# Air Quality Improving Activities at the Regional Air Quality Council

February 19, 2025

**Mike Silverstein, Executive Director** 



RACCC ... is the region's "Lead Air Quality Planning Agency" for more than 30 years

- RAQC's primary focus is developing the region's air quality plans, recommending emission reduction approaches, and implementing programs that directly reduce pollution.
- Each Governor appoints the Board, <u>32 Members at present</u>, and provides direction.
  - 8 members from local government, 5 from state government; 1 each from DRCOG, RTD, NFRMPO; the rest from the public, business & industry, academia, and transportation.
- RAQC <u>is not the State!</u> We are a private nonprofit business reliant on grants and contracts with the State and contributions from local governments.
  - DRCOG is our most generous partner, providing \$\$\$millions to RAQC through the CMAQ program. THANK YOU!
  - Local governments, primarily from the DRCOG region, now contribute about \$350K each year, Again, THANK YOU!

2

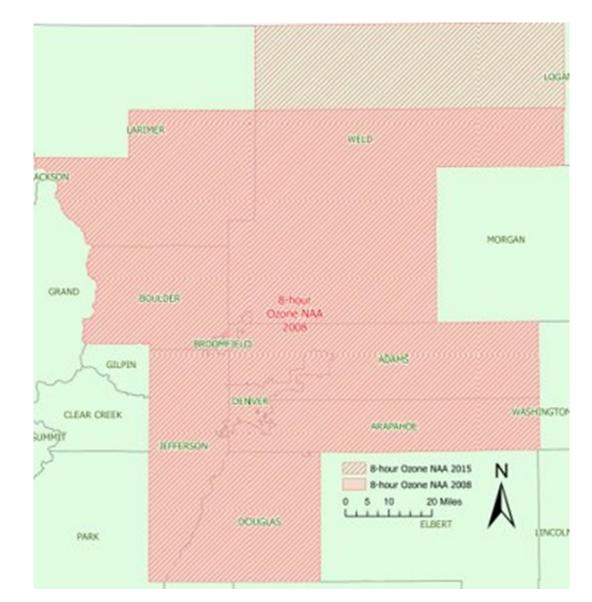
# WHERE WE SOMETIMES ARE, AND WHERE WE NEED TO BE







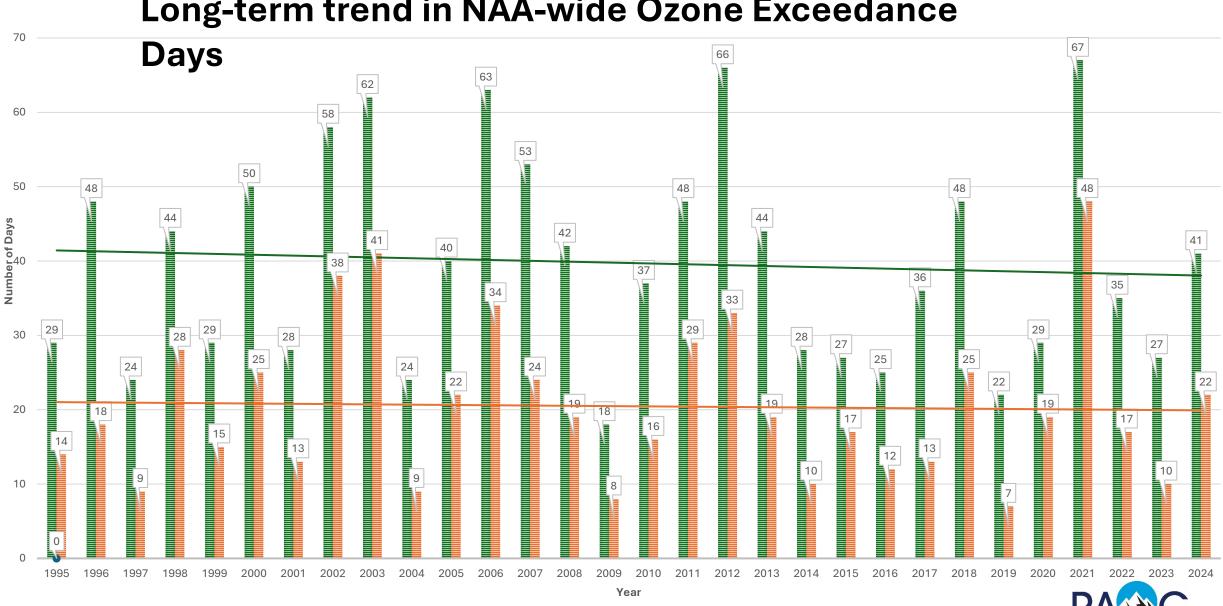
- Brings together ideas for analysis and strategies to include in specific programs, regulations, and plans to address the regional ozone nonattainment problem.
- Requires defining the problem(s) to address and analyzing solutions.
- Develops solutions to improve regional air quality for the greater Denver Metro and North Front Range region everyday.







