Scenario Planning and Transportation Findings

Committee of the Whole

METROPOLITAN COUNCIL

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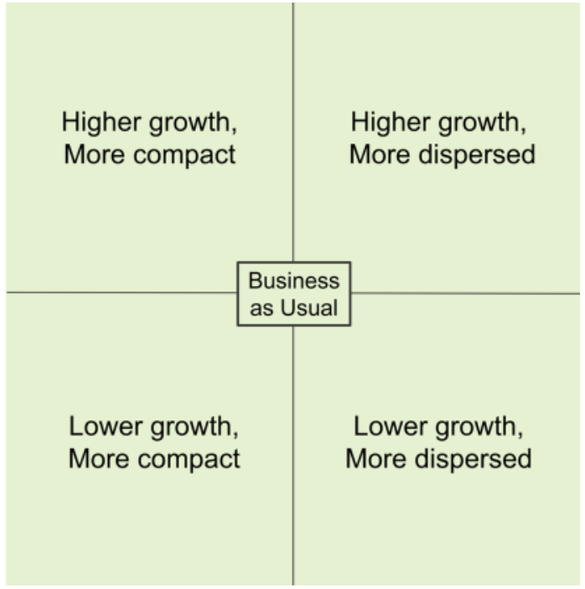
Presentation Overview

- A Roadmap for Scenario Planning
- Connections to Regional Goals
- Key Transportation Issues and Findings
- Connections to Land Use

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

Transportation Measures: Connections to Regional Goals

	Working Regional Goals				
Measure	**Equitable Inclusive Region**	**Healthy Safe Communities**	**Dynamic & Resilient Region**	**Climate Mitigation**	**Protected Restored Natural Systems**
VMT per Capita	✓✓	✓✓	✓	✓✓	✓
Greenhouse Gas Emissions	✓	✓	✓	✓✓	✓
Job Accessibility by Car	✓		✓✓		
Job Accessibility by Transit	✓✓	✓	✓✓	✓	
Transit Market Areas	✓	✓	✓✓	✓	

Key Transportation Concepts

Vehicle Miles Traveled per Capita

- Vehicle miles traveled per capita contribute to transportation-based greenhouse gas emissions.
- Vehicle miles traveled per capita have other impacts from vehicle travel (e.g., congestion, wear and tear, crashes)

Greenhouse Gas Emissions

- Greenhouse gas emissions are the main cause of climate change.
- Transportation-based greenhouse gas emissions is a key contributor to climate change.

Key Transportation Concepts

Job Accessibility by Car

- The number of jobs accessible by car within 30 minutes.
- Indirect proxy for accessibility to other destinations.

