



**Chittenden County
Metropolitan Planning
Organization**



Keeping Our Air Clean

Local and Regional Strategies to Improve Air Quality in Chittenden County

Presentation to:
CCMPO – February 17, 2010



Agenda

1. Overview of air quality study



2. Highlight report contents

3. Implications of EPA's proposed new ozone standard

4. Obtain Board acceptance of report



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Air Quality Project

1. Joint Work Program Task for CCMPO and CCRPC; funded by CCMPO

2. Work done by CCRPC and CCMPO staff



Air Quality Project

3. Guided by Air Quality Advisory Committee with broad range of expertise:

- CCMPO and CCRPC board members
- CCMPO TAC members
- VTrans and FHWA staff
- CCTA, CATMA, UVM TRC grad student
- S. Burlington Planning Director, Smart Growth Vermont
- GBIC/LCRCC, Burlington Electric
- VT Dept. of Health





Reasons for this Study

The Clean Air Act sets national ambient air quality standards (NAAQS) for common air pollutants.



Areas that don't meet the NAAQS (“non-attainment areas”) have additional regulatory requirements:

- Plans to return to compliance with mandatory programs
- Emission budgets for stationary and mobile sources
- Modeling to demonstrate plans will work
- Conformity review - have to demonstrate that all new transportation projects conform with the plan

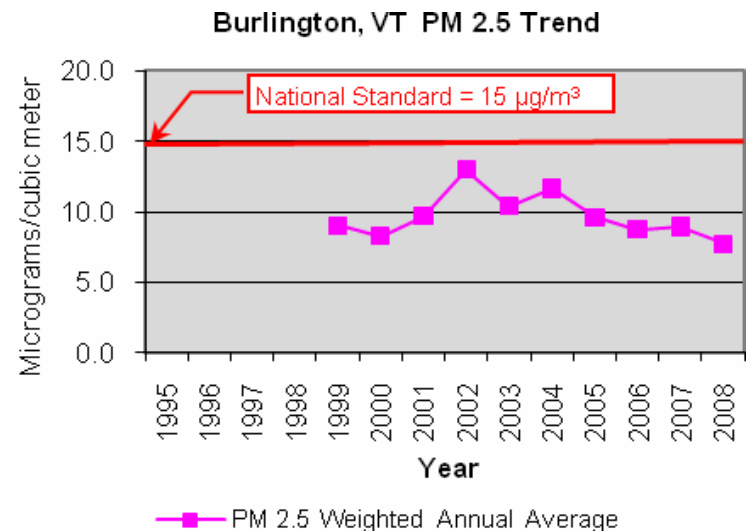
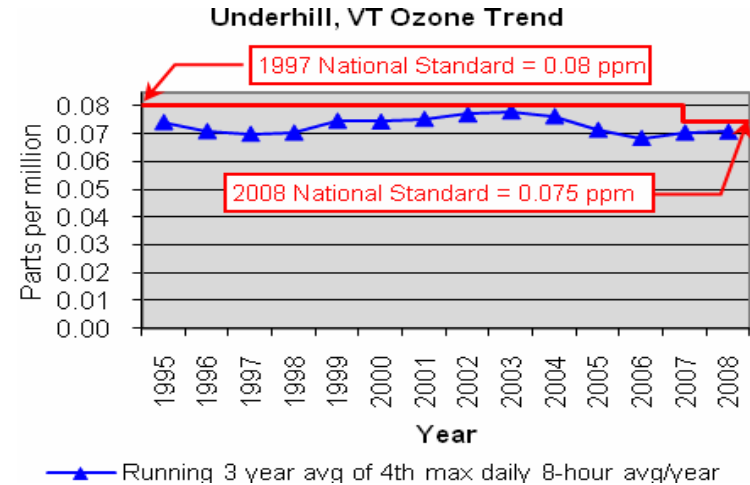
Significant regulatory burden and costs for state, MPO, businesses, local governments.



Chittenden County levels of ozone and fine particulates (PM 2.5) are close to the NAAQS.

