

Scenario Planning and Transportation

TPP Advisory Work Group

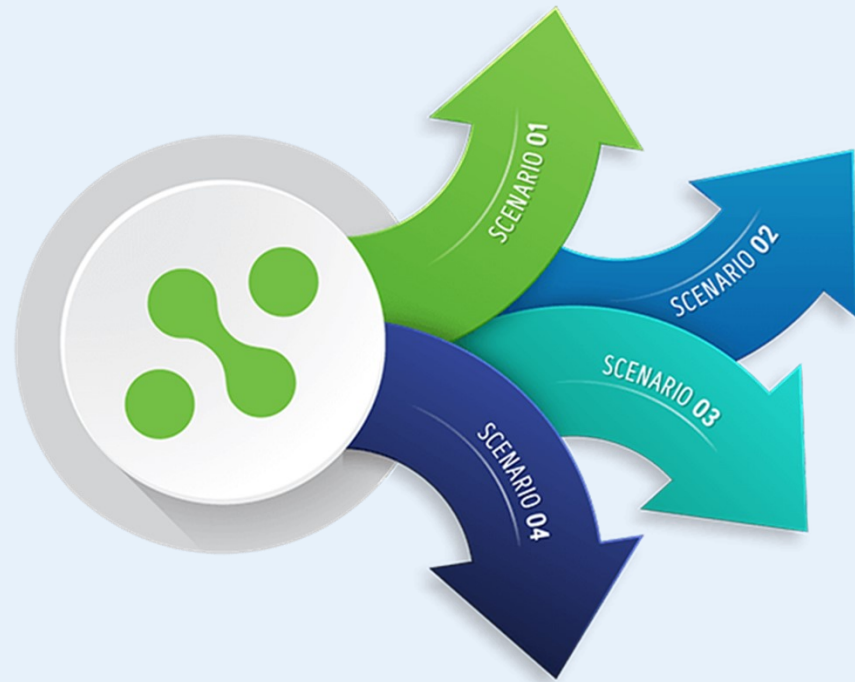


April 21, 2023

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Scenario Planning

What is scenario planning?

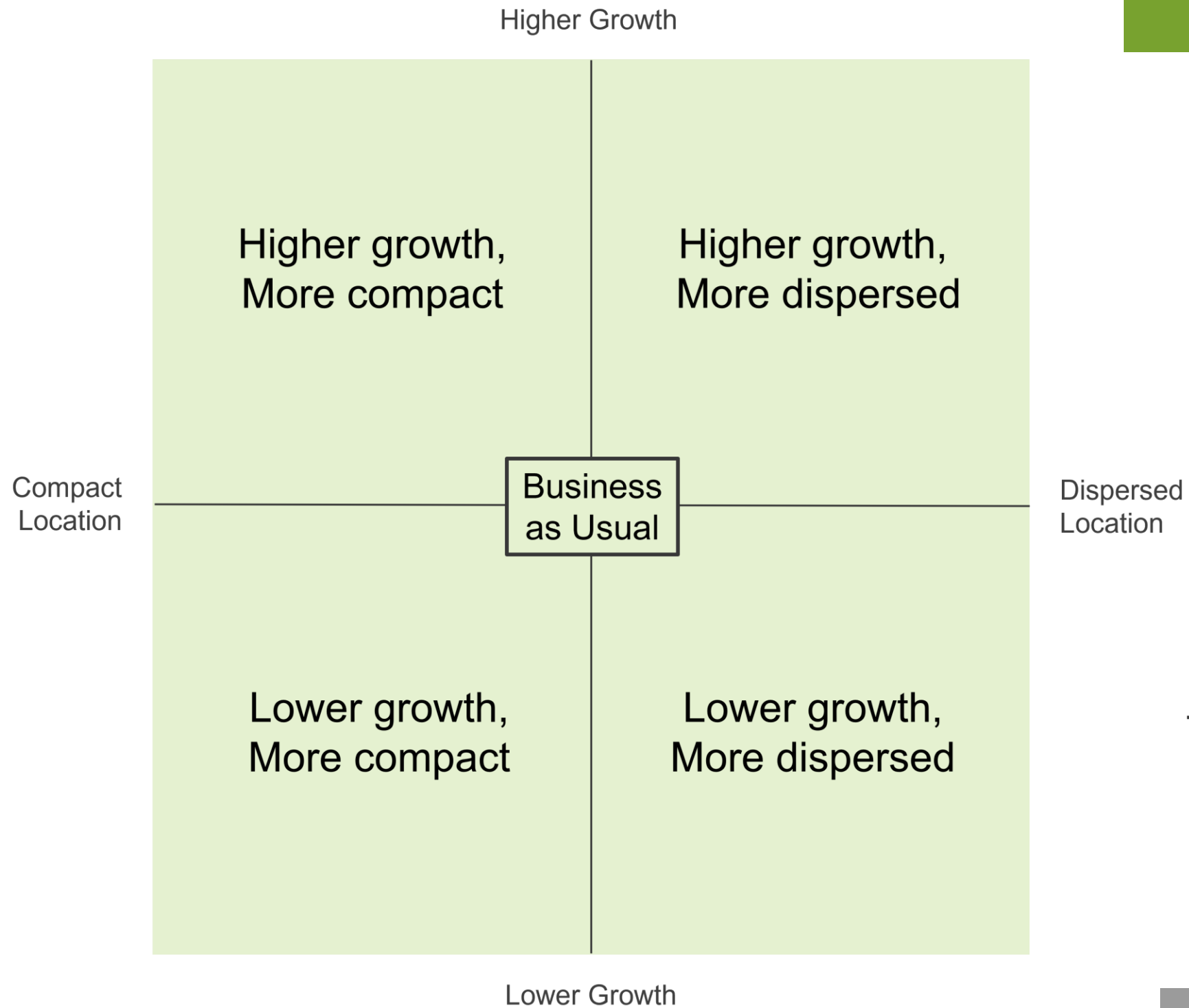


Why and how are we using it?