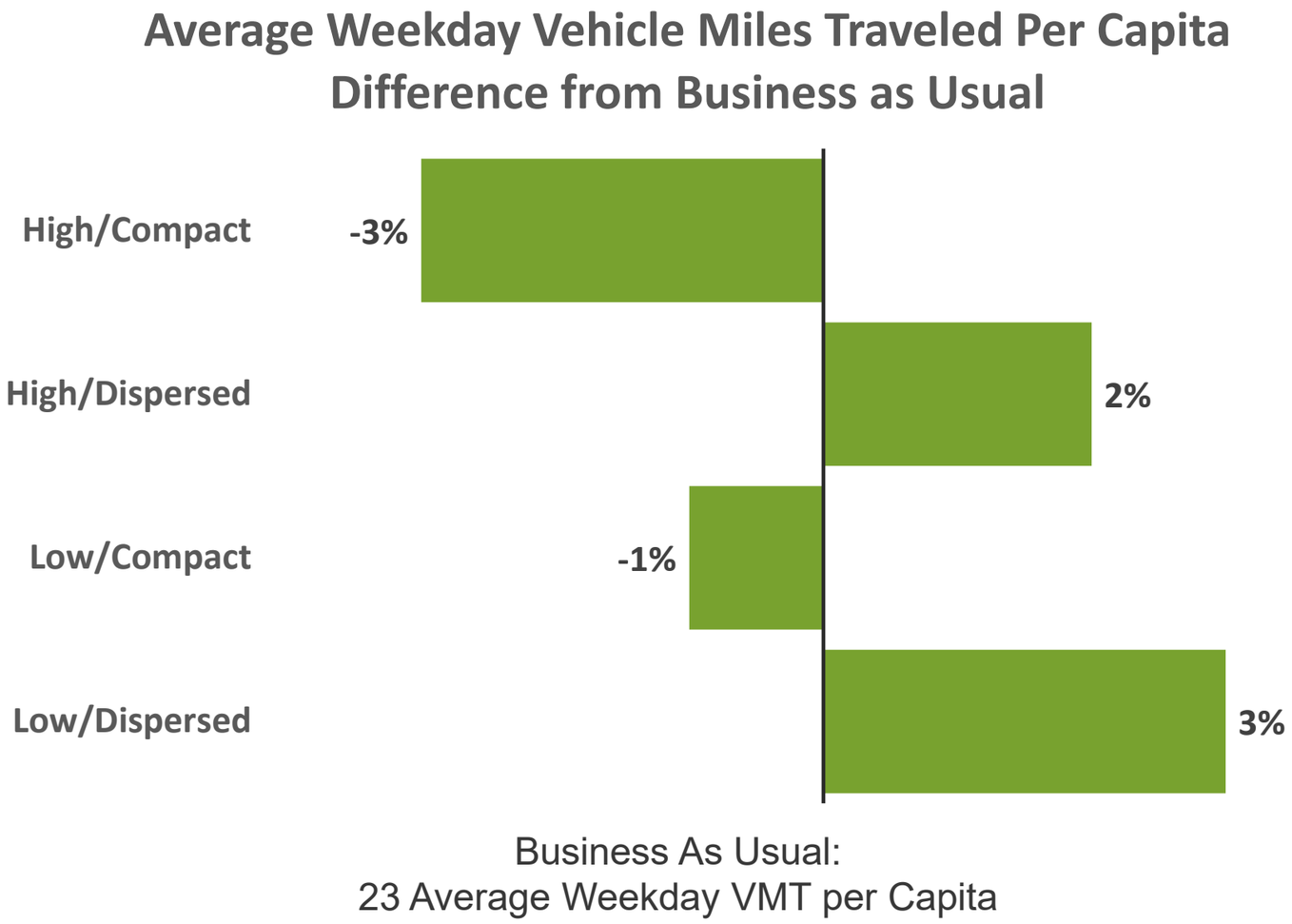
Job Accessibility by Transit

- The number of jobs accessible by transit within 30 minutes.
- Indirect proxy for accessibility to other destinations.

Transit Market Areas

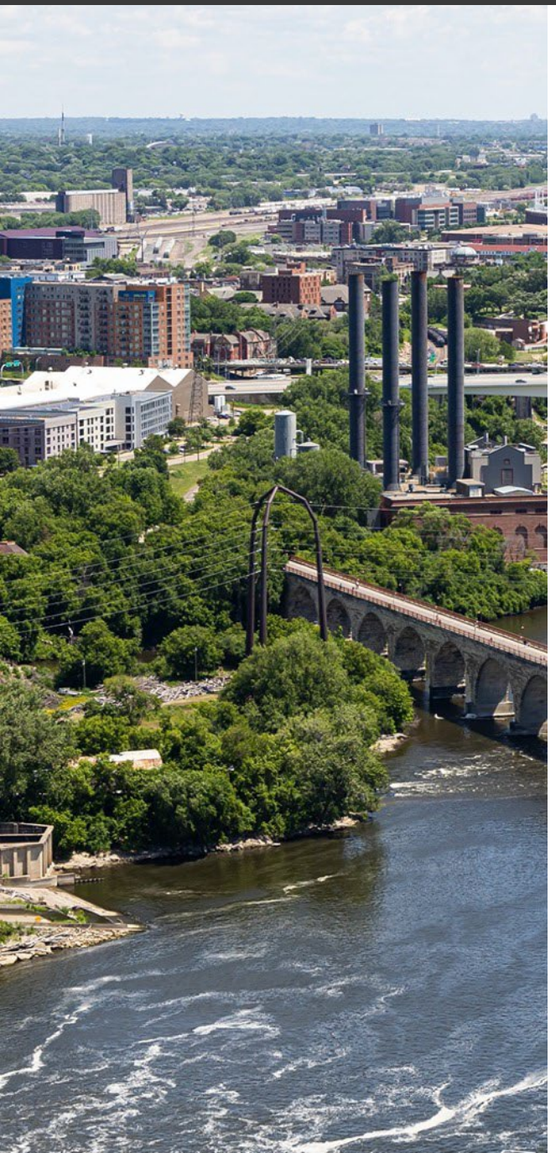
- Transit Market Areas (TMAs) estimate the local bus ridership that an area can support.
- TMAs 1 & 2 are the areas that could high levels of transit service.
- TMA 3 supports moderate/intermittent service.
- TMAs 4 & 5 support express and dial-a-ride service.

