

# From models to plans: Getting to local forecasts in the metro region

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[metro council.org/data/](https://metro council.org/data/)



# This presentation will cover:

1. Forecasts: why and how
2. Met Council's forecasts in the new planning cycle
3. When expectations change: interim forecast revisions

# Forecasts: why and how



# Why we forecast: regional context



## 30-year forecasts of population, households, 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
- Maintained, updated to inform planning
- Authorized by MN Statutes 473.146 and 473.859

# Why we forecast: local context



## Any good plan includes expectations about the future

- Where and when are new developments expected?
- Those expectations inform service plans
  - And capital improvement plans
  - And city budget projections
  - And coordination with transportation agencies (county, state, Met Council)
  - And coordination with regional water management
- All of the above considerations relevant *for all cities – metro or elsewhere*

# 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 a system of mathematical representations (formulas, parameter settings, time- and place-specific variables, etc.)



# Forecast models toolkit



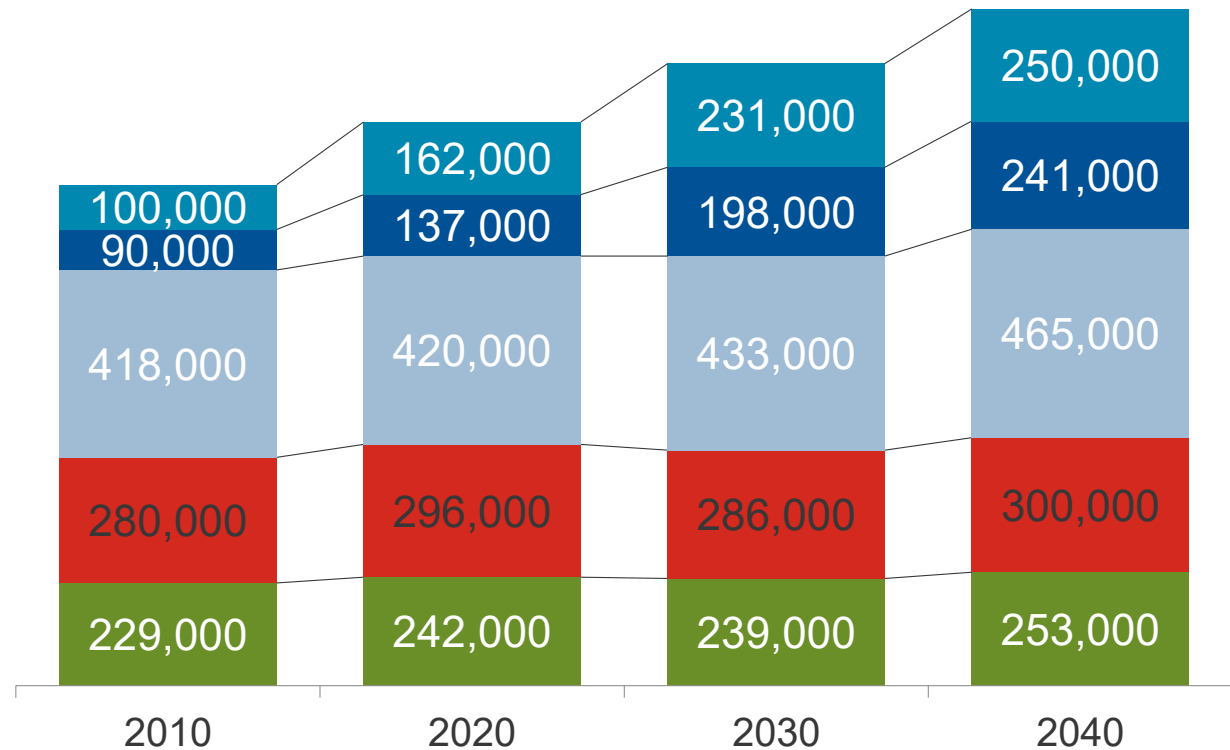
**Regional economic model** for macro-level employment and population

**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

# Households growth to 2040

- Age 65+: 2+ person household
- Age 65+: 1 person household
- Under 65: 3+ person household
- Under 65: 2 person household
- Under 65: 1 person household





# From macro-level to local: UrbanSim as our local land use model platform



## Regional totals from the macro model are allocated to local zones

UrbanSim's allocation logic is simulated real estate dynamic, with submodels that handle the projection of:

- Location choice behavior
- Real estate prices (or rents)
- Real estate supply (new development)

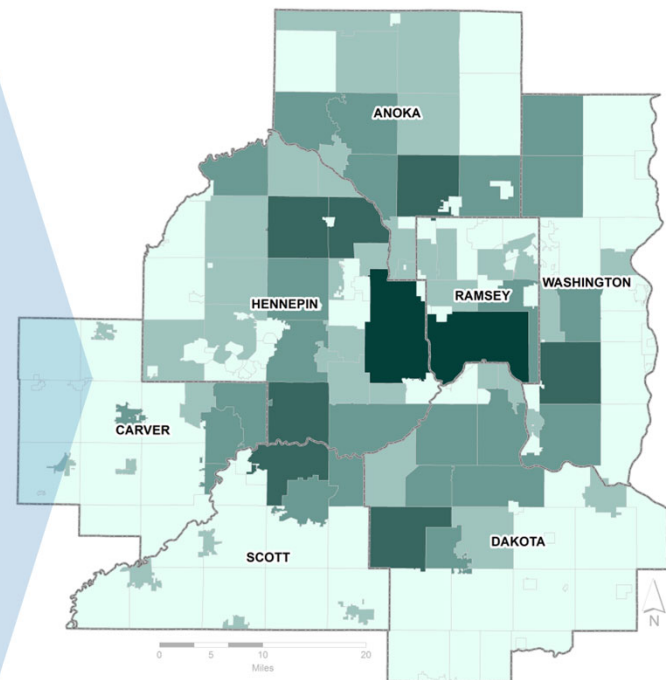
Travel demand model – a separate model! – projects future network conditions, accessibility measures

- UrbanSim results are input to TDM for travel generation
- Modeled travel outputs are passed back to the UrbanSim model

# Local data informs the model



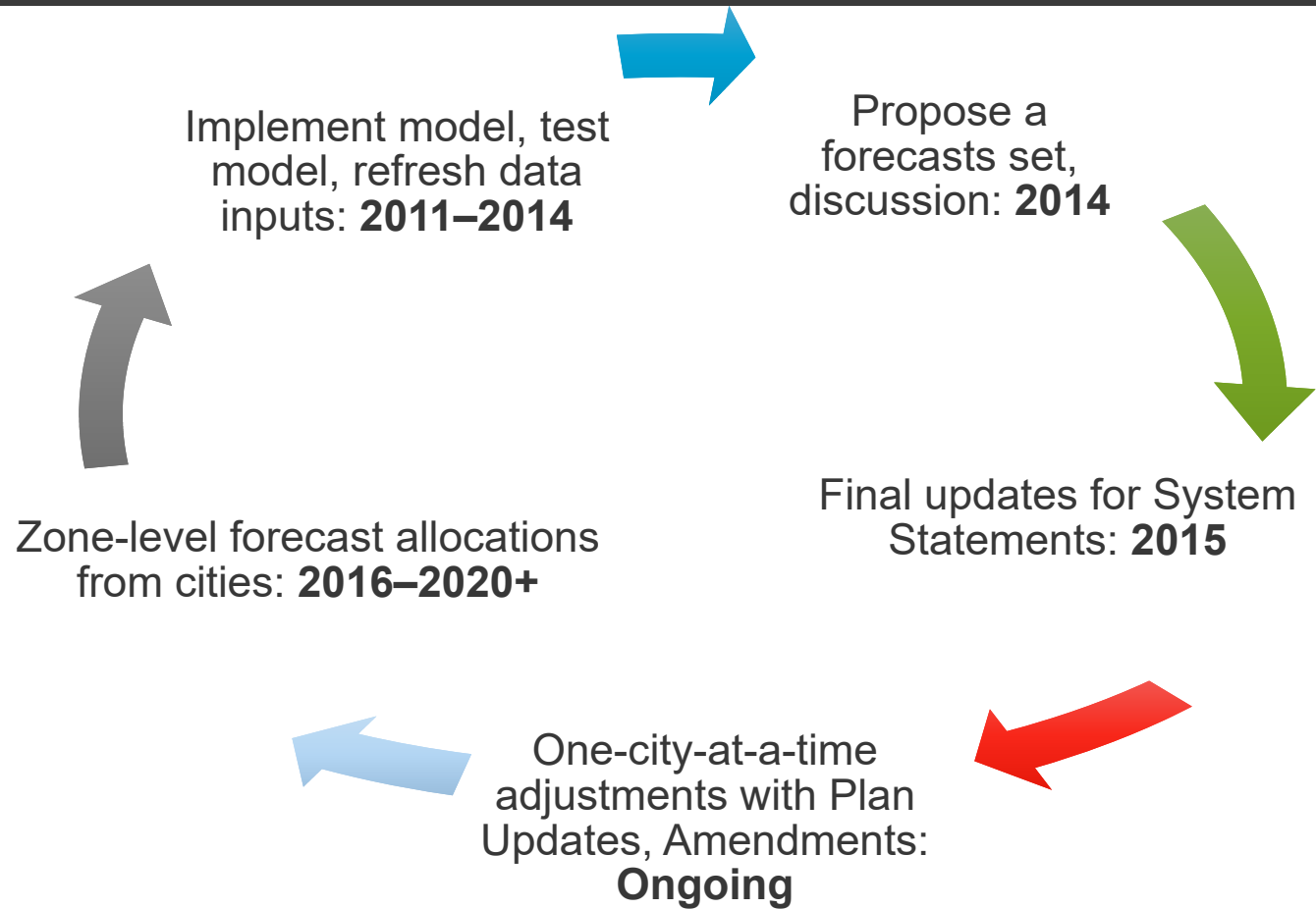
Base year land supply  
Employment levels  
Neighborhood demographics  
Housing stock: numbers and type  
Land prices  
Average prices and rents  
Land consumption rates  
Planned land use and capacities  
Regional systems and services  
Accessibility, by car and by transit



