

Appendix 18

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

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 Plan Update as a result of new demographics, updated revenue forecasts, refinements to Plan recommendations, and a new horizon year (2035). The TIP will incorporate necessary modifications in its four year scope. This analysis will meet the 36-month conformity requirement following acceptance of a conformity by FHWA. This conformity will satisfy the 8-hour conformity requirement using an approved/adequate MVEB from 2007 1-hour Attainment Demonstration (AD) as an interim emission test for the 8-hour attainment year of 2009.

Metropolitan Transportation Plan/Transportation Improvement Program

Demographics

- a. Population: H-GAC will use an in house developed model for regional econometric forecast, and feed this into the UrbanSim model for local area forecasts.
- 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.

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c. Socio-economics: H-GAC will use Census data.

Validation year: 2002

TIP years: 2008-2011

RTP year: 2035

Conformity Analysis Years

a. Baseline:2002

b. Attainment:2007, 2009

c. Intermediate:2019, 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.

Travel Demand Model: The VMT will be forecasted by using EMME/2.

Modal Split/Mode Choice: The modal split for transit ridership will be accomplished through the travel demand model.

VMT Adjustments: H-GAC will adjust the forecasted VMT to TxDOT's HPMS for all roadway facilities based on a 1.00 validation error (H-GAC, August 2006) and seasonal adjustment factor 0.95942 (TTI, November 2006)

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State Implementation Plan

The Attainment Demonstration State Implementation Plan for 2007 is the applicable SIP. The SIP motor vehicle emissions budgets deemed adequate by the Environmental Protection Agency are:

- a. VOC: 89.99 tpd
- b. NOx: 186.13 tpd
- c. CO: N/A
- d. PM: 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	2007
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				
i. Clean Cities/ Clean Vehicle Commitments	VMEP		x	2007
j. Bicycle/Pedestrian Facilities	TCM		x	
k. Employer Trip Reduction Programs				
l. Vehicle Scrappage	VMEP		x	2007
m. Sustainable Development				
n. Public Education/ Ozone Season Fare Reduction				

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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 2007, 2009, 2019, 2025, and 2035	
c. Time Periods:	24 1-hour timeperiods	H-GAC
d. Pollutants Reported:	VOC, NOx, CO	
e. Calendar Dates:	August 30	
f. Vehicle Class:	EPA 28 classification	EPA
g. Functional Class:		
h. Temperatures:	Hourly/county	TCEQ
i. VMT mix:	By timeperiod, by roadway category	TTI
j. Speed:	2.5-65 mph	
k. Vehicle Registration:	Mid-Year 2006 (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:	Seasonal adjustment factors	TTI
p. Strategies:	RFG, I/M, Tier2, TxLED	
q. Meteorological data:	humidity, temperature, barometric press.	TCEQ

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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.