

North Area Transportation Alliance Board Meeting

January 26, 2023







- 1. Welcome and introductions- Chair Greg Mills
- 2. Approval of December Meeting Minutes
- 3. 2023 SPC Ratification
- 4. 2022 NATA Year in Review Carson Priest
- 5. Regional Air Quality Council (RAQC) Presentation Mike Silverstein, RAQC
- 6. CDOT Commissioner Update
- 7. RTD Directors Reports Directors Buzek, Harwick, Davidson, Whitmore
- 8. Other



2023 Executive Officers



- Chair Brighton Mayor Greg Mills
- Vice Chair Westminster Mayor Nancy McNally
- Treasurer Erie Trustee Emily Baer



Strategic Planning Committee (SPC)



The SPC acts as the Executive Committee for NATA Board and includes the

Chair, Vice Chair, Treasurer, immediate past Chair preferably from areas

that are not geographically represented by the Officers and the

immediate past Chair.



2023 SPC Appointments



- Chair Brighton Mayor Greg Mills
- Vice Chair Westminster Mayor Nancy McNally
- Treasurer Erie Trustee Emily Baer
- Immediate Past Chair Commissioner Lynn Baca
- At Large Member –
- At Large Member -







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2022 Position Letters



- 9.27.2022 Letter to Kathleen Bracke re: Support for 2022 DRCOG TIP Grant Application for CO7 BRT Starter Service
- 3.22.2022 Letter to Pete Buttigieg re: Support for City of Commerce City's 88th Avenue Improvements Project
- 3.22.2022 Letter to Pete Buttigieg re: Support for City of Brighton's RAISE Grant Application for the Bridge Street "Smart Streets" Project





January:

- Review of NATA 2021 Year in Review Karen Stuart
- Smart Commute 2021 Year in Review Karen Stuart
- NATA's Sub-committee on 1-25/104th Improvement Project Karen Stuart
- CDOT Transportation Commissioner Report Commissioner Karen Stuart
- RTD Directors Reports Directors Vince Buzek, Shelly Cook, Erik Davidson, Troy Whitmore

February:

- Smart Commute Executive Director Transition, Rebrand & Summer Events Karen Stuart
- Sub-committee on 1-25/104th Improvement Project Report Karen Stuart
- CDOT Transportation Commissioner Report Commissioner Karen Stuart
- RTD Directors Reports Directors Vince Buzek, Shelly Cook, Erik Davidson, Troy Whitmore
- State Transportation Legislation update Andy Karsian, CDOT
- Federal infrastructure Funding and grants opportunities Jamie Grim, CDOT & Andres Carrera, Denver Metro Regional Director, Senator Hickenlooper's Office





March:

- RAISE Grants Letter of Support Discussion Lynn Baca
- Smart Commute Summer Outreach, Metro Vision Award, Bike Gap Analysis Carson Priest
- Sub-committee on 1-25/84th 104th Improvement Project Report Karen Stuart
- CDOT Transportation Commissioner Report Commissioner Karen Stuart
- RTD Directors Reports Directors Vince Buzek, Kate Williams, Erik Davidson, Troy Whitmore
- CO7 Corridor Plan Update Ryan Sorensen, CDOT & Broomfield staff

April:

• Annual NATA Retreat – Lynn Baca (Chair), Carson Priest & Tammy Herreid, Smart Commute

May:

- Smart Commute Bike to Work Day, Bike to Summer Campaign, RTD Outreach Carson Priest
- NATA Priority Projects Discussion Lynn Baca & Carson Priest
- CDOT Transportation Commissioner Report Commissioner Karen Stuart
- RTD Directors Reports Director Vince Buzek
- Front Range Passenger Rail Project & Special District Update David Singer & Spencer Dodge, CDOT





July:

- Smart Commute New Brand & Website, BTWD Recap Carson Priest
- CDOT Transportation Commissioner Report Commissioner Karen Stuart
- RTD Directors Reports Directors Vince Buzek
- RTD Zero Fare for Better Air August Campaign Director Vince Buzek
- I-25 Now Group Project Update Mike Cheroutes, Johnny Olson, Simon Drunsew

August:

- Smart Commute Bike Gap Analysis Phase I Carson Priest
- CDOT Transportation Commissioner Report Commissioner Karen Stuart
- RTD Directors Reports Director Troy Whitmore
- SB21-260 Enterprise Update, Jeff Sudmeier, CDOT

September:

- Smart Commute eBike Phase II, Nation TDM Week, CDOT/ACT TDM Conference Carson Priest
- CDOT Transportation Commissioner Report Commissioner Karen Stuart
- RTD Directors Reports Director Vince Buzek
- CDOT 10-Year Plan Update, Rebecca White, CDOT





October:

- Smart Commute Annual Commuter Survey, Outreach, TDM Conference Carson Priest
- CDOT Transportation Commissioner Report Commissioner Karen Stuart
- RTD Directors Reports Directors Vince Buzek, Troy Whitmore
- CDOT I-25 Virtual "Tour" Andy Stratton and Abra Geissler, CDOT

December:

- Smart Commute 2022 Annual Review and Annual Commuter Survey Results Carson Priest
- CDOT Transportation Commissioner Report Commissioner Karen Stuart
- RTD Directors Reports Directors Vince Buzek, Ian Harwick
- RTD Rider Appreciation Events, Business Carbon Footprint Analysis Karen Stuart, SCMN
- RTD Fare Study Update Director Vince Buzek
- RTD Zero Fare for Better Air August Update Director Vince Buzek



2022 Accomplishments and Ongoing Focus



- Returned to in-person meetings
- Updated Mission Statement
- Updated Shared Values
- Updated Master Projects List
- Monthly CDOT Commissioner Updates
- Monthly RTD Directors Report Updates
- Updates on RTD Fare and Equity Study
- Continued Subcommittee meetings for 1-25/84th 104th
- NATA Retreat April 2022
- Renewed focus on position letters
- Focus on positioning the region for federal funding opportunities
- Update the NATA Leave-Behind for lobbying efforts

2023 Smart Commute Board of Directors

- Chair: Jessica Sandgren, Mayor Pro Tem, Thornton
- Vice Chair: Wady Burgos, Parking & TDM Coordinator, Westminster Parking
- Treasurer: Nathan Batchelder, Senior Associate, CRL and Associates
- Kyle Harris, VP Community Development, McWhinney
- Ken Spangler, Manager, Google
- Troy Whitmore, Director, Public Affairs, United Power
- Pedro Costa, CEO, Northwest Parkway
- Stephanie Webb, Community Relations, Centura Health
- Joe Dudek, General Manager, Amazon DEN3
- Lisa Hough, President & CEO, AC-REP (Sara Gist, Alternate)
- Gene Putman, Putman Transportation Solutions
- Craig Hebrink, Sustainable Broomfield







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Air Quality Issues and Perspectives

Presentation to the North Area Transportation Alliance

January 26, 2023

Mike Silverstein Executive Director Regional Air Quality Council

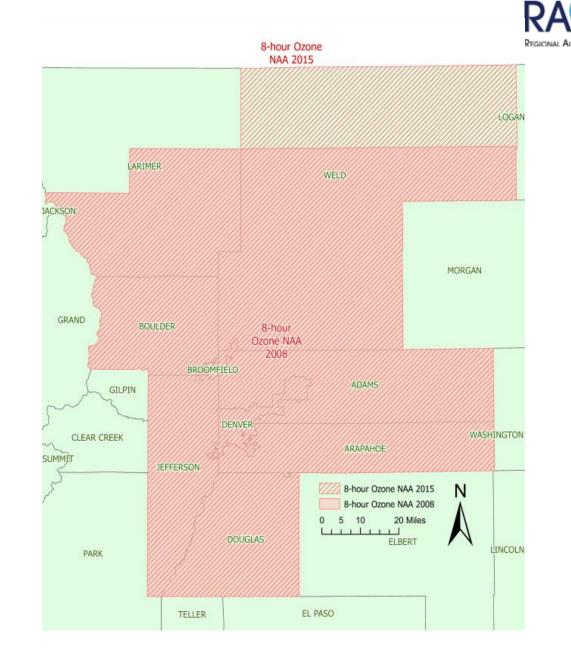
Regional Air Quality Council

RAQC is the lead planning agency for the Denver Metro/North Front Range Ozone Nonattainment Area

Governor appoints the 29 member Board -

Primary responsibilities:

- Planning to meet air quality standards and improve climate conditions
- Conduct public education and awareness programs
- Implement public/private projects to reduce emissions
- Represent and assist local governments in the air quality planning process



RAQC Programs





• Simple Steps. Better Air.