Vehicle Miles Traveled (VMT) Per Capita



Compact growth, produces lower VMT per capita than dispersed growth, regardless of how much the region grows.

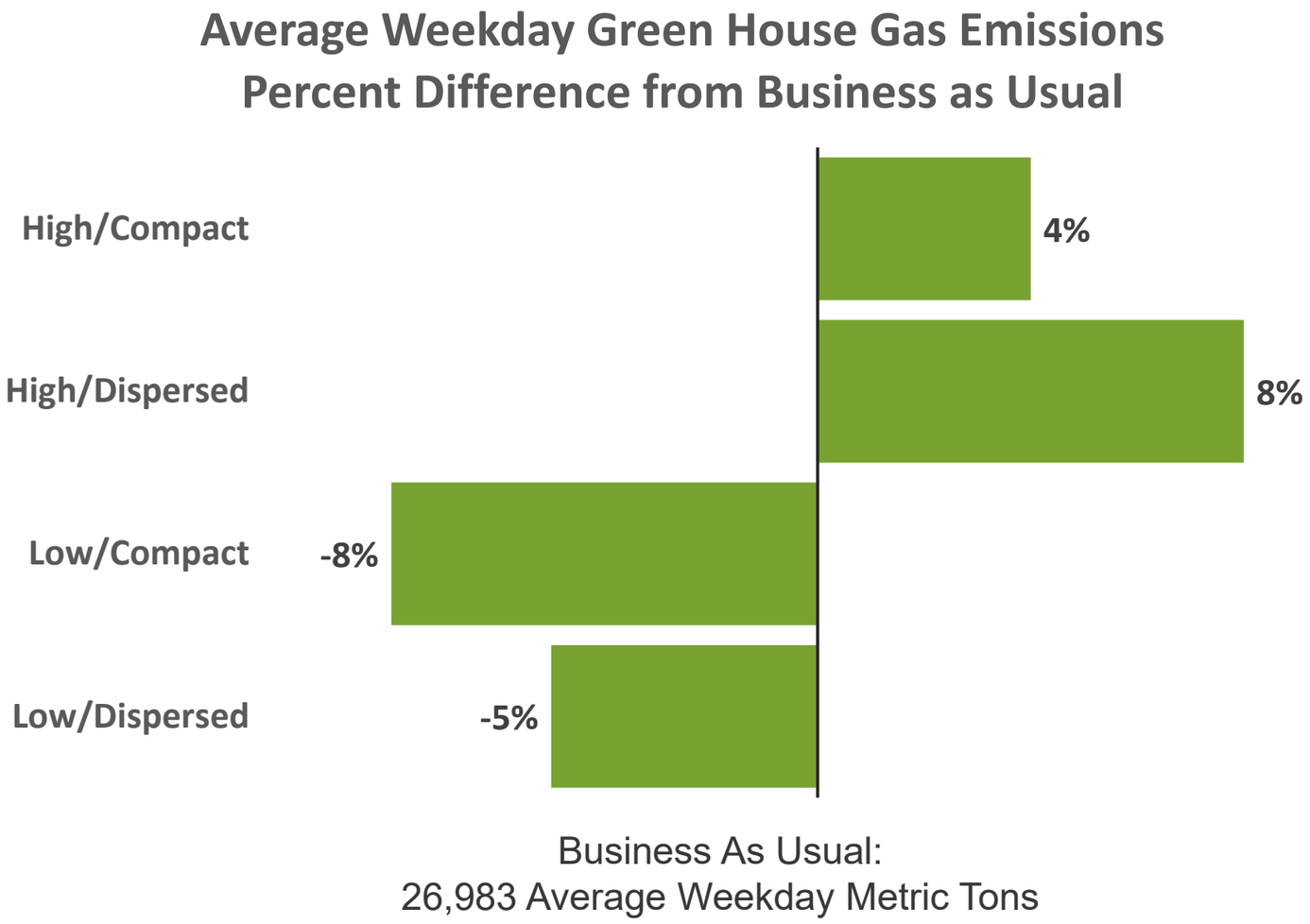
Key Takeaway on VMT per Capita



Vehicle Miles Traveled (VMT) per capita are lower in compact scenarios due to multiple factors.

