

## **Appendix 15**

### **Interagency Conformity Consultation Committee**

# Conformity Conference Call 2/27/13

## Meeting Summary

### 1. Participants

Chris VanSlyke (H-GAC), Graciela Lubertino (H-GAC), Charles Airiohuodion (TxDOT), Hans Michael Ruthe (H-GAC), Bill Tobin (H-GAC)

Via Phone: Jose Campos (FHWA), Jeff Riley (EPA), Shundreka Givan (FHWA), Jackie Ploch (TxDOT), Ramon Alvarez (METRO), Janie Temple (TxDOT), Amy Muttoni (TCEQ), Mary McGary Barber (TCEQ), Angela Kessel (TCEQ), Rachel Norton (TCEQ)

H-GAC needs to start this conformity due to the new nonattainment designation for the 2008 8 hour ozone standard. This new designation triggered a 1 year grace period to show conformity to the new attainment year (2015). The grace period ends on July 20, 2013. In addition, H-GAC needs to start the conformity before March 2, 2013 in order to be able to use the MOBILE6 model instead of MOVES since the Houston region does not have yet MVEB that were found adequate by EPA.

### 2. Pre-analysis Consensus Template document

The pre-analysis consensus document (Appendix 17) was presented to the committee for them to comment on it and to approve it later on. H-GAC agreed on using new seasonal factors to adjust the VMT coming from the latest RFP SIP revision.

### 3. Draft Timeline

The draft timeline was presented to the committee:

#### Phase III Conformity Timeline

- **February 27<sup>th</sup>** – start conference calls with conformity consultation partners to avoid March 2<sup>nd</sup> 2012 deadline to use MOVES since HGB region does not have EPA MOVES approved budgets
- **End February 2013** – Start updating networks and begin Travel demand modeling.
- **Mid March**
  - Complete travel demand model runs.
  - Complete conformity air quality calculations and documentation.
- **March 27<sup>th</sup>** - Open public comment period.
- **April 9<sup>th</sup>** – Hold two public meetings.
- **April 25<sup>th</sup>** – Close public comment period.
- **April 26<sup>th</sup>** – TPC final approval of conformity finding.

- **April 25<sup>th</sup>** – Conference call with conformity consultation partners to finalize the conformity finding.
- **July 20<sup>th</sup> 2013 deadline to avoid conformity lapse** – the conformity needs to be approved previous to this date to avoid a conformity lapse. This date shows the conclusion of the one-year grace period for newly designated areas to conform to the 2008 8-hr ozone standard.

Here is the definition of conformity lapse coming from the FHWA website:

[http://www.fhwa.dot.gov/environment/air\\_quality/conformity/policy\\_and\\_guidance/clgp.cfm](http://www.fhwa.dot.gov/environment/air_quality/conformity/policy_and_guidance/clgp.cfm)

A conformity "lapse" means that the conformity determination for a transportation plan or transportation improvement program has expired, and thus there is no currently conforming plan or transportation improvement program. During a conformity lapse, FHWA and FTA can only make approvals or grants for: Project that are exempt from the conformity process (pursuant to 93.126 and 93.127 of the conformity rule), and Transportation control measures (TCMs) that are included in approved SIPs. Only those project phases that have received approval of the project agreement and transit projects that have received a full funding grant agreement (FFGA), or equivalent approvals, prior to the conformity lapse may proceed during a conformity lapse.

# Conformity Conference Call 4/24/13

## Meeting Summary

### 1. Participants

Chris VanSlyke (H-GAC), Graciela Lubertino (H-GAC), Charles Airiohuodion (TxDOT), Hans Michael Ruthe (H-GAC), Ashby Johnson (H-GAC)

Via Phone: Jose Campos (FHWA), Jeff Riley (EPA), Shundreka Givan (FHWA), Ramon Alvarez (METRO), Janie Temple (TxDOT), Holly Ferguson (TCEQ), Heather Evans (TCEQ), Laura Norton (TxDOT), L.D. White (TTI), Dennis Perkinson (TTI), Michelle Conkle (TxDOT)

H-GAC initiated the conference call explaining that during the public comment period, it was discovered that the HPMS factor that adjust the vehicle miles traveled was calculated wrong because it did not include the VMT from toll roads. As a consequence, the air quality emissions had to be recalculated. Also, for the year 2018, the temperature and humidity adjustment needed to be applied in order to conform. Due to all these changes FHWA asked to re-open the public comment period for 30 more days, in order to give the public more time to review the changes. It was also requested by FHWA to re-calculate the year 2011 with the new HPMS and seasonal factors for consistency with the rest of the analysis. To reflect all these changes, the documentation for the conformity determination was updated in the website. Below is the new draft timeline.

