



Central Texas Early Action Compact

The MPO Perspective

NARC Workshop 2004



What is an Early Action Compact (EAC)?

- An agreement (MOA) between local governments, TCEQ and EPA
 - Attain the 8-hour ozone standard by 2007 (2005-2007 3 year average)
 - Maintain attainment through 2012
 - Defer nonattainment effective date and requirements as long as all milestones and terms are met
- Based on early action, local decisions



EAC Requirements

- Develop a Clean Air Action Plan (CAAP)
 - Similar to an ozone nonattainment state implementation plan (SIP)
 - Modeled 8-hour attainment demonstration
 - Emission reduction measures
- Enforceable and quantifiable measures
 - Existing state and federal measures
 - New mandatory measures
 - Some voluntary measures allowed



Additional Requirements

- Maintenance for Growth through 2012
- Continuing planning process
- Semi-annual tracking and reporting
- Stakeholder and public involvement
- Mandatory milestones
 - trigger rolling deferral of nonattainment effective date



Some Key EAC Milestones

- June 16, 2003
 - List potential emission reduction measures
- March 31, 2004
 - Submit plan to TCEQ for inclusion in the SIP
- December 31, 2005
 - Implement emission reduction measures
- December 31, 2007
 - Attain 8-hour standard (3 years clean data)



Rolling Nonattainment Deferral

- Each deferral is linked to key milestones
- First deferral until Sept 30, 2005
- Second deferral until December 31, 2006
- Third deferral until April 15, 2008
- Deferrals withdrawn if milestones are missed
- Nonattainment SIP due within 1 year of the new effective date



Why the EAC?

- Clean air sooner; it's a health issue
- Our air is borderline unhealthy and predicted to stay so through at least 2007.
- Nonattainment may negatively affect economy
 - EAC defers nonattainment effective date
- EAC provides local choice. Emission reduction measures are largely locally determined.
- Transported and local pollution contribute to poor air quality. Both need to be reduced.



Health Effects

- High ozone levels can:
 - Irritate throat and lungs
 - Reduce lung capacity
 - Aggravate asthma and other respiratory illnesses
- At-risk groups include:
 - Children
 - The elderly
 - Those who work or exercise outdoors



Economic Effects

- Non-attainment may result in:
 - Negative stigma that affects economic development
 - Emission control equipment that can increase costs to consumers
 - Limits on business expansions
 - Delays in meeting transportation needs
 - Diversion of resources to meet compliance needs



Ozone Design Value Austin MSA, Ozone Season 2003

Ozone 4th Highest Value
Austin MSA



Note: 6 year average on Murchison is 86ppb, and on Audubon is 84 ppb.



Base 2007 Design Values

- Ran the model seven times, each with slightly different versions of the base 2007 emissions inventory

84.8 ppb

84.91 ppb

85.6 ppb

84.5 ppb

84.6 ppb

84.37 ppb final run

85.08 ppb

- Modeling indicates the region will still be on the cusp of nonattainment in 2007 without additional emission reduction measures



Central Texas EAC

- Applies to the Austin Round Rock MSA
 - Bastrop, Caldwell, Hays, Travis and Williamson Counties
- Signed Dec 2002 by 5 counties, 7 cities
 - Austin, Bastrop, Elgin, Lockhart, Luling, Round Rock, San Marcos
- Region of varied characteristics
 - Urban, suburban and rural
 - Socioeconomic differences



EAC Goals and Challenges

- Ensure adequate safety margin against nonattainment
- Develop a reasonable CAAP that works for all jurisdictions, given varied circumstances
- Meet all EAC milestones



Regional AQ Planning Structure

- Clean Air Coalition (CAC)
 - Elected officials from the 5 counties, 7 cities
- EAC Task Force (EACTF)
 - Develop draft plans and agreements
- CLEAN Air Force (CAF) non-profit
 - Public involvement, voluntary programs
- Capital Area Planning Council (CAPCO)
 - Rider funding, technical analysis



CAAP Components

- Policy statements
- Technical analysis
- Public and stakeholder involvement
- Emission reduction measures
- Maintenance for growth
- Continuing planning process
- Tracking and reporting



