CITY OF AUSTIN

Mobility Committee Presentation

October 4, 2017

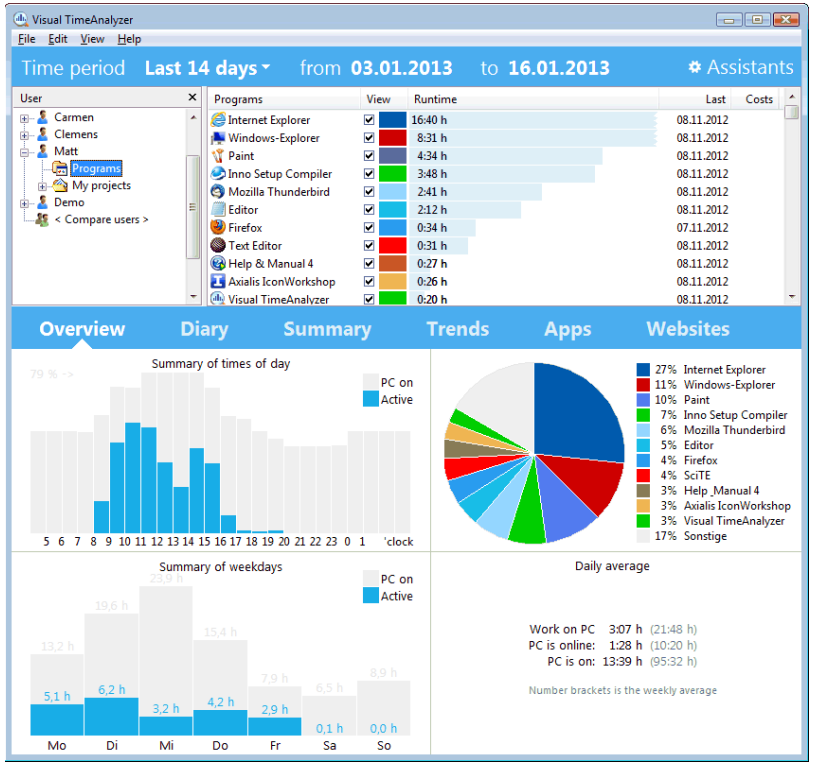
Presentation Overview

- Coordination between Climate Protection and Air Quality
- Ozone & Climate Change
- City of Austin, Office of Sustainability
- City of Austin, Air Quality Program

Coordination between Climate Protection and Air Quality

Voluntary Plans Rely on Outreach and Training

Annual tracking and reporting



Status of emission reductions
Annual Inventories

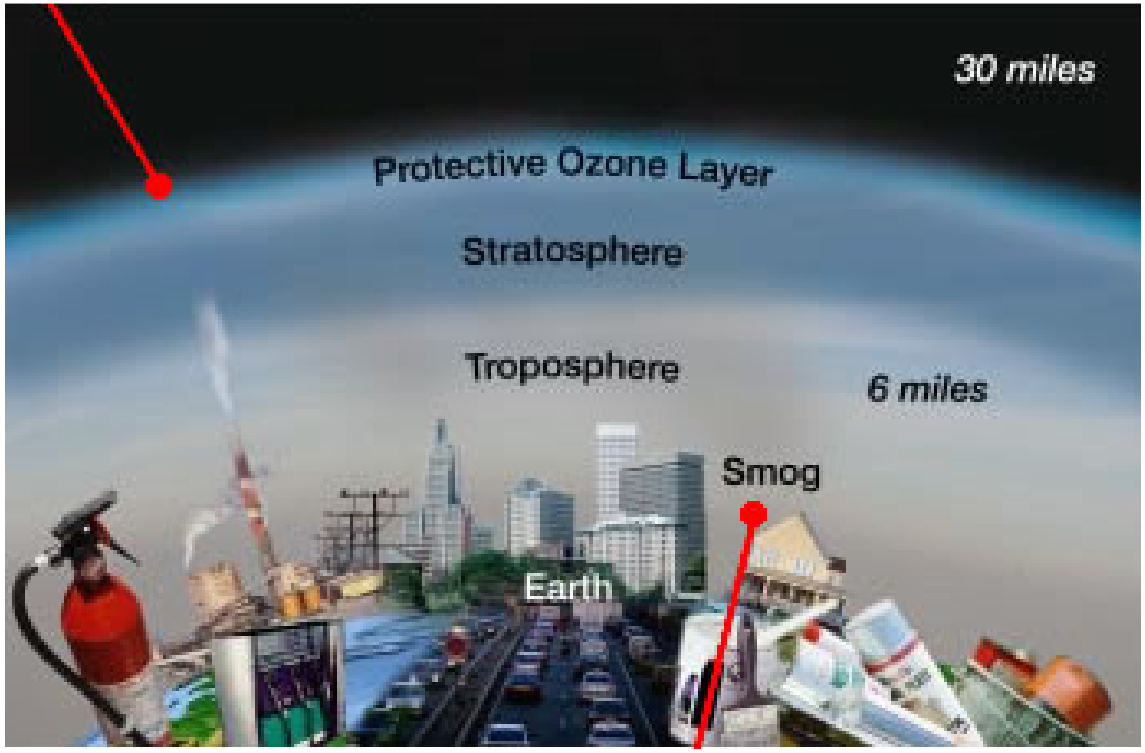
Reports:

- Sustainability Indicators Report
- City Operations Key Performance Indicators
- Community Climate Plan Updates
- State of the Environment Report
- Boards and Commissions

Ozone and Climate Change

What is Ground-Level Ozone?

