



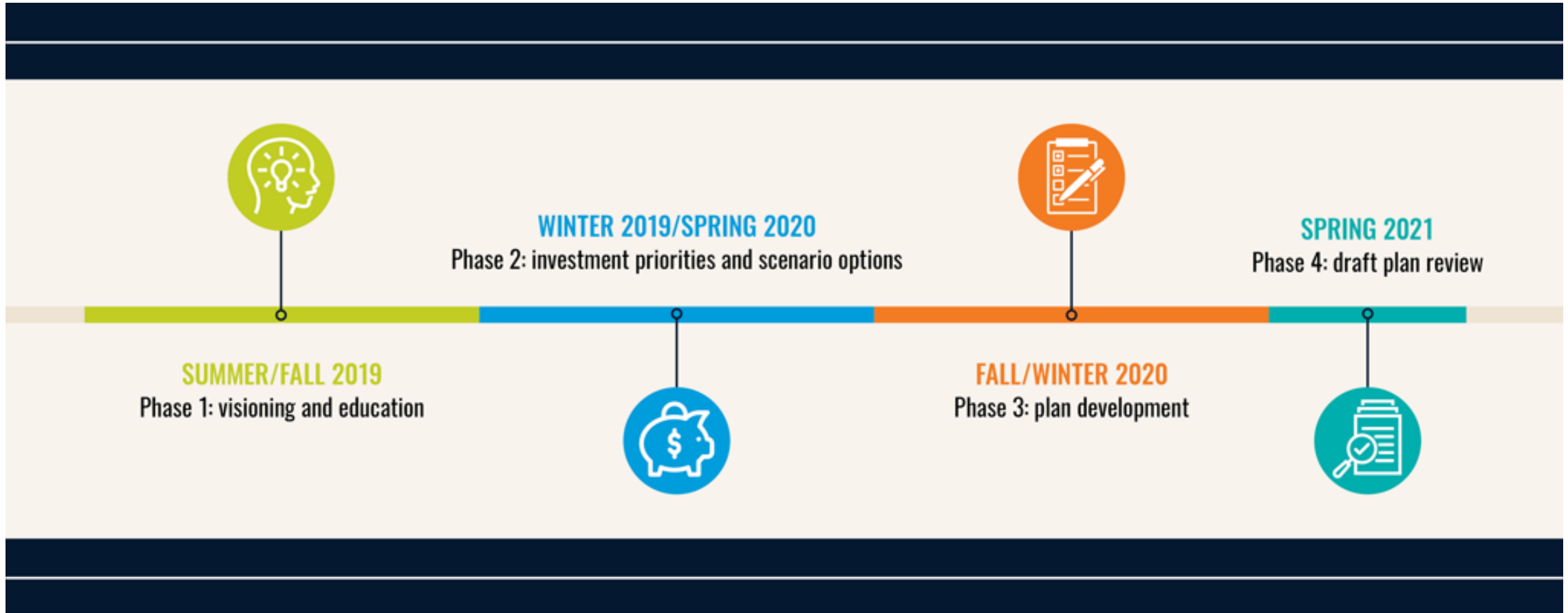
2050 Metro Vision Regional Transportation Plan – Scenario Outcome Measures

Board Work Session
February 5, 2020

Presented by:
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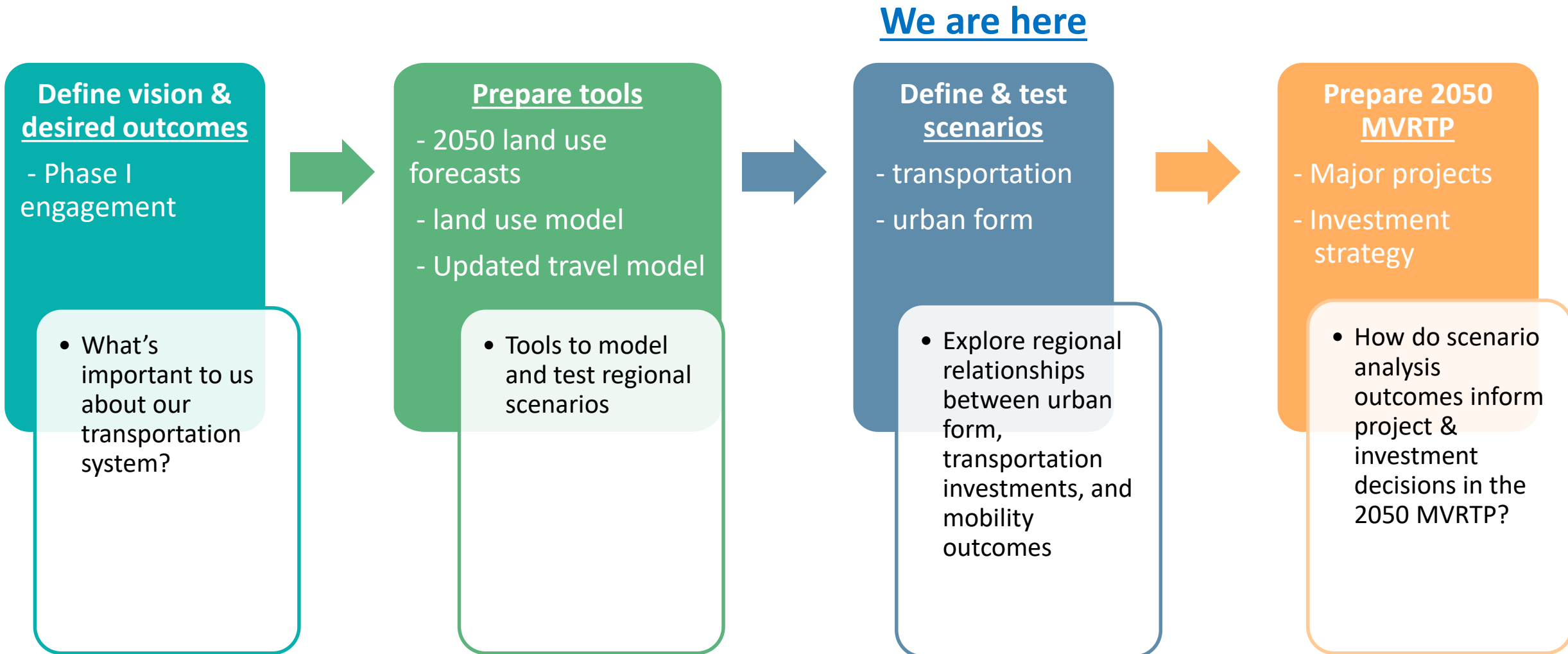