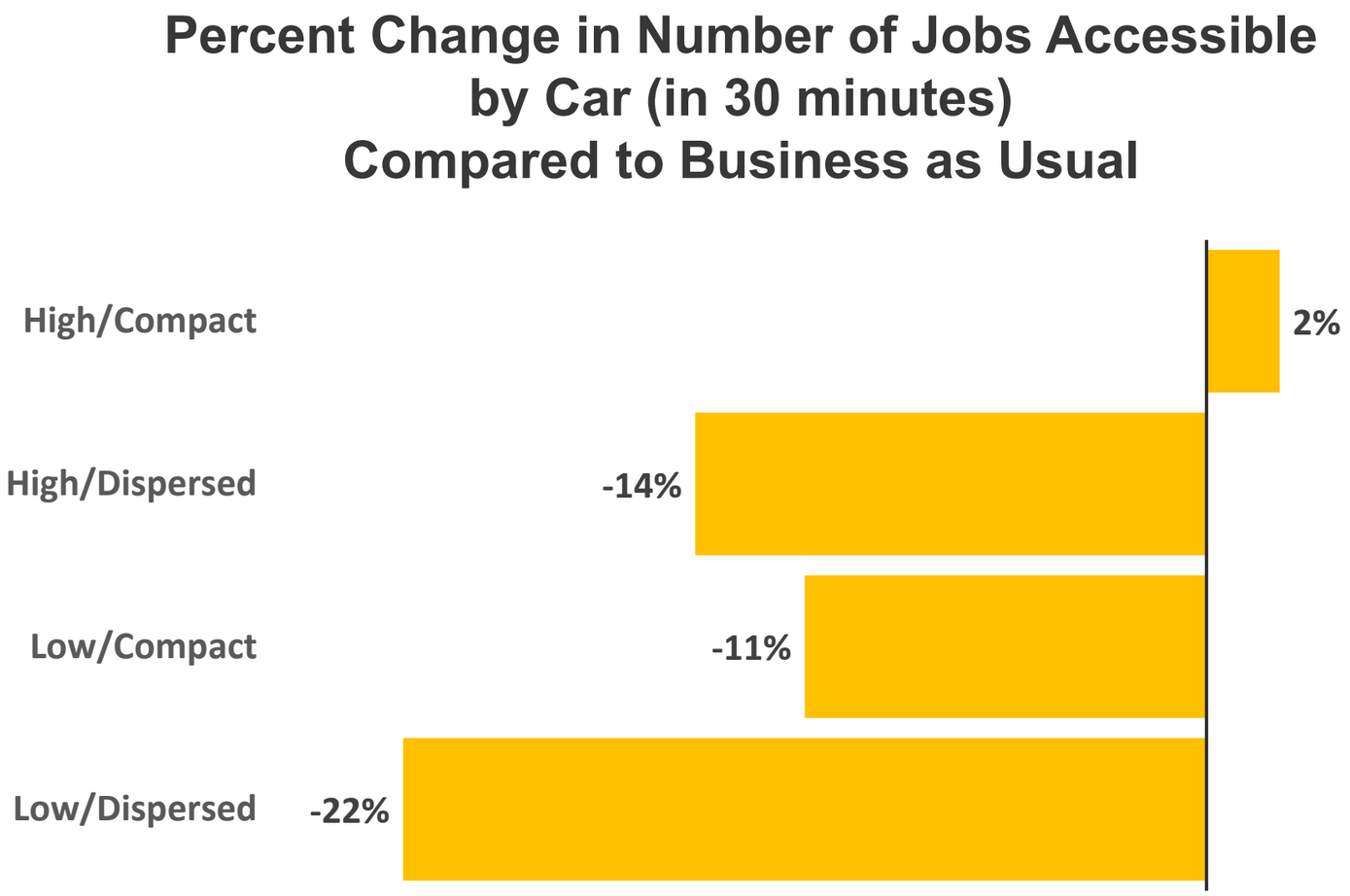
- Average trips get shorter because people are, on average, closer to **both jobs and services.**
- Transit accessibility goes up because more jobs and services **locate in areas with more frequent transit service,** causing a **small shift away from single-occupancy vehicles** to transit.

