

*Houston-Galveston-Brazoria
Air Quality and
State Implementation Plan Introduction*

Planning for Attainment by 2018



Overview

- Background
- Ozone Trends
- Emissions Inventory
- Next Steps
- Contact and Additional Information



HGB Background

Documents submitted to EPA June 15, 2007:

- Eight-Hour Ozone SIP
 - Includes rule revisions and local emissions reductions but does not demonstrate attainment of the 1997 eight-hour ozone standard
- Reasonable Further Progress SIP
- Governor's request for reclassification from moderate to severe for the 1997 eight-hour ozone standard



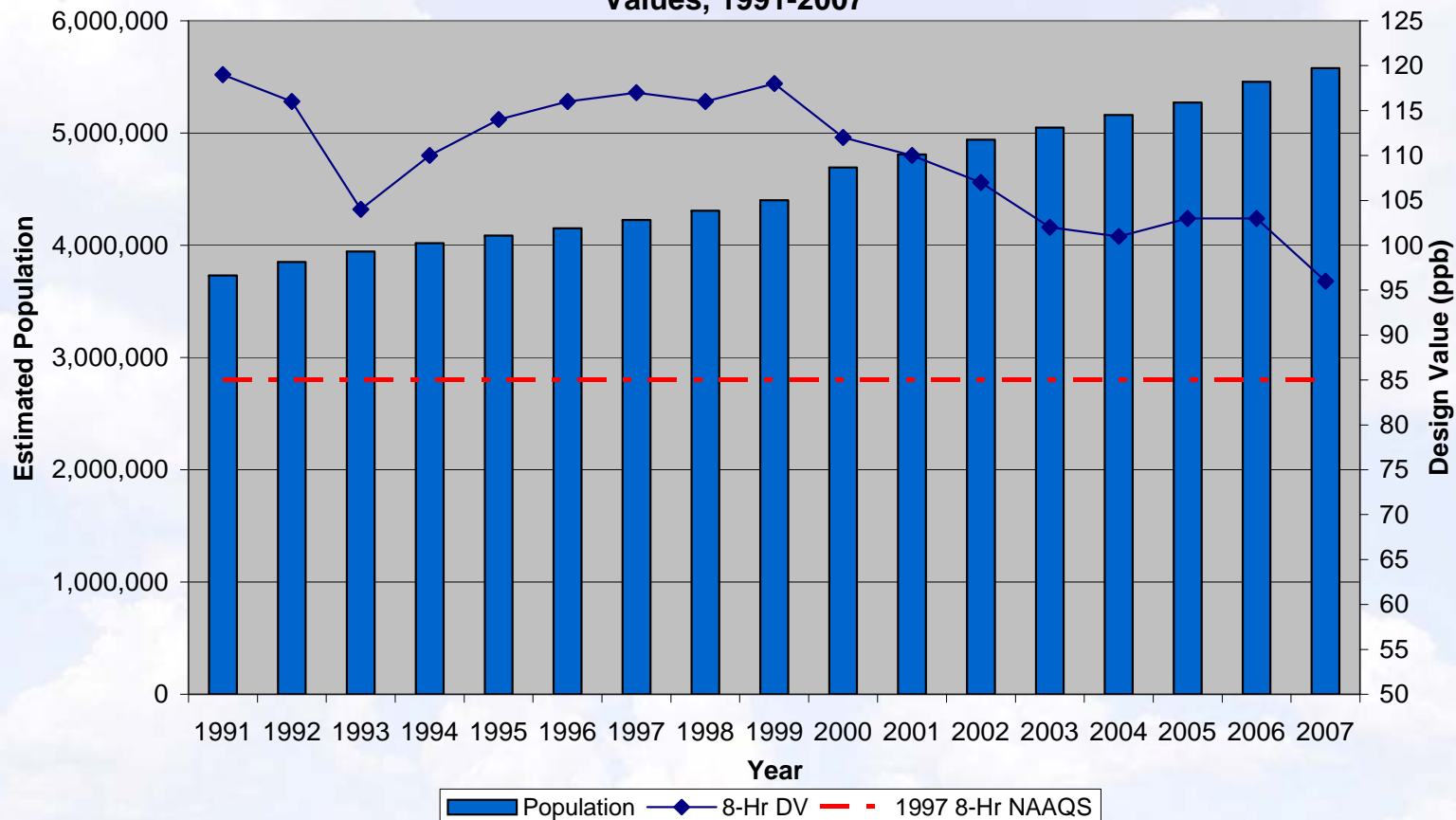
HGB Reclassification

- The EPA proposal published in the *Federal Register* (December 31, 2007) to:
 - Voluntarily reclassify the HGB area from moderate to severe with an attainment date as soon as practicable but no later than June 15, 2019
- TCEQ submitted comments to the EPA (January 30, 2008) that:
 - Support the reclassification and attainment as soon as practicable but no later than June 15, 2019
 - Provide justification for an April 2010 HGB SIP submittal date