2050 MVRTP major milestones & timeline





2050 MVRTP & scenario planning process framework



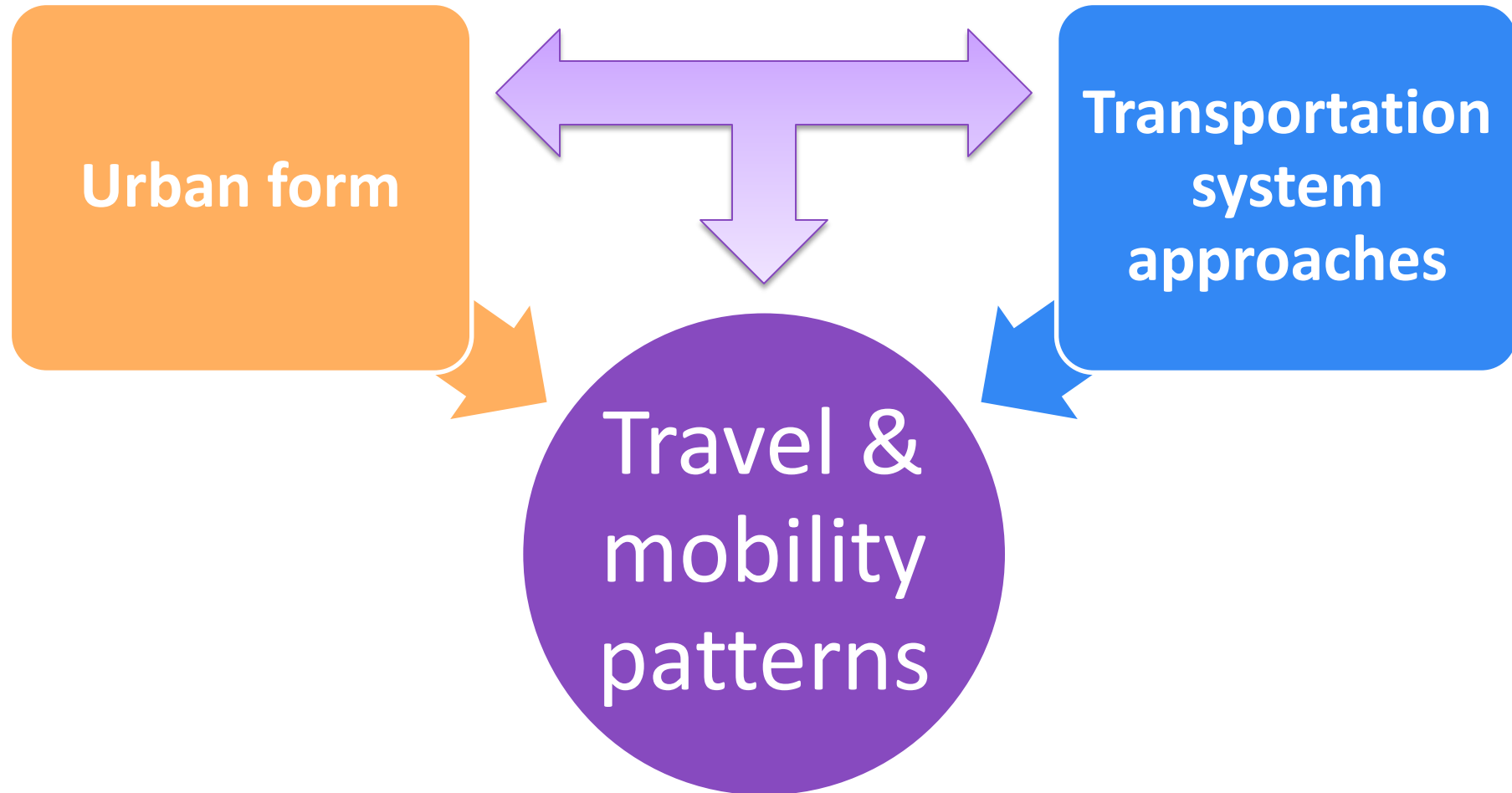


2050 MVRTP scenarios

- Transit network/service emphasis
 - Travel choices/urban arterials emphasis
 - Technology/connected & autonomous vehicles emphasis
 - Regional highway & operations emphasis
 - Freeway/interstate congestion emphasis
 - Regional jobs/housing balance emphasis
-
- Baseline (adopted 2040 MVRTP)



Assessing scenarios: understanding regional relationships





Assessing scenario outcomes context

- Explores “**what if**” alternative futures
- **Relative** comparisons between scenarios and baseline
- **Not** rigorous evaluation of scenarios, nor choosing/judging scenarios
- **Choices & tradeoffs** from individual scenarios
- Provide **guidance and direction** for transportation investments in the 2050 MVRTP



Proposed outcome measures: Metro Vision targets

RESIDENTS LIVING IN AFFORDABLE LOCATIONS



REGIONAL EMPLOYMENT



HOUSING NEAR HIGH-FREQUENCY OR RAPID TRANSIT



EMPLOYMENT NEAR HIGH-FREQUENCY OR RAPID TRANSIT



URBAN CENTER HOUSING



REGIONAL POPULATION - WEIGHTED DENSITY



TRAVEL TIME VARIATION (TTV)



URBAN CENTER EMPLOYMENT



NON-SINGLE OCCUPANT VEHICLE (SOV) TRAVEL TO WORK



VEHICLE MILES TRAVELED (VMT)



PERSON DELAY



TRAFFIC FATALITIES



SURFACE TRANSPORTATION GREENHOUSE GAS (GHG)



NON-SINGLE OCCUPANT VEHICLE (SOV) TRAVEL TO WORK

non-SOV mode share

2014 Baseline | 25.1%
2016 Observation | 25.1%
2040 Target | 35.0%

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VEHICLE MILES TRAVELED (VMT)

VMT per capita per day

2010 Baseline | 25.2
2016 Observation | 25.4
2040 Target | 10.0%
decrease from 2010

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TRAVEL TIME VARIATION (TTV)

average ratio of peak period to off-peak travel time

2014 Baseline | 1.22
2016 Observation | 1.21
2040 Target | *Less than 1.30*

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PERSON DELAY

minutes delay per capita per day

2014 Baseline | 5.7
2017 Baseline | 6.4
