



# Air Quality in the H-GAC Region



Andrew DeCandis

Regional Collaboration • Transportation Planning • Multimodal Mobility



# National Ambient Air Quality Standards



- Clean Air Act is the basis of all federal air quality rules
- Congress defined National Ambient Air Quality Standards (NAAQS) for six “criteria” pollutants, including ozone
- Defined process for nonattaining regions to meet the standard – the State Implementation Plan (SIP) process

# National Ambient Air Quality Standards



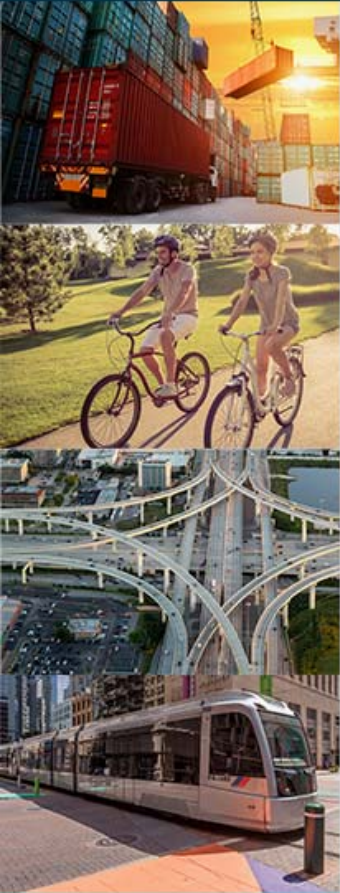
## ■ SIP process:

- Classifies regions based on severity of nonattainment
  - Marginal, Moderate, Serious, Severe, Extreme
- Sets deadlines to meet standards with deadlines based on severity
- Lays out process by which regions identify sources and take actions to reduce emissions
- Sets penalties for regions that do not comply with the process
- Requires that after attainment, regions must comply with rules for an additional 10-year maintenance period.

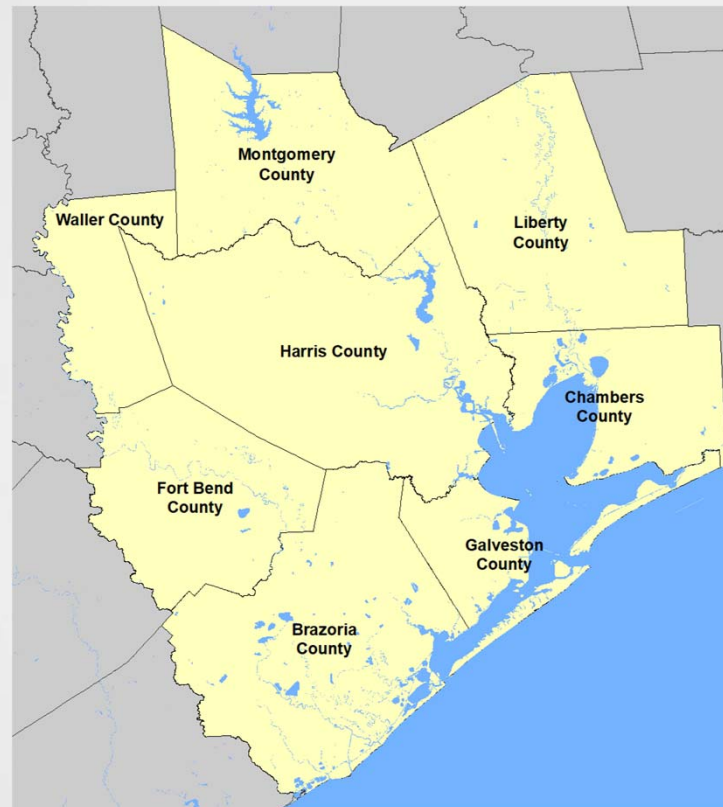
# National Ambient Air Quality Standards