EPA plans to tighten the ozone standard. Chittenden County may no longer comply.

How can we be proactive and stay in compliance?



Source: US Environmental Protection Agency



Goals of this Study

1. Identify strategies that can be employed within Chittenden County to improve air quality and aid in maintaining compliance with the National Ambient Air Quality Standards (NAAQS)
2. Document the impacts on Chittenden County if air quality fails to meet the NAAQS
3. Document the regulatory process and requirements associated with non-attainment of the NAAQS
4. Document the interconnected relationship between air quality, energy use and climate change



Work Product

Study report:

Keeping Our Air Clean – Local and Regional Strategies to Improve Air Quality in Chittenden County.



- Work product is a report identifying a range of possible strategies – it is not a plan.
- Report has been extensively reviewed, revised, and approved by:
 - Air Quality Advisory Committee
 - Transportation Advisory Committee



Report Highlights

1. Identifies sources of ozone and fine particulate pollution in Chittenden County. Major local emission sources are:

- On-road vehicles
- Non-road equipment
- Residential wood combustion
- Fossil fuel combustion

2. Identifies wide range of strategies, grouped by who could implement them:

- Individuals
- Employers
- Municipalities
- Regional organizations (CCMPO and CCRPC)

3. Priority recommendations for CCMPO and CCRPC



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Identified Strategies

Individual Strategies

- Transportation
- Home and Recreation

Employer Strategies

- Employee Transportation
- Employer Operations



Identified Strategies

Municipal Strategies

- Municipal Plans and Policies
- Zoning and Regulations
- Municipal Infrastructure

Regional Strategies

- Regional Transportation Planning
- Land Use Planning
- Energy and Climate Action Planning
- Air Quality Education and Outreach Program



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Priority Regional Recommendations

Regional Strategy 4 – Work with VTrans, employers and TDM and transit service providers to expand and enhance Transportation Demand Management services in Chittenden County

Regional Strategy 13 – Develop and implement a regional Energy and Climate Action Plan that includes air quality strategies as well as energy and climate strategies

Regional Strategy 14 – Develop and implement a regional education and outreach program to increase understanding and change behaviors that adversely affect air quality



TAC Review of Report

1. Presented in December 2009. Concurrent public comment period.

2. Extensively discussed January 2010

3. Revisions to address TAC and public comments

- Edits to update and clarify points
- New strategies

4. TAC approved February 2010



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Next Steps

1. Acceptance by CCMPO and CCRPC boards
2. Expand Advisory Committee to address related energy and climate action tasks.
3. Start work on recommended strategies (multi-year effort)