Emission Reduction Measures

- Developed through fair share approach
- State assisted measures
 - Most will apply MSA-wide
 - 2 county inspection & maintenance program
 - Product of stakeholder work groups
- Local measures (no state action needed)
 - Select from menu of options, provides choice
 - Reductions proportionate to contribution
 - O3 Flex and new EAC measures

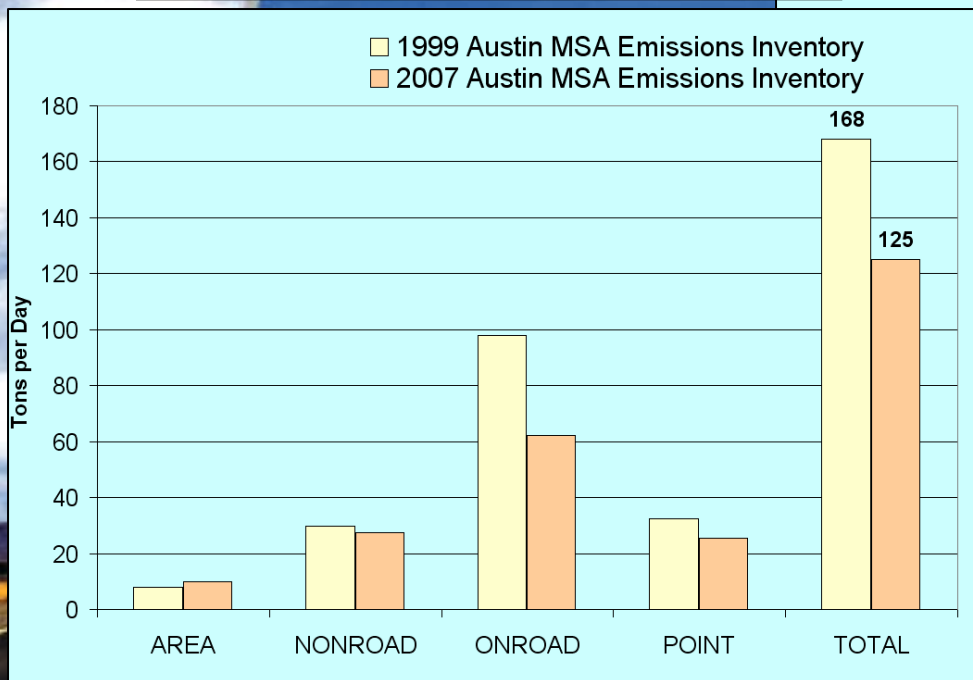


Why State Assisted Measures?

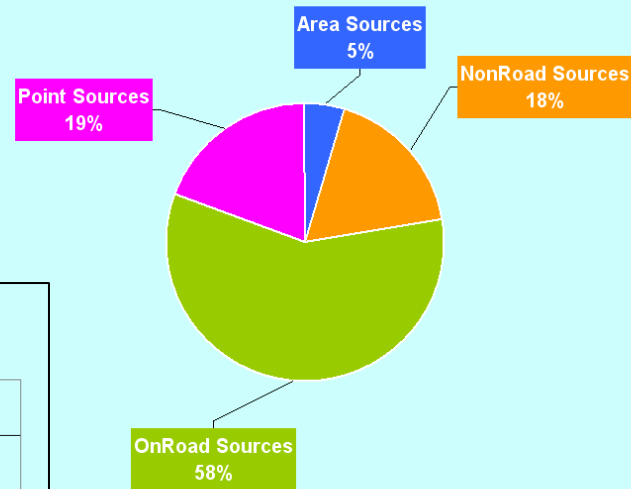
- Counties have limited legal authority to adopt air quality regulations
- Cities have legal authority, but there may be preemption issues
- TCEQ is the only entity that can provide uniform regulatory coverage
- Patchwork regulatory application would be confusing, create inequities and influence growth patterns