Ozone layer – protects against UV rays



Ground-level ozone causes respiratory problems

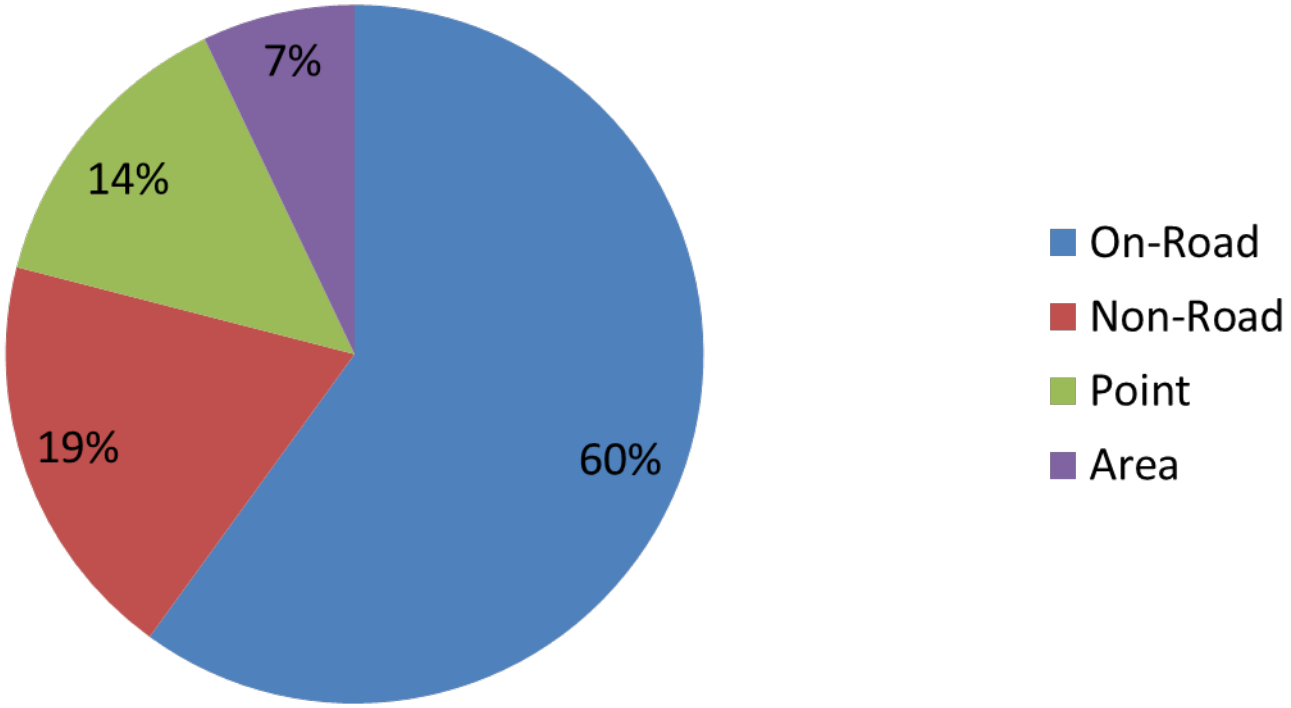
Why is Ozone a Health Problem for Central Texas?