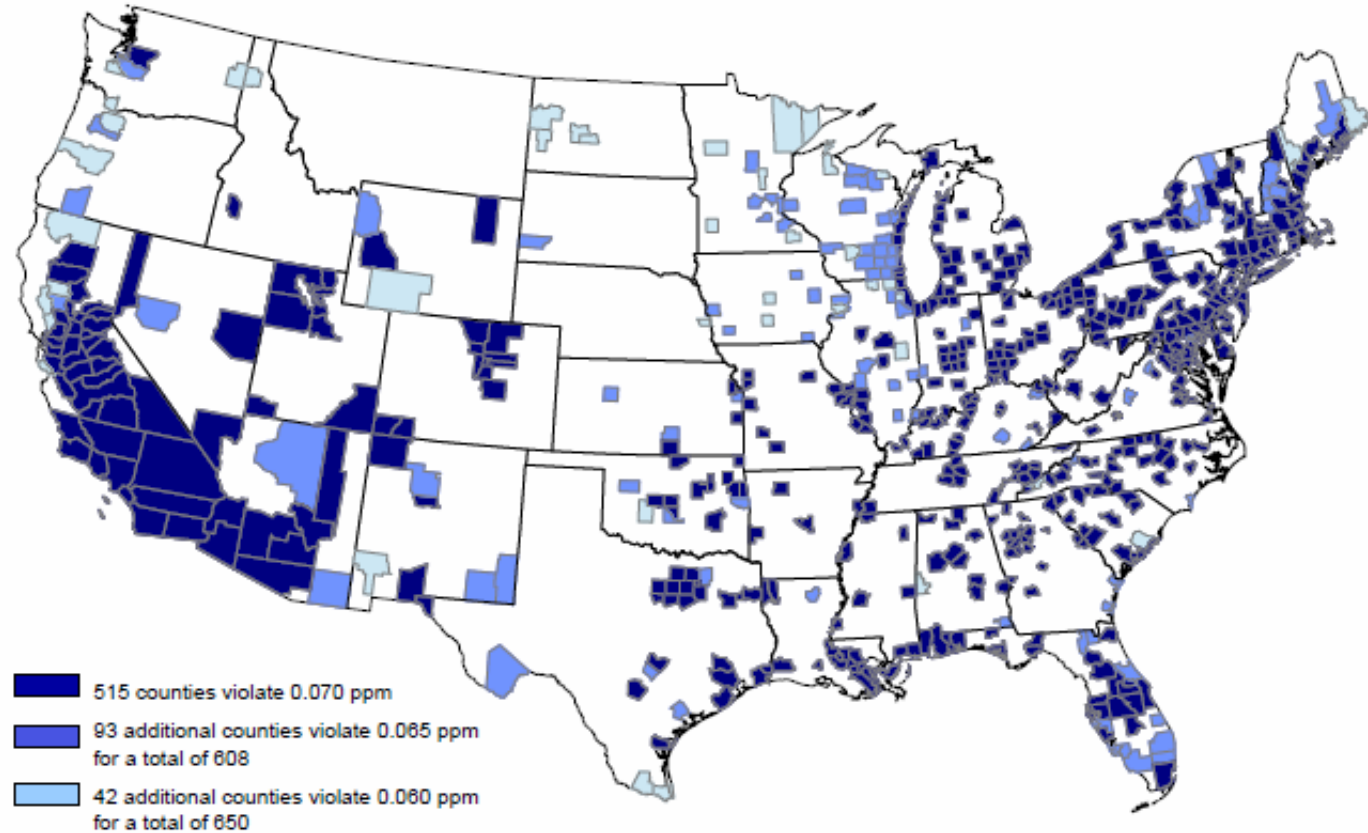


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Counties With Monitors Violating Proposed Primary 8-hour Ground-level Ozone Standards 0.060 - 0.070 parts per million (Based on 2006 - 2008 Air Quality Data)

EPA will not designate areas as nonattainment on these data, but likely on 2008 - 2010 data which are expected to show improved air quality.



Notes:

