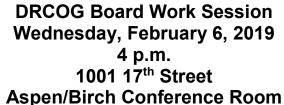


#### **Executive Committee**

Herb Atchison, Chair Bob Fifer, Vice Chair John Diak, Secretary Ashley Stolzmann, Treasurer Bob Roth, Immediate Past Chair Douglas W. Rex, Executive Director

# **AGENDA**





- 1. Call to Order
- 2. Roll Call
- 3. <u>Summary of October 3, 2018 Board Work Session</u> (Attachment A)
- 4. Public Comment

The chair requests that there be no public comment on issues for which a prior public hearing has been held before the Board of Directors.

- 5. <u>Discussion of transportation funding options</u>
  (Attachment B) Douglas W. Rex, Executive Director
- 6. <u>Discussion of Mobility Choice Blueprint</u>
  (Attachment C) Jacob Riger, Long Range Transportation Planning Manager,
  Transportation Planning & Operations
- 7. Adjourn

Persons in need of auxiliary aids or services, such as interpretation services or assisted listening devices, are asked to contact DRCOG at least 48 hours in advance of the meeting by calling (303) 480-6701



# ATTACH A

# BOARD WORK SESSION SUMMARY October 3, 2018

**Directors present:** 

Herb Atchison, Chair Westminster

Jeff Baker Arapahoe County

Elise Jones Boulder County

David Beacom

Nicholas Williams

City and County of Broomfield
City and County of Denver
City and County of Denver

Aaron Brockett Boulder
Tammy Maurer Centennial
Steve Conklin Edgewater

Bill Gippe Erie

Daniel Dick Federal Heights

Jim Dale Golden

Ron Rakowsky Greenwood Village

Wynne Shaw Lone Tree Ashley Stolzmann Louisville John Diak Parker

Participating via Webex:

Roger Partridge Douglas County
Lynette Kelsey Georgetown
Stephanie Walton Lafayette
Karina Elrod Littleton

Others present: Doug Rex, Executive Director; Jamie Hartig, Douglas County; Kent Moorman, Thornton; Danny Herrmann, CDOT; and DRCOG staff.

Board Chair Herb Atchison facilitated the work session. The session began at 4:00 p.m.

#### Summary of September 5, 2018 Board Work Session

The summary was provided for review. No revisions to the summary were requested

#### **Public Comment**

No public comment was received.

#### Discussion of Active Transportation Plan

Emily Lindsey, Transportation Planner, provided an update on the DRCOG regional Active Transportation Plan. Staff anticipates releasing the draft document for public and stakeholder comment in October. The 30-day public comment period will include public outreach and stakeholder engagement. The document will be revised based on feedback received and will be presented to the DRCOG committees.

#### Discussion of Community Assessment Survey of Older Adults (CASOA)

Jayla Sanchez-Warren, Area Agency on Aging Director, provided an overview of the CASOA. The survey is a tool used in completing an Area Plan on Aging for 2020-2024.

Board Work Session Summary October 3, 2018 Page 2

The Area Plan is a federal requirement. DRCOG contracted with the National Research Center to conduct a region-wide survey of older adults. The objective of the survey is to identify community strengths, articulate specific needs of older adults, estimate the contribution of older adults and determine the connection of older adults in their community. Ms. Sanchez-Warren presented the regional analysis of the survey.

# Discussion of FTA 5310 Designated Recipient

Matthew Helfant, Transportation Planner, provided an overview of the FTA 5310 program. The program funds projects to increase the mobility of older adults and individuals with disabilities. Eligible projects include both capital investment and operating assistance for service that goes beyond minimum Americans with Disabilities Act paratransit service requirements. DRCOG previously selected projects for this program and its predecessor program for several cycles for RTD. DRCOG's AAA also administers transportation projects funded through the Older Americans Act. The coordination of the two funding sources could significantly increase service efficiency, reduce duplication, and increase the number of trips provided. DRCOG staff has met with the Colorado Department of Transportation, Federal Transit Administration, Regional Transportation District, and stakeholders to obtain input and support. CDOT, FTA, and RTD have indicated support, and stakeholders have provided useful feedback. DRCOG staff are continuing discussions with stakeholders to address their questions and concerns.

The work session ended at 5:46 p.m.

# ATTACH B

To: Chair and Members of the Board of Directors

From: Douglas W. Rex, Executive Director (303) 480-6701 or drex@drcog.org

Meeting Date	Agenda Category	Agenda Item #
February 6, 2019	Discussion	5

#### SUBJECT

Briefing on regional transportation funding options.

# PROPOSED ACTION/RECOMMENDATIONS

N/A

#### **ACTION BY OTHERS**

N/A

#### **SUMMARY**

Conversations exploring regional transportation funding options in the Denver region have intensified over the years as our region has struggled to adequately mitigate growing mobility concerns. Those discussions were largely put on hold as a variety of partners statewide worked to build consensus around a comprehensive statewide transportation funding effort, culminating in Proposition 110 on the November 2018 ballot.

With the defeat of Proposition 110, the Metro Mayors Caucus (MMC) at their annual retreat in January discussed the appetite and possible opportunities to take steps to address the growing need for transportation investments in the Denver region. MMC has identified, to date, three possible regional funding models each with their own pros and cons:

- Regional Transportation Authority (RTA) formed under existing statute or after amendments to existing statute.
- Metro Transportation Collaborative (MTC) formed through new legislation to set boundaries and governance.
- Empower Existing Body (EEB) seek new taxing authority for an existing agency/body.

Arvada Mayor Marc Williams, MMC's co-vice chair and transportation committee chair, will share the conversations that occurred at the retreat and lead a discussion seeking feedback from DRCOG directors on the possibility of moving forward as a region to address mobility needs, discuss the purpose of this approach and next steps.