7% of the population

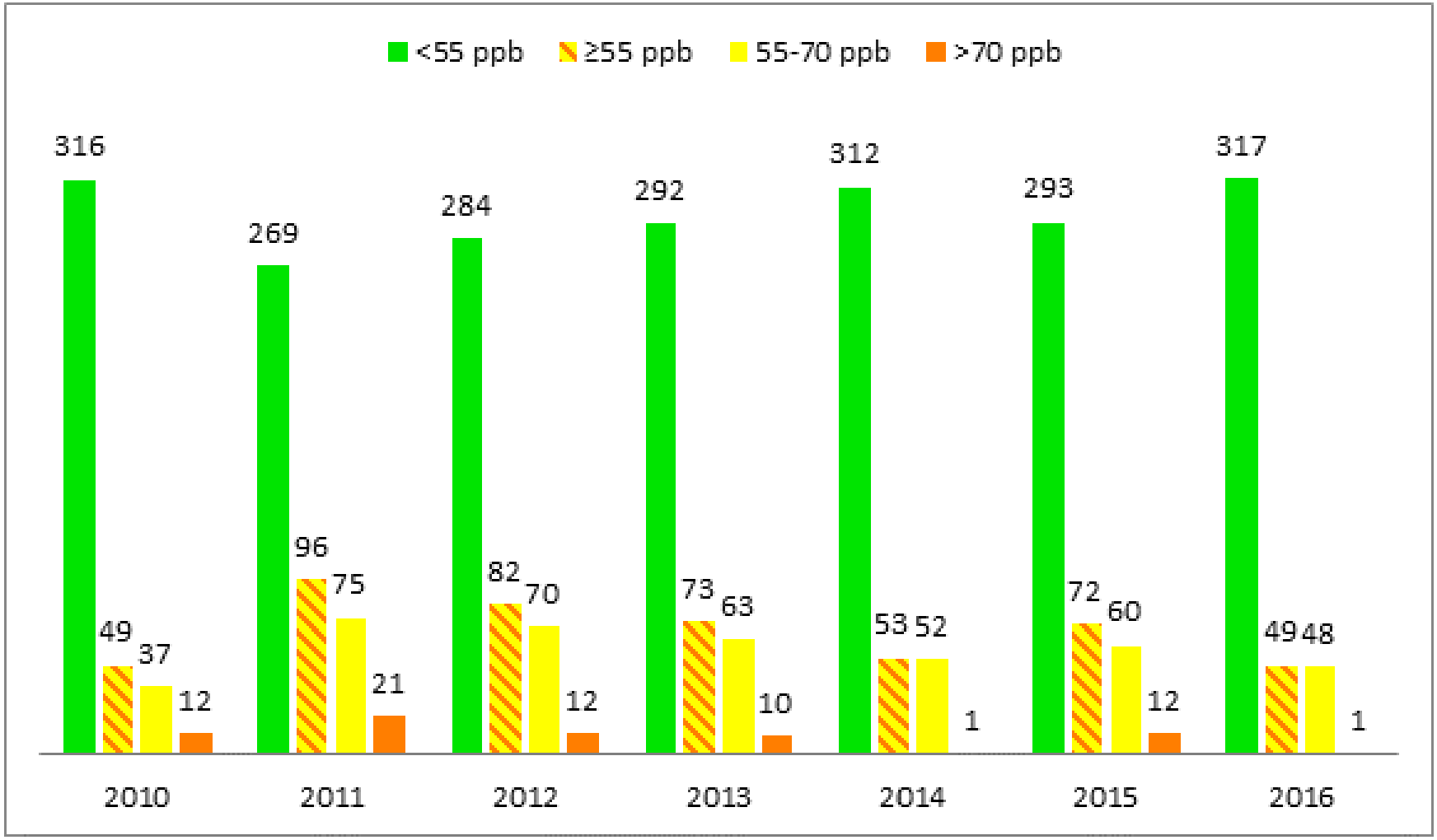
25% of the population

8% of the population

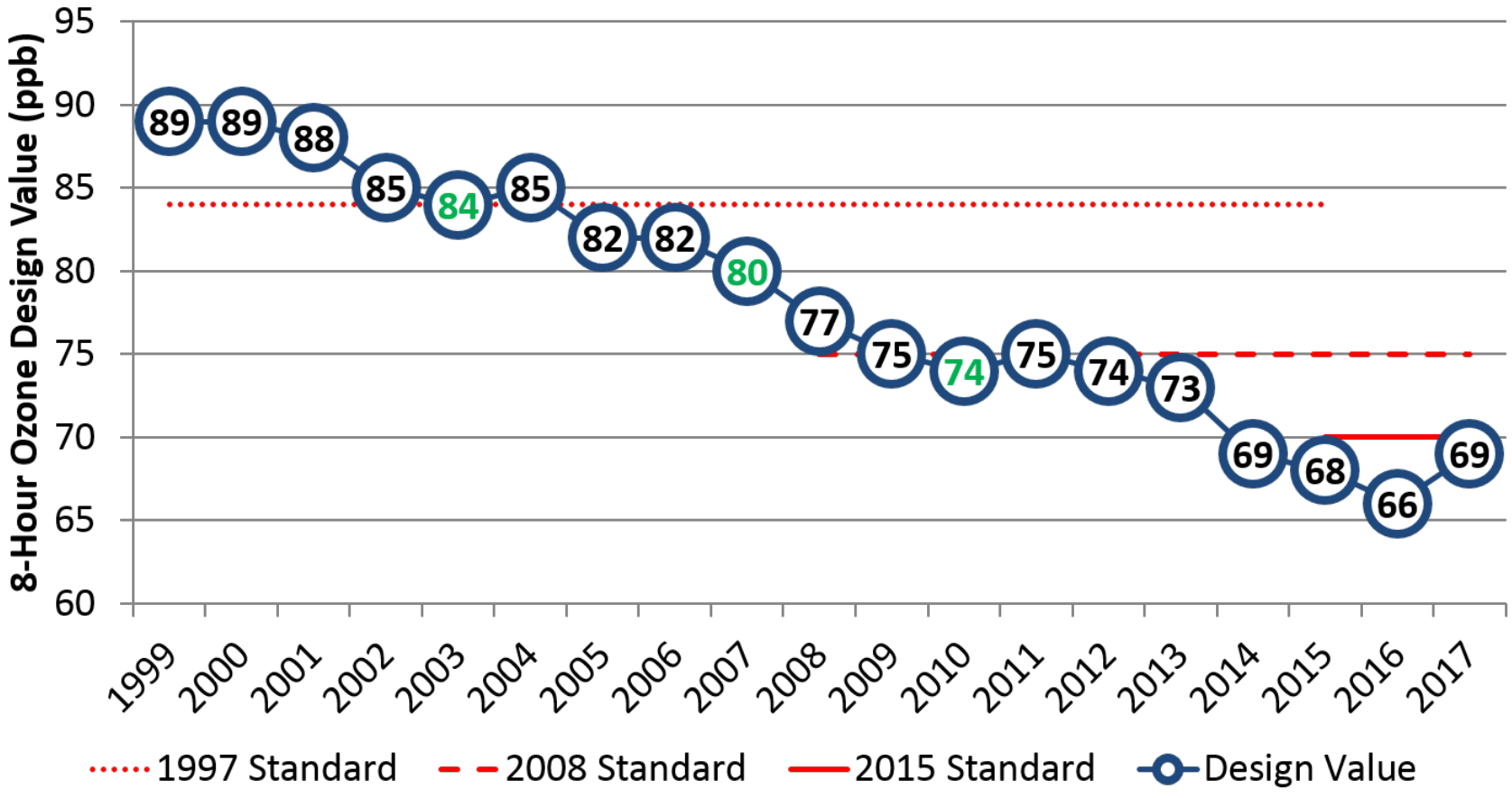