Daily Greenhouse Gas Emissions



Compact growth produces lower GHG emissions than dispersed growth, no matter how much the region grows.

Job Accessibility by Car

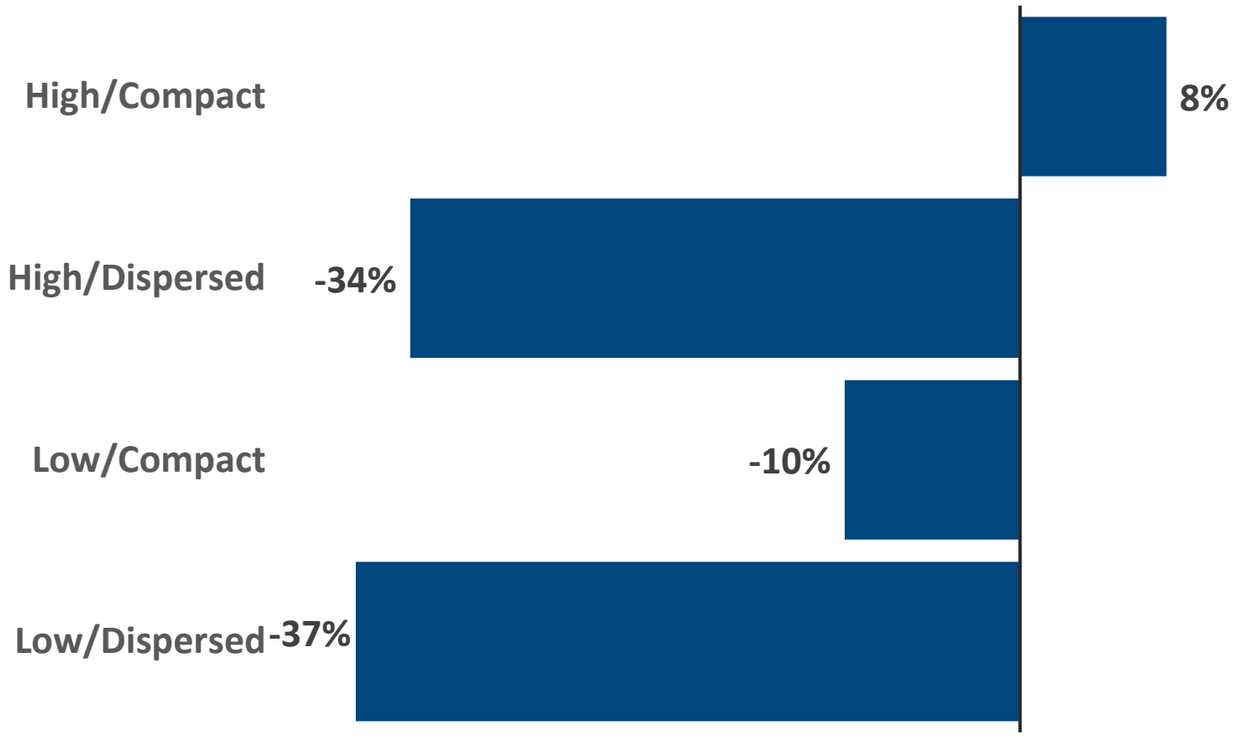


Dispersed growth reduces access to jobs by car, regardless of how much the region grows.

Low growth reduces access to jobs by car, especially in the dispersed scenarios.

Job Accessibility by Transit

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



Dispersed growth reduces access to jobs by transit, regardless of how much the region grows.

Low growth reduces access to jobs by transit, especially in the dispersed scenarios.

Job Accessibility

Access to jobs increases in compact development scenarios

- Employment growth in job and activity centers support greater regional job accessibility.
- Job dispersal throughout the region may increase suburb-suburb travel.