# PREVIOUS DISCUSSIONS/ACTIONS

N/A

#### PROPOSED MOTION

N/A

Board Work Session February 6, 2019 Page 2

# ATTACHMENTS

- 1. Metro Mayors Caucus: Moving Forward on Transportation in 2019
- 2. Metro Mayors Caucus presentation

# ADDITIONAL INFORMATION

If you need additional information, please contact Douglas W. Rex, Executive Director, at (303) 480-6701 or <a href="mailto:drex@drcog.org">drex@drcog.org</a>

### Background

The forty-member Metro Mayors Caucus has convened and engaged in transportation and mobility conversations for 25 years. Through our consensus process, our mayors have lent support to multiple rail lines, TREX, FasTracks, FASTER, numerous legislative attempts to identify meaningful transportation funding and, most recently, to Proposition 110. The Caucus has opposed recent attempts to fund statewide needs through Transportation Revenue Anticipation Notes (TRANS) without the concurrent identification and approval of a dedicated and sustainable revenue source. To do otherwise is fiscally irresponsible as it forces cuts in other statewide obligations including education, healthcare and critical system maintenance.

Since 2012, the Caucus has convened, reconvened and finally set aside conversations about a regional multi-modal funding. This important discussion was ultimately put on hold in order to convene partners to discuss a statewide approach to funding our state and local multi-modal needs. To this end, the Caucus convened MPACT64 — the acronym is derived from the first letters of Metro Mayors, Pro-15, Action 22, Club 20, and Transportation. These membership of the four regional organizations encompasses all of Colorado's 64 counties. This statewide discussion quickly grew to include others including CML, CCI, DRCOG, MACC, CASTA, COPIRG, Bicycle Colorado, LiveWell, SWEEP, DRCOG and leadership from other planning regions. The Caucus convened this conversation despite knowing that our region would be the donor in any statewide distribution formula because we agreed it was critically important to try to pass statewide solution before implementing a regional fix.

Some have questioned why MPACT64 decided that a sales tax increase was the best available solution. Primary among the reasons is the need for a revenue source that would generate a significant portion of the funding needed to address the massive backlog of state and local multi-modal investment. CDOT alone has a \$9B shortfall in the 10-year Development Plan. While a nearly \$1B per year shortfall of funding gives pause, it is critical to understand that approximately 80% of paved surfaces are maintained by cities and counties. The \$9B shortfall is CDOT's alone — it does not include local governments' tremendous unfunded mobility needs. Below we discuss the alternatives evaluated by MPACT64, why the sales tax was selected and how we plan to move forward following the defeat of the statewide sales tax proposed in 110.

#### SOT, Fines & Fees

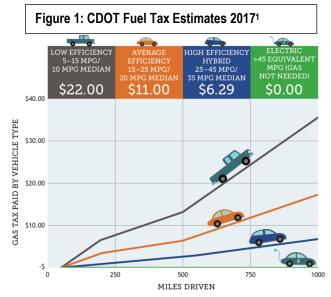
As recently as March of 2018, Colorado Concern advocated that instead of a sales tax increase, legislation be introduced that would propose a fee for electric vehicles, a two-year fee on new residents with cars, and a change to the Specific Ownership Tax (SOT) on older vehicles. The SOT is a property tax, assessed based on value and age, that is collected by the state for class A vehicles and then distributed to counties and by each county when a vehicle is registered or renewed for all other classes of non-exempt vehicles. The revenues from SOT are then distributed to property tax collecting local governments including counties, municipalities, school districts and special districts who can use the revenues as they see fit. Current law sets a maximum tax rate of \$3 for vehicles 10 years and older. Colorado Concern's proposal was similar to SB 17-303 sponsored by Senators John Cooke of Greeley and Tim Neville of Littleton that proposed raising that rate on 10+ year old vehicles Colorado and devoting the new revenues to new TRANS bond debt for state highway projects. The Caucus did not endorse Colorado Concern's SOT proposal due to a number of concerns, primary among which is that the proposed SOT increase would have generated

 $<sup>^1\</sup> https://www.bizjournals.com/denver/news/2018/03/05/senate-republicans-brush-aside-new-business-backed.html$ 

<sup>&</sup>lt;sup>2</sup> https://leg.colorado.gov/sites/default/files/ib\_17-05\_the\_specific\_ownership\_tax\_2017.pdf

insufficient revenue for even CDOT's needs. The fiscal note for SB 17-303 projected that the increase, if approved by voters, would raise just \$87M in FY 2020/2021.<sup>3</sup> Given that the increase would require voter approval, it is important to note that vehicle registration fees, paid annually in conjunction with the SOT, are already considered particularly burdensome by voters. A December 2017 poll found that 21% of Colorado voters feel they are too high, compared to just 10% for sales tax. In the same poll, 58% of likely voters opposed raising the \$3 SOT on vehicles 9 years and older to raise \$200M for transportation.<sup>4</sup>

MPACT64, in its multi-year discussion generally did not consider the SOT as a viable option or seriously explore any increase in fees. Fees were not seriously evaluated for a variety of reasons including: a divided legislature, citizen privacy concerns associated with mileagebased user fees, the conservative backlash to the fees implemented via SB 09-108 "FASTER,"<sup>5</sup> and, ongoing conservative opposition to fees as a perceived end-run on TABOR. However, in all discussions since 2012, a Road User Charge (RUC), alternatively knows as Vehicle Miles Traveled (VMT) fee or Mileage Based User Fee "MBUF", was widely acknowledged by MPACT participants to be an optimal

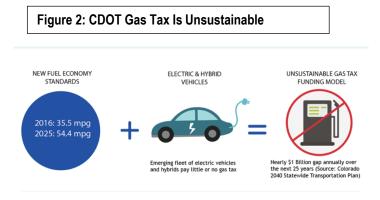


replacement for the gas tax despite voter apprehension about the privacy issues and technological obstacles.

#### **Motor Fuels Taxes**

Colorado's gas tax has remained static since 1991 at 22¢/gallon and the federal gas tax, unchanged since 1993, is just 18.4¢/gallon. An increase, or increase and indexing, of the motor fuels taxes were evaluated by MPACT64 and rejected for several reasons. First, the gas tax is a declining revenue source due to fuel efficiency gains and conversion to alternative fuels and electric vehicles (Figures 1 and 2).