NOx Emissions 1999 - 2007

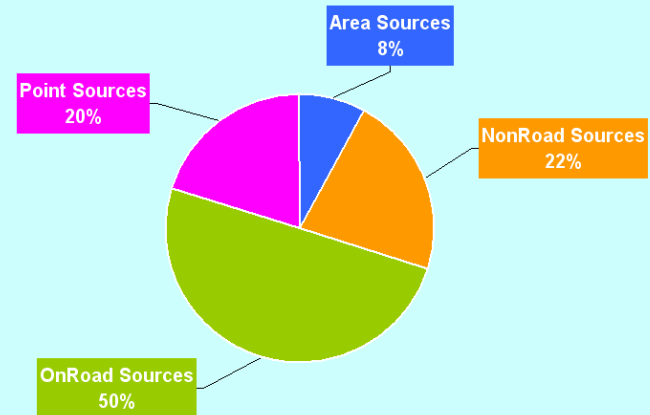


Man-made Sources of Nitrogen Oxide (NOx) Pollution - 1999



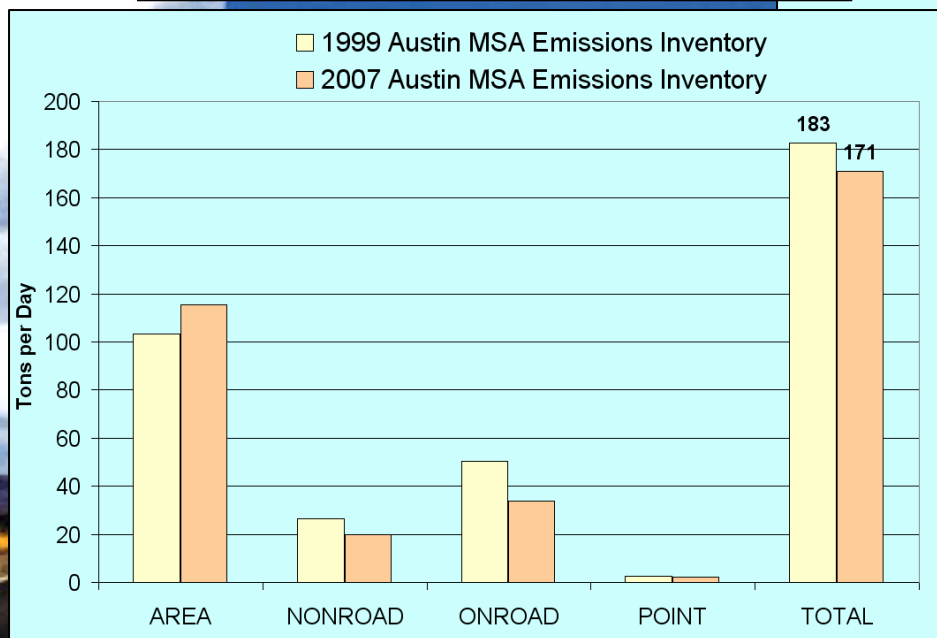
1999 Man-made NOx Levels: 168 Tons Per Day

