



## Mobility and Emissions in the Denver Region

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### **MOBILITY TRENDS IN THE DENVER REGION**

#### Denver Regional Council of Governments (DRCOG)



- Federal required MPO Metropolitan Planning Organization (transportation)
- 9 ¼ Counties
- Population 3.3 million
- Employment 1.8 million





9 million vehicle trips (84 mil. VMT)





#### Average Daily VMT in the Denver Region (2000 – 2018)



## Growth in the Denver Region

- booming economy
- population and job growth
- housing prices/longer commutes
- construction activity







#### DRCOG Region: Means of Transportation to Work (2005-2017)



# **Solution** Five-Year Travel Trends



+250%

vehicle miles traveled via ride-hailing services

> +INFINITY% e-scooter share of vehicle miles traveled



# Five-Year Travel Trends





vehicle miles traveled





## Five-Year Motor Vehicle Emission Trends



## Five-Year Crash and Congestion Trends









# Five-Year Freight Trends

+12% -//-Denver International Airport air cargo







## FUTURE OF MOBILITY IN THE DENVER REGION





#### Trends and Forecasts in Roadway Travel



Metro Vision

#### **Overarching Themes**



An Efficient and Predictable Development Pattern

A Connected Multimodal Region

A Safe and Resilient Natural and Built Environment

Healthy, Inclusive and Livable Communities

A Vibrant Regional Economy



## Mitigating impacts of congestion

## waytogo

Program of **DRCOG** 

#### Avoid it

Real-Time Information Extra Night in Mountains Flexible Work Hours Telework

#### How to Mitigate Congestion

#### Adapt to it

Mobility Choices:

- Alternative modes
- Transit, Walk, Bicycle
- Car/Vanpool

Real-Time Information Efficient Land Use Designs



#### Alleviate it

Add Lanes / Capacity Improve Operations:

- Traffic Signals

- Signing and Striping
- Access Management
- Incident Management

Expand Transit Facilities

## Ozone Precursor Emissions- Vehicle Technology





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Tons per Day of GHG Emissions

per Capita

Total Tons Per Day of GHG Emissions





#### Colorado EV Sales Over Time By Scenario Includes BEV and PHEV



## DRCOG partners and funds programs with the Regional Air Quality Council





#### Unpredictable impacts of new mobility services and technology





- Personal habits and preferences
- Mobility services, transit evolution, TNCs, micromobility
- Alternative fueled vehicles
- Connected vehicles
- Automated vehicles











# Other plans and projects

# regional vision

#### **REIMAGINE RTD TOGETHER, LET'S EXPLORE AND REDESIGN TRANSPORTATION**



#### Road Usage Charge Pilot Program



#### HOPON BOARD! RTD IS CONDUCTING A FEASIBILITY STUDY TO PRIORITIZE LOCATIONS FOR BUS RAPID TRANSIT IN THE DERIVER METRO AREA.



#### Micromobility Work Group



#### What could the future look like? Development of 2050 MVRTP





## QUESTIONS?