- Prepare for contingencies in an unknown future
- Identify future opportunities and challenges
- Inform future regional growth policies

Regional Growth Scenarios

How much?
Where?



Scenario Assumptions



A range of significant yet plausible futures

- Based on planned land use in adopted 2040 comprehensive plans, 2040 transportation network, and 2040 MUSA boundaries.
- Simulate additional growth between now and 2050, not a wholesale transformation of the region.
- High growth: 50% more than business-as-usual
Low growth: 25% less than business as usual

Disclaimer: What this project is not

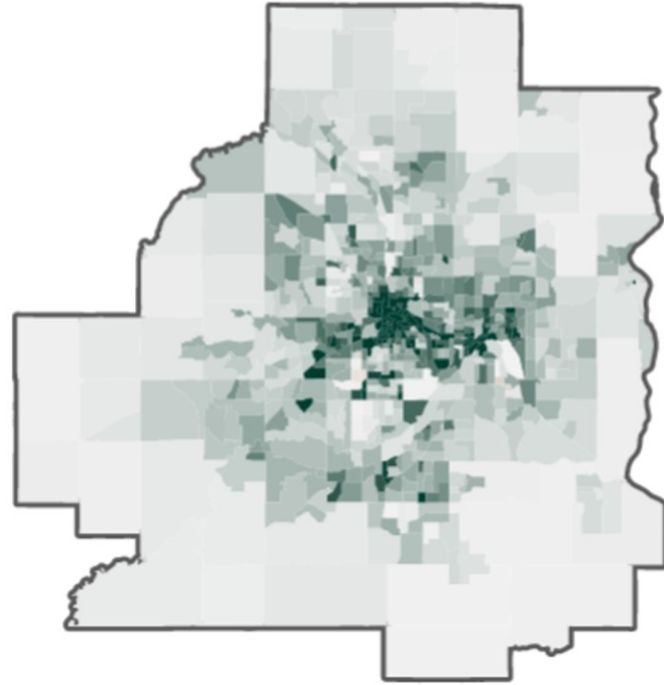
We are not picking a future.

- Instead, we are exploring our preparedness for a variety of futures.

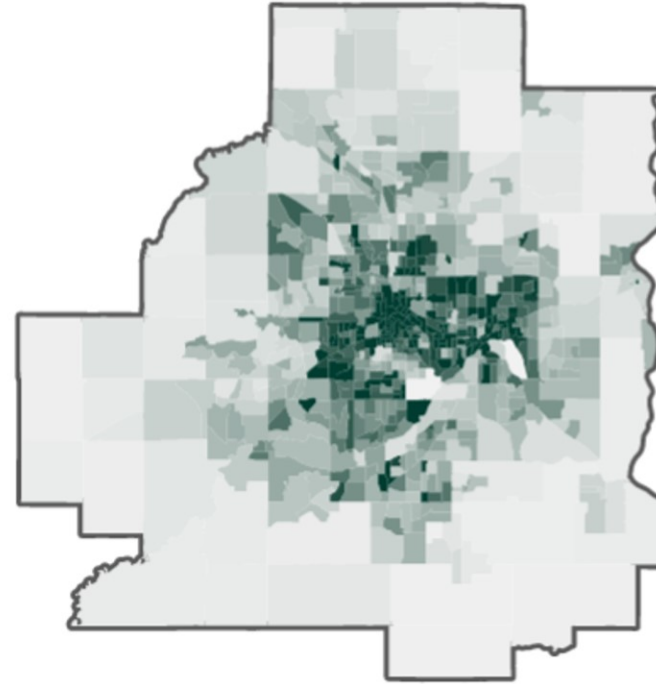
This is not our official 2050 regional forecast.

- We are using the same forecast tools, but in a hypothetical planning exercise.