### Phase III Conformity Draft-Timeline

- **February 27<sup>th</sup>** – start conference calls with conformity consultation partners to avoid March 2<sup>nd</sup> 2012 deadline to use MOVES since HGB region does not have EPA MOVES approved budgets
- **End February 2013** – Start updating networks and begin Travel demand modeling.
- **Mid March**
  - Complete travel demand model runs.
  - Complete conformity air quality calculations and documentation.
- **March 27<sup>th</sup>** - Open public comment period.
- **April 9<sup>th</sup>** – Held two public meetings.

- **May 23<sup>rd</sup>** – Close public comment period.
- **May 24<sup>th</sup>** – TPC final approval of conformity finding.
- **End May 2013** – Conference call with conformity consultation partners to finalize the conformity finding.
- **July 20<sup>th</sup> 2013 deadline to avoid conformity lapse** – the conformity needs to be approved previous to this date to avoid a conformity lapse. This date shows the conclusion of the one-year grace period for newly designated areas to conform to the 2008 8-hr ozone standard.

## **Conformity Conference Call 5/13/13**

### **Meeting Summary**

#### **1. Participants**

Chris VanSlyke (H-GAC), Graciela Lubertino (H-GAC), Charles Airiohuodion (TxDOT), Bill Tobin (H-GAC)

Via Phone: Jose Campos (FHWA), Jeff Riley (EPA), Shundreka Givan (FHWA), Janie Temple (TxDOT), Holly Ferguson (TCEQ), Heather Evans (TCEQ), Laura Norton (TxDOT), Dennis Perkinson (TTI), Michelle Conkle (TxDOT)

H-GAC went one more time over Appendix 17 (Pre-Analysis Consensus Template) and asked for approval to all participating conformity partners (TCEQ, EPA, FHWA and TxDOT). All approved Appendix 17.

Appendix 12 and 18 were discussed since they are going to be modified due to the inclusion or modification of projects due to the TIP called for projects. This will affect the air quality emission calculations. All modified appendices will be posted in the ftp site.

## **Conformity Conference Call 7/11/13**

### **Meeting Summary**

#### **1. Participants**

Chris VanSlyke (H-GAC), Graciela Lubertino (H-GAC), Shelley Whitworth (H-GAC), David Wurdlow (H-GAC), Hans Michael Ruthe (H-GAC)

Via Phone: Jose Campos (FHWA), Jeff Riley (EPA), Shundreka Givan (FHWA), Janie Temple (TxDOT), Jamie Zech (TCEQ), Rachel Nelson (TCEQ), Mary McGarry Barber (TCEQ), Laura Norton (TxDOT), Dennis Perkinson (TTI), Michelle Conkle (TxDOT), Charles Airiohuodion (TxDOT), Andy Mullins (TTI), Edmund Petry (METRO), Catherine McCreight (TxDOT)

The following topics were discussed:

- H-GAC stated that almost all the comments have been addressed and included in Appendix 15. H-GAC is going to continue working on addressing the few editorial comments from FHWA that have not been answered yet. The reason for not answering to these comments was because they overlap with the EPA comments.
- TCEQ asked to FHWA and TxDOT to bless the VMT calculations since they don't have the expertise, to which FHWA and TxDOT responded that all the VMT results are appropriate.
- TCEQ also said that at the moment all the air quality calculations looked good and by tomorrow they will finish reviewing all the files.
- EPA said that they were fine with all the corrections already done to the documentation.
- H-GAC will add the footnotes for Appendix 13 (TCMs) as FHWA requested.

## **Inter-Agency Comments**

### **HGB Conformity Phase III**

#### **TCEQ Review Comments**

**Chris Kite**

**April 16, 2013**

The relevant electronic files are not available on the FTP site. I looked at the FTP directory that H-GAC references in their e-mail and there are no files in it: [ftp://ftp.hgac.com/Pub/Transportation/Conformity/Phase3\\_conf/](ftp://ftp.hgac.com/Pub/Transportation/Conformity/Phase3_conf/). I searched around all of the subdirectories within <ftp://ftp.h-gac.com/Pub/Transportation/Conformity/>, and I could only find files dated from 2007-2012 in [ftp://ftp.hgac.com/Pub/Transportation/Conformity/Mid12\\_Con/rates/factors/](ftp://ftp.hgac.com/Pub/Transportation/Conformity/Mid12_Con/rates/factors/). Examples of electronic files needed for review are available on our FTP site at [ftp://amdaftp.tceq.texas.gov/pub/Mobile\\_EI/HGB/m62/2018/](ftp://amdaftp.tceq.texas.gov/pub/Mobile_EI/HGB/m62/2018/), which contains all of the