MARGINAL (3 Years)	MODERATE (6 Years)	SERIOUS (9 Years)	SEVERE (15-17 Years)	EXTREME (20 Years)
<p>Emissions Inventory</p> <p>Emissions Statements</p> <p>Nonattainment NSR Program &amp; Emissions Offsets</p> <p>RACT Fixups</p> <p>I/M Corrections</p>	<p>Basic I/M</p> <p>RACT &amp; RACM Emissions Reductions</p> <p>Attainment Demonstration</p> <p>Contingency Measures</p> <p>RFP - 15% VOC Reductions Within 6 Years</p>	<p>Enhanced Monitoring and I/M</p> <p>Modeled Attainment Demonstration</p> <p>3% per Year VOC Reductions After 6 Years</p> <p>RFP Milestone Contingency Measures</p> <p>Clean Fuels Program</p> <p>VMT Demonstration</p>	<p>VMT Growth Offset</p> <p>Major Source Fees for Failure to Attain (185 Fees)</p>	<p>Clean Fuels and Controls for Boilers</p> <p>Traffic Controls During Congestion</p>
DRAFT		Major Source Threshold (tpy)	DRAFT	
100	100	50	25	10
1.1 : 1	1.15 : 1	1.2 : 1	1.3 : 1	1.5 : 1
NSR Offset Ratios				

# Regional NAAQS Compliance



Houston-Galveston-Brazoria Ozone Nonattainment Region



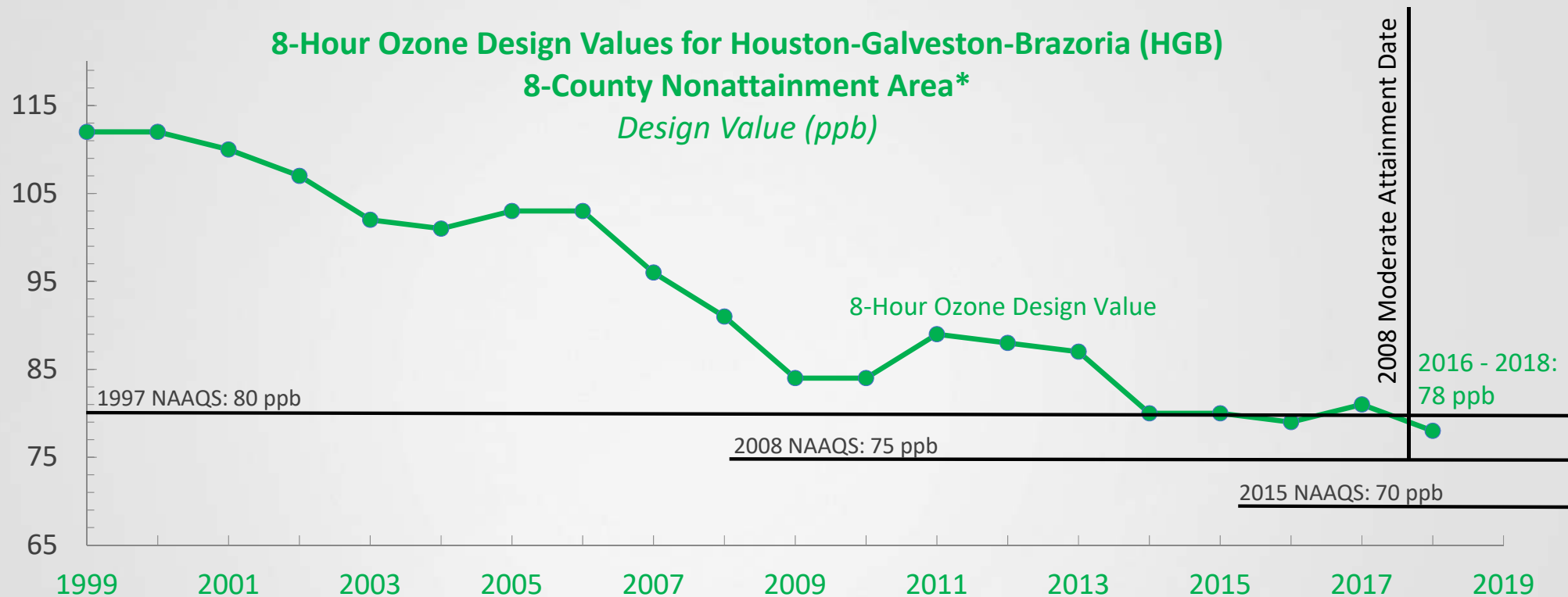
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# Regional NAAQS Compliance