Second, to even partially address CDOT's funding backlog would require a doubling of the current state gas tax and voter opposition to any gas tax increase is extremely high. In 2017, Colorado highway fuel taxes generated \$630M. Each 1¢ increase in the gas tax produces approximately \$28.6M, but the revenues will continue to decline with efficiency gains and fleet



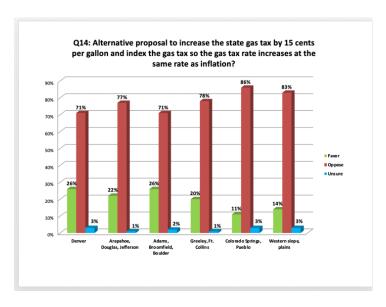
<sup>3</sup> https://leg.colorado.gov/sites/default/files/documents/2017A/bills/fn/2017a sb303 f1.pdf

<sup>&</sup>lt;sup>4</sup> Coloradans for Colorado polling conducted December 13-18, 2017.

<sup>&</sup>lt;sup>5</sup> https://www.codot.gov/programs/high-performance-transportation-enterprise-hpte/about-us/documents/sb-09-108-with-signatures/view

conversion. In 2014, to provide a minimum return to CDOT of \$300M per year in new revenues would have required a 15¢ gas tax increase and indexing. However, March 2014 polling (Figure 3) showed that more than 70% of voters opposed an indexed 15¢ gas tax increase.<sup>6</sup> A 2013 poll showed a similar level of opposition to a much smaller increase of just 5¢, with support at just 33% statewide. According to Legislative Council's Initiative 153 (Proposition 110) analysis, a .62% sales tax would raise \$767M in year 1 and grow over time (Figure 4). A gas tax increase of 27¢ would be required to raise an equivalent first year amount, but the gas tax would have diminishing returns.

Figure 3: 2014 Colorado Transportation Poll



Finally, both the revenue allocation and mode-split for gas tax penalize the metro area as the population center of the state. The Colorado Constitution requires that all vehicle registration fees, fines and motor fuel taxes be used for the construction, maintenance, and supervision of public highways, yet mobility solutions in the urbanized areas of the state require multi-modal approaches. Colorado gas tax revenues are allocated via the Highway Users Tax Fund (HUTF) through a complex statutory formula that results in a distribution of 60% to CDOT, 22% to counties and 18% to municipalities. This split has led to the metro area, with its dense population and serious mobility challenges, contributing 60% but receiving just 38-42% of HUTF dollars.

#### Sales Tax

Voter preference for the sales tax was also a deciding factor for MPACT64. Voters have consistently expressed a preference for the sales tax over all other revenue options in polling conducted over several years.

Figure 4: Legislative Council Analysis of 153/110

Table 1. Tax Revenue Under Initiative #153				
FY 2018-19	FY 2019-20			
\$164.7 million	\$345.0 million			
\$54.9 million	\$115.0 million			
\$146.4 million	\$306.7 million			
\$366.0 million	\$766.7 million			
	\$164.7 million \$54.9 million \$146.4 million			

Furthermore, a sales tax would capitalize on the 80+ million visitors to Colorado each year and capture that value to reinvest in the transportation network serving residents and visitors alike. Municipalities ultimately supported a .62% sales tax increase because of its capacity to raise revenues to sufficiently address statewide needs and tailor local solutions (Figure 4 above). A highways-only solution via TRANS, SOT or a gas tax increase simply cannot address the congestion challenges and the multi-modal mobility needs of

<sup>&</sup>lt;sup>6</sup> March 2014 Colorado Transportation Coalition Poll https://www.dropbox.com/s/tkiyeynxjg1si35/CTC%20Presentation%2003-26-14.pptx?dl=0

<sup>&</sup>lt;sup>7</sup> July 2013 Colorado Transportation Poll

our region, the 360,000 Coloradans 16+ that don't have driver's license, or the 1.5M seniors projected to live in Colorado by 2040.

### Moving Forward Together

With November 2018 failure of the .62% statewide sales tax increase in 110 and fiscally irresponsible TRANS proposal in 109, the Metro Mayors Caucus encourages the new administration to evaluate all options capable of generating sufficient new revenues to address the state's \$1B per year funding shortfall, including: Road User Charges, fees for alternative fuels vehicles and self-driving/autonomous vehicles, and dedication of new online sales tax revenues to mobility needs. We would also be very supportive of and an active participant in a statewide education campaign designed to help voters understand how we fund critical transportation investments and why current revenues are not sufficient to preserve the current system, much less make the critical investments to necessary maintain our quality of life and economic viability. The Caucus is committed to working with the new administration and legislature on efforts to address statewide need – even if only a partial solution can be found.

It is also important to underscore that the needs in the Denver region are incredibly urgent and as elected officials, we can no longer set aside our discussion of a regional solution. More than 55% of the state's population lives in metro Denver and every trip begins and ends on a local road or sidewalk. We are reliant on multi-modal solutions that are critically underfunded and upon RTD whose structural constraints limit our options for transit expansion. A regional multi-modal funding solution is critical to sustaining our region's livability and economy and could complement a statewide solution. A regional sales tax would not need to be as significant as a statewide ask. A half-cent sales tax in the seven metro counties could produce \$364.8M/YR 1. This YR1 amount is more than metro Denver would have received from CDOT investment, multi-modal fair share and local distributions combined had voters authorized a statewide .62% increase. Rather than competing, MMC believes that a regional funding strategy could complement a statewide funding proposal and allow the region to more rapidly address our significant mobility needs.

