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!

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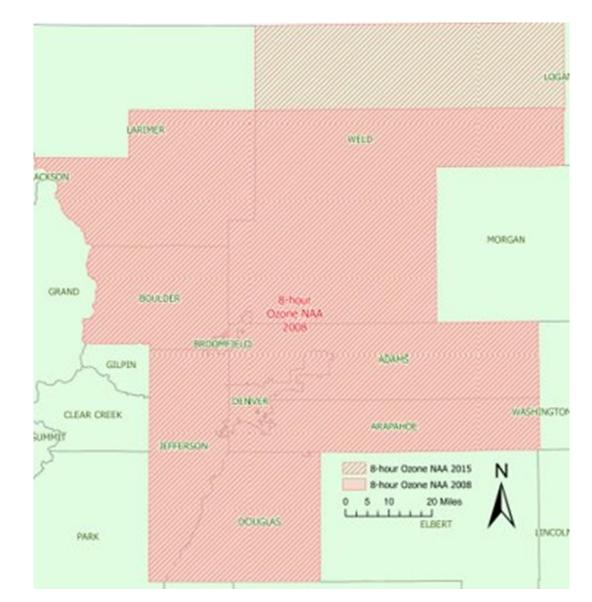
WHERE WE SOMETIMES ARE, AND WHERE WE NEED TO BE



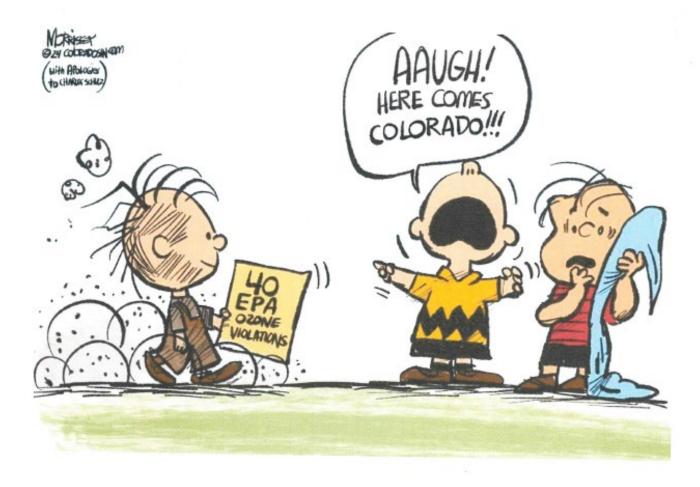




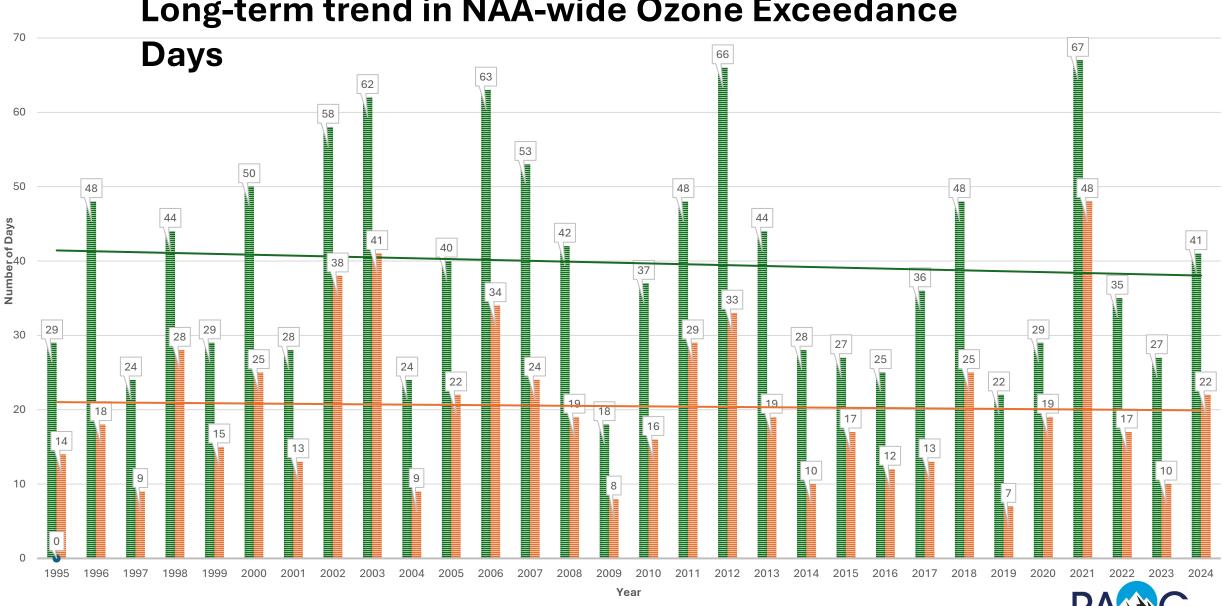
- Brings together ideas for analysis and strategies to include in specific programs, regulations, and plans to address the regional ozone nonattainment problem.
- Requires defining the problem(s) to address and analyzing solutions.
- Develops solutions to improve regional air quality for the greater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







5



Long-term trend in NAA-wide Ozone Exceedance

80

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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)