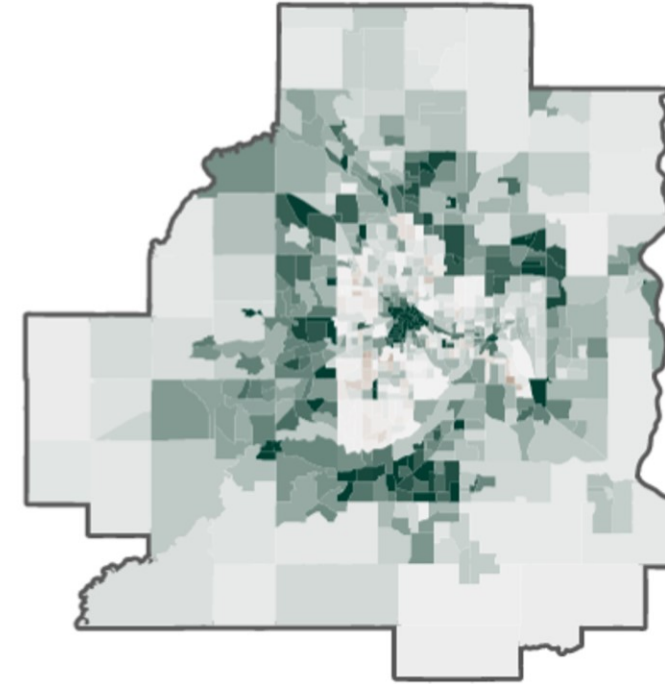
Business as usual



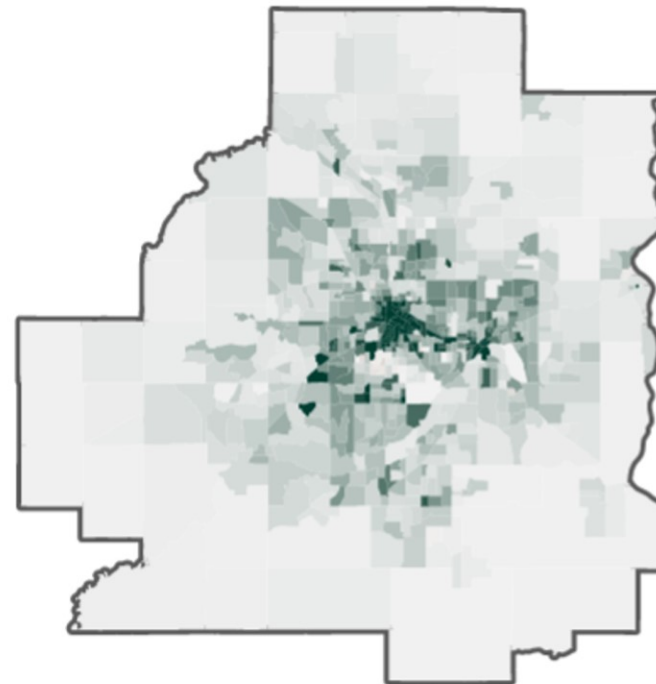
Higher growth, more compact



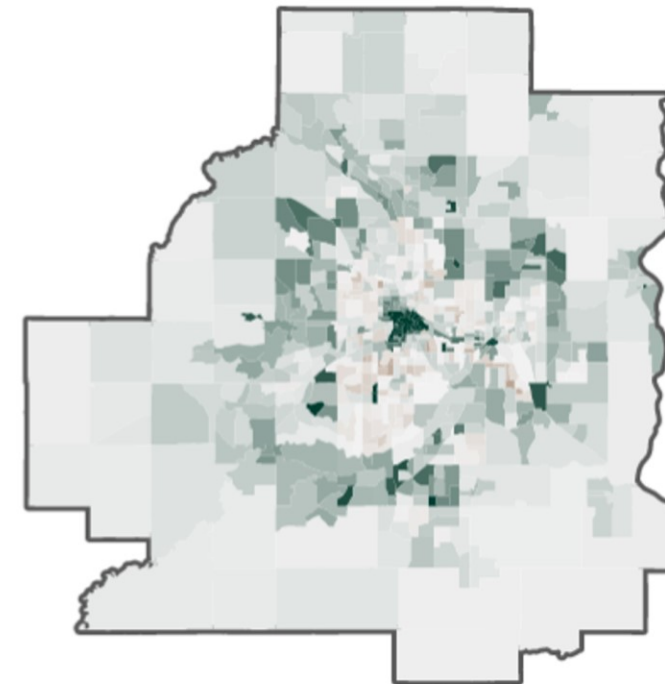
Higher growth, more dispersed



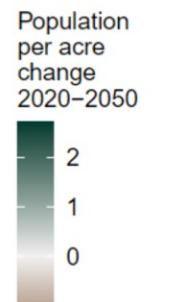
Lower growth, more compact



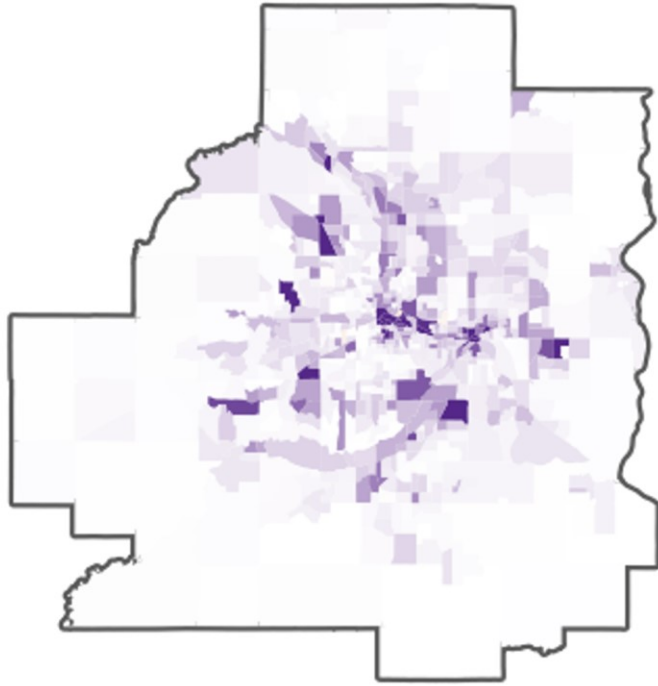
Lower growth, more dispersed