Travis County NO_X Emissions



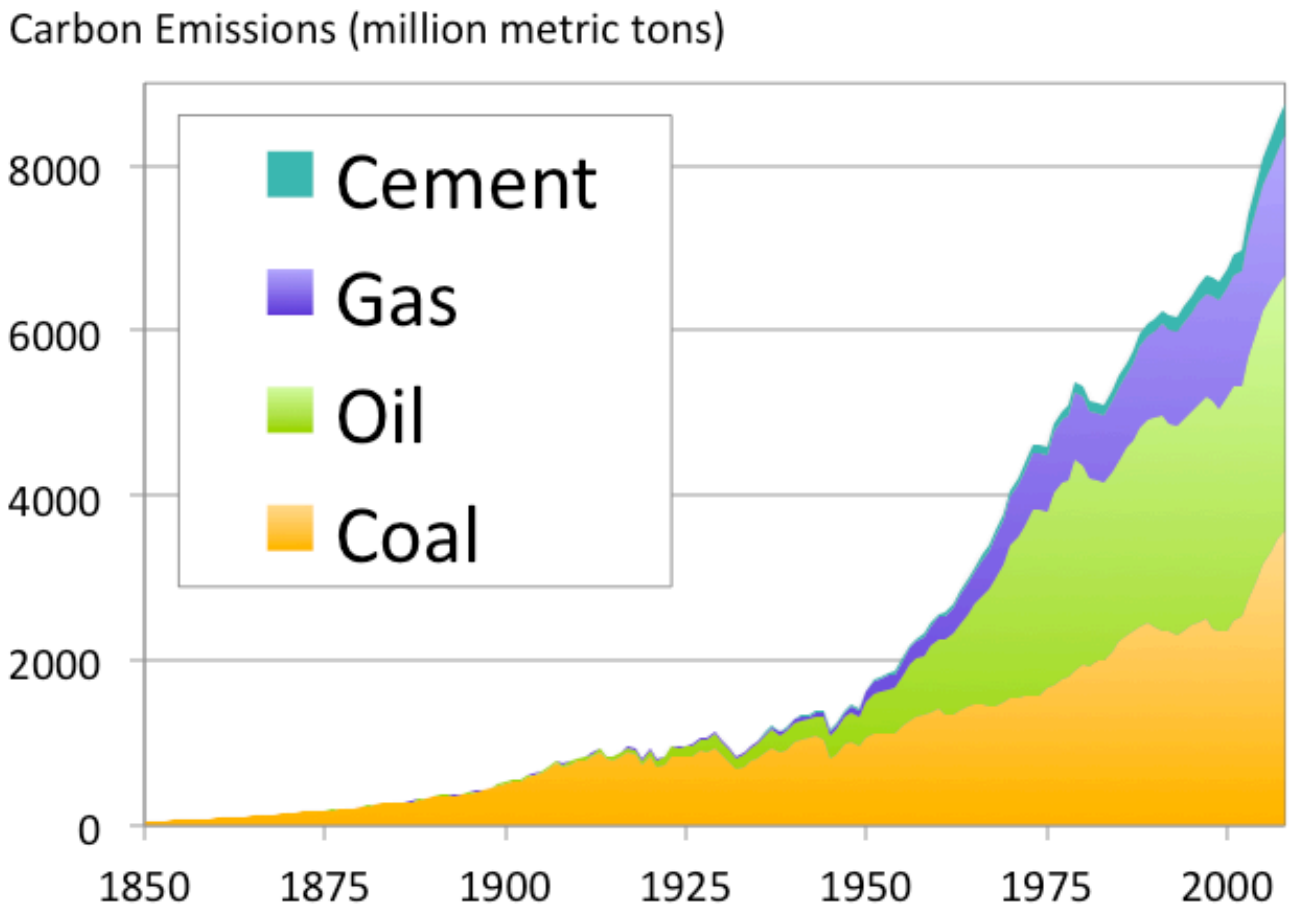
Why is Ozone a Problem for Central Texas?