- Heightened education/outreach efforts
- *Reduced travel encouraged teleworking and e-commerce!*



Mow Down Pollution

- Retail-based residential program
- Grant-based public sector program
- Grant-based private sector commercial program under development



• Air Quality Planning

- Numerous emission control strategies under development through a Board committee process
- Planning underway for the next ozone plan and additional measures

WHERE WE SOMETIMES ARE AND WHERE WE NEED TO BE





Denver Metro/North Front Range Air Quality Status



Fine Particulates (PM_{2.5})

Nitrogen Dioxide (NO₂)

Sulfur Dioxide (SO₂)

Lead (Pb)

Carbon Monoxide (CO)

Coarse Particulates (TSP&PM₁₀)

Ozone (O_3)

1979 1-hour standard: 125 ppb 1997 8-hour standard: 84 ppb 2008 8-hour standard: 75 ppb

2015 8-hour standard: 70 ppb

Never Violated - Occasional Exceedances Do Occur

Denver Attained in mid '80's

Never Violated

Denver Area Attained in mid '80's

Denver, Longmont, Ft. Collins, Greeley Attained in 1990's - Maintenance Areas

Denver Area Attained in 1993 – Maintenance Area

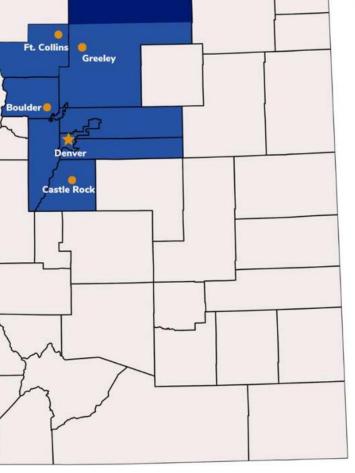
Region Attained 1987 (Standard Revoked) Region Attained in 2009 (Standard Revoked) Region Out of Compliance Region Out of Compliance



COLORADO'S OZONE STATUS Colorado is not meeting federal ozone standards

- Colorado's human-caused emissions are decreasing
- Almost ¼ of ozone formation comes from Colorado's human-caused emissions

THERE'S MORE TO DO



'SEVERE' OZONE NON-ATTAINMENT

(Partial List of Communities)

- Arvada
- Aurora
- Boulder
- Brighton
- Broomfield
- Castle Rock
- Centennial
- Commerce City
- Denver
- Englewood
- Estes Park
- Evergreen
- Ft. Collins
- Golden

Lakewood Littleton

• Highlands Ranch

Lone Tree

Greeley

- Longmont
- Louisville
- Loveland
- Northglenn
- Parker
- Superior
- Thornton
- Westminster
- Windsor

Counties: Adams • Arapahoe • Boulder • Broomfield • Denver • Douglas • Jefferson • Larimer • Weld

Part of 2015 nonattainment area, outside 2008 nonattainment area

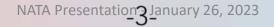


HOW'S THE AIR QUALITY IN METRO DENVER?











Denver Metro/North Front Range Area - 2022 8-Hour Ozone Summary* Through 10/02/22



Monitor	1st Max 2022	2nd Max 2022	3rd Max 2022	4th Max			2020-2022 Design Value^	2020-2022 Design Value excluding 2020		
				2022	2021	2020	2 - 18-18-19-18-18	flagged days ⁺		
Aurora East	77	71	71	70	77	77	74	71		
Autora East	05/12/22	07/22/22	06/15/22	07/19/22			14	1:1.		
Black Hawk	74	73	72	71	82	75	76	75		
DIACK HAWK	09/07/22	06/16/22	08/09/22	08/29/22	02	15	10	15		
Boulder Reservoir	79	78	73	72	82	76	76	76		
Boulder Reservoir	06/16/22	08/10/22	08/04/22	09/07/22	02	10	10	10		
CAMP	73	72	72	71	77	74	74	71		
CAMP	08/11/22	07/22/22	06/16/22	08/04/22		14	14	61		
Chatfield State Park	93	82	80	78	89	83	83	80		
Chatheld State Park	06/16/22	07/27/22	06/22/22	06/15/22	0.5	0.5	05	00		
=1	92	76	76	75	81	63	73	73		
Evergreen ¹	06/16/22	06/14/22 09/06/22	06/15/22	81	03	13	13			
Fort Collins - CSU	73	73	71	70	76	67	71	69		
Fort Collins - CSU	06/16/22	06/13/22	08/10/22	08/11/22						
Fort Collins - West	78	74	74	73	85	75	77	76		
Fort Collins - West	06/16/22	09/07/22	08/11/22	08/10/22						
Greeley, Wold Tower	76	73	70	70	76	72	72	71		
Greeley - Weld Tower	06/13/22	08/11/22	07/17/22	09/07/22						
115-bland	79	75	74	73			80	76		
Highland	07/27/22	06/16/22	06/15/22	06/22/22	84	04	83	80	70	
1 - 0	74	74	73	72	83		02	00 70	77	75
La Casa	08/11/22 08/04	08/04/22	07/22/22	08/13/22		78	11	75		
NDCI	86	80	78	77	89	07	84	00		
NREL	06/16/22	08/11/22	09/06/22	07/27/22	- 69	87	64	82		
Platteville Atmospheric	80	75	75	73		70		1		
Observatory ²	06/13/22	06/16/22	07/15/22	07/17/22	83	76	77	77		
	85	81	80	79						
ocky Flats	06/16/22	09/07/22	08/04/22	08/11/22	87	84	83	81		
	72	71	71	68				70		
Rocky Mtn. Nat'l Park**	06/16/22	09/07/22	08/10/22	06/08/22	77	72	72			
	78	76 76 75 70 77	-							
Welby	08/11/22	06/16/22	07/12/22	08/09/22	79	78	77	75		