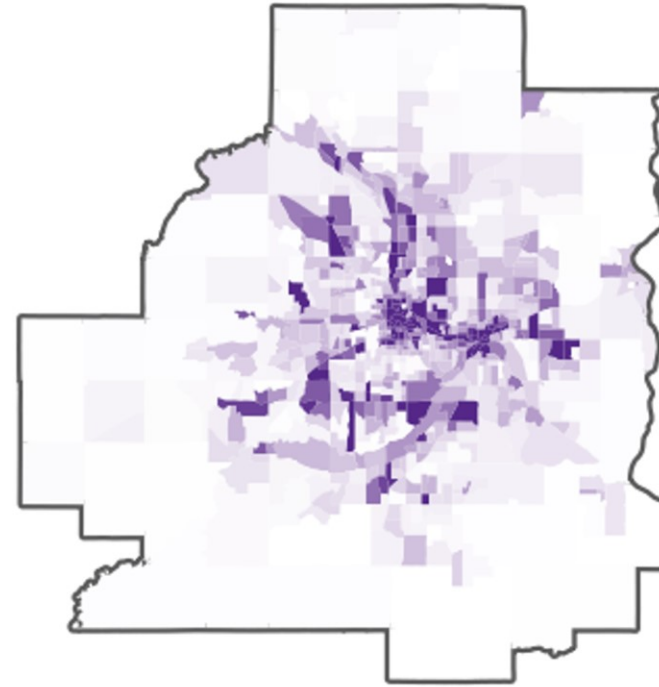
Population Per Acre Change, 2020-2050



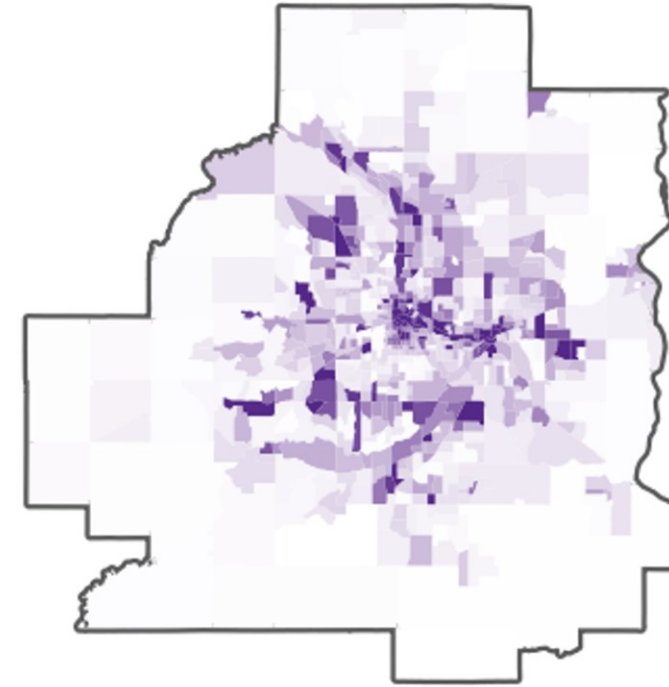
Business as usual



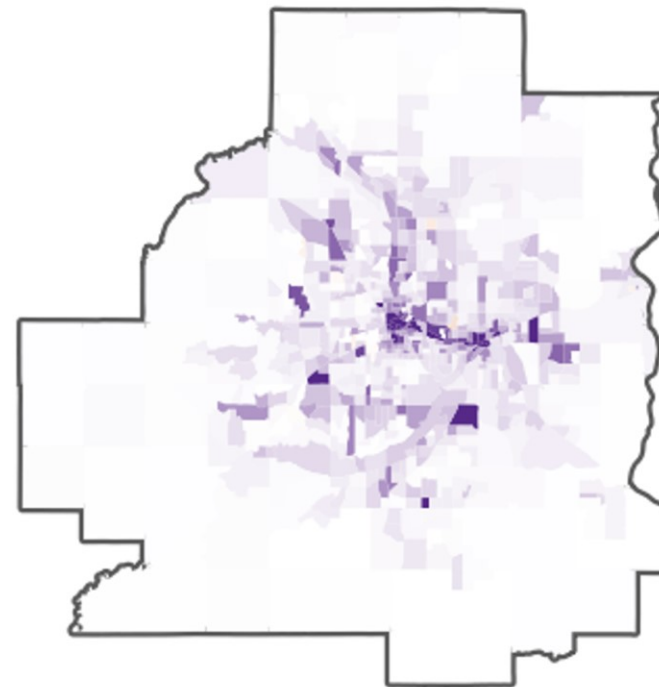
Higher growth, more compact



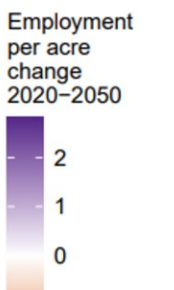
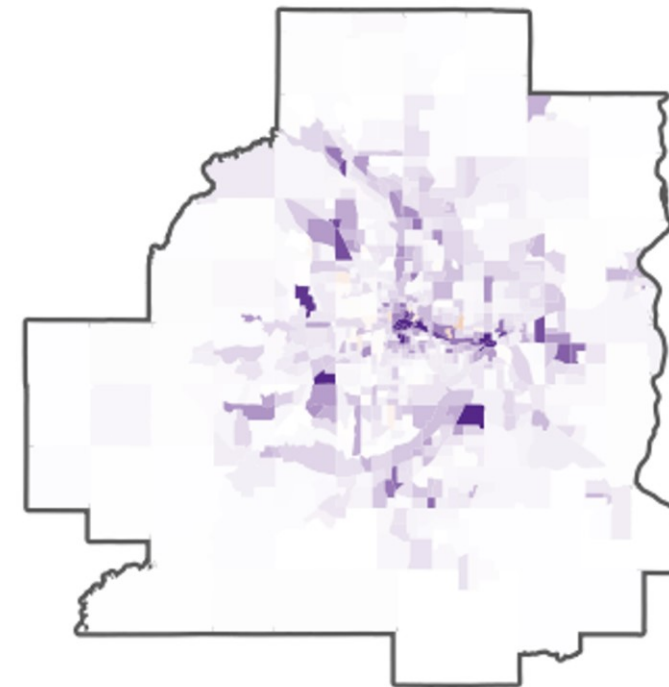
Higher growth, more dispersed