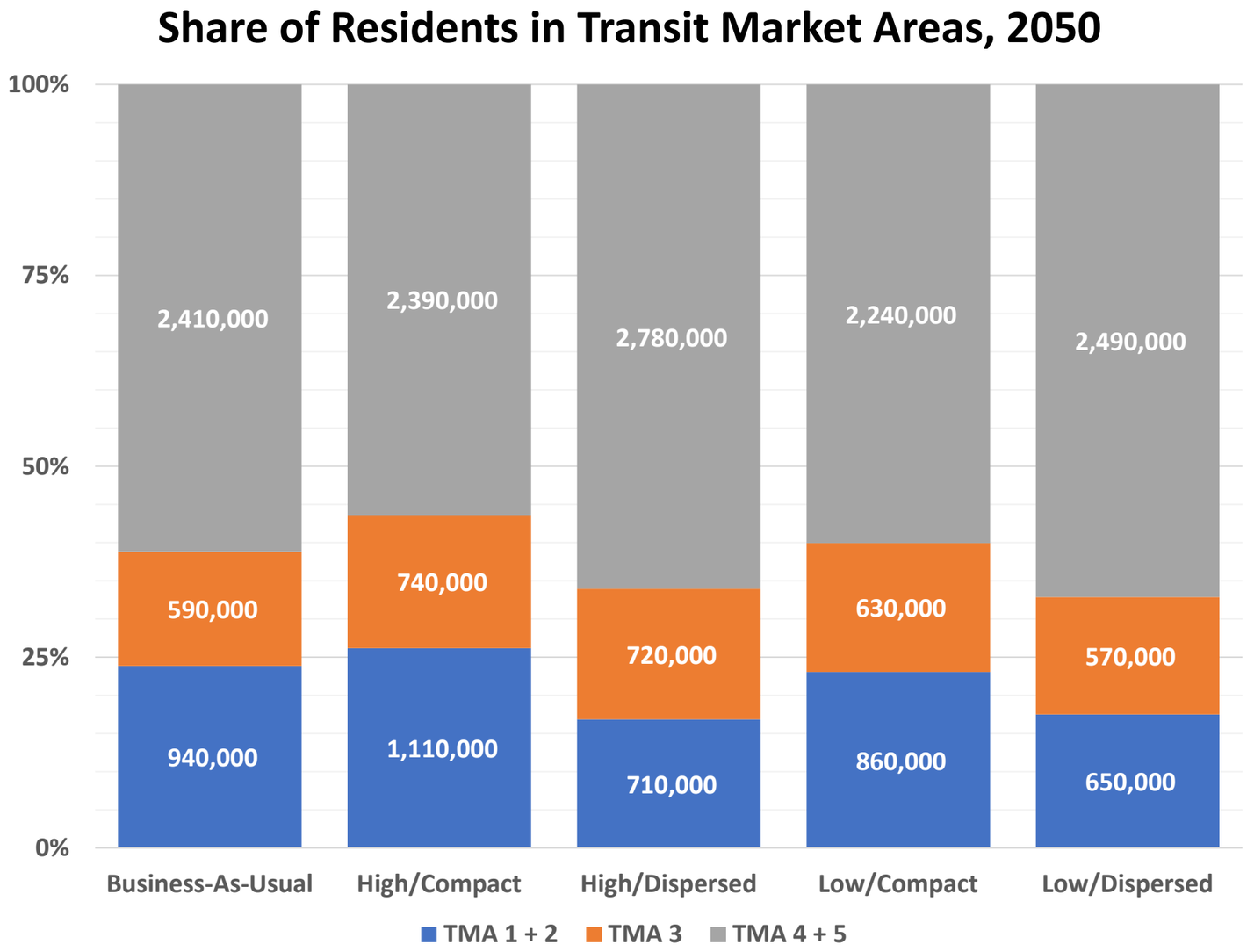
Transit Access: Transit Market Areas (TMAs)

Compact growth is more conducive to transit ridership.

Compact growth scenarios have more people living in areas that could support high levels of transit (TMA 1 & 2).

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

Dispersed growth scenarios have more people living in areas that don't support local transit service (TMA 4 & 5).



Transportation Findings

- Dispersed scenarios make meeting state emissions reductions targets, and attaining our region's draft goal on climate mitigation, more difficult.
- Reduced accessibility in dispersed scenarios may reduce the overall efficiency of the regional highway system.
- Most of the existing land development patterns stay the same in all scenarios, which limits the impacts of scenarios on transit market areas.

Connections to Land Use

Compared to dispersed growth, compact growth results in

- Lower Vehicle Miles Travelled
- Lower Greenhouse Gas Emissions
- Greater Job Accessibility
- Better Transit Access

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