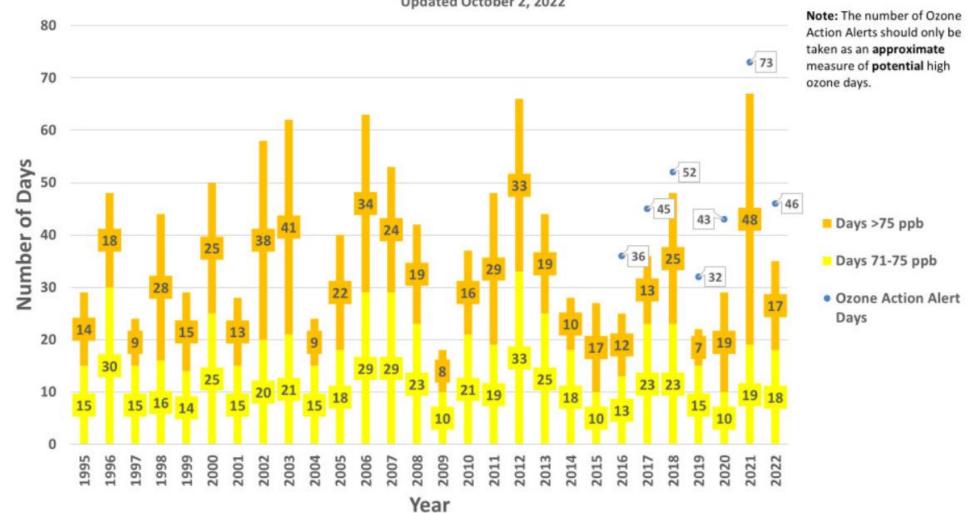
* Based on 8-hour averages of raw 1-hour ozone data from the Colorado Department of Public Health and Environment (CDPHE)

through the EPA AirNow API

and consistent with Data Reporting and Handling Conventions outlined in 40 CFR Part 50 - Appendix P.

The form of the standard is in parts per million (ppm), however, values in this table are expressed in parts per billion (ppb) for simplicity.

Data is synced monthly with Air Pollution Control Division (APCD) monthly ozone summary with final quality assurance conducted by APCD at end of ozone season.



Historical Number of High Ozone Days and Action Alert Days Updated October 2, 2022





General Contribution to Front Range Summertime Ozone Concentrations

Source Group

Light Duty Vehicles (Contribution: 5.7 ppb)

Oil & Gas Area Sources (Contribution: 5.3 ppb)

Non EGU Point Sources (Contribution 3.5 ppb)

Lawn & Garden (Contribution: 2.6 ppb)

Oil & Gas Point Sources (Contribution: 2.2 ppb)

Non-Road Sources, Balance (Contribution: 2.2 ppb)

Non-Road, Construction (Contribution: 2.2 ppb)

EGUs (Contribution: 1.8 ppb)

Oil & Gas Tanks (Contribution: 1.1 ppb)

Medium/Heavy Duty Vehicles (Contribution: 1.1 ppb)

Non Road, Trains (Contribution: 1.0 ppb)

Biogenics (Contribution: 0.8 ppb)

Other Area Sources (Contribution: 0.7 ppb)

Consumer Products (Contribution: 0.5 ppb)