Lower growth, more compact



Lower growth, more dispersed



Employment per Acre Change, 2020-2050

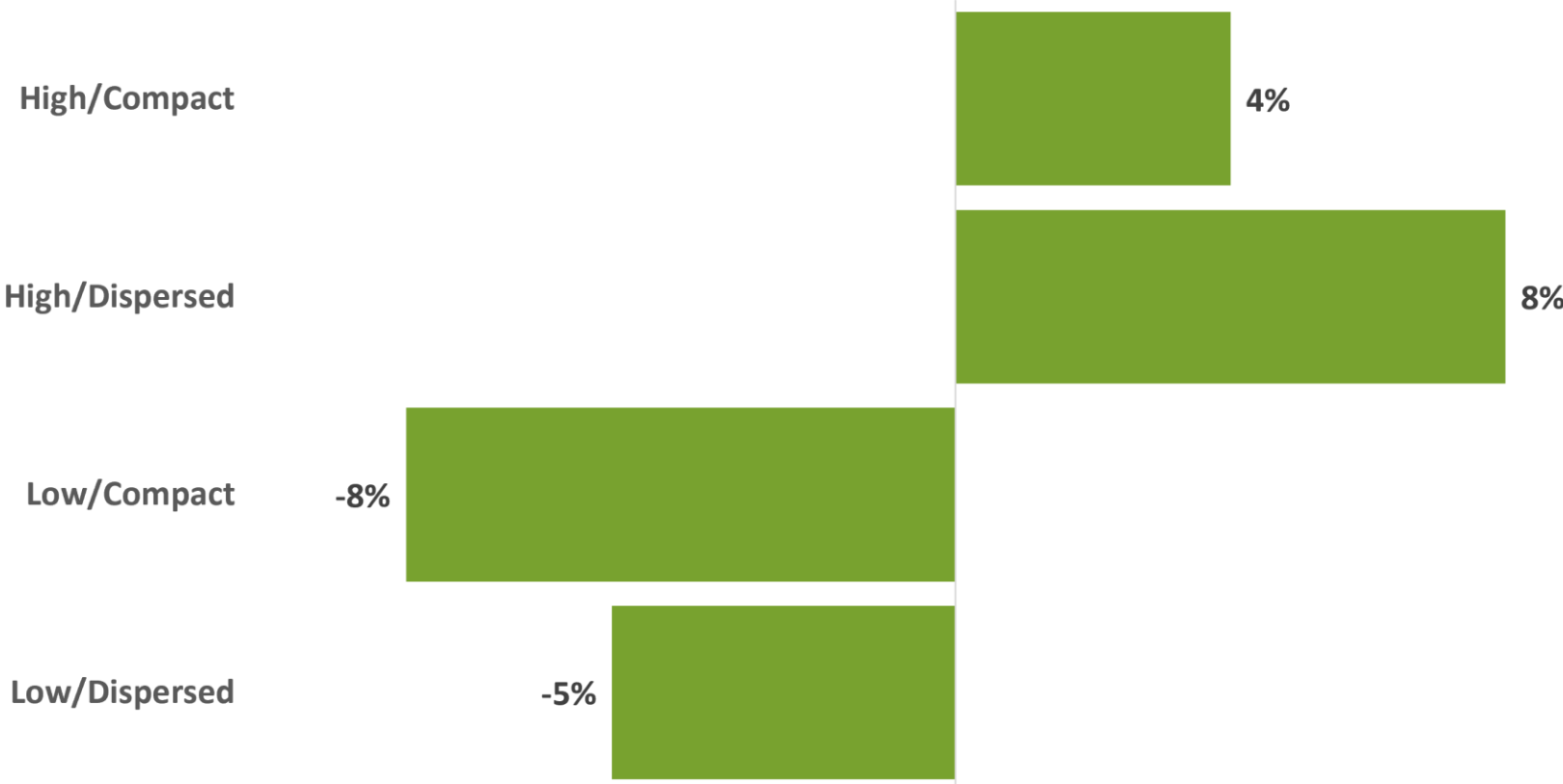
Transportation Measures of Scenarios

Measure	Council Vision Components			
	Equitable Inclusive Welcoming	Healthy Safe Vibrant	Climate Mitigation Adaptation Resilience	Natural Systems Protected Restored
Greenhouse Gas Emissions		✓	✓	✓
VMT per Capita			✓	
Job Accessibility by Car	✓	✓		
Job Accessibility by Transit	✓	✓		
Transit Market Areas		✓		

Daily Green House Gas Emissions

Climate concerns are better addressed by compact growth, which produces lower GHG emissions than dispersed growth, no matter how much the region grows.