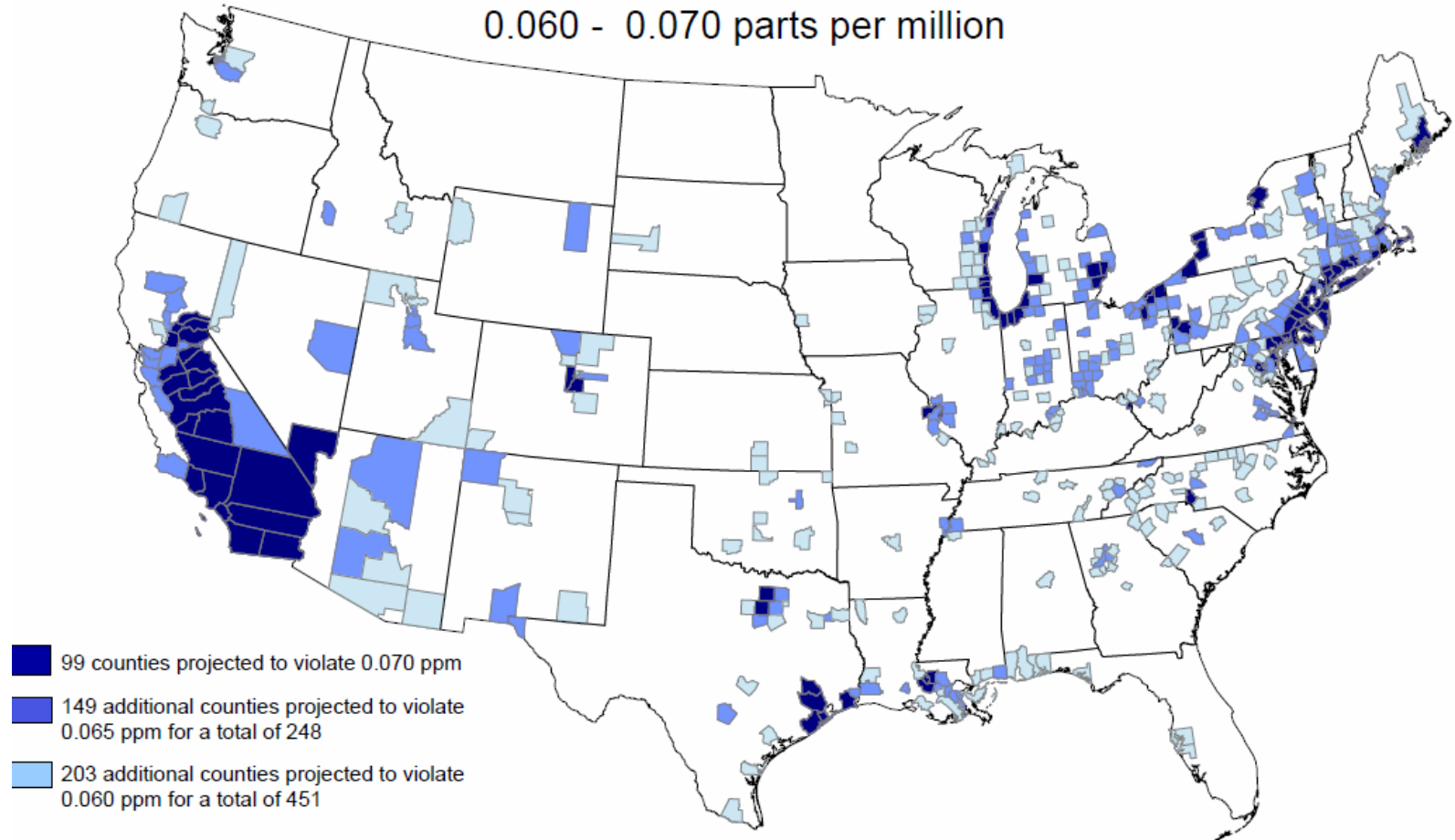
1. No monitored counties outside the continental U.S. violate.
2. EPA is proposing to determine compliance with a revised primary ozone standard by rounding the 3-year average to three decimal places.






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Counties With Monitors Projected to Violate Proposed Primary 8-hour Ground-Level Ozone Standards in 2020 0.060 - 0.070 parts per million



-  99 counties projected to violate 0.070 ppm
-  149 additional counties projected to violate 0.065 ppm for a total of 248
-  203 additional counties projected to violate 0.060 ppm for a total of 451

Notes:

1. The modeled emissions in 2020 reflect the expected emissions reductions from federal programs by 2020 including: the Clean Air Interstate Rule, the Clean Air Mercury Rule, the Clean Air Visibility Rule, the Clean Air Nonroad Diesel Rule, the Light-Duty Vehicle Tier 2 Rule, the Heavy Duty Diesel Rule, the proposed rules for Locomotive and Marine Vessels and for Small Spark-Ignition Engines, and an estimate of State-level mobile and stationary source controls that were projected to be needed to attain pre-existing PM 2.5 and ozone standards.
2. Controls applied are illustrative. States may choose to apply different control strategies for implementation.
3. EPA did not model future violations outside the continental U.S.
4. EPA is proposing to determine compliance with a revised primary ozone standard by rounding the 3-year average to three decimal places.



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Questions?

Board Action to Accept Report

