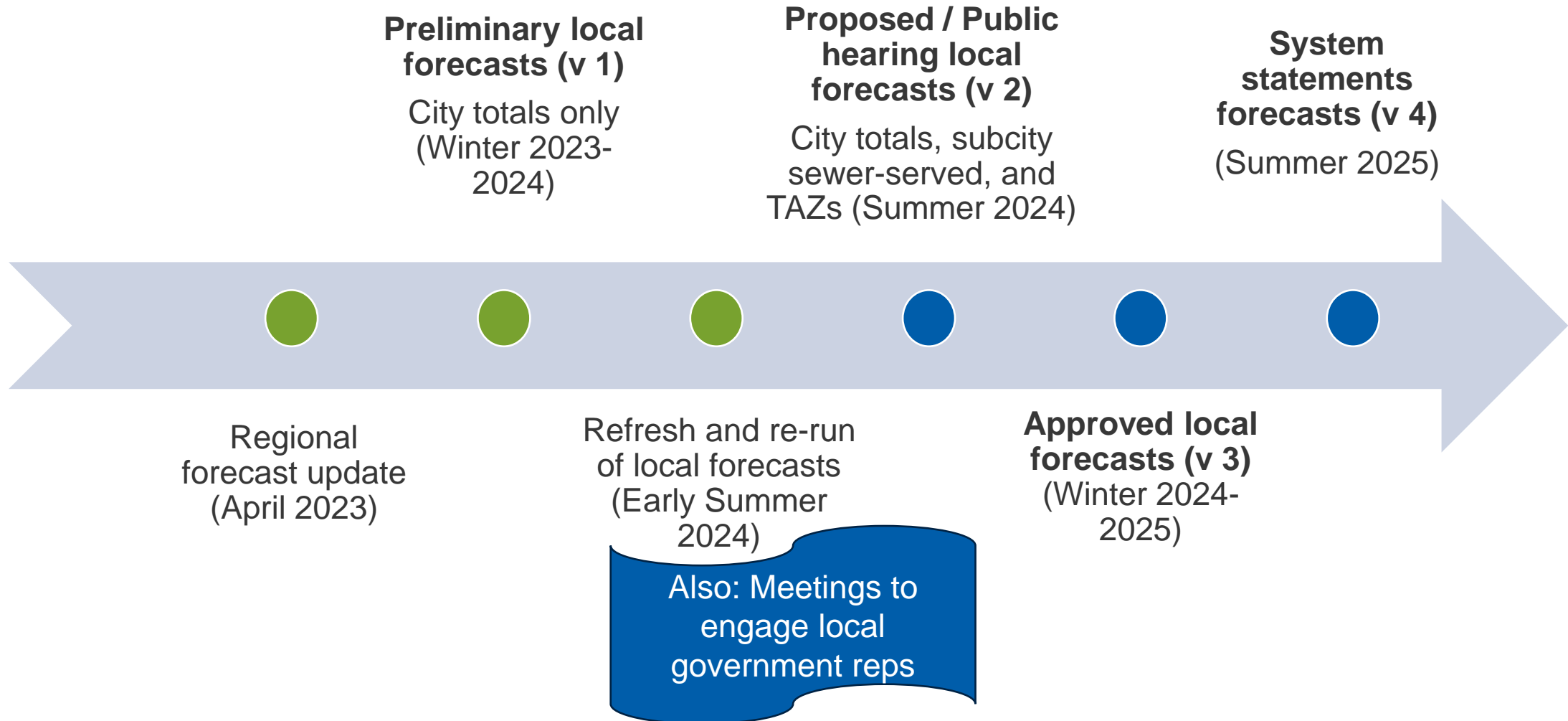
UrbanSim model results are very different from Council's previous model

- 40% of the net growth in urban centers and urban communities
- 45% in suburban and suburban edge
- 11% in emerging suburban edge
- 4% in rural communities
- This pattern is -8 points *less* urban than current forecast

Proposed local forecasts, version 2



Forecast timeline parallels the *Imagine 2050* timeline



Why versions 1, 2, 3...?



We want to get this right

Preliminary Local Forecasts (version 1) does not yet reflect known/ proposed developments; transportation model results; nor any new regional policies.

- Published January 2024. Local governments can comment, Jan. 25 – Feb. 29

Proposed Local Forecasts (version 2) will introduce new regional system characteristics, including a refresh of planned transportation and transit networks. It will further introduce new regional policies and implications for spatial planning. Council staff are asking direction on new policies from Council Members.

- Expected Summer 2024. Public hearing, Aug. 15 – Oct. 7, 2024

Heard during first comments period



Contact with 36 local governments

- 5 comments that 2050 local forecasts appear reasonable
- 11 comments or requests that either employment or households forecasts be **reduced**
 - 10 of these cited capacity or full development concerns
- 15 comments or requests that either employment or households forecasts be **expanded**
 - Mostly suburban and suburban edge
- 5 contacts: only questions, no comments

Improvements expected for proposed local forecasts (version 2)

Process programming adjustments

- Improvement of housing product mix prediction
- Improvement of population per household prediction

Data inputs

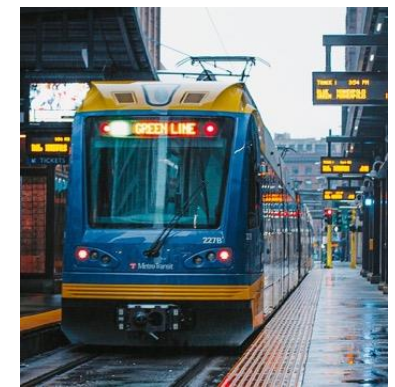
- Reflect known developments, in the right places, thru 2023
- Update certain predictor data: land values, local planned land use capacities
- Update system characteristics: 2050 MUSA, high frequency transit geography, future accessibility skims
- New policies or policy implications for spatial planning. Council staff are asking direction on new policies.

Participation of cities and the public



Multiple opportunities for adjustments

Jan. – Feb. 29, 2024	Review and comment on Preliminary Local Forecasts v. 1 <ul style="list-style-type: none"> Includes population, households, employment for counties, cities, townships
Aug. 15 – Oct. 7, 2024	Review and comment on Proposed Local Forecasts v. 2 <ul style="list-style-type: none"> Includes population, households, employment for counties, cities, townships, subcity sewer-serviced, and Transportation Analysis Zones Part of public comment period for <i>Imagine 2050</i>
Sept. – Dec. 2025	Review and comment on System Statement Local Forecasts <ul style="list-style-type: none"> Includes population, households, employment for counties, cities, townships, subcity sewer-serviced and policy areas Part of appeals period for System Statements
2026 – 2028	Preparation and review of Comprehensive Plan Updates <ul style="list-style-type: none"> Met Council and local governments can agree to local forecast revisions as expectations and plans evolve
2026 – 2034	Preparation and review of Plan Amendments <ul style="list-style-type: none"> Met Council and local governments can agree to local forecast revisions as expectations and plans evolve



Validation and improvement

Input that will be most useful to us

comments on the reasonableness of metrowide patterns

comments on the reasonableness of local results

validation or substitution of our data inputs and assumptions, including:

- inventories of major proposed developments
- inventories of proposed removals of buildings and housing stock
- local land use plan maps for 2050
- local land policies not otherwise apparent in land plan data

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