5



#### Long-term trend in NAA-wide Ozone Exceedance

80

Presentation to DRCOG - 2/19/2025

Days >75 ppb — Linear (>71 ppb) — Linear (Days >75 ppb) daa 17<

REGIONAL AIR QUALITY COUNCIL

# General Contribution to Front Range Summertime Ozone Concentrations

#### 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) 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)

Source Group

Background Concentration (Contribution: 47.4 ppb)

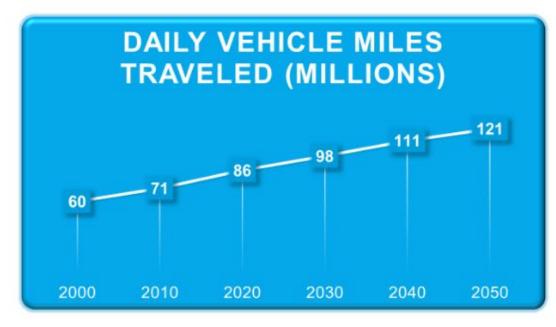
Contributions taken from 2023 modeling efforts. Do not represent

Presentation to DRCOG - 2/19/20/25 ition at any singular monitor. Additional information available in7

2021 Modeling Forum Presentations

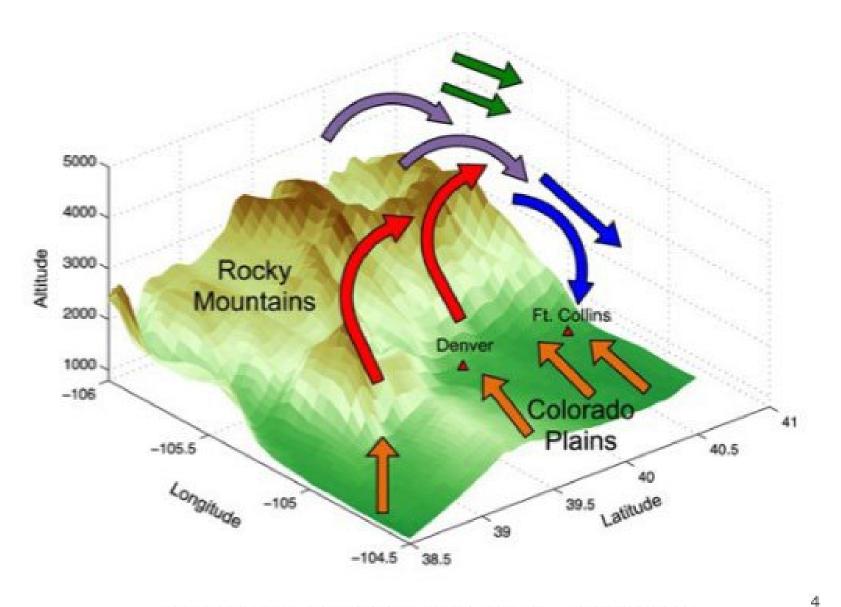






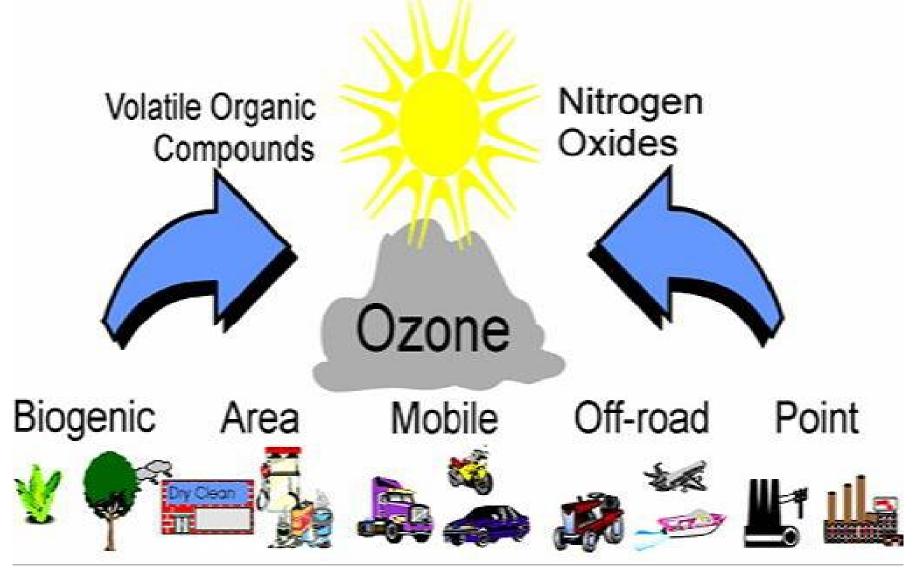


Our complex meteorology is natural and conducive to the buildup of pollutants.



#### Source: Sullivan et al., (2016)

#### **How Ozone is Formed**



Source: www.montgomerycountymd.gov/DEP/Resources/Images/outreach/air/ozoneformation.jpg



#### Focus of the Regional Air Quality Council:



- The Board recognizes that there is much more work ahead for the region to achieve full compliance with both federal ozone standards as rapidly as possible.
- The RAQC shares the urgency for better air quality expressed by many residents within the region and understands more action must be taken to achieve that goal.
- The RAQC hopes to fully develop and advance appropriate measures brought forward by staff, state agency partners, and stakeholders for consideration during 2023-25 and recommend direct implementation throughout this period.











#### Planning, Research, Outreach & Incentive Programs

- Ozone Planning Modeling, Control Strategy and other Technical Assessments
- Education, Marketing and Outreach
- Localized Community-Based Social Marketing
- Micro-Mobility Programs