Local Fires (Contribution: 0.4 ppb)

Background Concentration (Contribution: 47.4 ppb)

Contributions taken from 2023 modeling efforts. Do not represent contribution at any singular monitor. Additional information available in 2021 Modeling Forum Presentations



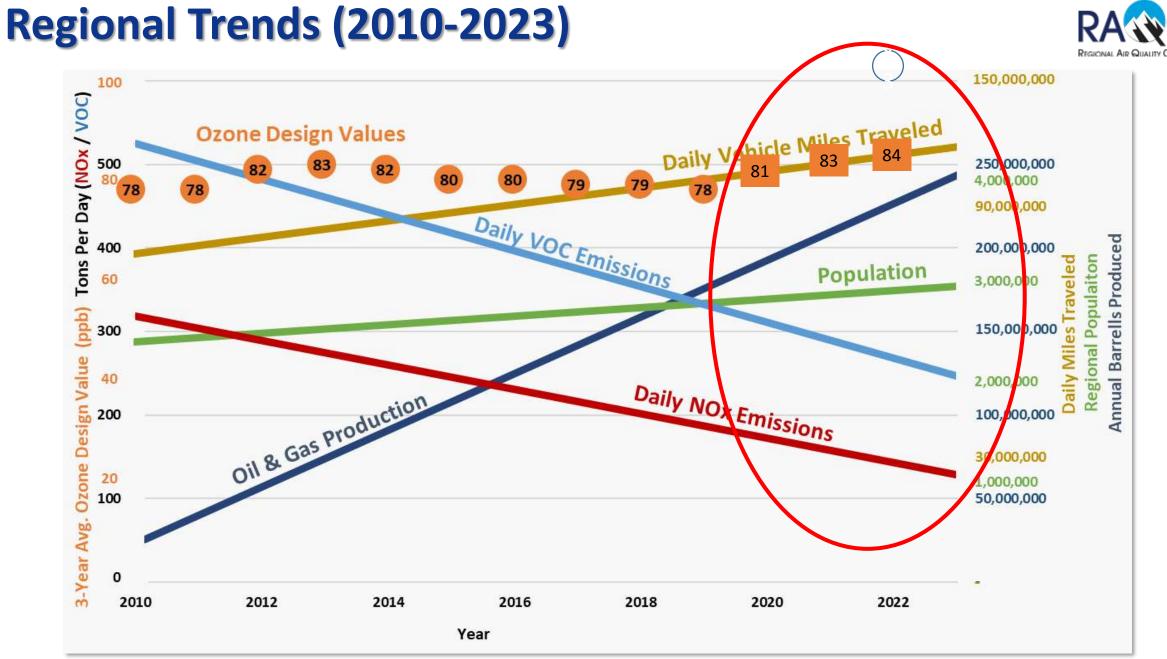
Ozone Source	Contribution	Includes		
Oil & Gas	8.6 ppb	Area and point sources (operations, storage facilities, drilling, trucking and engine exhaust)		
On-Road Vehicles	6.8 ppb	Light/Medium/Heavy Duty Vehicles (SUVs, cars, pickup trucks)		
Non-Road Sources	5.4 ppb	Construction operations, rail/train operations, agriculture		
Point Sources	5.3 ppb	Industrial sources and electricity generation		
Lawn & Garden	2.5 ppb	Commercial lawn equipment and residential lawn and garden equipment (mowers, leaf blowers, trimmers, etc.)		
Area	1.2 ppb	Personal care products, cleaning products, paints, and solvents		
Background and Natural	48.6 ppb	Background ozone, transport, local fires, plant-based emissions		

*The ozone contributions illustrated here represent the maximum modeled impacts (in parts per billion) occurring somewhere in the nonattainment area.

Numerous Emissions Control Programs Already in Place



- New vehicle emission standards
- Vehicle inspection and maintenance program
- Gasoline and diesel fuel standards and requirements
- National small engine, non-road and off-road limits
- Industrial source permitting and emission controls
- Numerous standards for commercial solvents/paints/coatings supplies and use
- Architectural and industrial maintenance coatings and consumer products
- Oil and gas industry regulations
- Transportation planning and transit
- Public education and outreach
- Electrification of the transportation network
- Electricity generated from renewable resources
- Greenhouse gas emission reductions requirements for transportation plans



