2050 Metro Vision Regional Transportation Plan Overview

Summer Subregional Forums (Douglas County Example)
June/July 2019
INTRODUCTION
DRCOG Overview

- Local governments collaborate to establish guidelines, set policy and allocate funding for:
  - Transportation and Mobility
  - Growth and Development
  - Aging and Disability Resources

- DRCOG is:
  - Council of Governments (9+ counties)
  - Regional Planning Commission
  - Metropolitan Planning Organization (transportation)
  - Area Agency on Aging
Metro Vision Plan and MVRTP Overview

DRCOG Metro Vision Plan
Shared vision for the future

20-year “vision” transportation system

Metro Vision Regional Transportation Plan (MVRTP)

20-year affordable transportation system

Fiscally Constrained Regional Transportation Plan

4-year program of funded projects

Transportation Improvement Program

Air Quality Conformity Reg. Modeling

Project Development NEPA Studies
NEPA – National Environmental Policy Act (1970)

Construct Project
Metro Vision Regional Transportation Plan (MVRTP) Overview

- Presents region’s vision for multimodal transportation system
- Identifies “fiscally constrained” (cost feasible) system & project investments
- Identifies major roadway capacity & rapid transit projects
- Determines eligibility for major projects to compete for Transportation Improvement Program funding
- Addresses federal requirements – core MPO function
- Helps implement Metro Vision
- Is updated every four years and amended more frequently
DOUGLAS COUNTY DATA PROFILE SUMMARY
DRCOG – a wealth of data and information

- Community profiles
- Census data
- Traffic counts
- Crash data
- Planimetric data
- Project tracking (TRIPS)
- Regional data catalog
- Denver Regional Visual Resources
- Metro Vision Regional Transportation Plan
- Active Transportation Plan
- Mobility Choice Blueprint
- Coordinated Transit Plan
- Multimodal Freight Plan
- Regional Vision Zero Plan
DRCOG Community Profile – Douglas County

### Demographics
- DOLA Population: 328,330
- Households: 114,017
- Average Household Size: 3
- Median Age: 38
- Median Household Income ($): 105,759
- High School Diploma or More (%): 98
- Bachelor’s Degree or More (%): 86
- Single Occupancy Commuters (%): 78
- Unemployment Rate (%): 4

### Housing
- Housing Units: 118,178
- Occupied Housing: 114,017
- Owner Occupied Housing: 90,730
- Median Home Value ($) : 376,300
- Median Monthly Owner Costs ($): 1,865
- Renter Occupied Housing: 23,287
- Median Monthly Renter Costs ($) : 1,459
- Multifamily Housing: 19,050
- Vacant Housing: 4,161

### Income (Percent of total; income is in 2016 dollars)

- Household Income to $39,999: 2.17%
- Household Income to $14,999: 1.27%
- Household Income to $24,999: 3.50%
- Household Income to $39,999: 6.86%
- Household Income to $49,999: 14.23%
- Household Income to $59,999: 13.92%
- Household Income to $100,000 or more: 24.65%
- Household Income to $149,999: 13.72%
- Household Income to $199,999: 15.33%
DRCOG Community Profile – Douglas County

Population Pyramid (Count by age group)

Race/Ethnicity (Percent of total)

Source: "Population Data 2016" Colorado Department of Local Affairs. 
Urban Centers & Major Transportation Network

Source: DRCOG, ESRI, CDOT, RTD, Local Municipalities, Mapbox
Travel to Regional Employment Centers

Source: DRCOG, ESRI, CDOT, LEHD Employment Centers, Mapbox
Regional Bicycle Facility Network

- Douglas County Boundary
- Municipality Boundaries
- Road Network
- Bicycle Facilities On-Street
- Bicycle Facilities Off-Street

Source: DRCOG, ESRI, Mapbox
Older Adult Population Distribution

Percent of the Population 60 and Older

- Less than 10%
- 11-20%
- 21-30%
- 31-43%

Source: DRCOG, ESRI, 2013-2017 ACS, Mapbox
The Denver region’s 75-plus population (2014-2024)

- DRCOG Region: 
  - 2014: 64.5%

<table>
<thead>
<tr>
<th>County</th>
<th>Population (Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams</td>
<td>2014: 10, 2024: 15</td>
</tr>
<tr>
<td>Arapahoe</td>
<td>2014: 20, 2024: 30</td>
</tr>
<tr>
<td>Boulder</td>
<td>2014: 50, 2024: 60</td>
</tr>
<tr>
<td>Broomfield</td>
<td>2014: 2, 2024: 3</td>
</tr>
<tr>
<td>Clear Creek</td>
<td>2014: 1, 2024: 2</td>
</tr>
<tr>
<td>Denver</td>
<td>2014: 30, 2024: 40</td>
</tr>
<tr>
<td>Douglas</td>
<td>2014: 10, 2024: 15</td>
</tr>
<tr>
<td>Gilpin</td>
<td>2014: 1, 2024: 2</td>
</tr>
<tr>
<td>Jefferson</td>
<td>2014: 40, 2024: 50</td>
</tr>
</tbody>
</table>
Crash Density – Fatality or Serious Injury

- Douglas County Boundary
- Road Network

Density of Crashes with Serious Injury or Fatality
- Low
- Medium
- High

Source: DRCOG, ESRI, CDOT 2017 Crash Data, Mapbox
Douglas County mode share to work