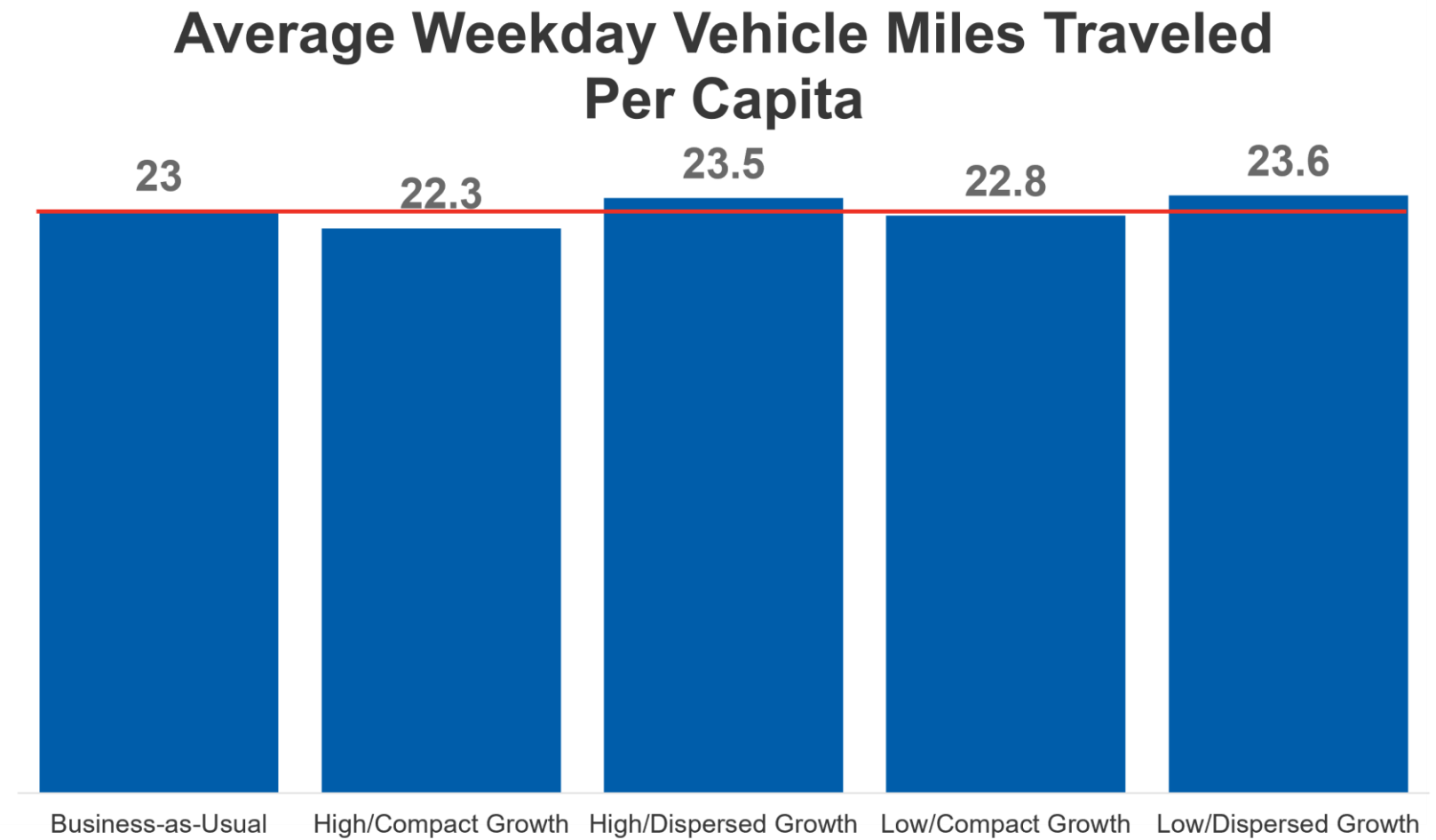
Average Weekday Green House Gas Emissions
Percent Difference from Business as Usual