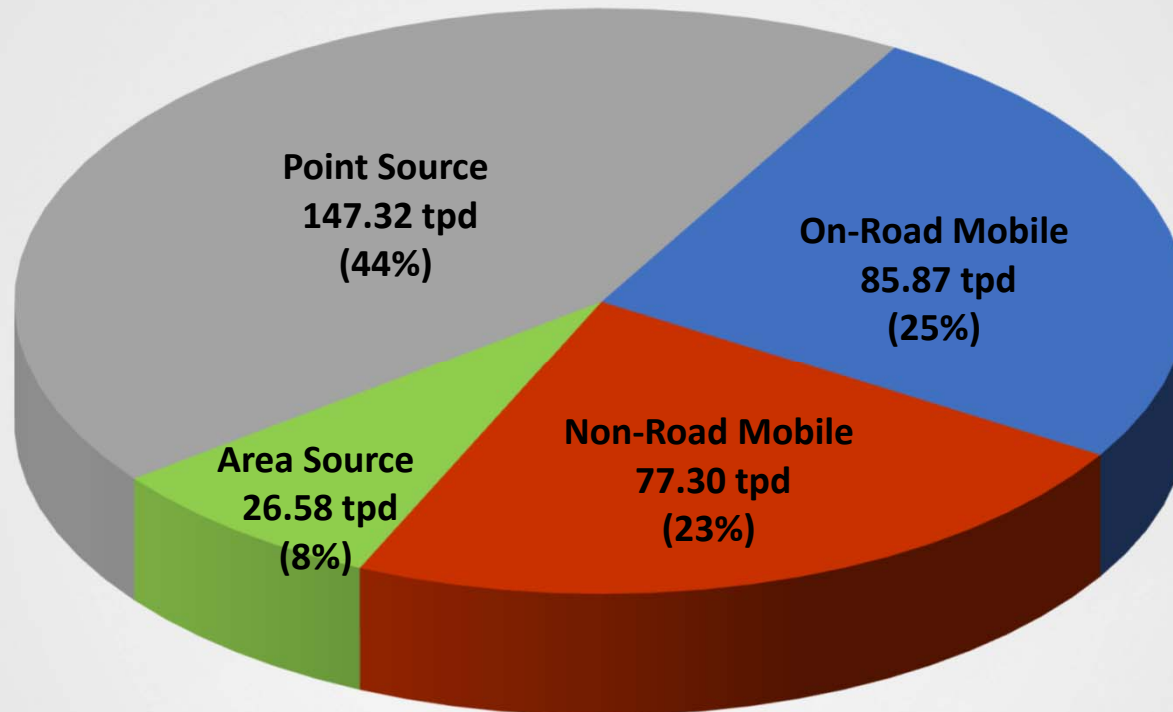
- Two different standards applicable to our region:
- 2008 8-Hour Standard
  - Marginal Nonattainment; 2014 Attainment Date
  - Later reclassified to Moderate, then Severe
- 2015 8-Hour Standard
  - Marginal Nonattainment; 2021 Attainment Date

# Regional Air Quality Trends



\* The eight counties include Brazoria, Chambers, Fort Bend, Galveston, Harris Liberty, Montgomery, and Waller.

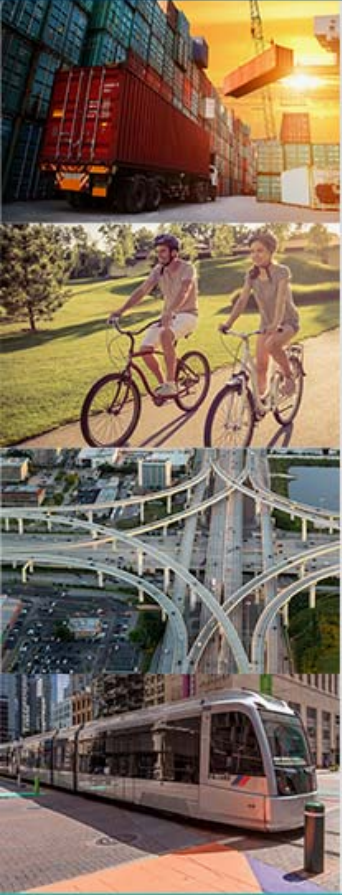
# Regional Air Quality Trends



Source: 2017 Modeled Inventory Estimate, Texas Commission on Environmental Quality (TCEQ)



# H-GAC Responsibilities



- Model roadway usage and emissions
- Ensure that road projects don't increase emissions
- Develop and Implement on-road transportation control strategies
  - Cooperative Research Studies
  - Accelerated Vehicle Replacements:
    - On-Road Heavy-Duty Diesel / Clean Vehicles
    - Buses
    - Limited Support for Other Vehicles

# H-GAC Responsibilities



- **Transportation Control Strategies (cont.)**
  - **Alternative Fuels:**
    - Education and Information
    - Funding for Alternative Fueling Vehicles and Stations
  - **Support for Other Related Programs**
  - **Commuter Programs:**
    - Education and Information
    - Active Transportation
    - VanPool
    - Pilot Transit Projects

Questions?