- Anti-Idling Programs Food Truck Grants, Education & Outreach, Schools
- Auto Maintenance & Vehicle Repair Programs Incentives & Outreach
- Emission Source Data Tracking
- Public Sector, Commercial & Residential Lawn and Garden Equipment Electrification Incentives

# Fund raising and further program development a continuous process!

Presentation to DRCOG - 2/19/2025



#### **Program Implementation is Tenuous**

	$\sim$	
		$\geq$
( (		• • •
8		0
TD.	LAN	111-

	CT No	
ľ	SIMPLE STEPS	
	BETTER	
U		

ENGIN	ES
<b>SC</b>	С
	Г



- Federal priorities are rapidly changing; federal funding situation is chaotic.
- RAQC is cautiously proceeding:
  - Program offerings are under assessment, on hold, or are being slow-rolled.
  - Planning and control strategy development proceeding.
- The next ozone plan is due this summer;
  - Technical assessments are underway.
  - Emission reduction evaluations at RAQC are proceeding for:
    - Consumer products, oil and gas, transportation, landscape maintenance equipment.
    - One important assessment: those sources/activities that generate or attract a lot of vehicle trips, termed <u>INDIRECT SOURCES</u>.



### What are Indirect Sources?

Indirect Sources of Pollution - Facilities or installations that, by nature of their operations, cause substantial mobile emissions



**Common Examples:** 

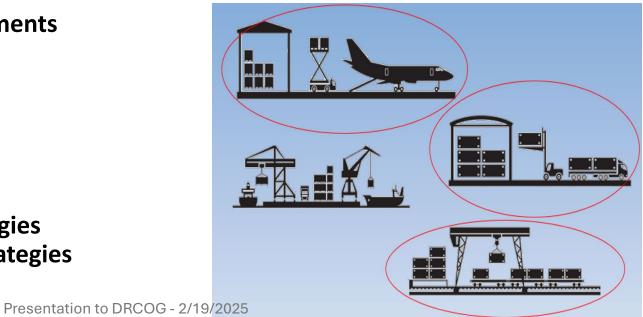
- Warehouses/Distribution Centers
- Industrial or commercial developments
- Recreation venues
- Airports
- Higher Education Campuses

**Emission Reducing Actions:** 

- Trip Reduction Strategies
- Vehicle Emission Reduction Strategies
- Construction Emission Control Strategies
- Permitting Requirements
- Efficiency Strategies



Freight-related Emission Sources in the Denver Metro / North Front Range Ozone planning region



Mike Silverstein Executive Director (303) 629-5450 x 250 msilverstein @raqc.org raqc.org



