IMPLICATIONS OF BEING DESIGNATED NONATTAINMENT

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Clean Air Act (CAA) last amended in 1990

Requires Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for six criteria pollutants:

- Carbon Monoxide (CO)
- Lead (Pb)
- Nitrogen Oxides (NO\textsubscript{x})
- Ozone (O\textsubscript{3})
- Particulate Matter (PM)
- Sulfur Dioxide (SO\textsubscript{2})

EPA must complete a review of NAAQS every five years
According to the US EPA NAAQS, attainment is reached when, at each monitor, the three-year average of the annual fourth-highest daily maximum eight-hour average ozone concentration is less than or equal to 70 parts per billion (ppb).
PROPOSED NONATTAINMENT COUNTIES

Colors represent Air Quality Index breakpoints based on the 2015 National Ambient Air Quality Standards (NAAQS) for ozone. According to the US EPA NAAQS, attainment is reached when, at each monitor, the three-year average of the annual fourth-highest daily maximum eight-hour average ozone concentration is less than or equal to 70 parts per billion (ppb).
Impacts on Transportation

Transportation Conformity

On-road mobile inventories for Reasonable Further Progress and Attainment Demonstration State Implementation Plans (SIP)

Air Quality programs to reduce on-road mobile emissions contributing to ozone formation

Vehicle Inspection and Maintenance (I/M) Program

Congestion Mitigation and Air Quality Improvement (CMAQ) Program
New Source Review (NSR) Permit Program

- Nonattainment NSR Permits – required for new major sources or major sources making a major modification; and
- Depending on the classification of the nonattainment area, these point sources will be required to comply with emissions off-sets for NO\textsubscript{X} and Volatile Organic Compounds (VOC) emissions.

Economic Development – Indirect Impacts

- Installation of pollution control equipment, limit production, or otherwise find reductions in emissions by “offsetting” in order to expand; and
- Companies are less likely to locate to a nonattainment area; and
- Cost to operate is increased because of requirement to install pollution controls or enforce stringent operational limits.
Purpose
Demonstrate air pollutant emissions from metropolitan transportation plans (MTP), transportation improvement programs (TIP) and projects are consistent with (“conform to”) the State’s air quality goals in the SIP.

Responsible Agencies
Metropolitan Planning Organization’s Policy Board adopts Transportation Conformity documentation

Federal Transit Agency and Federal Highway Administration provides conformity determination

Conformity Triggers
Must be performed every four years
Approval or adequacy finding of SIP Motor Vehicle Emissions Budgets (MVEB)
Nonattainment designation or reclassification
Development of amendment or update to MTP
Development of update to TIP
TRANSPORTATION CONFORMITY

Development
Formal Interagency Consultation Process Required
Consultation Partners: EPA, FHWA, FTA, TxDOT and TCEQ

Schedule/Timeframe
Prior to Transportation Plan or TIP Approval
Applicable through life of Transportation Plan

Requirements
Conforms to purpose and specifics of SIP
Consistency with emission budgets established in SIP
Timely implementation of transportation control measures

Implications
Transportation Plan and TIP must be consistent with SIP budgets
If Conformity is not demonstrated:
   1. Transportation Plan may need to be modified
   2. Additional emission controls may need to be added to SIP
   3. Only previously conforming transportation projects may proceed
What is a State Implementation Plan (SIP)?

State air quality plan for meeting the NAAQS prepared by a State or local air quality agency and submitted to EPA for approval.

Designed to achieve better air quality by attaining, making progress toward attaining, or maintaining the NAAQS.

Includes:

- Air Quality Monitoring (TCEQ)
- Air Quality Modeling (TCEQ)
- Emission Inventories (MPO for transportation-related emissions)
- Emission Control Strategies (TCEQ, MPO, Local Agencies)

State and local air quality agencies implement air pollution control strategies to gradually reduce ozone pollution.
Motor Vehicle Emissions Budgets (MVEB)

Portion of the total allowable emissions established in the SIP allocated to on-road mobile sources, such as cars, trucks, and buses.

MVEBs act as a ceiling on emissions from the on-road transportation sector.

Approved MVEBs through Adequacy Finding

For transportation conformity, projected emissions from transportation sector must be less than or equal to the MVEBs.
Transportation Control Measures (TCMs)
Specific projects or programs designed to reduce emissions from transportation sources included in the SIP.

Weight of Evidence (WOE)
Complement existing regulatory programs through voluntary changes in transportation choices and activities.

Transportation Emission Reduction Measures (TERMs)
Transportation projects and related activities that are designed to achieve on-road mobile source emission reductions, but are not included as control measures in the SIP.
VEHICLE I/M PROGRAM

1990 Amendments to the CAA made I/M Programs mandatory for any ozone nonattainment county in any Metropolitan Statistical Area, with a population of 100,000 or more\(^1\)

Helps improve air quality by identifying cars and truck with high emissions

Texas I/M Program

Annual emissions inspection for gasoline-powered vehicles 2–24 years old

Vehicles must be inspected through Department of Public Safety–certified inspection stations

1996 and newer vehicles receive an On-Board Diagnostic Test

1995 and older receive Two-speed Idle or Acceleration Simulation Mode Test

Established in 1991 to provide a funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act.

Eligible activities include, but are not limited to:

- Efforts to provide signal systematization
- Construct HOV lanes
- Streamline intersections
- Add turning lanes
- Improve transportation systems management and operations that mitigate congestion and improve air quality
- Implement Intelligent Transportation Systems (ITS) and other projects that improve incident and emergency response or improve mobility
- Transit investments
- Non-recreational bicycle transportation and pedestrian improvements that provide a reduction in single-occupant vehicle travel
- Vehicle Inspection and Maintenance Programs

Source: http://www.fhwa.dot.gov/map21/guidance/guidecmaq.cfm
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