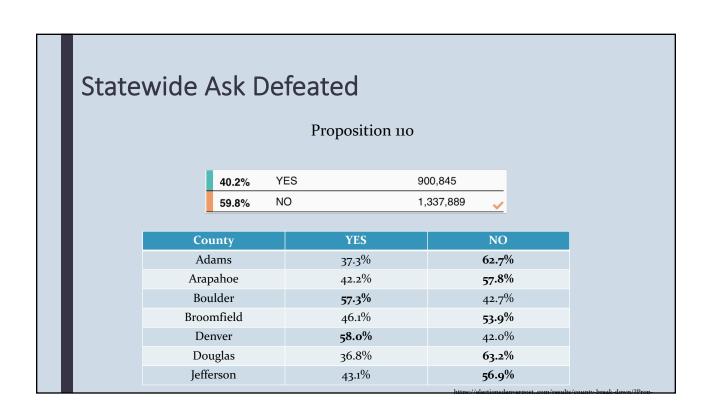


# Where We Started...

- 2012 Hunt & Pilgrim convene regional funding dialogue
  - MMC, MACC & stakeholders
  - Goal: identify regional funding strategy
  - Resulted in MTD concept and straw man
- 2013 Agree to try for statewide funding 1st
  - MMC convenes MPACT64 to discuss statewide funding

# Why Statewide Funding First?

- State needs comprehensive, safe, and effective transportation system
- Metro region has tax base to address need but few other regions do
- Metro has >50% of population so metro funding passage may jeopardize support for statewide ask



# January 2019 the Current Situation...

- Needs and shortfalls continue to grow
- County funding discussions spur fear of regional fracture
- State infrastructure funding new options on table?

# Revisiting Regional Mobility Funding

- Accelerate regional and local mobility priorities
- Collaboration, not competition, with state
  - Reduces necessary size of any CDOT/Legislative solution
  - Model for other regions
  - Partner with CDOT, RTD and others

# Regional Funding Advantages

Metro Region - MTD Sales Tax Scenarios

		REGIONAL SALES TAX ESTIMATE		PROP 110 ESTIMATE
	% Share	Year One	Year One	Year One
Sales Tax Rate		0.25%	0.5%	0.62%
Metro Sales Tax Revenue	100%	\$ 182,400,403.23	\$ 364,800,806.45	\$ 314,470,000.00
Growth Forecast		3.54%		

A metro only sales tax of .5% would produce more revenues than the region (combined city, county, metro CDOT, and fair share of multi-modal) would have received under Prop. 110 at .62%.

# Menu of Regional Models

- o **RTA** new Regional Transportation Authority formed under existing statute or after amendments to existing statute
- MTC authorize Metro Transportation Collaborative through new legislation to set boundaries and governance
- EEB Empower Existing Body to seek new taxing authority for existing agency/body

# **RTA Pro & Cons**

### **■** Pros

- Already in statute and well tested
- 7 RTAs operating in the state
- Pikes Peak RTA similar but smaller

# **■** Cons

- Statute designed for small collaborations
- IGA among up to 60 jurisdictions
- Holdouts would make corridor investments difficult
- Big Board with 1 Rep/Participant Cumbersome

# MTC Pro & Cons

# ■ Pros

- Governance can be refined in the legislation to meet our needs
- No need for 60 IGAs
- Contiguity and continuity ensured

#### **■** Cons

- Requires legislative action
- New layer of government

# EEB Pro & Cons

# ■ Pros

#### **■** Cons

- No new level of government
- Political baggage?
- No formation costs
- Experienced staff in place

# Mayors' Discussion

# Regional — What Do We Want?

- Path new or existing
- Governance size and composition
- Revenues project types & modal splits
- Authority pass through OR build & maintain
- Prioritization project selection process

# State - What Can We Support?

- Autonomous vehicle fee
- Mileage based user/VMT fee
- Alternative fuels fee
- Dedicate online sales taxes to transportation

# Mayors' Retreat Discussion Results

# Regional — What Do We Want?

- Path explore empowering **DRCOG**
- Governance nimble and responsive AND representative

# State - What Can We Support?

- "All of the above" approach for significant & sustainable revenues
- Regional funding as complement not replacement for new or existing state revenues

To: Chair and Members of the Board of Directors

From: Douglas W. Rex, Executive Director

303 480-6701 or drex@drcog.org

Meeting Date	Agenda Category	Agenda Item #
February 6, 2019	Discussion	6

#### SUBJECT

Briefing on the Mobility Choice Blueprint project.

### PROPOSED ACTION/RECOMMENDATIONS

N/A

#### **ACTION BY OTHERS**

N/A

#### SUMMARY

Since the last Mobility Choice Blueprint briefing to the Board in September 2018, project stakeholders and the consultant team have been finalizing the draft 2030 Blueprint plan document. The draft report will focus on the technical and community/engagement work undertaken to develop the Blueprint; the tactical actions that provide specific process, program, and pilot project implementation guidance; emerging mobility systems; and an overall implementation framework. The project team also developed a summary brochure (Attachment 1) and 90-second video. More information about Mobility Choice is available at the project website: <a href="http://www.mobilitychoiceblueprintstudy.com/">http://www.mobilitychoiceblueprintstudy.com/</a>.

Staff from HDR, the project's lead consultant, will provide an update on the Mobility Choice Blueprint project. In addition, DRCOG staff will provide an overview of a potential governance structure to coordinate and support implementation of priority tactical actions.

#### PREVIOUS DISCUSSIONS/ACTIONS

April 18, 2018 – Board of Directors

September 19, 2018 - Board of Directors

#### PROPOSED MOTION

N/A

#### **ATTACHMENTS**

- 1. Mobility Choice Blueprint brochure
- 2. Consultant presentation
- 3. Mobility Choice Governance presentation

### ADDITIONAL INFORMATION

If you need additional information, please contact Douglas W. Rex, Executive Director, at (303) 480-6701 or <a href="mailto:drex@drcog.org">drex@drcog.org</a>; or Jacob Riger, Long Range Transportation Planning Manager at 303 480-6751 or <a href="mailto:iriger@drcog.org">iriger@drcog.org</a>









# **BLUEPRINT**





**FEBRUARY 2019** 











# Technology Is Changing And So Is The Way We Travel

# Mobility GRIDLOCK

Here's how our region looks and feels in 2030 if we simply **REACT** to new transportation technologies



In this scenario, the Denver region makes limited or uncoordinated efforts and investments to prepare for emerging mobility systems and technologies. Without a clear, coordinated public sector response, the private sector is left largely alone to implement new services and facilities that continue to develop and be adopted at a rapid pace.



