

Appendix 17

Checklist

Houston-Galveston-Brazoria Pre-analysis Consensus Plan for Transportation Conformity

Purpose of Analysis

Check Those That Apply and Provide Brief Explanation In Space Provided:

- New Metropolitan Transportation Plan (demographics, horizon year, etc.)
- Modify Existing Metropolitan Transportation Plan (interim year adjustments)
- Transportation Improvement Program
- State Implementation Plan Requirement
- Other

Houston-Galveston-Brazoria Pre-analysis Consensus Plan for Transportation Conformity

Purpose of Analysis

The Houston-Galveston Area Council (H-GAC) is proposing the following plan and procedures to conduct a conformity analysis. This plan is being submitted to the interagency consultation partners for soliciting consensus before commencement of a full scale transportation conformity analysis. The plan and procedures may be revised as H-GAC proceeds with the analysis. Notification of such changes will be made to the interagency consultation partners. Specifically, the process will consist of a Regional Transportation Plan Update as a result of project modifications. This conformity will satisfy the 8-hour conformity requirement using an approved/adequate MVEB from 2008 8-hour Reasonable Further Progress (RFP) SIP as an emission test for the conformity years of 2009, 2019, 2025 and 2035. In the case of this conformity, there is no Attainment Demonstration budget. The project that is being modified on US290 is the following: from West 34 to Pinemont: reconstruct and widen to 12 main lanes (instead of 10 main lanes) MPOID: 11573, CSJ: 0050-09-069. In the current situation, that segment of US290 has in some parts 8 lanes and 6 lanes. This project is affecting conformity years 2019, 2025 and 2035.

Metropolitan Transportation Plan/Transportation Improvement Program

Houston-Galveston-Brazoria Pre-analysis Consensus Plan for Transportation Conformity

Purpose of Analysis

Demographics

- a. Population: Use forecast approved by H-GAC Board on February 2006.
There will be no changes on demographics from the last conformity.
- b. Employment: H-GAC will use an in house developed model for regional econometric forecast -supplied data as a baseline, and feed this into the UrbanSim model for local area forecasts. Use forecast approved by H-GAC Board on February 2006
- c. Socio-economics: H-GAC will use Census data. Use forecast approved by H-GAC Board on February 2006

Validation year: 2005

TIP years: 2008-2011

RTP year: 2035

Conformity Analysis Years

- a. Baseline:2005 - Budget year: 2008 (RFP)
- b. Attainment: 2019
- c. Intermediate:2009, 2025
- d. Horizon:2035

Affected Nonattainment Counties: Harris, Galveston, Brazoria, Fort Bend, Montgomery, Liberty, Chambers, and Waller

Land-Use Model: H-GAC is currently using appraisal district data fed into UrbanSim. No changes from last conformity.

Travel Demand Model: The VMT will be forecasted by using Cube Voyager

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Modal Split/Mode Choice: H-GAC in collaboration with METRO updated the Mode of Choice model by simplifying the nesting structure. The resulting model greatly improved model performance and accuracy. See Appendix 3 for further information on the Mode Choice model.

VMT Adjustments: H-GAC will adjust the forecasted VMT to TxDOT's HPMS for all roadway facilities and seasonal adjustment factor - **HPMS factor = 1.001970381; Seasonal factor= 0.96776**

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State Implementation Plan

The Reasonable Further Progress State Implementation Plan for 2008 is the applicable SIP. These budgets were approved by EPA effective June 22, 2009.. The SIP motor vehicle emissions budgets deemed adequate by the Environmental Protection Agency are:

- 2008 RFP Budgets
- a. VOC: 86.77 tpd
 - b. NOx: 186.13 tpd
 - c. CO: N/A N/A
 - d. PM: N/A N/A

Control Strategies

Emission reduction credits will be taken for the following on-road mobile SIP commitments.

Strategy	Methodology
a. VMEPS	MOSERS (see below: Reduction Measures)
b. TCMs	MOSERS (see below: Reduction Measures)
c. RFG	MOBILE
d. I/M programs	MOBILE
e. Tier 2/ Low Sulfur	MOBILE
f. TxLED	TransCAD postprocessing of total emissions
g. Temperature/Humidity	TransCAD postprocessing of total emissions
h.	

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Mobile Source Emission Reduction Strategies

	Strategy	Category	Modeled	Post-processed	Year(s) Credited
a.	Intersection Improvements	TCM		x	
b.	Rail Service	TCM	x		
c.	High Occupancy Vehicle Lanes	TCM	x		
d.	Park-n-Ride Lots	TCM	x	x	
e.	Vanpools	VMEP		x	
f.	Grade Separations	TCM	x		
g.	Traffic Signal Improvements	TCM		x	
h.	Intelligent Transportation Systems	VMEP			
i.	Clean Cities/ Clean Vehicle Commitments	VMEP		x	
j.	Bicycle/Pedestrian Facilities	TCM		x	
k.	Employer Trip Reduction Programs	VMEP		x	
l.	Vehicle Scrappage	VMEP		x	
m.	Sustainable Development				
n.	Public Education/ Ozone Season Fare Reduction				

Houston-Galveston-Brazoria Pre-analysis Consensus Plan for Transportation Conformity

Purpose of Analysis

MOBILE Model

H-GAC will use the following MOBILE model input parameters in the conformity analysis.

	Parameter	Details	Data Source
a.	Emission Model Version(s):	MOBILE6.2	EPA
b.	Emission Model Runs:	years 2009, 2019, 2025, and 2035	
c.	Time Periods:	24 hours 4-timeperiods	H-GAC
d.	Pollutants Reported:	VOC, NOx, CO	
e.	Calendar Dates:	July (2009, 2019, 2025, 2035)	TCEQ
f.	Vehicle Class:	EPA 28 classification	EPA
g.	Functional Class:	Freeway, arterial and collector	
h.	Temperatures:	ozone season- hourly averages from the 10 highest ozone exceedance days from 2003-2005 (no calendar dates-only averages)Hourly/regional	TCEQ
i.	VMT mix:	By timeperiod, by roadway category	TTI
j.	Speed:	2.5-65 mph	
k.	Vehicle Registration:	Mid-Year 2009 (latest available)	TxDOT
l.	I/M Program:	ASM/OBDII, except in 3 rural counties	
m.	RVP:	6.8	
n.	Low Sulfur Diesel:	15 ppm	
o.	Local Area Parameters:	Temperatue, humidity, pressure, VMT mix, vehicle registration, I/M program, RVP	
p.	Strategies:	RFG, I/M, Tier2, TxLED	

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- q. Meteorological data: humidity, temperature, barometric press. TCEQ
From RFP SIP scenario.

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Purpose of Analysis

Project Listings

A roadway listing for each year, including all projects that change roadway capacity (new roads, widenings, roadway removals, etc.) will be provided in addition to the following:

CMAQ Projects

H-GAC will include a spreadsheet in the conformity document showing status of funded CMAQ projects, including; emission reductions for each project, amount of funding for each project, and implementation dates.

Non-Federal Projects

H-GAC will identify all projects in the RTP and TIP that do not receive federal funding with their implementation dates (local initiatives, private ventures, etc.).

Exempt Projects

H-GAC will identify exempt projects in the TIP according to the specifications outlined in the Conformity Regulations (§93.126) and their implementation dates.