



# Scenario Planning and Land Use Analysis

Metropolitan Council



July 12, 2023

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# Overview



What is scenario planning?

Why do we do scenario planning?

How do we do scenario planning?

Land use implications

# Scenario Planning

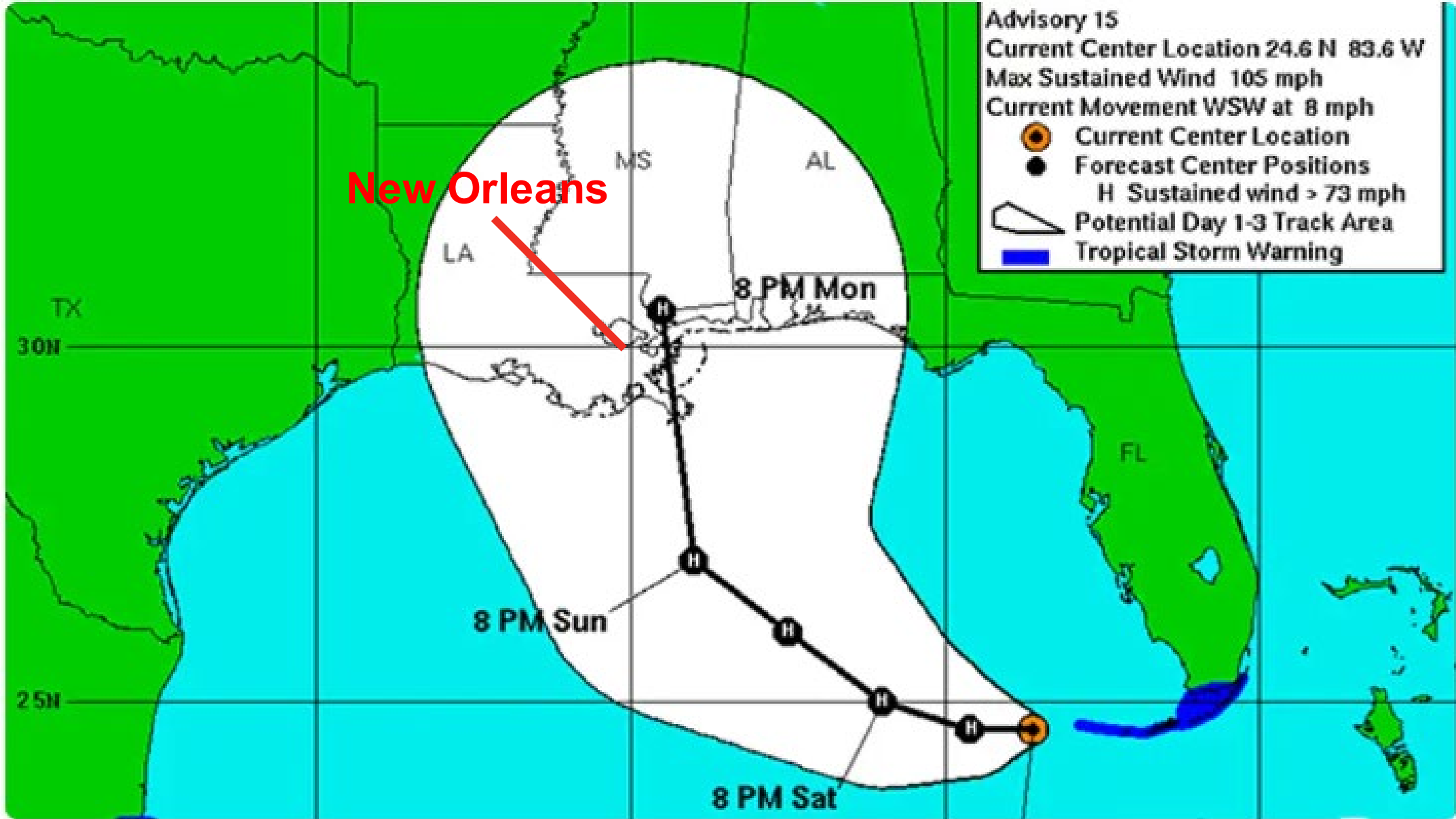


- Planning for an uncertain future.
- Asking ‘what if’ questions.
- Preparing for different possibilities.