2040 Target | *Less than 9.0*

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TRAFFIC FATALITIES

fatalities per year

2014 Baseline | 185
2016 Observation | 278
2040 Target | *Less than 100*

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COMPREHENSIVE PERFORMANCE MEASURES STATUS REPORT

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Example transportation system measures

Population		
Households	Vehicle and Congestion Performance Measures	
Employment		
Person Trips	Vehicle Miles Traveled (VMT)	
Within Region (Internal-Internal) SOV Drivers	Total Vehicle Trips	Fixed Route Transit Performance
Internal-External SOV Drivers	VMT Per Capita	Rail Transit Boardings
External-External SOV Drivers	Vehicle Hours Traveled	Bus Transit Boardings
Commercial Vehicle Trips	Vehicle Hours of Delay	Total Transit Boardings:
Total SOV Driver Trips	Person Miles Traveled (PMT)	Total Transit Trips
Shared Ride Driver	Person Hours Traveled	Person Miles Traveled on Transit
Shared Ride Passenger	Person Hours of Delay	Transit Share of Daily Work Trips
School Bus Trips	Average Vehicle Speed - Peak Hours (mph)	Transit Share of Total Daily Trips
Total Transit Trips (Bus and Rail)	Average Person Delay Per Trip (minutes)	Percent of Households Making a Transit Trip
Drive Trips to and from Transit	VMT/PMT	Accessibility Performance
Pedestrian/Bicycle Trips to and from Transit	Severely Congested Lane Miles (roadways with three or more lanes in one direction with severe congestion) (volume to capacity ratio ≥ 0.95)	Share of total population with good transit-job accessibility (100,000+ jobs within a 45-minute transit trip)
Bicycling Trips		
Pedestrian Trips		
Total Person Trips:	Percent of VMT in Severe Congestion	Share of population in low-income or minority areas with good transit-job accessibility (1)



Other outcome measures/topics

- Planning-level scenario cost estimates
- Growth & development trends
- Safety-related measures
- Human service transportation use
- Environment, resiliency, accessibility
- Qualitative storytelling
- Others?

THANK YOU!