HGB Eight-Hour Ozone Trends

Houston-Galveston-Brazoria -- Estimated Population and 8-Hour Ozone Design Values, 1991-2007



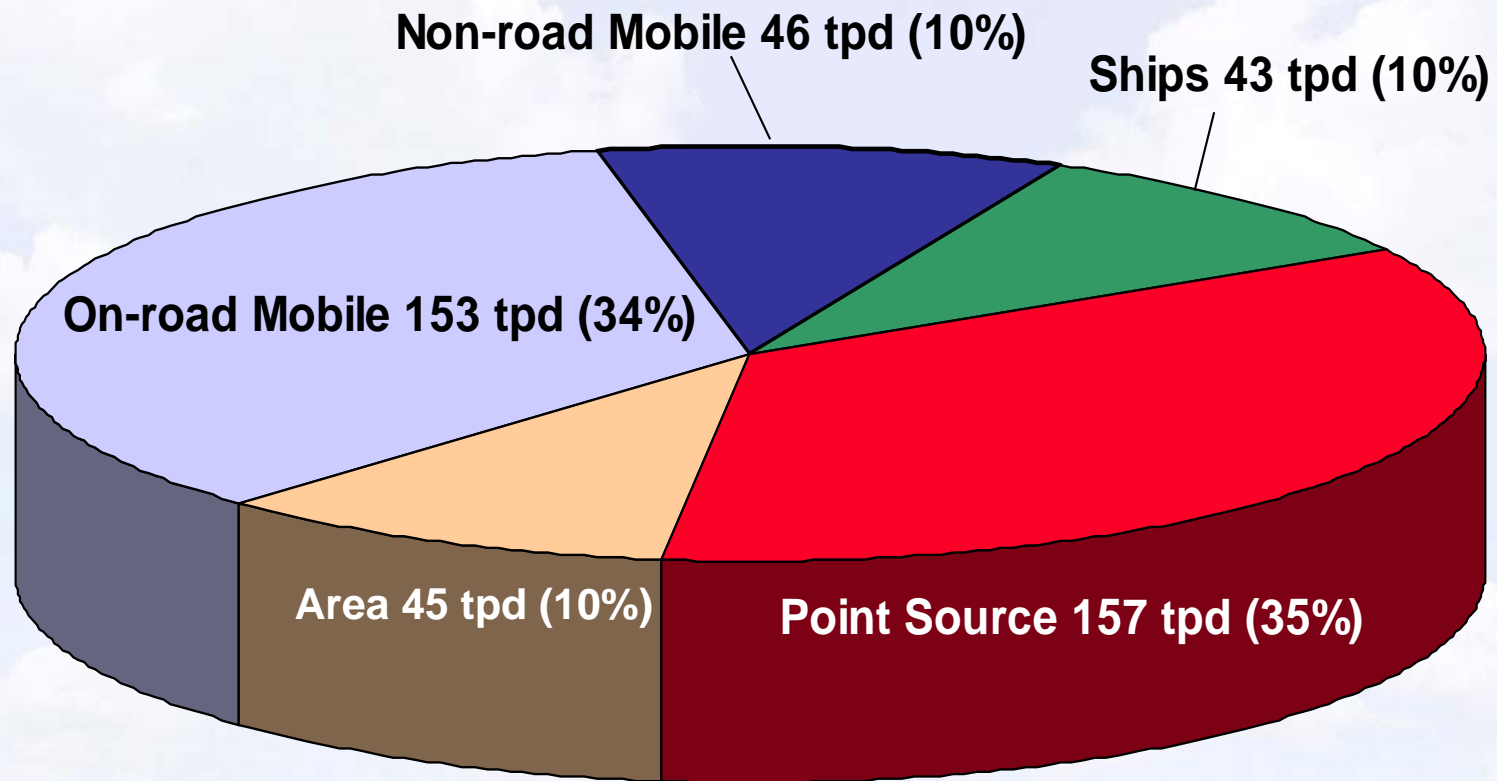
*Source: Ozone -- EPA's AQS database.

1991-2007 Population --<http://www.census.gov/popest/archives/1990s/MA-99-03b.txt> and <http://www.census.gov/popest/counties/CO-EST2007-01.html>, May 9, 2008