Why is Ozone a Regulatory Problem for Central Texas?

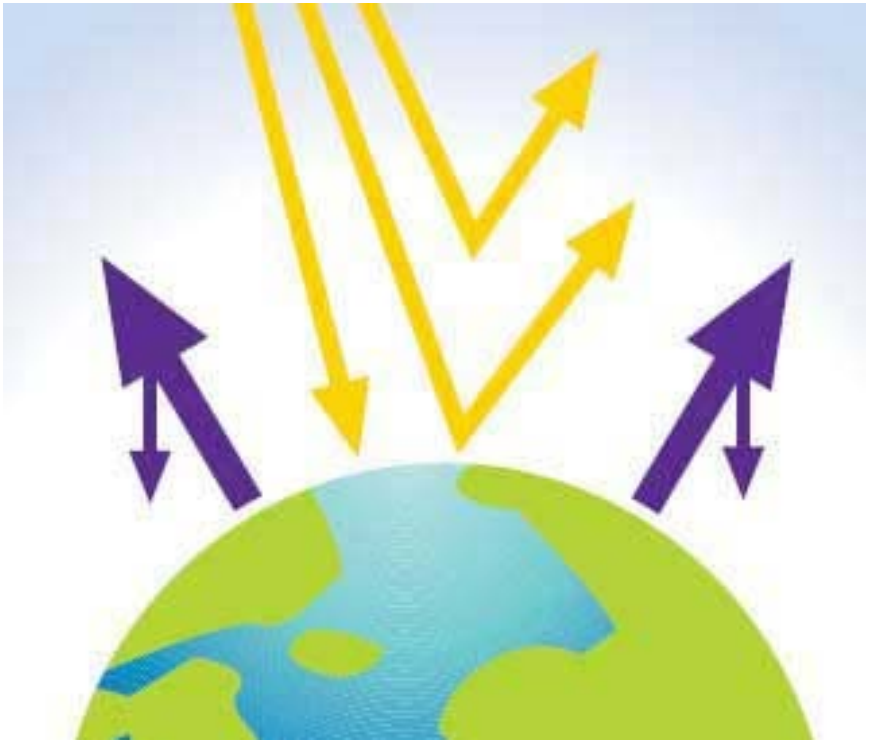


Our activities produce heat-trapping gases



Source: K. Hayhoe for 2014 U.S. National Climate Assessment

… that are building up in the atmosphere

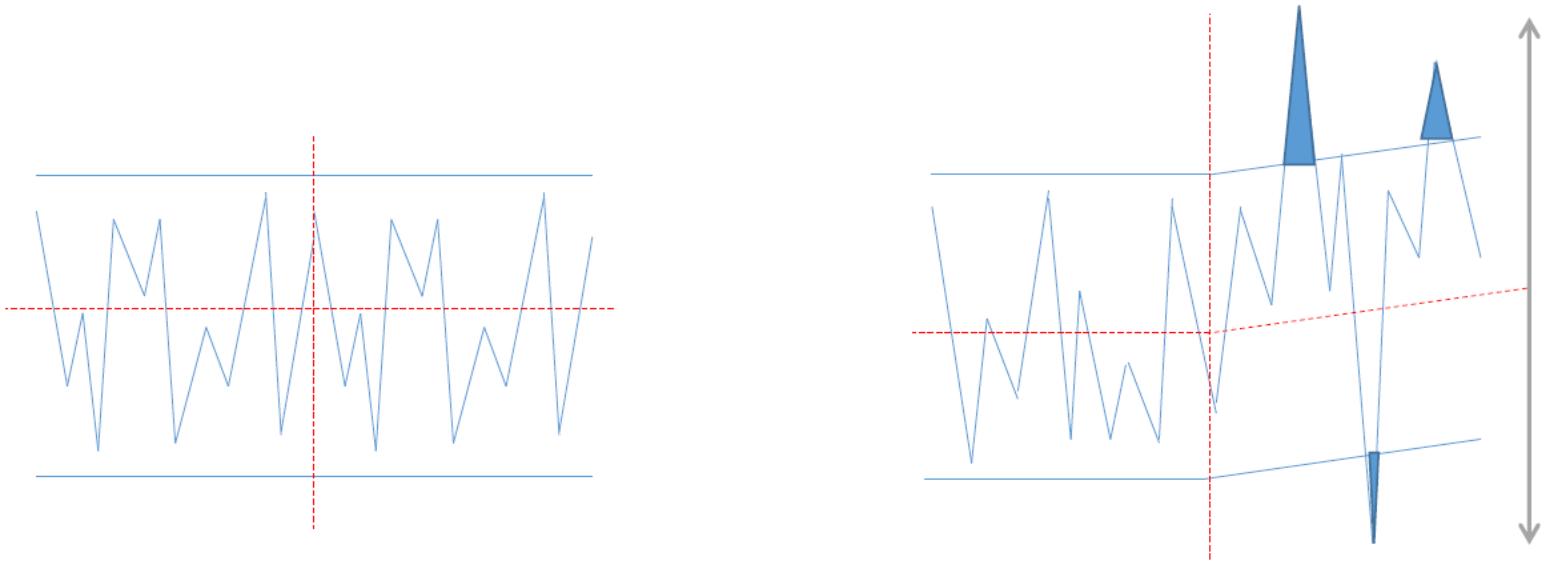


THE NATURAL GREENHOUSE EFFECT

THE ARTIFICIAL HUMAN GREENHOUSE EFFECT

Climate Change: Game Changer

The past = The future **vs.** **Uncertain future**



Climate projections = increase in shocks/stressors