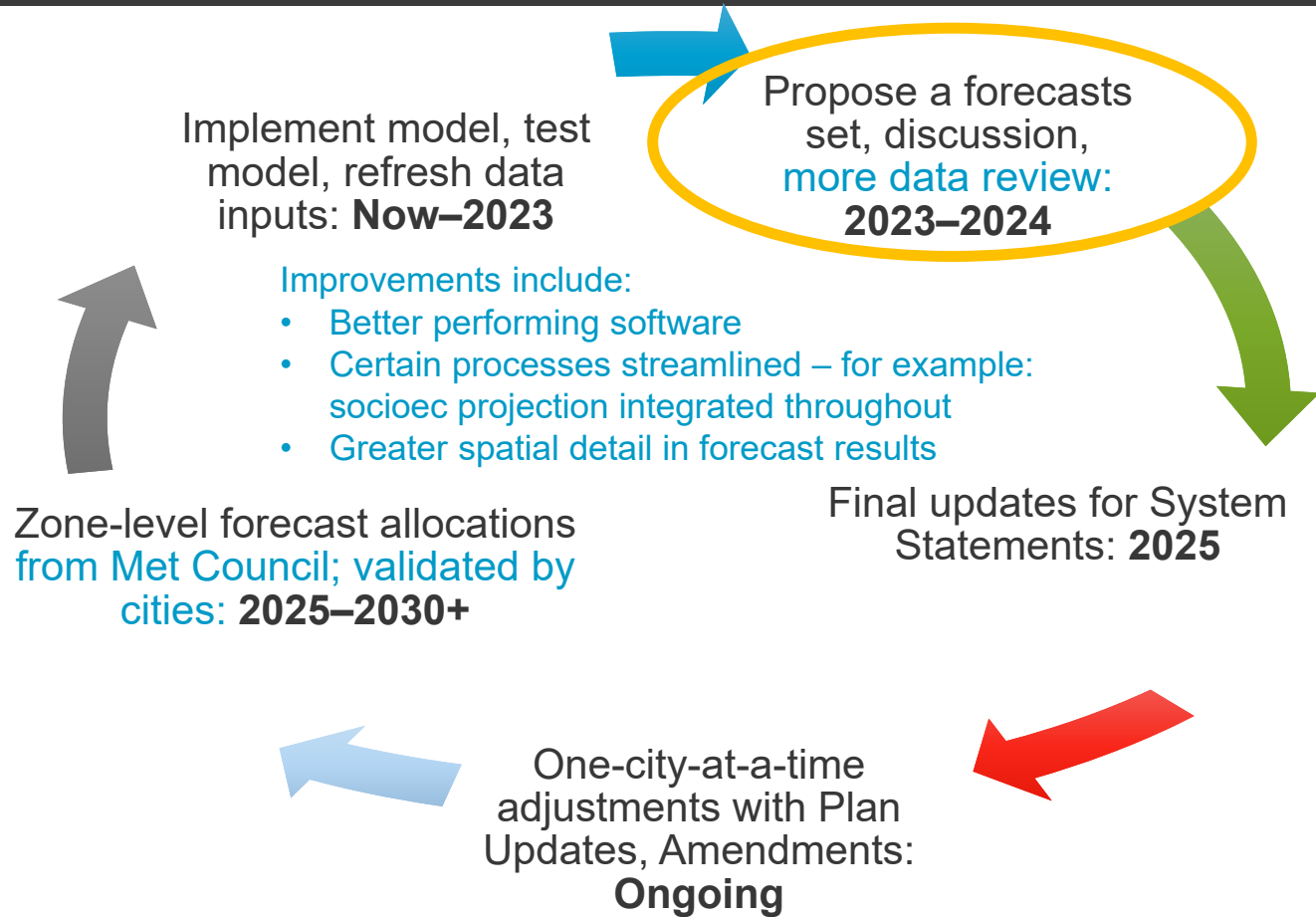
# Metropolitan Council's forecasts in the new planning cycle