MOBILE6.2 input files used for the attainment demonstration (AD) SIP on-road inventory, plus tab-delimited summary tables for each county. **They are available now.**

2. I read the draft report and, in the future, it should receive both a spelling/grammar checker and formatting review before it is sent out for public comment. I'm not trying to be overly picky about occasional errors. But there are numerous places where periods are out of place, excessive spaces exist between words and sentences, margins are inconsistently aligned, etc. **Done**

3. This statement on page 18 needs elaboration: "This time the consultation partners could not reach an agreement on the Pre-analysis Consensus Template document previous to the air quality analysis, as a consequence this document was not used for this conformity." There is a pre-analysis consensus template included as Appendix 17. Was this one used? If not, which one was? Or, please detail the items in this appendix for which consensus could not be reached. It is important for the reader to know if and/or how this lack of consensus affected the input parameters used. **Done**

4. This statement on page 19 needs to be reworded: "The area covered by this plan includes Harris, Galveston, Brazoria, Fort Bend, Montgomery, Liberty, Chambers and Waller counties. These counties comprise the consolidated metropolitan statistical area (CMSA), a region of more than 7,000 square miles and almost 5 million residents." Instead of saying "comprise the CMSA", it should perhaps say "included within the MSA". Prior to 2013, the Houston-Sugar Land-Baytown MSA also included Austin and San Jacinto counties (<http://www.census.gov/population/metro/files/lists/2009/List1.txt>). As of February 2013, the Houston-The Woodlands-Sugar Land MSA is comprised of the eight ozone nonattainment counties plus Austin county for a total of nine (<http://www.whitehouse.gov/sites/default/files/omb/bulletins/2013/b-13-01.pdf>). Also, the term "consolidated metropolitan statistical area" is obsolete (<http://www.whitehouse.gov/sites/default/files/omb/bulletins/fy2008/b08-01.pdf>). Terms like combined statistical area and core based statistical area are now used instead. **Done**

5. Prior to TCEQ being able to approve the final inventory, transportation activity experts will need to approve the vehicle miles traveled (VMT) estimates by calendar year. The projected estimate of 2018 Summer Weekday VMT has continued to decline over the last few years as shown below. I am not implying that these future estimates are wrong. We know that travel demand model projections and HPMS adjustment factors are subject to change. It is just that the TCEQ does not have transportation experts on staff that can confirm the acceptability of a 20% drop in future projected VMT between the SIP work (from a few years ago) and the most recent conformity analysis:

Inventory Analysis	Documentation Date	2018 Summer Weekday VMT	Relative to HGB AD SIP	
			Difference	Change
HGB AD SIP	3/10/2010	180,993,087		
Phase I Conformity	9/10/2012	152,767,689	-28,225,398	-15.6%
Phase II Conformity	3/18/2013	151,913,019	-29,080,068	-16.1%

Phase III Conformity	3/27/2013	145,368,368	-35,624,719	-19.7%
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The modeled VMT for Phase I, Phase II and Phase III Conformity have been review and found reasonable by both TxDOT and FHWA. It is indeed the case that the VMT has decreased significantly since the emission inventories were developed by TTI. The reduction of VMT can be attributed to two main causes: the validation of the travel demand model to 2009 and the resulting HPMS adjustment decreased from 1.006 to 0.953, and implement of a feedback loop. The feedback loop takes congested travel speeds from the AM peak period model and inputs them into the distribution model; as a general rule, feedback loops reduce trip-length times as congestion levels increase. VMT decreased by approximately 5% in 2009 validation year when compared to a non-feedback loop model run, and by 2018 the VMT decreased by approximately 9%. In addition to the new HPMS adjustment and the feedback loop, significant capacity improvements were injected into the TIP and Plan which improved the efficiency of the network. I have taken the liberty to correct the VMT table that was included in this comment. These data shows that the VMT has stabilized since the implementation of the feedback loop.