# Katrina Forecast 8/26/2005 11:00 a.m.

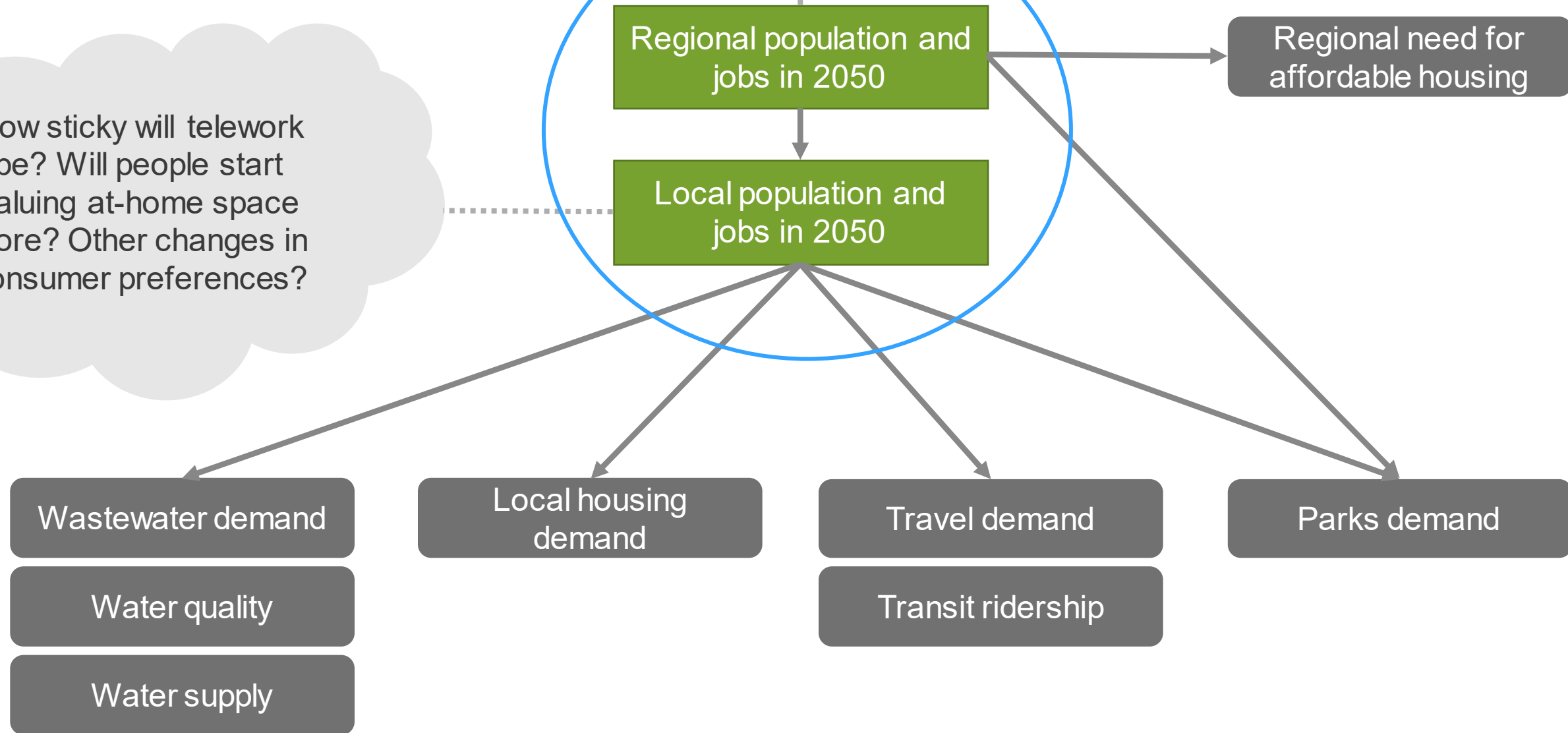


# Katrina Forecast 8/26/2005 11:00 p.m.



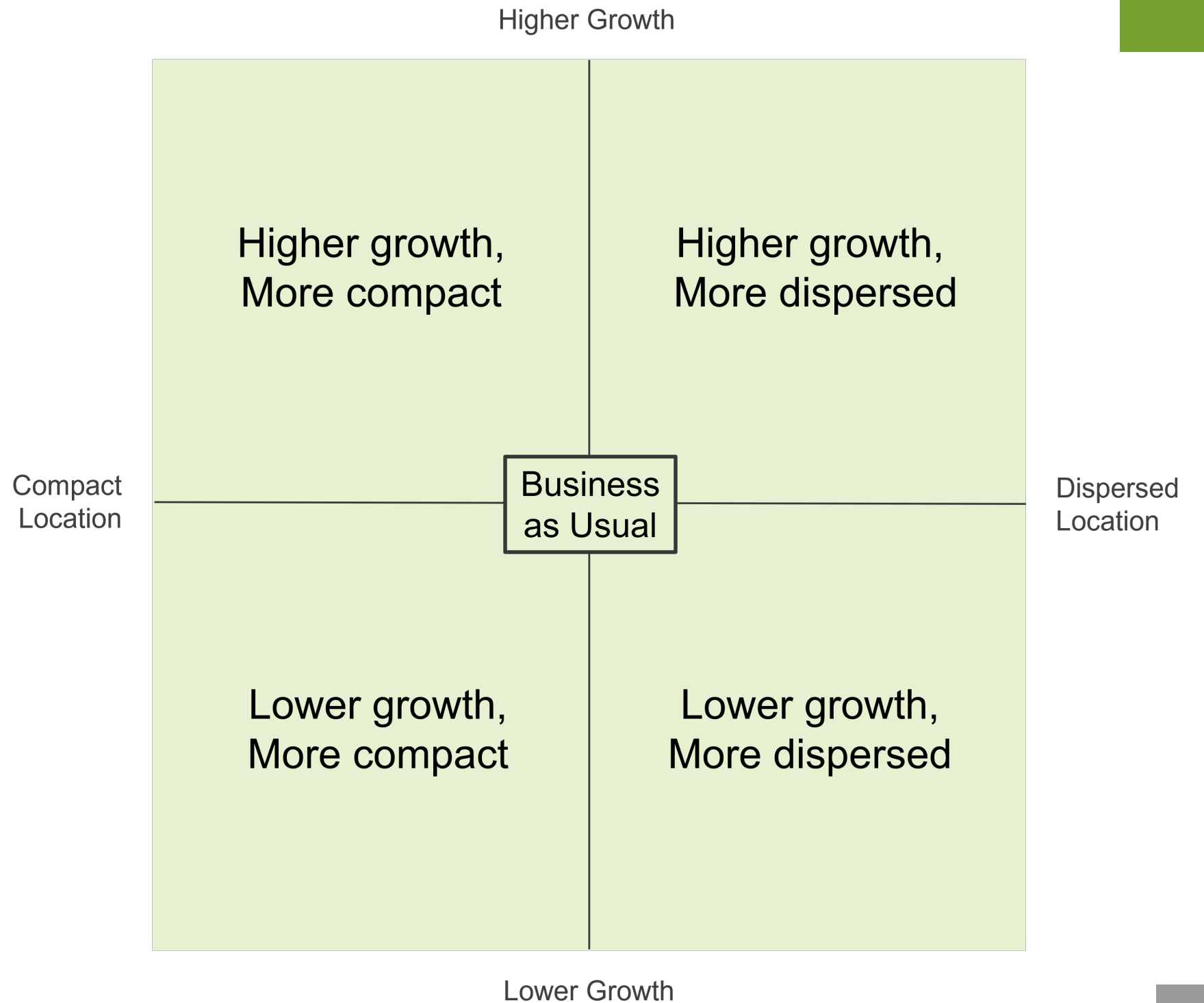
How will the pandemic affect birth rates? How will telework impact net migration to the region? How many climate refugees will we get? Will immigration levels change?