**GRIDLOCK & DISARRAY** 



LIMITED ACCESS





**ECONOMIC BARRIERS** 



CONGESTION

# \$50 Million in Lost Benefits

If current trends continue, increased traffic congestion and uncoordinated adoption of new technologies could cost the region \$50 million each year of unrealized benefits by 2030, despite gains in economic productivity, safety and accessibility.

### **EQUITY**

**AIR QUALITY** 

# Reduced Access

The number of people who have no ready access to a vehicle (including elderly, low-income, and disabled persons) increases by 18,000 compared with 2015.



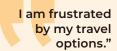
# CONGESTION



# Travel Delays

50% more hours of vehicle delay (compared with 2015).

# GRIDLOCK EXPERIENCES



l live far from downtown, and my bus route is not flexible."

# **Moderate Pollution**

Gasoline and diesel powered vehicles are responsible for 33% of the state's greenhouse gas emissions, increasing their annual output of pollutants by 4.5 million metric tons over 2010 levels.



#### **SAFETY**

# Unchanged Crash Rates

50% increase in crashes (compared with 2015).

My wife and I will walk around the park, but we're nervous about crossing intersections."

Which will be our Moblity Choice?

If we act now, **TOGETHER** we can move toward a mobility future defined by people rather than technology.

S



# Mobility BOLD

Here's how our region looks and feels in 2030 if we take a **PROACTIVE** approach to new transportation technologies

In this scenario, the Denver region maintains community visions and improves mobility for all by pushing boundaries and taking a chance on bold programs that work to break down traditional silos, builds new partnerships, and prioritizes impactful and innovative applications of emerging technologies.

**ECONOMY: OPPORTUNITIES FOR ALL** 

# \$1.9 Billion in Benefits Gained

The actions recommended by the Mobility Choice Blueprint are expected to decrease time spent traveling, improve safety, allow more efficient freight movement, and compound gains to accessibility and productivity, resulting in an annual benefit to the region in

excess of \$1.9 billion annually (in 2018 dollars) compared with Mobility Gridlock. ECONOMIC OPPORTUNITY



HAPPIER COMMUTE



ACCESSIBILITY FOR ALL



OPTIONS & CHOICE



**EQUITY** 

# Fewer Barriers

91,000 people who would otherwise face mobility challenges enjoy a range of travel options enabled by coordinated adoption of new mobility technologies.









# BOLD EXPERIENCES

Getting around is much more affordable than I thought, and I have the flexibility to live my life."

It's so easy to get around here, and there are so many options."

I feel more connected to my community than ever."

#### CONGESTION

# **More Free Time**

1.5 million fewer hours of vehicle delay per year (compared with Mobility Gridlock).





# Cleaner Air

Electric vehicles emit
41% less carbon
per mile than
gasoline-powered
vehicles in the Denver
area. Strategies and
programs incentivizing
the switch to electric
vehicles significantly
improve regional
air quality.

SAFETY

# Safer Roads

8,200 fewer crashes per year result in \$550 million saved.

# Path to 2030

What is unique about this strategy?

Advanced technology is providing new travel options around the Denver region.

4

To maintain the economic competitiveness and livability of our communities, the region's major multimodal agencies have agreed to develop a Mobility Choice Blueprint — a coordinated strategy for how we enable more accessible and effective transportation mobility choices to enhance the quality of our social, cultural, and economic life now and in the future.

# 1

# Collaboralive

The Blueprint conversation started with the Denver Metro Chamber, Denver Regional Council of Governments, Regional Transportation District, and Colorado Department of Transportation. To build on the collaborative momentum of this effort, these partners will initiate Tactical Actions and engage the private sector and county and municipal agencies, along with interested organizations and community groups, and integrate Blueprint Tactical Actions throughout our region.

#### **ALIGNMENT BETWEEN PUBLIC & PRIVATE AGENCIES**











# Our Vision

Our metropolitan region employs a full array of flexible technology and services to maximize safety and access to mobility choices connecting people of all ages, incomes, and abilities to jobs, recreation, healthcare, amenities, and other daily activities, enhancing and protecting our quality of life now and in the future.

#### **GREATER DENVER REGION POPULATION**



**26%** Population Increase

**2015: 3.1 MILLION** το **2030: 3.9 MILLION** 

# 2 Inlegrated

The Mobility Choice Blueprint process assessed a range of futures based on the complex interactions of technological, institutional, and societal forces. Global transportation experts, regional leaders, and a broad range of community members worked to understand the region's transportation needs over the long term and map the future of mobility. The Blueprint reflects a deep understanding of external influences, organizational frameworks, and end-users of the transportation system.

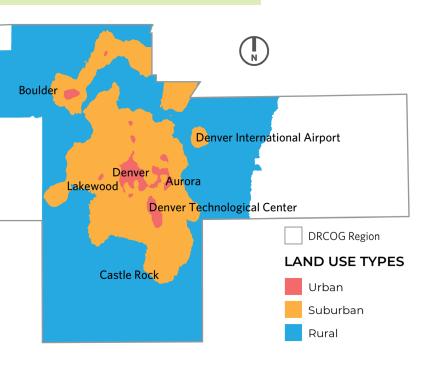


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#### AREAS BENEFITING FROM THE BLUEPRINT

# Regional

The Denver region is home to more than 3 million people in urban, suburban, and rural areas stretched over 9 counties and more than 5,000 square miles. DRCOG's established Metro Vision Plan articulates a shared regional vision, identifying several overarching themes. Building on this collective understanding of our communities, the Blueprint identifies a cohesive approach for adapting to new mobility technologies. Ideas from a wide range of stakeholders from across the region resulted in a set of recommended Tactical Actions consisting of policies, programs, and pilot projects.