# Managing the forecasts: The past decade



# Managing the forecasts: Into the new decade



# From modeled to plan-ready forecasts



## Timeline

2022: Forecast models preparation and tuning is happening now

Jan.–July 2023: Prepare **Preliminary Modeled Forecast (v1.1)**

August 2023: **Preliminary Plan-use Forecast (v1.2)** for internal departments

- August 2023–Feb. 2024: 6 months for system-specific analysis or modeling with UrbanSim results as inputs

Fall 2023: Provide the same to local planners, and ask for feedback

- Fall–Winter: Details of outreach plan: TBD

Spring 2024: Refresh the land use model and **Modeled Forecast (v2.1)**

- Refresh to include late arriving inputs, proposed transpo network changes, refreshed model skims, proposed MUSA changes, other new policies

July 2024: Publish a **Proposed Plan-use Forecast (v2.2)**

# Forecast Model Team's expected work with partners and advisors

## We enlist internal and external advice, we ask for requirements

We can adjust to fit planning needs and special circumstances

Met Council will publish **preliminary plan-use forecast (v1.2)** set in Fall 2023

- Discuss with local governments
- Invite review of data inputs and results
- Details of outreach plan: TBD

Informed by this vetting, the local forecasts set evolves

*Objective: State, local, and regional planners all working from the same numbers*

# From modeled to plan-ready forecasts (continued)



## Timeline (continued)

July 2024: Publish a **Proposed Plan-use Forecast (v2.2)**

- This release starts a 1-2 months public review period; changes possible.

4th Qtr 2024: Met Council formal approval of a **Final Forecast (v3)**; will be appendix to the 2050 metro development guide.

2025: A year of finalizing System Plans, informed by the 2050 metro development guide and adopted forecast.

Summer 2025: Met Council authorizes content of System Statements – includes **System Statements Forecast (v4)**

- Could include still more changes; politically driven? requirements driven? or otherwise?

*Objective: State, local, and regional planners all working from the same numbers*