Business As Usual:
26,983 Metric Tons

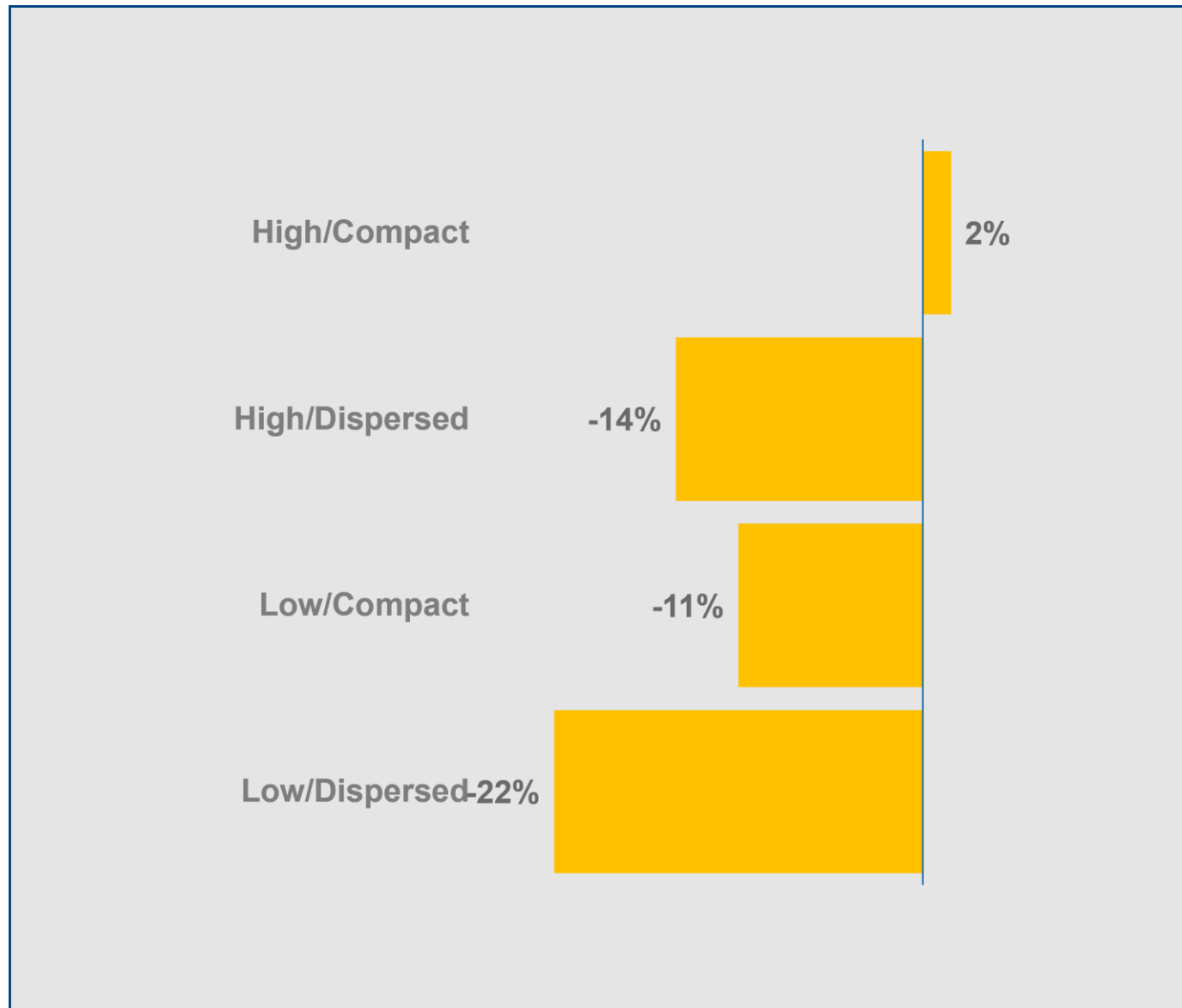
Vehicle Miles Traveled (VMT) Per Capita

Climate concerns are better addressed by compact growth, which produces lower VMT per capita than dispersed growth, regardless of how much the region grows.