# Objectives & Actions



#### **OBJECTIVE 1**

# Regional Collaboration

Close institutional gaps, update legal and regulatory frameworks, and coordinate with private sector technology implementers



#### **OBJECTIVE 2**

# System Optimization

Connect transportation systems and vehicles with smart technologies to improve safety and operations



#### **OBJECTIVE 3**

# Shared Mobility

Integrate new options of vehicle sharing and ride sharing into the existing multimodal transportation system network



#### **OBJECTIVE 4**

# Data Security and Sharing

Analyze travel data from public and private mobility providers to improve transportation system performance while maintaining security and protecting privacy



#### **OBJECTIVE 5**

# **Mobility Electrification**

Encourage use of electric powertrains in automobiles and transit vehicles



# **OBJECTIVE 6**

# **Driverless Vehicle Preparation**

Prepare for autonomous vehicles to provide safe operations and reduced congestion while retaining a sound human experience



#### **OBJECTIVE 7**

# New Transportation Funding

Establish new funding sources to replace traditional sources that are losing effectiveness

Signing up for the Mobility as a Service program has changed my life! I love the flexibility and affordability."



The options in our neighborhood mobility hub give my wife and me freedom to travel to the activities we enjoy."



I'm a car geek, so everything about driverless vehicles is intriguing, including the independence they may give me as my physical disability worsens."

#### The Mobility Choice Blueprint worked to build broad consensus around numerous Tactical Actions.

These 34 policies, programs, and pilot projects represent a wide range of ideas that build on the groundwork laid by the study's individual participants, as well as best practices emerging across the globe.

	TACTICAL ACTIONS
1.1	Establish a mobility technology advisory committee
1.2	Establish a new public-private entity or entities to pursue mobility technology implementation
1.3	Engage university resources to develop mobility technology research and development
1.4	Make Mobility as a Service available to all
1.5	Develop regional guidelines for drone delivery and drone passenger travel
1.6	Establish a regional smart mobility navigator
2.1	Evaluate technology upgrades and interoperability in projects in DRCOG's Transportation Improvement Program
2.2	Prepare for technology upgrades and interoperability in project development of transportation projects
2.3	Accelerate testing of bicycle/pedestrian detection at crossings
2.4	Implement transit priority on all major bus corridors
2.5	Implement smart traffic signal control technology on all major regional arterial corridors
2.6	Pilot integrated corridor management on ten arterial corridors
2.7	Implement "smart corridor" operations on all regional freeways
2.8	Coordinate traffic management center systems and operations
2.9	Pilot mobility technologies on mountain corridors
2.10	Pilot modular lanes
7.1	
3.1	Develop a universal mobility app for trip planning and payment
3.2	Adopt a regional compact defining common standards for micromobility services
3.3	Develop incentives to improve ridehailing and ridesharing operations
3.4	Implement curbside management standards
3.5	Pilot neighborhood-scale mobility hubs
3.6	Partner with the private sector to provide transportation in mobility-challenged communities
3.7	Pilot smart parking at Park-n-Rides
4.1	Establish a regional mobility data platform
4.2	Establish data sharing requirements for private sector roadway users
5.1	Incentivize ridehailing and ridesharing providers to use electric vehicles
5.2	Create an electrified mobility development program
5.3	Transition government fleets to electric and other zero-emission vehicles
3.3	Transition government neets to electric and other zero-emission vehicles
6.1	Pilot driverless microtransit to increase public exposure to automated vehicle technology
6.2	Minimize zero occupancy and encourage high shared use of driverless automated vehicles
6.3	Support legislative efforts to ensure that automated vehicles operate safely
7.1	Expand DDCOC funding cormark for a mobility tochnology innovation fund
7.1	Expand DRCOG funding earmark for a mobility technology innovation fund
7.2	Explore the concept of a road usage charge for Colorado
7.3	Support legislative efforts to ensure that driverless automated vehicles generate appropriate funding



The tech company I work for creates solutions for mobility-challenged communities. I feel like I'm really making a difference."



The roadway technology alerts our car of winter conditions, giving us a smoother and more reliable trip to the mountains."





















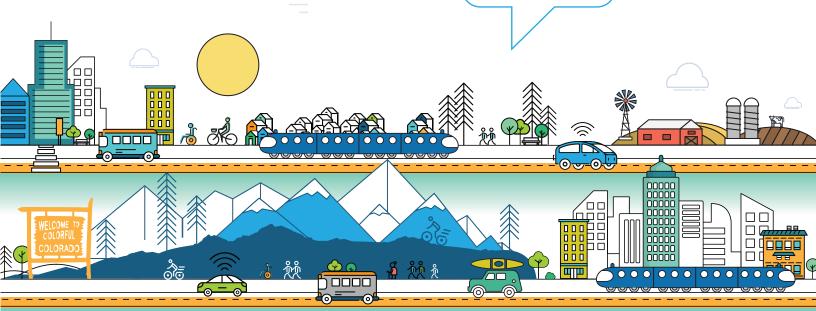
# **FOLLOW US**

MobilityChoiceBlueprint



#### **LEARN MORE**

Local events and opportunities to participate



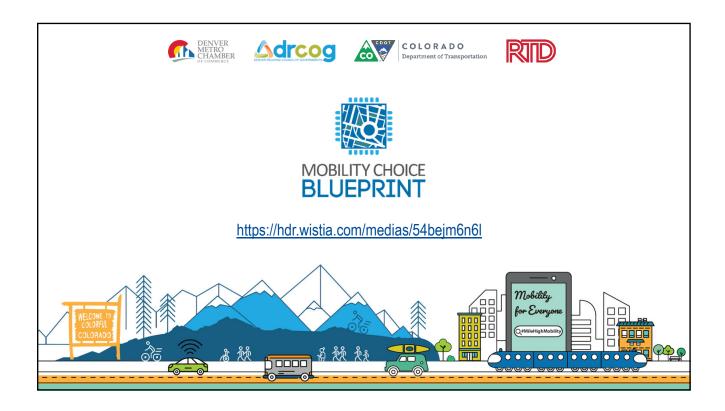
# Acknowledgements

#### PROJECT TEAM

- + CDOT
- + DRCOG
- + Denver Metro Chamber of Commerce
- + Mobility Choice Initiative
- + RTD

#### **CONSULTANT SUPPORT**

- + HDR
- + CityFi
- + KPMG



# **Today's Presentation**

- Tactical Actions & Objectives
- Mile High Travelers
- Moving Forward
- Final Report Launch Event Date