HGB 2009 Emissions Inventory

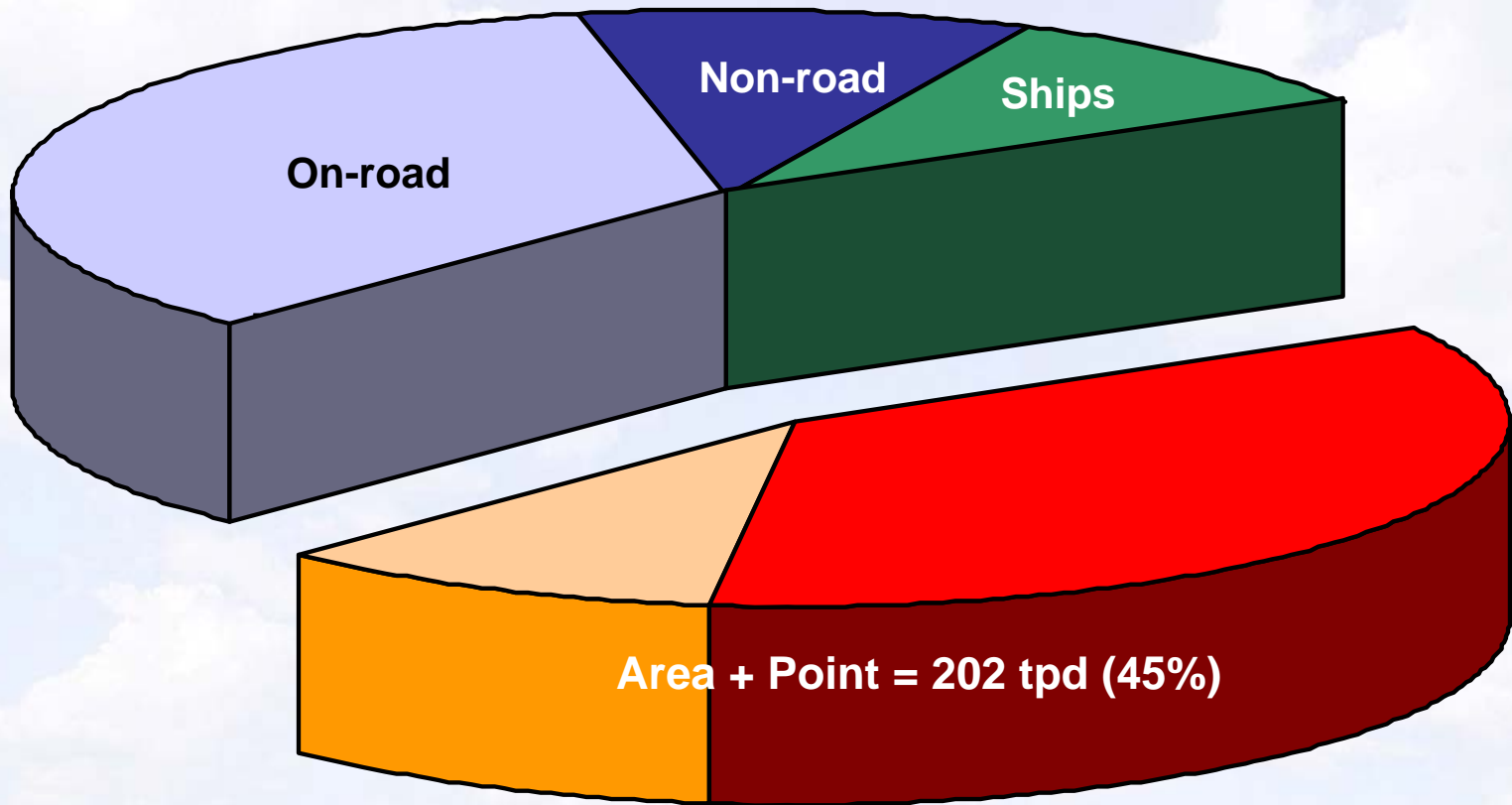
NO_x Source Category Estimates





HGB 2009 Emissions Inventory

HGB NO_x Source Categories that TCEQ Directly Regulates





Ship Channel Analysis

Houston Ship Channel 4km Mask





HGB Ship Channel Analysis

- Removed point source and ship emissions from the main portion of the ship channel (Primarily in Harris County)
- Removed 67 tpd NO_x and 109 tpd VOC
 - Result:
 - Ozone = 93 parts per billion
 - Five exceedance days within the time period modeled
 - Exceedance level for the 1997 ozone standard = 85 parts per billion



Next Steps: Photochemical Modeling

- 2005 episode
 - Includes final base case, baseline, future baseline and future controls
 - Estimated completion: August 2008
- 2006 episode
 - Estimated completion: March 2009
 - TexAQS II intensive period episodes (2006) meteorological and emissions modeling files will be included



Next Steps: HGB SIP Development

- Control strategy development:
February 2008 – March 2009
- SIP narrative and rule proposals
development:
April 2009 – August 2009
- SIP Proposal Agenda: October 2009
- SIP Adoption Agenda: March 2010



Public Participation is Critical

- Emission reductions are needed from **ALL** source categories
- Extensive stakeholder involvement is needed for development of broad measures
- Consider measures that other cities, such as Austin and Dallas have done



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Additional Information

- HGB ozone SIP website:
 - <http://www.tceq.state.tx.us/implementation/air/sip/hgb.html>
- Electronic Updates:
 - <http://www.tceq.state.tx.us/>
 - Click on “sign up for e-mail updates.”