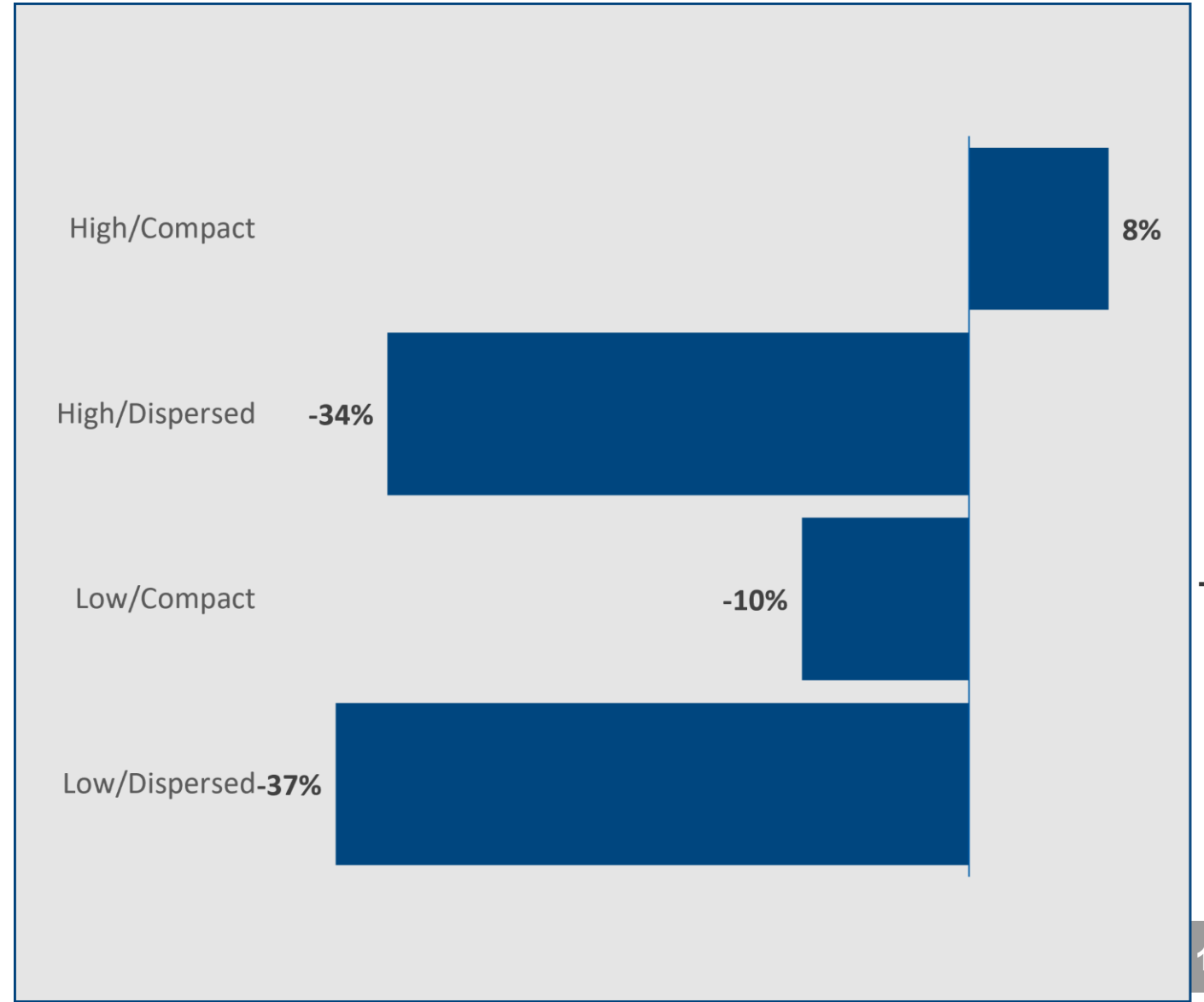


Access to Jobs Increases with Compact Growth (especially with transit)

Percent Change in Number of Jobs Accessible by Car (30 minutes) Compared to Business as Usual



Percent Change in Number of Jobs Accessible by Transit (30 minutes) Compared to Business as Usual



Transit Market Areas

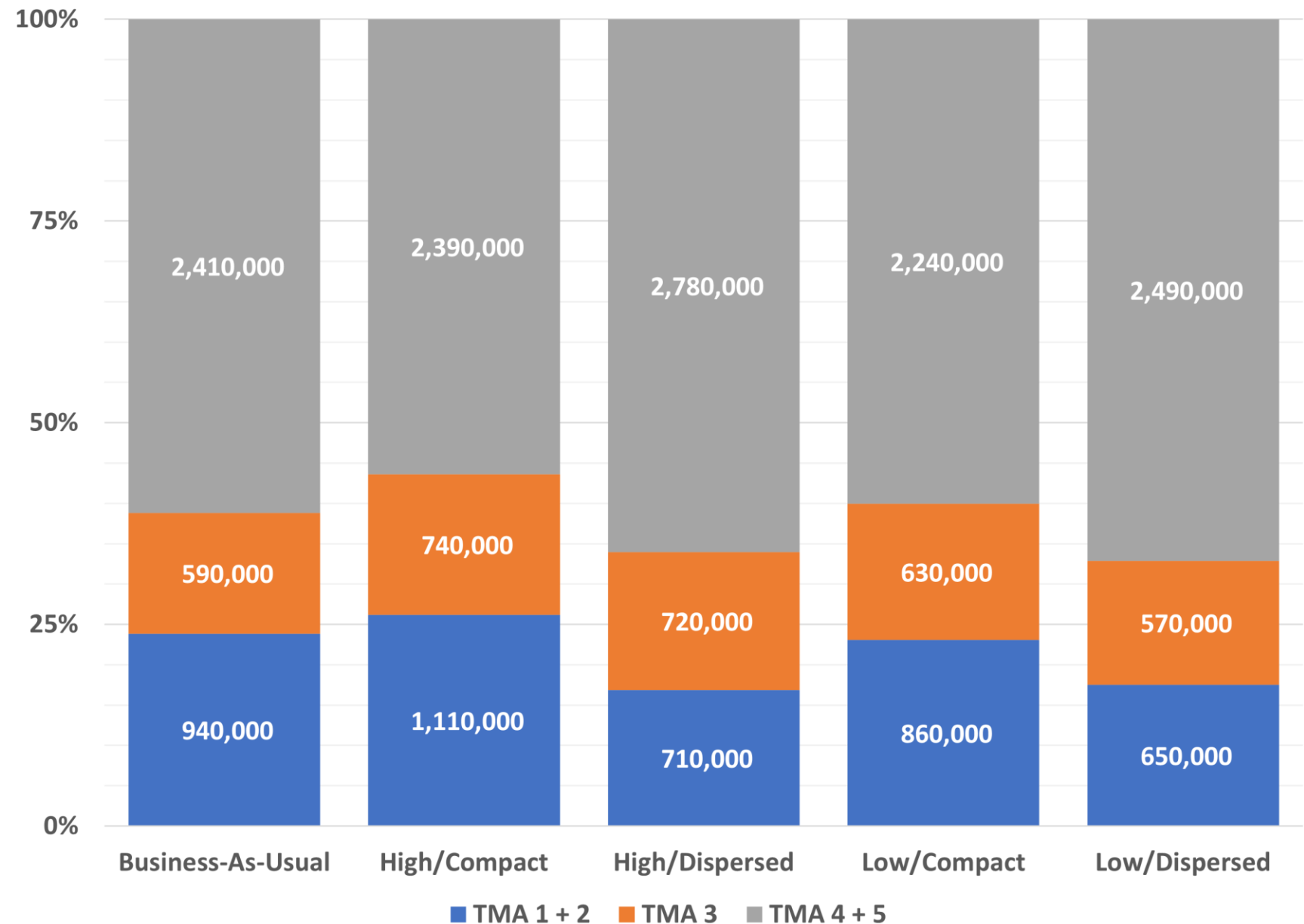
Compact growth is more conducive to transit.

Compact growth scenarios have more people living in areas that could support all-purpose transit (TMA 1&2).

Dispersed growth scenarios leave more people with minimal transit service (TMA 4&5).

Compact scenarios have slightly more people living in areas that could support intermittent transit (TMA 3).

Share of Residents in Transit Markets, 2050



Thank you

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