2



# **Regional Collaboration**

Close institutional gaps, update legal and regulatory frameworks, and coordinate with private sector technology implementers



# System Optimization

Connect transportation systems and vehicles with smart technologies to improve safety and operations

# **Objective 3**

3



# **Shared Mobility**

Integrate new options of vehicle sharing and ride sharing into the existing multimodal transportation system network



# **Data Security & Sharing**

Analyze travel data from public and private mobility providers to improve transportation system performance while maintaining security and protecting privacy

# **Objective 5**

4



# **Mobility Electrification**

Encourage use of electric powertrains in automobiles and transit vehicles



# **Driverless Vehicle Preparation**

Prepare for autonomous vehicles to provide safe operations and reduced congestion while retaining a sound human experience

**Objective 7** 

5



# **New Transportation Funding**

Establish new funding sources to replace traditional sources that are losing effectiveness



# **Initiator: DRCOG (18)**

1.1 Establish Mobility Technology Advisory Committee

• 1.2 Establish a new P3 mobility entity or entities to pursue mobility technology implementation

1.3 Engage university resources to develop technology mobility research and development

1.6 Establish a regional smart mobility navigator

- 2.1 Evaluate technology upgrades and interoperability in transportation construction projects included in the TIP
- · 2.2 Prepare for technology upgrades and interoperability in transportation construction projects
- 2.5 Implement smart traffic signal control technology on all major regional arterial corridors
- 2.6 Pilot integrated corridor management (ICM) on 10 arterial corridors
- 3.2 Adopt a Regional Compact defining common standards for micromobility services
- 3.4 Implement Curbside Management Standards
- 3.5 Pilot neighborhood scale mobility hubs
- · 3.6 Partner with private sector to provide transportation in mobility challenged communities
- 4.1 Establish a Regional Mobility Data Platform
- 4.2 Establish data sharing requirements for private sector roadway uses
- 5.1 Incentivize TNCs to use electric vehicles
- 5.3 Establish an aggressive, agreed-upon goal to transition government fleets to zero-emission vehicles

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- 6.2 Minimize zero occupancy and encourage high shared use of driverless automated vehicles
- 7.1 Expand DRCOG funding earmark for a mobility technology innovation fund

Regional Coordination

System Optimization

Shared Mobilit

Data Security & Sharing

Regional Coordination

Shared Mobility

3.2

7

1.1

# Establish mobility technology advisory committee

# **THEME**

Funding & Finance Infrastructure Governance

#### TACTIC INITIATOR

DRCOG, CDOT, RTD, Denver Metro Chamber

### **ADDITIONAL PARTICIPANTS**

New mobility entity



Adopt a regional compact defining common standards for micromobility services

#### **THEME**

Safety Infrastructure Governance

# TACTIC INITIATOR

DRCOG

#### **ADDITIONAL PARTICIPANTS**

Cities, counties



Data Security & Sharing

4.1

# Establish a regional mobility data platform

#### **THEME**

Human Experience Infrastructure Governance

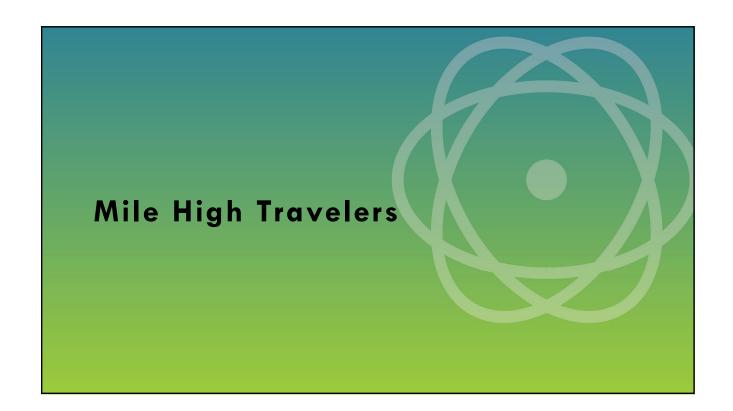
# **TACTIC INITIATOR**

DRCOG, CDOT, RTD, Denver Metro Chamber

### **ADDITIONAL PARTICIPANTS**

Cities, counties, National Renewable Energy Laboratory, universities, new mobility entity, Colorado Office of Information Technology





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# **Meet our Mile High Travelers**



MARIA is a 22-yr-old mother who lives in Aurora. She is a student at Metro State University who also works part time at a restaurant in downtown Denver. Her pride and joy is her 4-yr old son Gabriel, who is taken care of by Maria's mother each day.



TONYA is a 34-year-old Colorado native, who lives in Boulder and is married with two young children.



JORDAN is a 29-year-old who recently moved to Denver from the Bay Area. Central Denver is not affordable for him, so he bought a home in Parker, which also provides him a yard for his dog.



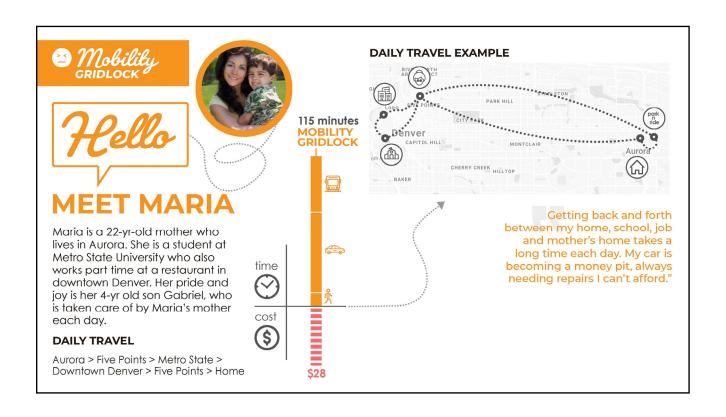
CARL is middle-aged, married with a teenaged son. His biggest concern is a recent health issue that is beginning to limit his mobility and forcing him to walk with a cane.