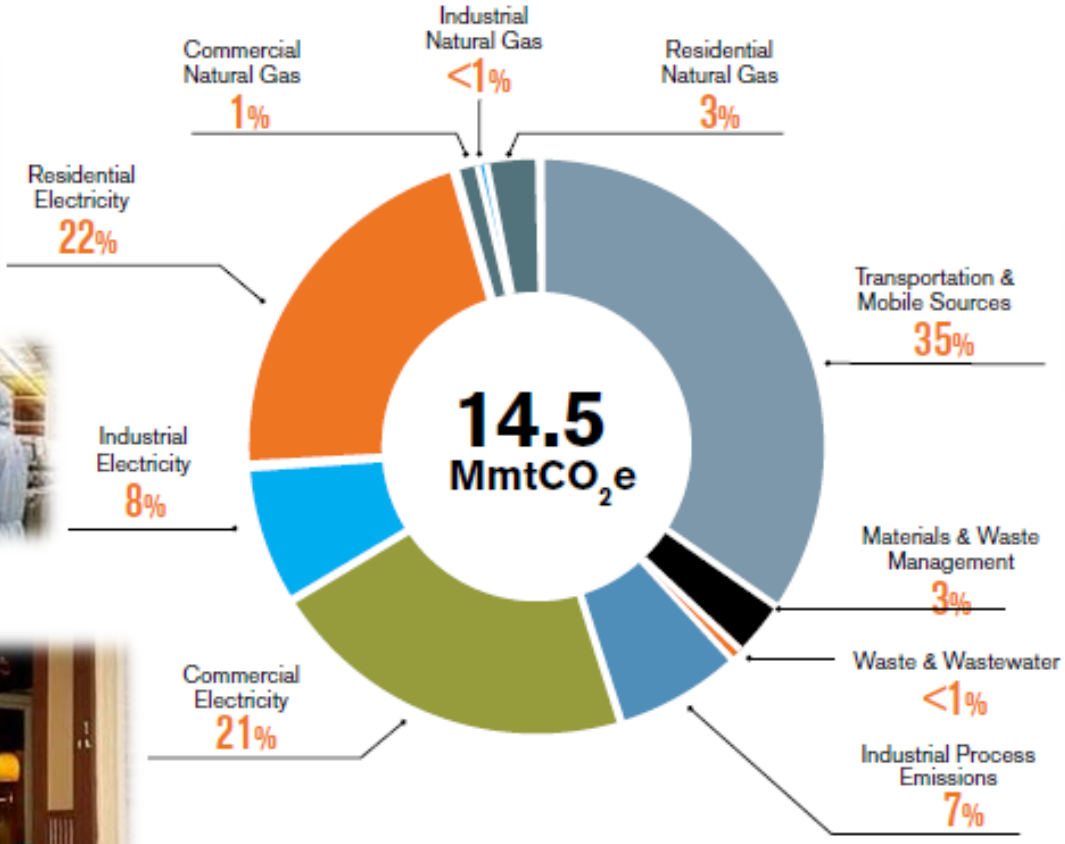
HIGHER TEMPERATURES

EXTENDED PERIODS OF DROUGHT

INTENSE RAIN AND FLOODING

INCREASED RISK OF WILDFIRE

2010 Estimated Travis County Greenhouse Gas Inventory



NOx and Ozone v. CO2 and Climate Change

NOx and Ozone

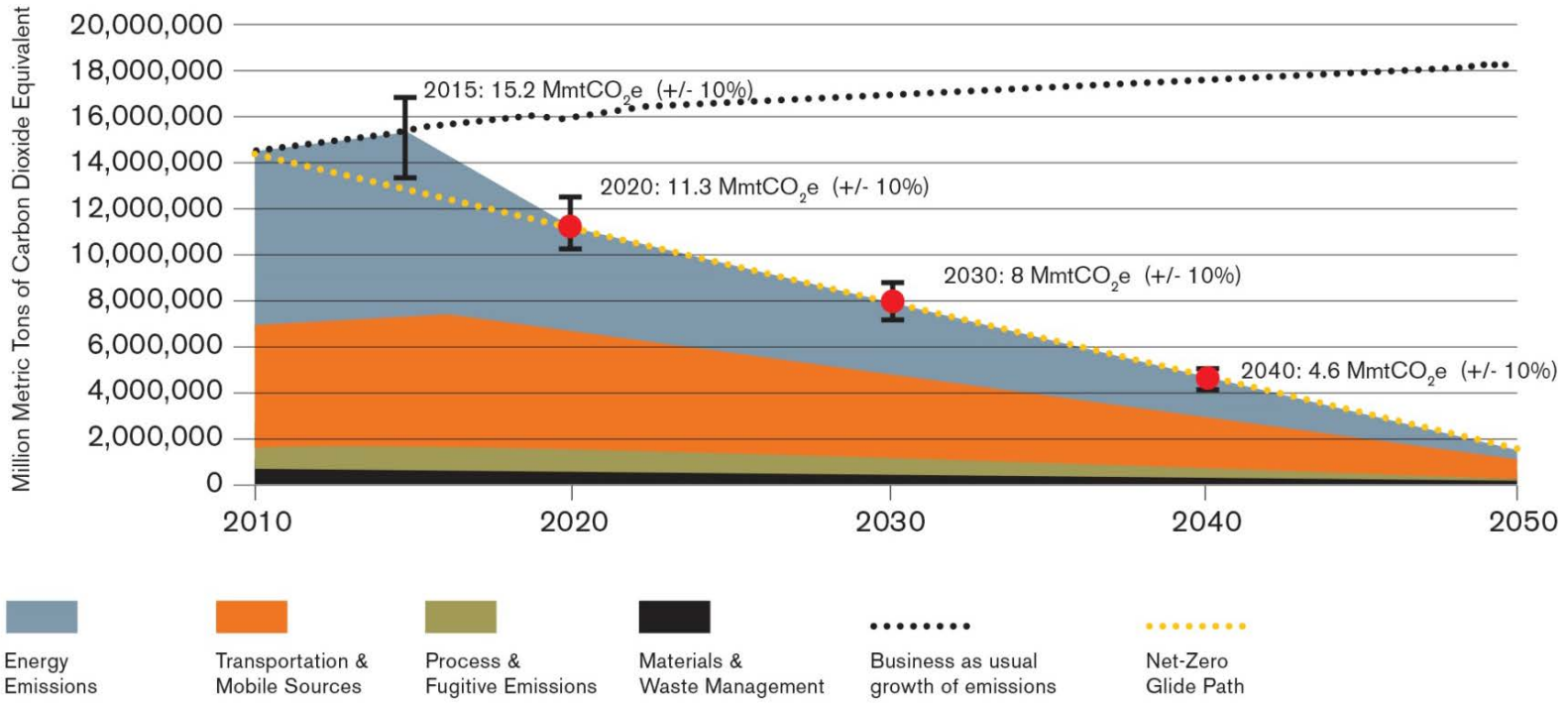
- Emissions can immediately impact local human health if the conditions are right (sun, heat, humidity, wind direction)
- The pollutant levels are small comparatively to CO2 and the time frame is daily
- Regulations and control technology have been very effective at reducing emissions while still using fossil fuel

CO2 and Climate Change

- Direct emissions don't immediately impact local human health
- Emission amounts are very large and CO2 stays in the atmosphere for over 100 years
- Fossil fuels are the issue and there is no add-on "control technology"
- If we have zero CO2 emissions and burn no fossil fuel, air quality issues are non-existent