How sticky will telework be? Will people start valuing at-home space more? Other changes in consumer preferences?



# Regional Growth Scenarios

How much?  
Where?

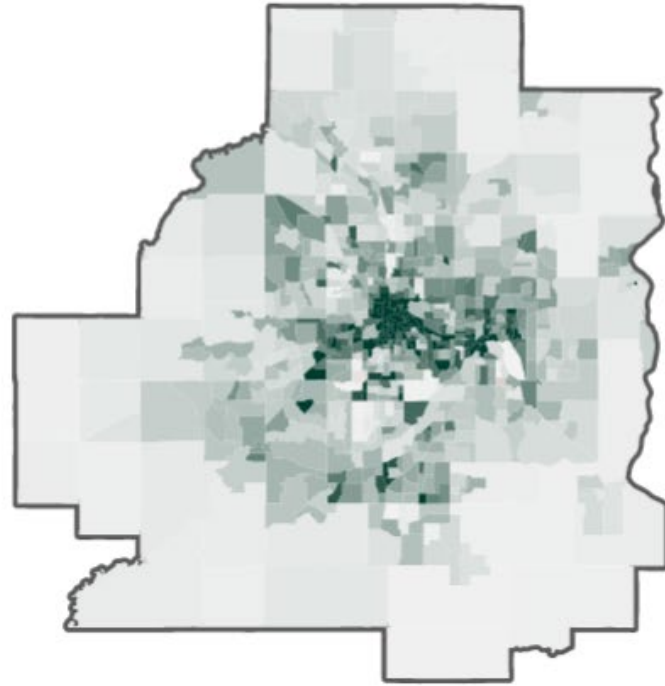


# What do different futures look like?

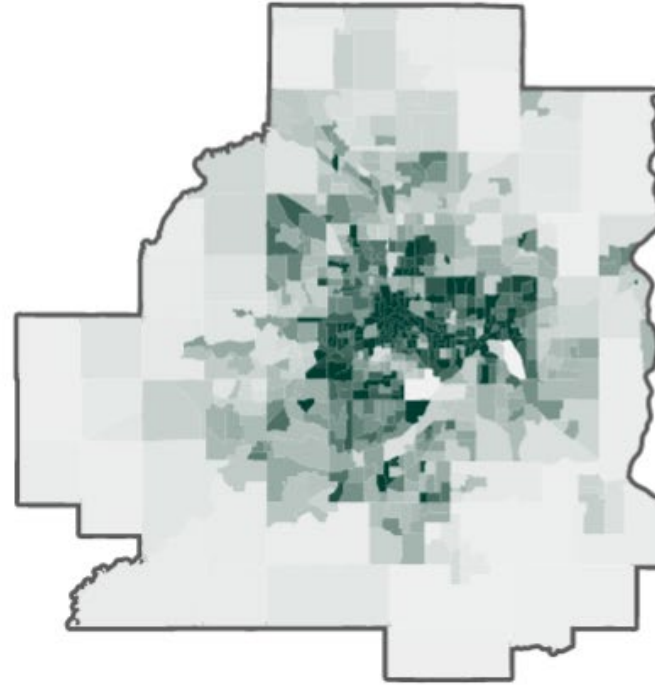




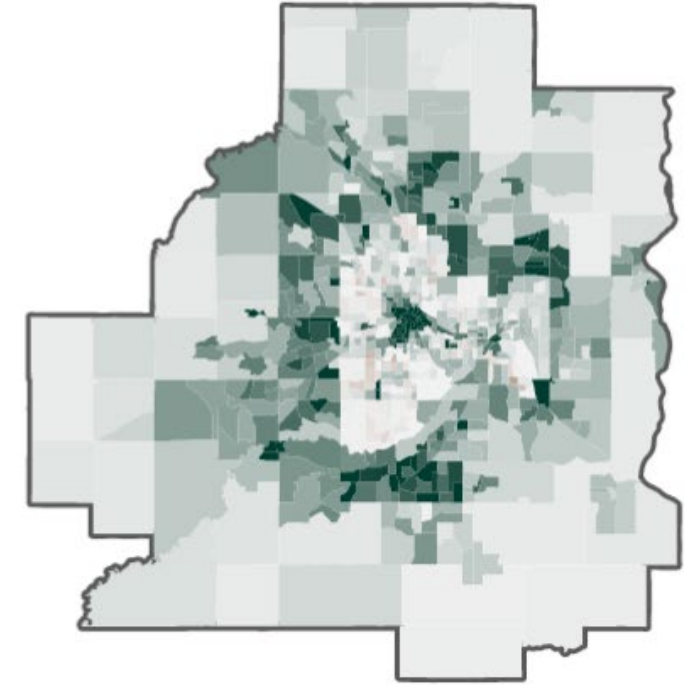
Business as usual



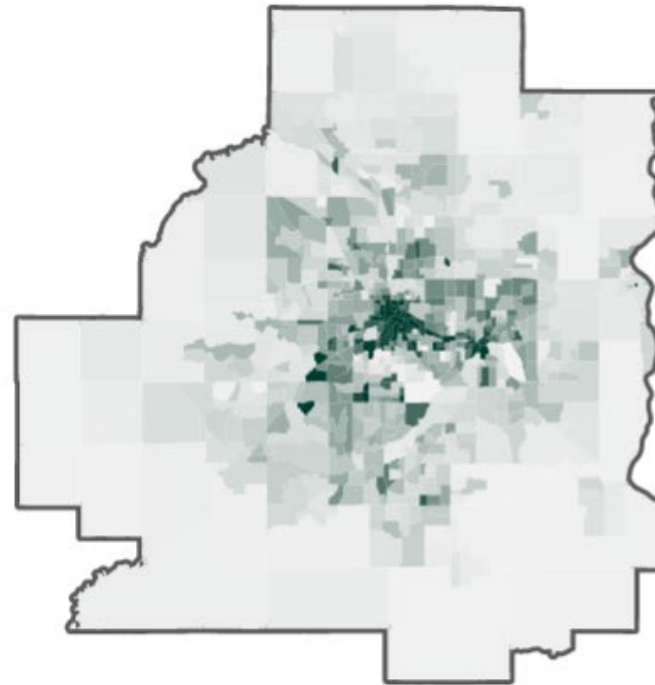