- **Drove alone**: 78.0%
- **Carpooled**: 8.7%
- **Public transportation**: 1.9%
- **Bicycled**: 0.2%
- **Walked**: 1.0%
- **Other (incl taxi, motorcycle, other)**: 1.2%
- **Worked at home**: 11.0%

Number of Commuters: in Thousands
METRO VISION PERFORMANCE TARGETS
Purpose: assessing collective impact

Metro Vision measures:

1. help to verify whether the shared actions of planning partners, including local governments, are moving the region toward desired outcomes

2. are not intended to judge the performance of individual jurisdictions or projects
Metro Vision performance measure status

**Ahead of schedule**
- Residents living in locations affordable to the typical household
- Housing near high-frequency or rapid transit
- Employment near high-frequency or rapid transit
- Regional employment

**On track**
- Urban center housing
- Regional population-weighted density
- Travel time variation (TTV)
- Urban center employment

**Behind schedule**
- Non-single-occupant vehicle (SOV) travel
- Vehicle miles traveled (VMT)
- Person delay
- Traffic fatalities
- Surface transportation greenhouse gas (GHG) emissions
- Employment in high-risk hazard areas

**No determination**
- Protected open space
- Housing in high-risk hazard areas
Measure status

<table>
<thead>
<tr>
<th>Year</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>1</td>
</tr>
<tr>
<td>Year 2</td>
<td>2</td>
</tr>
<tr>
<td>Year 3</td>
<td>3</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>2040 Target</td>
<td>50</td>
</tr>
</tbody>
</table>

Description of measurement units

Illustrative trendline (baseline to target) in teal

Observations in orange
Non-single-occupant vehicle (SOV) travel

Behind schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014*</td>
<td>25.1%</td>
</tr>
<tr>
<td>2015*</td>
<td>24.8%</td>
</tr>
<tr>
<td>2016*</td>
<td>25.1%</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>2040 Target</td>
<td>35.0%</td>
</tr>
</tbody>
</table>

* - reflects five year window of survey data ending in year shown
Vehicle miles traveled (VMT) per capita

<table>
<thead>
<tr>
<th>Year</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>25.2</td>
</tr>
<tr>
<td>2011</td>
<td>24.4</td>
</tr>
<tr>
<td>2012</td>
<td>24.2</td>
</tr>
<tr>
<td>2013</td>
<td>24.3</td>
</tr>
<tr>
<td>2014</td>
<td>24.4</td>
</tr>
<tr>
<td>2015</td>
<td>24.9</td>
</tr>
<tr>
<td>2016</td>
<td>25.4</td>
</tr>
<tr>
<td>2017</td>
<td>25.6</td>
</tr>
<tr>
<td>2040 Target</td>
<td>10% decrease</td>
</tr>
</tbody>
</table>

Behind schedule

![Graph showing VMT per capita per day from 2010 to 2040]

VMT per capita per day

Back to “Metro Vision performance measure status”
### Travel time variation (TTV)

<table>
<thead>
<tr>
<th>Year</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>1.22</td>
</tr>
<tr>
<td>2015</td>
<td>1.24</td>
</tr>
<tr>
<td>2016</td>
<td>1.21</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td><strong>2040 Target</strong></td>
<td><strong>Less than 1.30</strong></td>
</tr>
</tbody>
</table>

**Average ratio of peak period to off-peak travel time**

On track
## Traffic Fatalities

### Behind schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>185</td>
</tr>
<tr>
<td>2015</td>
<td>238</td>
</tr>
<tr>
<td>2016</td>
<td>278</td>
</tr>
<tr>
<td>2017</td>
<td>266</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>2040 Target</td>
<td>Less than 100</td>
</tr>
</tbody>
</table>

![Graph showing traffic fatalities over the years, indicating behind schedule progress towards the 2040 target of less than 100 fatalities.](image-url)
2050 MVRTP STRATEGIC ISSUES
2050 MVRTP Strategic Issues

- How will the Denver region grow & change by 2050?
- How do we make our streets safer for all travelers?
- What role will technology play in travel and mobility?
- How do we respond to the persistent lack of adequate transportation funding?
- What mix of projects and investment decisions in the 2050 MVRTP will best achieve Metro Vision’s performance targets?
- What choices and tradeoffs are we willing to make around mobility, travel choices, congestion, and maintenance?
2050 MVRTP SCHEDULE & NEXT STEPS
Summary Schedule (2019 and 2020)

Public & Stakeholder Engagement (continuous)
- Prepare Engagement Plan
- Conduct Engagement
- Hold Public Hearing for Plan Adoption

“Definitions” Tasks (2019)
- Functional Classification
- Environmental Justice
- Vision Projects

Financial Planning (2019)
- 2050 Revenues & Program Distribution
- Define Expenditures
- Allocate Revenues & Expenditures to Projects & Categories

Scenario Planning (Late 2019, Early 2020)
- Complete 2050 Base Land Use Forecast
- Define & test scenarios
- “Select” Scenario or Hybrid

Prepare & Adopt 2050 MVRTP (2020 – adopt by early 2021)
- Identify Capacity Projects
- Conduct Air Quality Conformity Model Runs
- Prepare Plan Document
THANK YOU!

Jacob Riger, AICP
Manager, Long Range Transportation Planning
DRCOG
(303) 480-6751
jriger@drcog.org