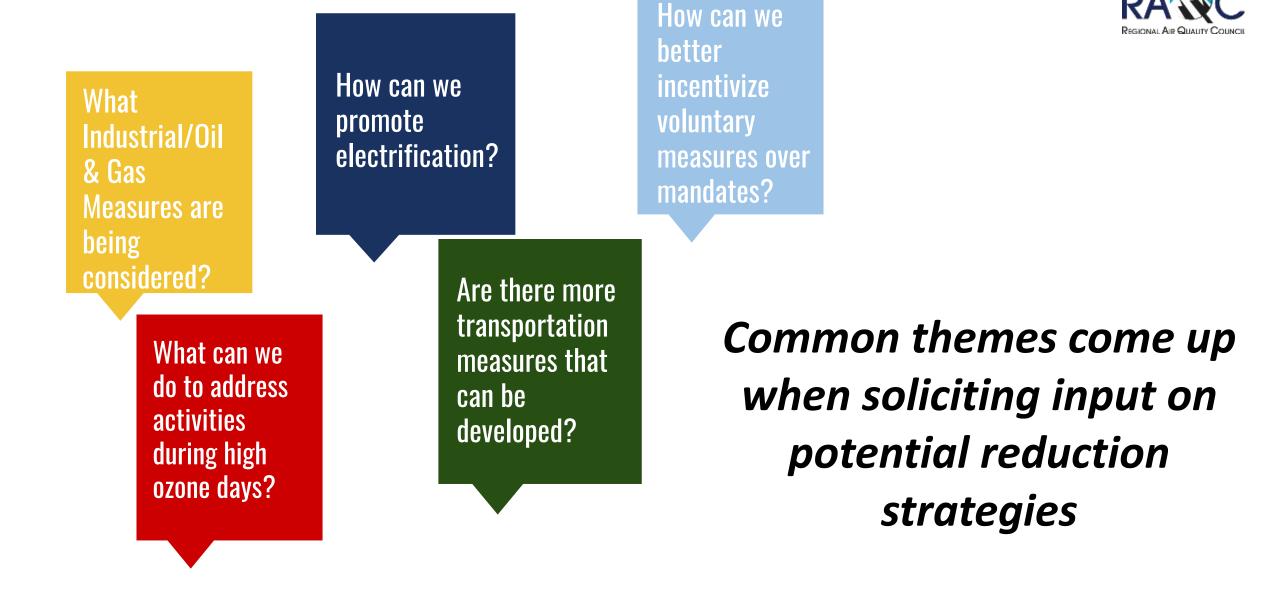
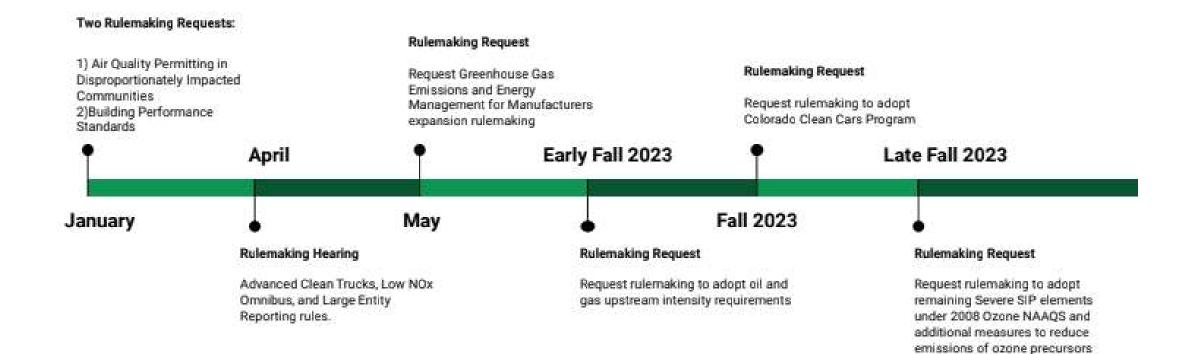




Table 2. 2017 and 2023 Nonat	ttainment Area Emis	sions Invento	ory (tons per	day)
ription	2017 NOx	2017 VOC	2023 NOx	2023 \