Higher growth, more compact



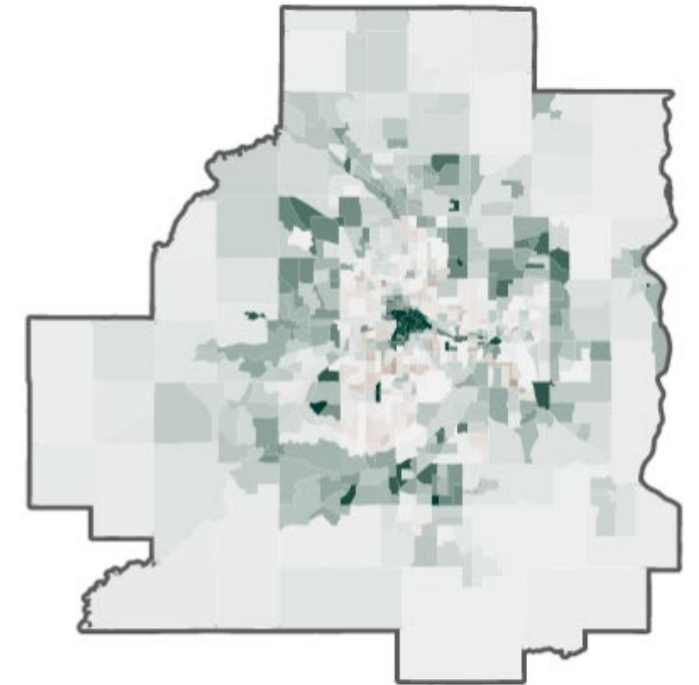
Higher growth, more dispersed



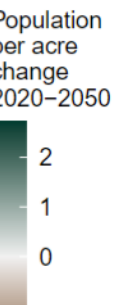
Lower growth, more compact



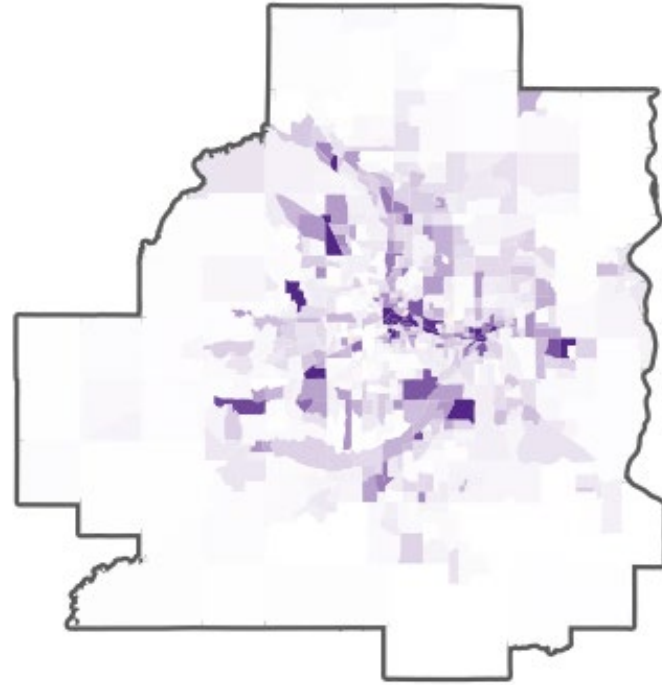
Lower growth, more dispersed



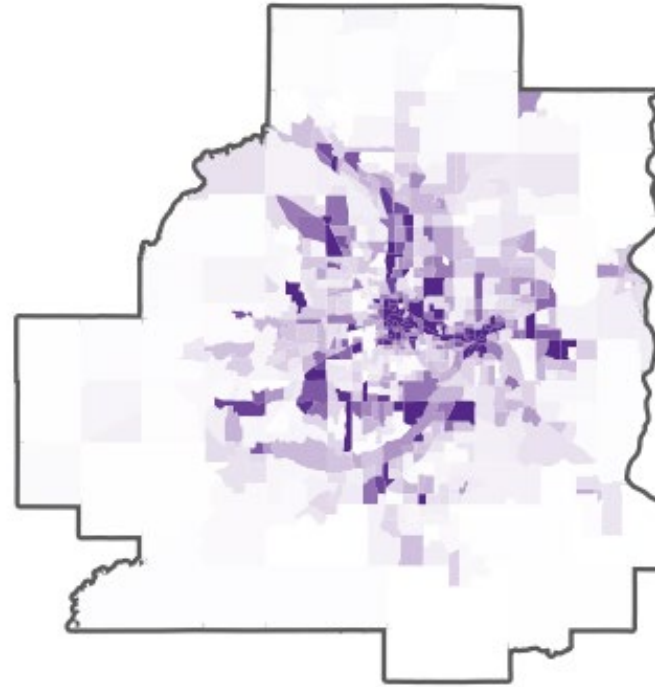
# Population Per Acre Change, 2020-2050



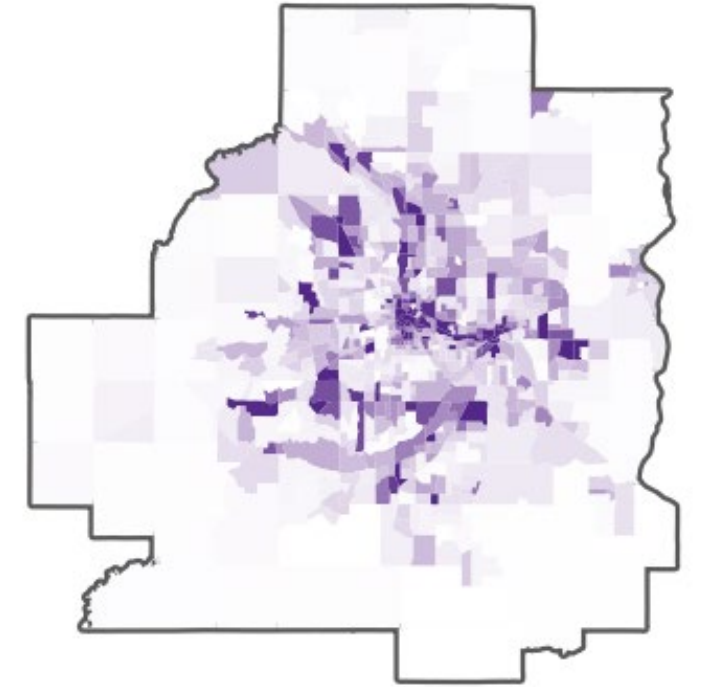
Business as usual