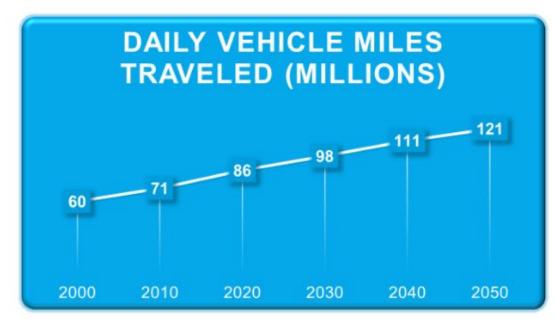
Contributions taken from 2023 modeling efforts. Do not represent

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

2021 Modeling Forum Presentations

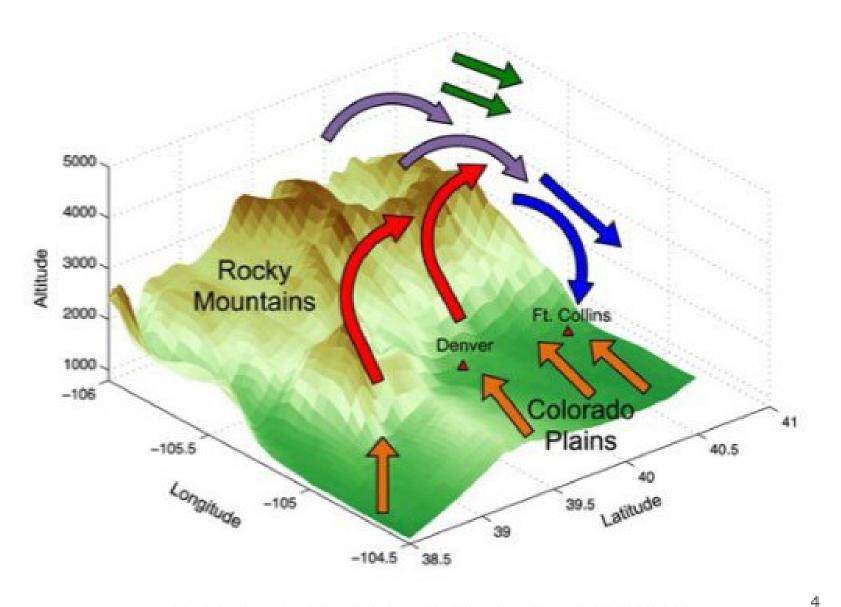






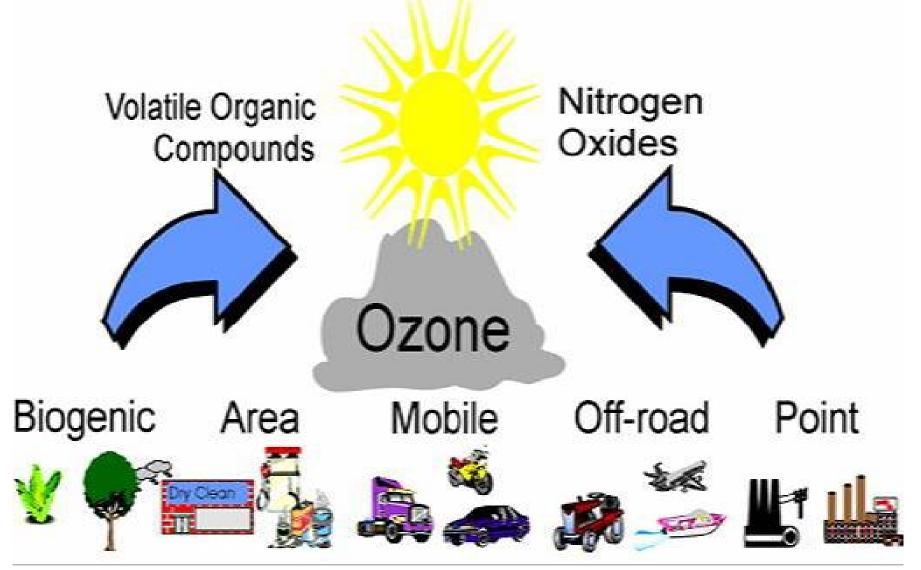


Our complex meteorology is natural and conducive to the buildup of pollutants.



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!

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Program Implementation is Tenuous

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- 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:

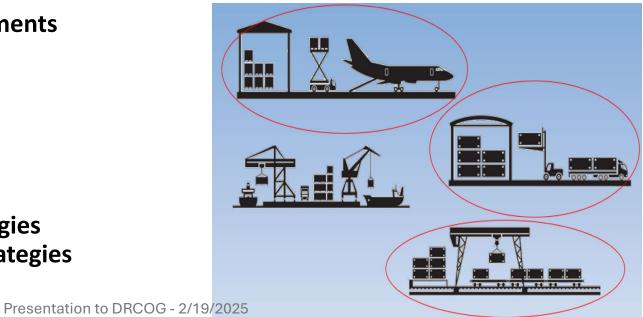
- Warehouses/Distribution Centers
- Industrial or commercial developments
- Recreation venues
- Airports
- Higher Education Campuses

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



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