Man-made Sources of Nitrogen Oxide (NOx) Pollution - 2007

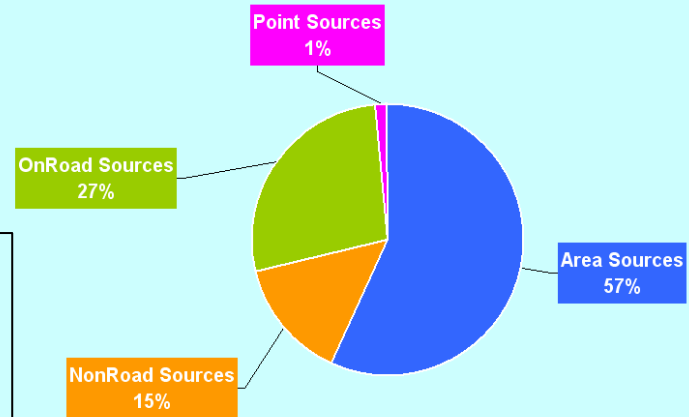


2007 Man-made NOx Levels: 125 Tons Per Day

VOC Emissions 1999 - 2007

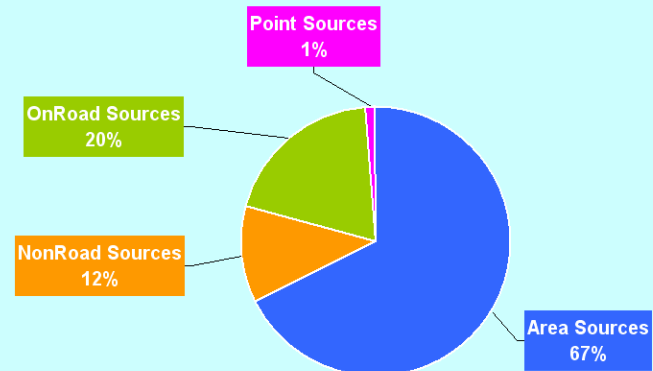


Man-made Sources of Volatile Organic Compound (VOC) Pollution - 1999



1999 Man-made VOC Levels: 183 Tons Per Day

Man-made Sources of Volatile Organic Compound (VOC) Pollution - 2007



2007 Man-made VOC Levels: 171 Tons Per Day

Modeled Measures

	NOx tpd	VOC tpd
I & M	2.89	3.84
Idling Restrictions	0.19	0.0
TERP	2.0	0.0
TERMs	0.72	0.83
Point Source	7.08	0.0



Modeled Measures

	NOx tpd	VOC tpd
Gas Cans	0.0	2.6
Stage I	0.0	4.88
Degreasing	0.0	6.39
Auto Body	0.0	0.05
Cut Back Asphalt	0.0	1.03
Total	12.88	19.62



Modeled Measures 2007 Results and Conclusions

- Final scenario reduced the 2007 design value from 84.37 ppb to 83.39 ppb
- No single measure reduced the 2007 design value below 84 ppb
- All modeled measures, plus other measures, are needed to ensure an adequate safety margin against nonattainment



Other CAAP Measures

- Point Source Emissions Balancing
 - Maintenance for growth measure
- Commute Emission Reduction Measure
- Petroleum Dry Cleaning Controls
- Low RVP GAS (7.8 to 7.0)
 - No longer under consideration
- Local Emission Reduction Measures
 - Total of 184 commitments



Continuing Planning Process

- Requirements include modeling updates and assumption verification
 - particularly growth assumptions
- Must consider and evaluate
 - Future transportation patterns and their impact on air quality in a manner that is consistent with the most current adopted long-range transportation plan
 - Most current trend and projections of local vehicle emissions



Continuing Planning Process

- If adopted EAC measures are not enough to address emissions growth, additional measures will be added to the CAAP.
- Analysis of emissions growth through 2012 and estimated emissions from current adopted transportation plan indicate current CAAP measures will be sufficient



Transportation Conformity

- Will not apply if the EAC is successful
- If the area becomes nonattainment, conformity will apply 1 year after the effective date of designation
- The EAC continuing planning process addresses the goal of transportation conformity



Related CAMPO Actions

- Long-range plan update due June 2005
 - Next plan update in 2010
- Develop 2005 plan as if nonattainment
 - 2030 plan horizon
 - Intermediate years
 - Emissions analysis



Transportation Emission Reduction Measures (TERMs)

- Identify and quantify TERMS
 - Existing and committed projects until 2012
- Call for projects funds additional TERMS
 - Developed scoring criteria
 - Funded 10 projects for \$3+ million STPMM
- Total of 467 TERMS projects
- TERMS tracking and semi-annual report
 - Implementation date and emission reductions
 - Substitution if project delayed or cancelled



Transportation Emission Reduction Measures (TERMS)

Project Type	2007 VOC Reductions (lbs/day)	2007 NOx Reductions (lbs/day)
Intersection Improvements	448.82	374.95
Signal Improvements	797.30	705.14
Bicycle/Pedestrian Facilities	69.88	62.54
Grade Separations	5.94	5.28
Park and Ride Lots	98.26	87.99
Traffic Flow Improvements	159.43	145.98
ITS	41.32	41.32
Transit	35.10	14.51
Total (lbs/day)	1656.05	1437.71
Total (tons/day)	0.828	0.719

Other CAMPO Activities

- Commute Solutions Program
 - Train Employer Transportation Coordinators
 - Commute Solution fairs, ride matching
 - Commute Solutions month
- Emission Reduction Program
 - Reduce commute emissions by 10% year round
 - No meetings before 10:00 am during ozone season
 - Work at home until 10:00 am on ozone action days



Next Steps

- TCEQ adopts CAAP SIP by Dec 2004
- Implement emission reduction measures
 - Continue implementing CAMPO measures
 - Support implementation of other measures
- Track measures, report semi-annually
- Conduct continuing planning process
 - Emissions analysis of MPO 2005 plan update
- Continued education and involvement
 - Public and stakeholders



Questions?

Thank You!

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