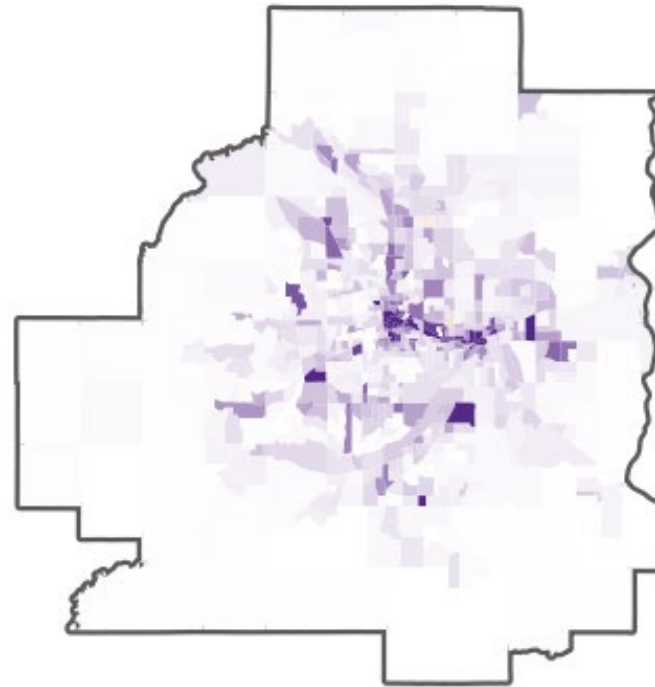
Higher growth, more compact



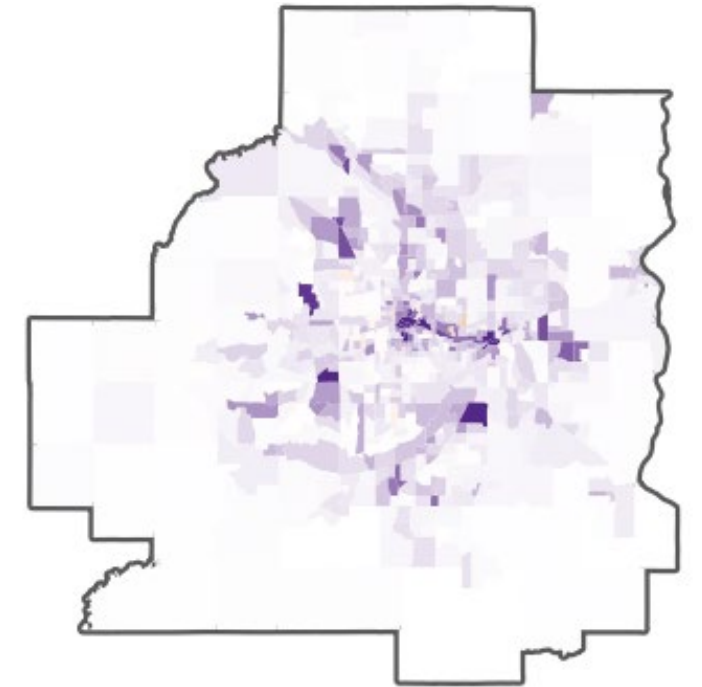
Higher growth, more dispersed



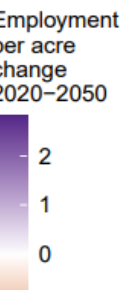
Lower growth, more compact



Lower growth, more dispersed



## Employment per Acre Change, 2020-2050



**What are the land use implications of each future?**



Regional  
Population  
and Jobs



Local  
Population  
and Jobs