Description	2017 NOx	2017 VOC	2023 NOx	2023 VOC
Area	0.1	80.1	0.1	76.8
Architectural and Industrial Maintenance		24.0		18.6
Consumer Products		38.1		39.4
Other	0.1	18.1	0.1	18.8
Non-Road	42.9	44.5	37.5	45.9
Agriculture	2.8	0.3	1.7	0.2
Aviation	7.2	2.2	8.3	2.5
Commercial Equipment	17.2	6.7	12.1	6.5
Lawn & Garden	7.8	32.2	7.5	34.4
Railroad	7.4	0.4	7.4	0.4
Recreation	0.5	2.7	0.5	2.0
Oil and Gas	78.2	211.1	74.1	127.9
Area	62.4	48.5	56.6	73.7
Condensate/Oil Tanks	2.3	151.6	0.4	39.0
Point	13.6	11.0	17.0	15.2
On-Road	57.4	48.1	31.6	35.2
Light-Duty Vehicles	45.5	46.7	23.4	34.4
Medium/Heavy-Duty Vehicles	11.9	1.3	8.2	0.8
Point (Non Oil and Gas)	24.2	21.9	19.7	22.5
EGU	8.4	0.3	4.7	0.3
Non-EGU	15.8	21.6	15.1	22.2
TOTAL	202.9	405.7	162.9	308.3

Next Steps: 2023 Scheduled Rulemakings





Next Steps: Additional Strategy Evaluations Lead by the RAQC

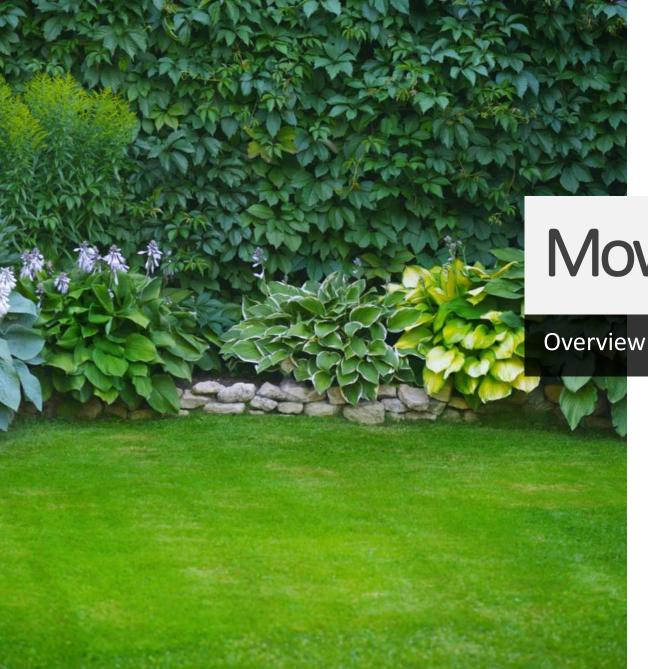
- Prohibitions on gasoline-powered lawn and garden equipment use and sales, and further incentives for the conversion of gas-powered equipment to electric.
- Appliance efficiency standards.
- Residential auto maintenance incentives.
- Commercial diesel best practices initiatives.
- Mobile source credits as part of nonattainment new source review.
- Additional/permanent funding for VMT reducing strategies such as zero-fare transit, increased transit services, and bicycle and walking infrastructure.
- Emission reduction approaches for indirect sources.



Next Steps: Additional Strategy Evaluations Lead by the State

- Emission limitations on <1,000 horsepower (hp) natural gas- and dieselpowered stationary engines.
- Limitations on pre-production/drilling emissions in summer ozone season.
- Adoption of standards to limit emissions from non-road engines.
- Strengthening the vehicle inspection and maintenance program.
- Other oil and gas and industrial source controls.







Mow Down Pollution

- Our program information can be found at <u>www.mowdownpollution.com</u>
- We are working on three different divisions of the program.
 - Local Government
 - Residential
 - Commercial





Residential

- We have \$200,000 to incentivize the use of electric mowing equipment.
- We are currently offering \$50 dollar vouchers if you have nothing to recycle and we are offering \$150 vouchers if you have old equipment, you are willing to recycle.
- We are working on a few large-scale recycling events in coordination with local governments. (Hopefully for April/May)



Residential

36

Improving Air Quality





Local Government



State of Colorado has invested 1.3 million dollars to go to local governments

- We are launching in February
- Offering public entities up to \$50,000 (maybe more then one round) for replacing equipment and infrastructure costs.
- We are incentivizing local governments to make the switch.
- City of Denver alone has over 3,000 lawn and garden assets. (that's a lot of pollution)



Commercial

- Currently, working to build out a commercial program
- We're having discussions with commercial operators
- Commercial division represents a large amount of emissions
- Seeking \$400,000 dollars to help get immediate emission reductions