City of Austin, Office of Sustainability

Austin Community Climate Plan: Goal of Net Zero GHG by 2050



Technical Advisory Group Strategies

Electricity and Natural Gas	• Buildings and Integrated Efficiency • Promote Behavior Change • Resource Technologies
Transportation and Land Use	• Infrastructure and Service • Land Use • Demand Management • Policy and Planning • Vehicles and Fuel Efficiency • Economic and Pricing Solutions
Materials and Waste Management	• Organics Diversion • Purchasing • Methane Management • Recycle / Reduce / Reuse
Industrial Process	• Fuel Switching • Process Optimization • Capture and Destruction • Local Offsets

Direct Benefits to the Community

- Reduced energy costs
- Improved energy security and reliability
- Decreased risk of energy shortages or outages
- Greater affordability for all
- Reduced pollution
- Improved air quality
- Improved public health
- Thriving local economy
- Expanded local jobs creation
- Enhanced transit system
- Reduced traffic congestion
- Safer streets
- Improved disaster preparedness
- Protected and enhanced ecosystems
- Diminished water consumption by power plants

Timeline

2007 – Original Climate Protection Plan Resolution Adopted by Council

2013 – Resolution from Council to study future impacts of Climate Change

2014 – Council adopts the Net Zero Community-wide Emissions by 2050 target

2015 – Community Climate Plan is completed and adopted by Council

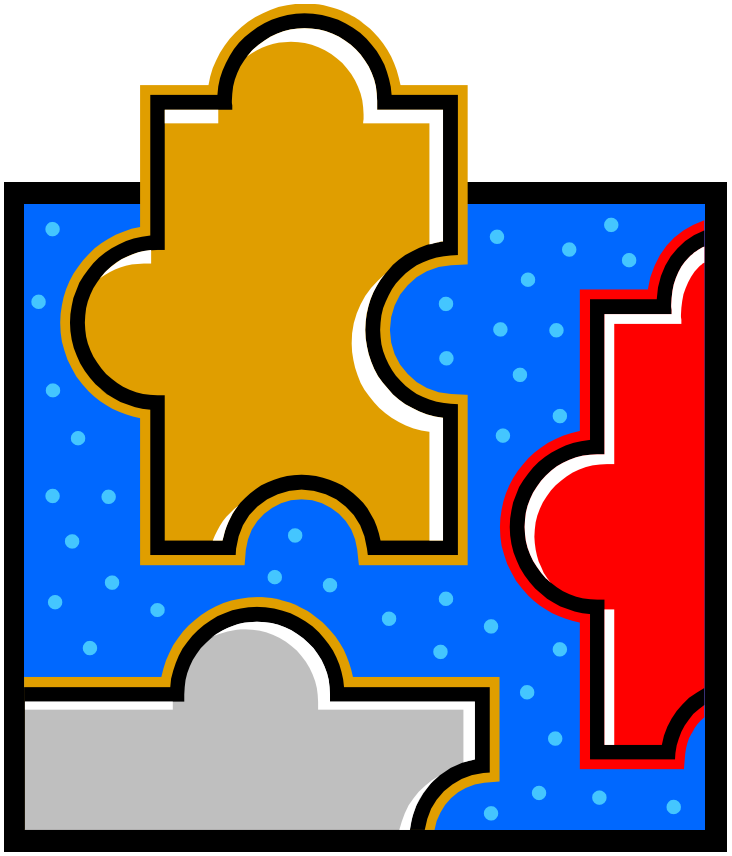
2016 – Community Climate Plan - Implementation Plan is completed

2017 – Community Climate Plan - Cost / Impact analysis and action tracking

City of Austin, Air Quality Program

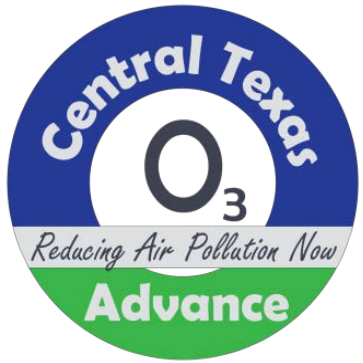
Efforts to Reduce Ozone in Central Texas

- Internal City of Austin Programs
  - Transit Benefit, B-cycle Benefit, Commute Connections, Smart Commute Incentive, Outreach
- City-Wide Programs
  - Marketing and Outreach, Test your AQ IQ Incentive
- Regional Air Quality Partnerships
  - Clean Air Coalition, Clean Air Force, Commute Solutions
- Federal Air Quality Plan
  - Central Texas Ozone Advance Plan



Efforts to Reduce Ozone in Central Texas

- Designed to address 2008 Ozone standard and get an “advance” on new standards
- City of Austin committed to over 30 measures
- GOALS:
  - Continue educing Ozone to avoid nonattainment designation for new Ozone standard
  - Reduce exposure when high Ozone occurs
  - Minimize costs to region of potential nonattainment designation



QUESTIONS AND CONTACTS?

Zach Baumer, City of Austin

Climate Program Manager

Zach.baumer@austintexas.gov

512.974.2836

Pharr Andrews, City of Austin

Air Quality Program Coordinator

Pharr.andrews@austintexas.gov

512.974.6476