High/  
Compact



High/  
Dispersed



Business as  
Usual



Low/  
Compact



Low/  
Dispersed

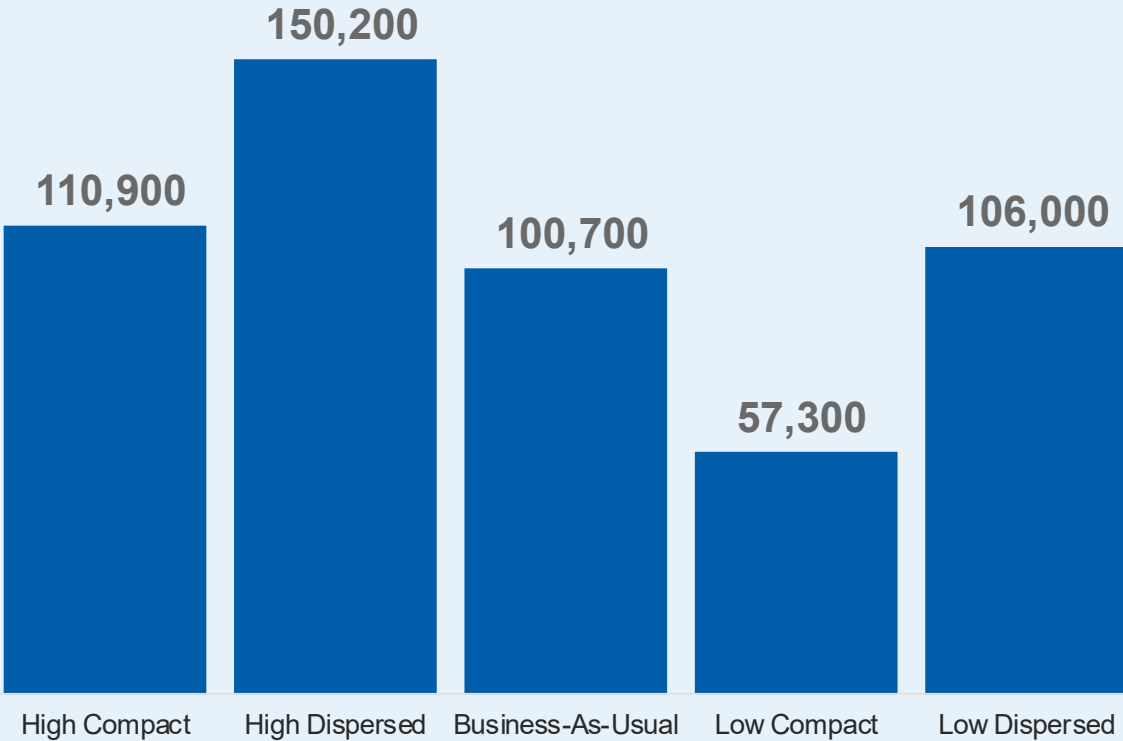
# Land Use Measures



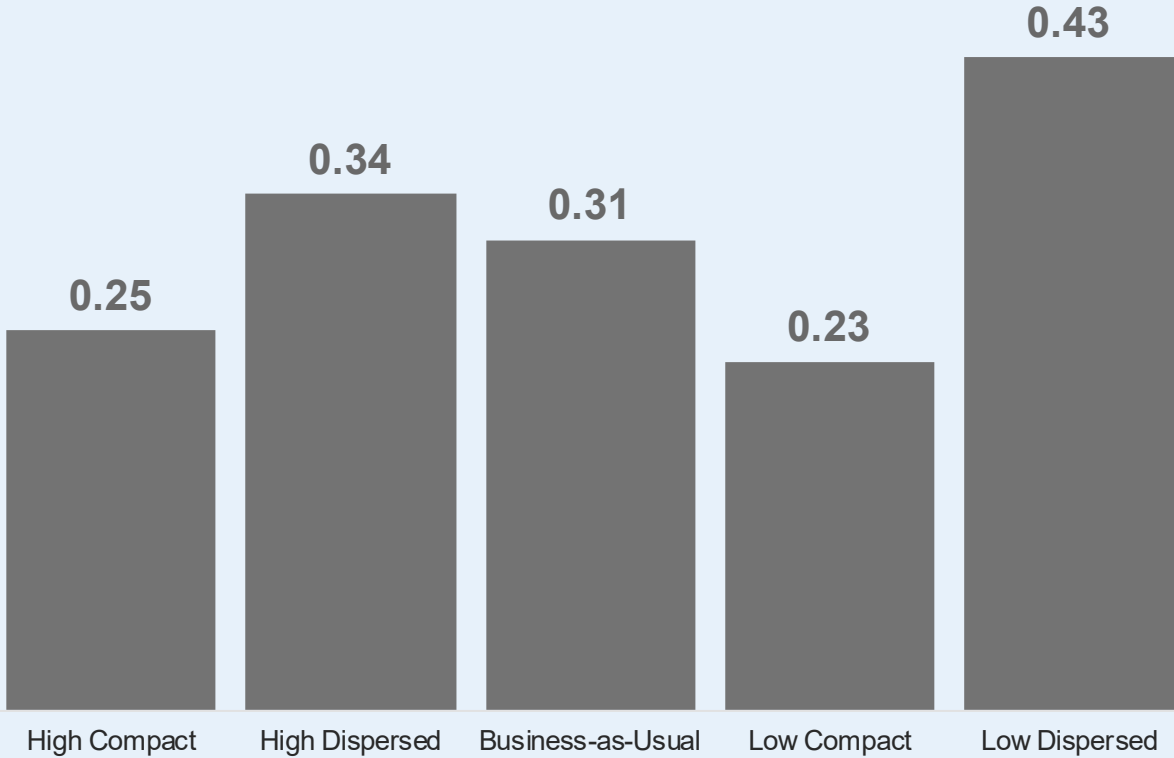
Concept	Measure
Land Consumed	Total Acres of Land Developed
Density of Land Use	Average Acres of Land Use per Household
Agricultural Land Developed	Total Acres of Agricultural Land Lost to Development