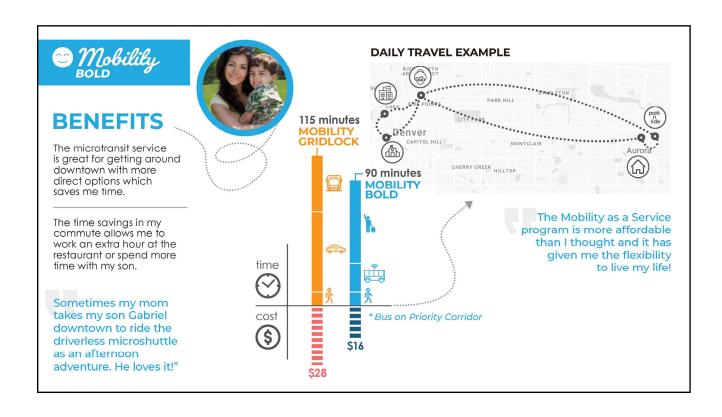


DAN is a 75 year old semi-retired professor who is married and lives in a South Denver neighborhood.

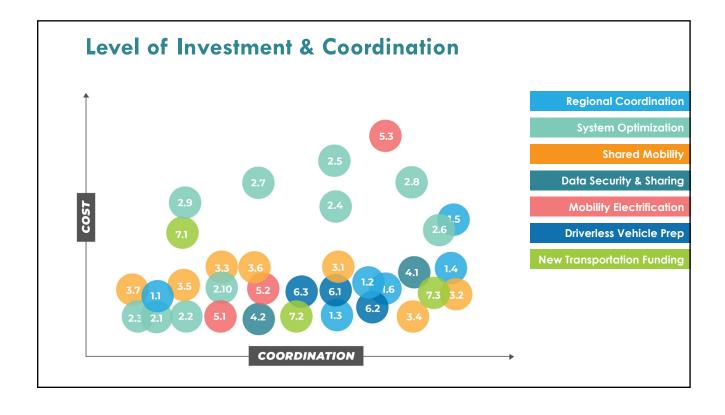


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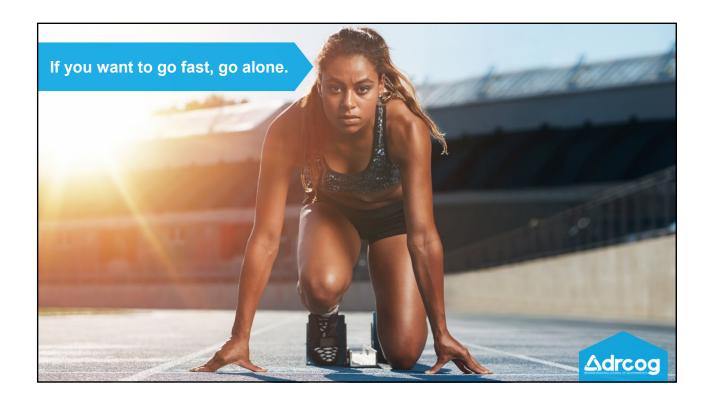


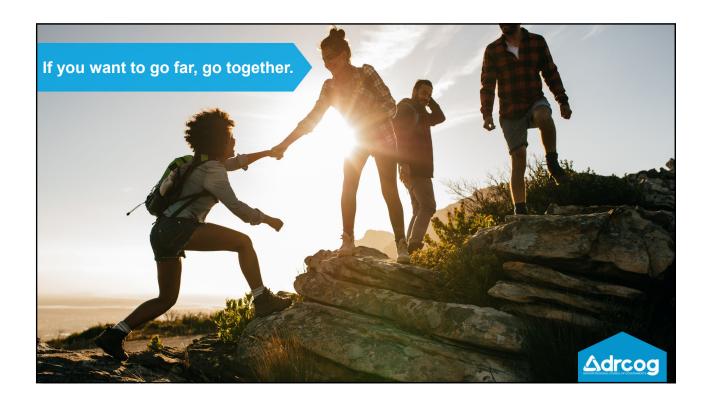




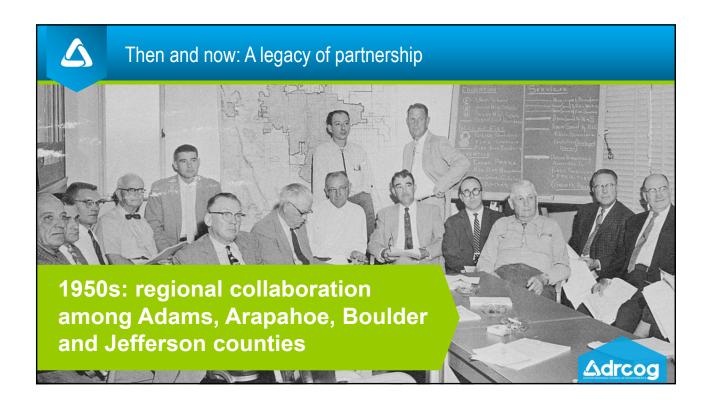


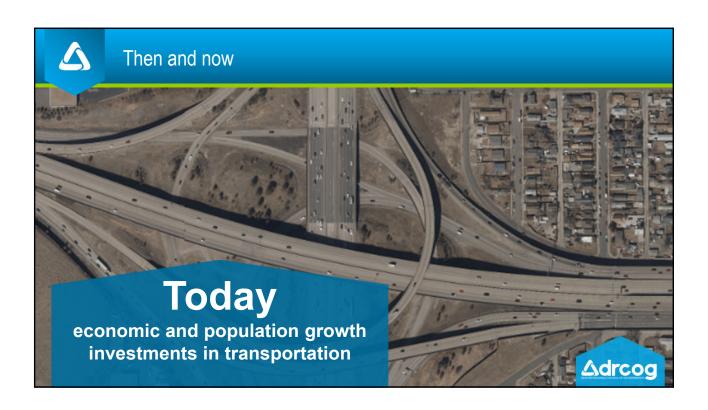


















# Establish mobility technology advisory committee

#### **THEME**

Funding & Finance Infrastructure Governance

#### TACTIC INITIATOR

DRCOG, CDOT, RTD, Denver Metro Chamber

# **ADDITIONAL PARTICIPANTS**

New mobility entity