# New forecasts v.1 *still a year away*



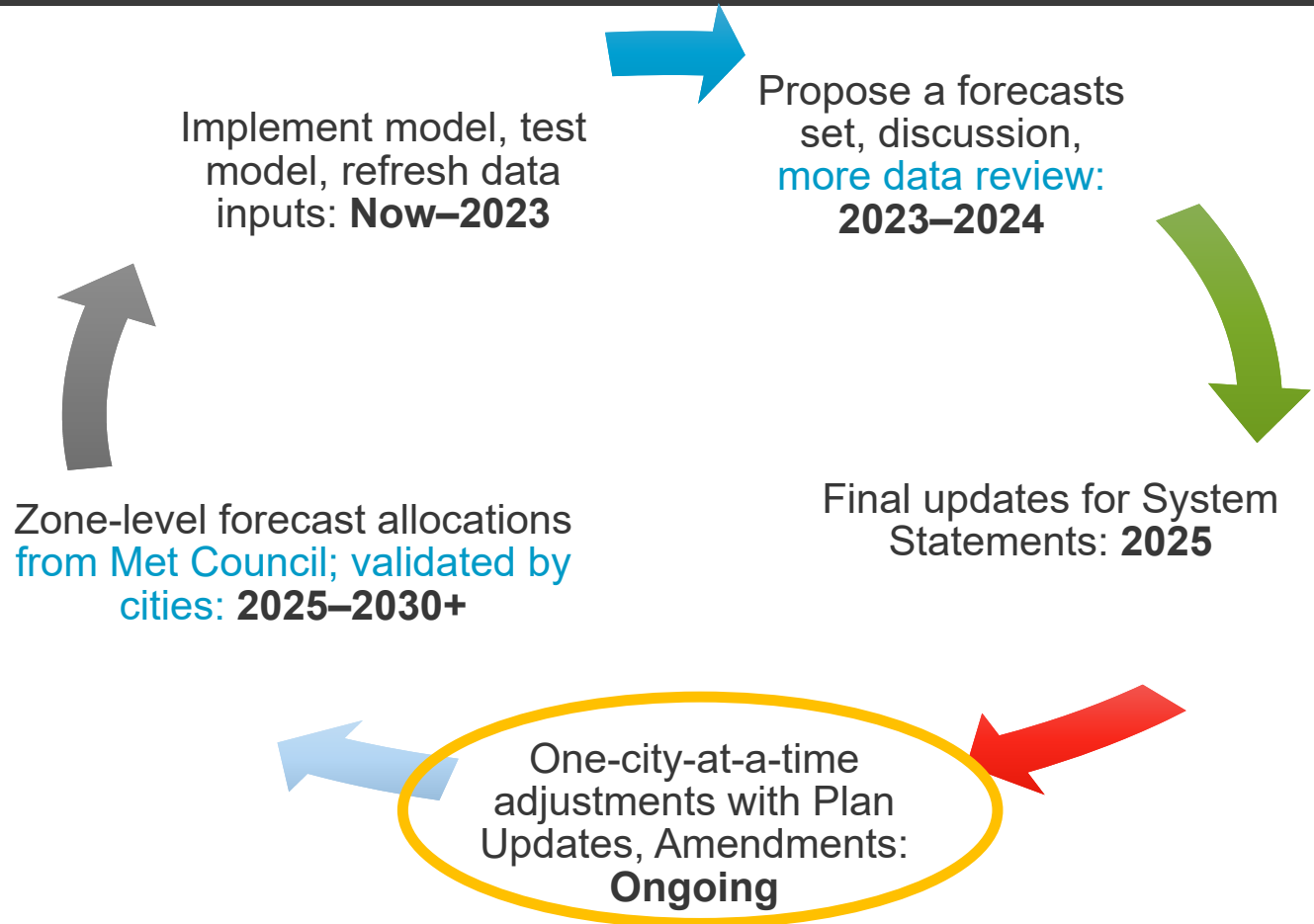
In the meantime, still forecasts set from the previous cycle is still in place, still on our website

- 2040 forecasts for cities, townships: <https://metro council.org/forecasts/>
- 2040 forecasts for transportation analysis zones (19 counties): <https://gisdata.mn.gov/dataset?q=taz+forecast>

**When  
expectations  
change:  
interim  
forecast  
revisions**



# Plans can change – and forecasts can change if needed



# How to Request a Local Forecast Change



## Forecast changes requested or needed

- Met Council's Plan Reviews process asks cities: *Do the changes entailed in Plan Amendments affect the current communitywide forecast? If so, to what extent?*
- We review whether changes to expectations, capacity or forecast cause any system impacts.
- **Reasonable** forecast changes, with no system impacts, have always been approved
- In recent years, we've clarified the situations where we **recommend** a forecast change vs. where we **require** a forecast change
- More at <https://metrocouncil.org/Handbook/Resources.aspx>

# Sometimes Met Council requires an interim forecast change



## Metropolitan Council may require a forecast change accompany a comprehensive plan amendment...

1. Where a subject development or other known developments will cumulatively advance employment or households counts to exceed 2030 or 2040 forecast levels
2. Where those forecast levels have **already** been reached or exceeded in a recent year
3. Where capacities for employment or households are so substantially changed (increased or decreased) that the approved forecast for 2030 or 2040 becomes impossible

An online documents describes how we analyze forecast changes:  
<https://metrocouncil.org/Handbook/Resources.aspx>

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