# Land Use Modeling Results

### Total Acres of Additional Land Developed, 2020-2050

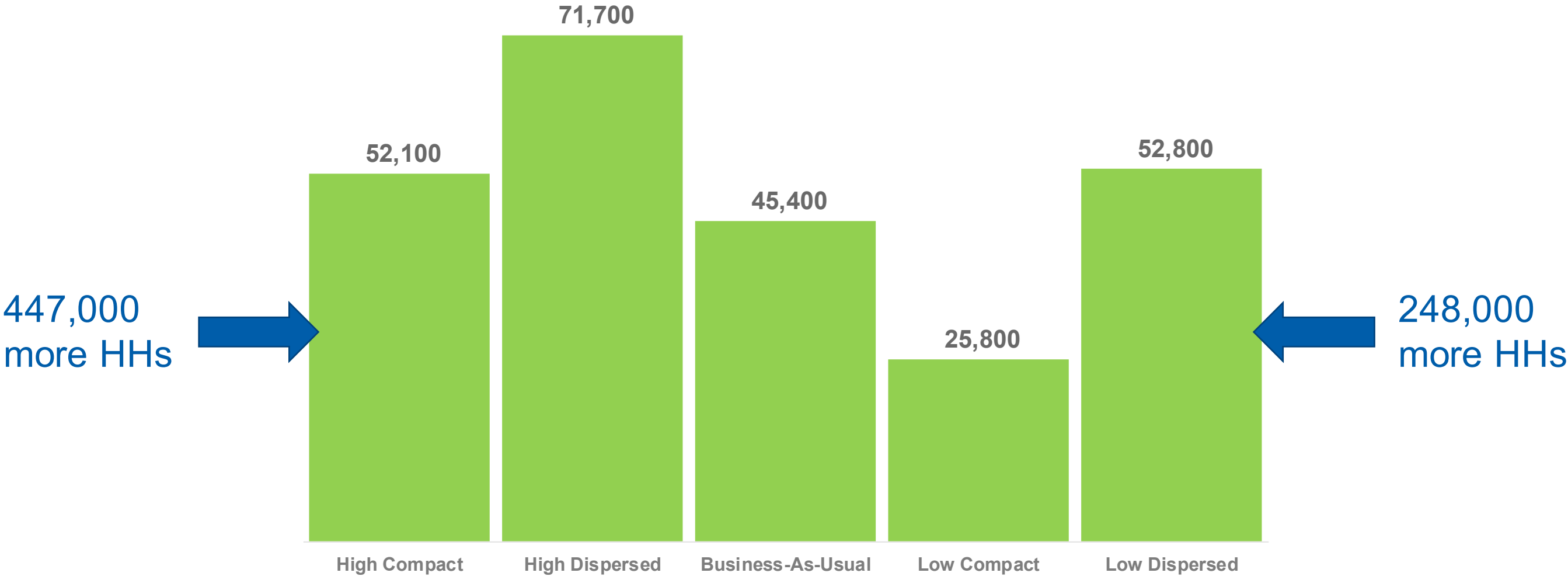


### Average Acres of Land Used Per Household



# Land Use Modeling Results

## Total Acres of Agricultural Land Lost to Development



# Implications on Land Use Policy



## Findings

Compact development uses land more intensely and efficiently.

Dispersed development increases pressure on agricultural land.



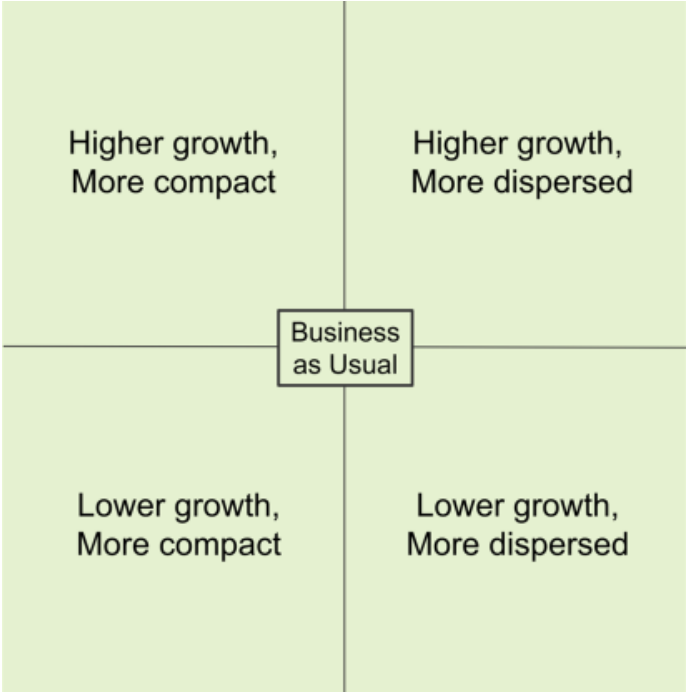
# Connection to Regional Vision and Goals

Measure	Working Regional Goals				
	Equitable Inclusive Region	Healthy Safe Communities	Dynamic Resilient Economy	Mitigated Adapted Resilient Climate	Protected Restored Natural Systems
Total Acres of Land Developed			✓		✓
Average Acres of Land Used per Household	✓	✓		✓	
Total Acres of Agricultural Land Developed			✓		✓

# From Analysis to Policy Development

## Analysis Phase

How might the region's growth vary?



How would those futures impact the region?



How do those impacts align with our vision?

- Equitable Inclusive Region
- Healthy Safe Communities
- Dynamic Resilient Economy
- Mitigated Adapted Resilient Climate
- Protected Restored Natural Systems

## Policy Phase

What policies are needed to achieve our vision?

### Regional Development Guide

- Land Use Policy
- Transportation Policy
- Water Policy
- Regional Parks Policy
- Housing Policy

# Scenario Conversations



- Ongoing LUAC and CDC conversations about managing growth:
  - Land Use
  - Transportation and Housing
  - Water
  - Regional Parks
  - Natural Systems and Climate
- Upcoming conversations with the Council.
- The goal is to facilitate policy conversations based on the information generated by the scenario analysis.
- Informs our forecast work.

# Questions?

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