Commercial

Improving Air Quality





Mike Silverstein

Executive Director

(303) 629-5450 x 250

msilverstein@raqc.org















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COLORADO Department of Transportation

I-25/88th Transit Impact & Safety Analysis #24962

January 25, 2023



Stakeholders









Department of Transportation







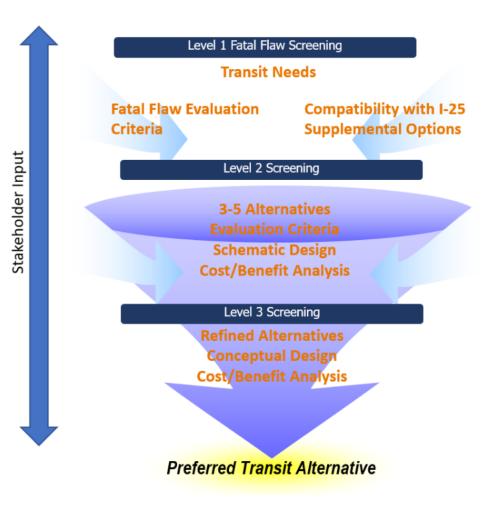
PROJECT GOAL: Maximize overall Transit Benefit and Safety Improvements

- Measuring Safety Impacts (MP 217 to 221) of Alternatives:
 - Existing Conditions (2,307 crashes from 2017 to 2019 68% SB, 3 involved RTD Bus from 2019 to 2021)
 - EA Alternative
 - White Paper Supplemental Options A, D, and F
 - Transit Alternatives (mostly qualitative)
- Methodology
 - Highway Safety Manual
 - Safety Performance Functions (SPFs) and Crash Modification Factors (CMFs)
 - Qualitative & Other Measures (HOT Lane, RTD Bus Incidents, etc.)
- Traffic Impacts of Transit Alternatives Using Previous Transmodeler Model
- Final Report Traffic and Safety Metrics by Alternative & Recommendations



Level 1 Analysis

- 17 initial Alternatives were developed
- Level 1 Evaluation Criteria
 - ROM Capital Costs
 - Stakeholder (CDOT/RTD Support/Opposition)
 - Fatal Flaws Analysis/ Feasibility Review
- Level 1 Screening is based primarily on CDOT/RTD input and fatal flaws
- 7 Alternatives, including a "No-Build" scenario advanced to Level 2





- 7 Level 2 Alternatives + No Build will be scored
- Level 2 Evaluation Criteria
 - Alternatives scored "Low, Medium, High" for each criteria
- Up to 3 Alternatives will be advanced

Level 2 Analysis - High Level Criteria Stakeholder Support Bus safety/ease of operations Safety of passenger access Transit travel time/Reliability Safety benefit to vehicles Relative capital cost Magnitude of construction impacts Community/Environmental Impact



Project Schedule

CDOT I-25/88th Transit Analysis						[1																						
1/3/2023													2023																			
TASK	September			October				November			December				January				February				March				April					
1 PROJECT MANAGEMENT															Ē																	
2 EXISTING CONDITIONS - Data Gathering and Review										Ĩ																						
3 SAFETY/TRANSPORTATION ANALYSIS																																
4 TRANSIT ALTERNATIVES DEVELOPMENT & SCREENING																																
4.1 Develop Transit Needs and Preliminary Evaluation Criteria																																
4.2 LEVEL 1 Analysis - Develop up to 5 Transit Alternatives																																
4.3 LEVEL 2 Analysis - Refine Transit Alternatives							_	-																								
4.4 LEVEL 3 Analysis - 10% Conceptual Design & Cost Benefit Analysis																																
5 CONCEPTUAL TRANSIT DESIGN OF RECCOMMENDED ALTERNATIVE																																
6 CONCEPTUAL COST ESTIMATE																																
7 FINAL WHITE PAPER REPORT																																
						-																								_		

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Upcoming Presentations and Discussions



- DRCOG TIP Adams County Project Updates
- Bustang Future of Service Update
- CO-7 Full Scope Update
- NATA Region Projects funded via TIP Calls
- NATA Letter of Support Status Update
- I-25 Seg. 2 Updated Scope Presentation
- CDOT Mobility Hub Plan Update
- ????
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2023 Schedule

- January 26
- February 23
 - March 23
 - April 27
 - May 25
 - June 22
 - July 27
- August 24
- September 28
- October 26
- November- no NATA meeting
- **December 14** (2nd Thursday)