Inventory Analysis	Documentation Date	2018 Summer Weekday VMT	Relative to HGB AD SIP	
			Difference	Change
HGB AD SIP	July 2009	180,993,087		
Phase I Conformity	9/10/2012	152,767,689	-28,225,398	-15.59%
Phase II Conformity	3/18/2013	151,913,019	-29,080,068	-16.07%
Phase III Conformity	3/27/2013	153,005,419	-27,987,668	-15.46%

6. Related to the comment from above, within the short time between the Phase II and Phase

III conformity analyses, the future VMT projections have declined between 4.3-4.5% for each year as shown below. Once again, transportation activity experts will need to confirm that these estimates are correct. My understanding is that HPMS data are now available for 2011, but not yet for 2012. Is there a specific reason why Summer Weekday VMT in the greater Houston area is expected to drop from 139 million in 2011 to 136.6 million in 2014? And then not reach the 2011 level of 139 million again until sometime after 2015?

Calendar	Phase II	Phase III	Phase III - Phase II
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Year	Conformity	Conformity	Difference	Change
2011	139,073,646	139,073,646	0	0.0%
2014	142,926,711	136,617,515	-6,309,196	-4.4%
2015		138,801,765		
2017	149,619,604	143,253,555	-6,366,049	-4.3%
2018	151,913,019	145,368,368	-6,544,651	-4.3%
2025	170,929,056	163,283,187	-7,645,869	-4.5%
2035	206,765,547	197,735,237	-9,030,310	-4.4%

It appears that VMT in this comment was from the initial Phase III air quality model runs prior to the correct HMPS that included toll VMT and new season adjustments were applied. Below please see the correct Phase II and Phase III VMT. Again the VMT is stable and does not change much.

Calendar Year	Phase II Conformity	Phase III Conformity	Phase III - Phase II	
			Difference	Change
2011	139,073,646	140,525,060	1,451,414	1.044%
2014	142,926,711	143,821,184	894,476	0.626%
2015		146,966,350		
2017	149,619,604	150,741,930	1,122,326	0.750%
2018	151,913,019	153,005,419	1,092,400	0.719%
2025	170,929,056	171,825,787	852,043	0.525%
2035	206,765,547	208,122,927	1,357,380	0.656%

7. Unlike the Phase II conformity analysis, the Phase III draft report does not mention the temperature/humidity NOx correction step for the 2018 inventory. This could be because it was not needed for showing conformity with the lower 2018 VMT estimate of 145.4 million (from Phase III) versus 151.9 million (from Phase II). If so, that is fine, but a simple sentence should be included to state that this post-processing step was not done. Someone reviewing the SIP and/or previous HGB area conformity analyses would see that it was done and wonder why it wasn't in this situation. **Done**

8. At the end of Appendix 5, our FTP site is incorrectly referenced. The TTI report referencing the motorcycle emission rate adjustment factors is quite old and has been

removed from our FTP site. Instead of the FTP site link, the title, author, and date of the report should be stated: *2005 and 2006 Virtual Link On-Road Emissions Inventories for All 254 Texas Counties*, Texas Transportation Institute, August 2007. **Done**

9. Very small item, but there appear to be minor typos in the motorcycle adjustment factors listed in Appendix 5. For 2014, the NOx reduction should be 30.91% instead of 30.1% as shown. And the NOx adjustment factors for 2025 and 2035 have too many decimal places. Just 0.4456 and 0.4301 should be listed instead of 0.445644 and 0.430098, respectively.

**Done**

### **HGB Conformity Phase III**

#### **TCEQ Review Comments**

**Mary McGarry Barber**

**May 17, 2013**

After the MOBILE6 input files and external data files were posted, final review was completed.

#### Updates May 17, 2013

The final comment from April 17 below was MOBILE6 input information could not be checked for consistency because the MOBILE6 files were not yet posted. The files have been posted, checks were done on the MOBILE6 input files and the MOBILE6 external data files.

6. The I/M data description files for years 2014, 2015, 2017 and 2018 have a first model year of 1987. The values should be 1990, 1991, 1993 and 1994, respectively. For analysis years 2011, 2025 and 2035 the first I/M model year values are correct. As noted in Comment 4 below, the first model year values documented in Appendix 8, Tables 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, corresponding to analysis years 2014, 2015, 2017 and 2018 also have an incorrect first model year.

**Corrections done.**

7. Posted on the web site are two sets of I/M data description files. One set uses the year specific values for I/M MODEL YEARS. The other set uses the I/M GRACE PERIOD and I/M EXEMPTION AGE rather than modifying the model years for each analysis year. The MOBILE6 files posted use the I/M data description files that are analysis year specific. These are the I/M data descriptions files with the incorrect first model year for analysis years 2014, 2015, 2017 and 2018. If alternative MOBILE6 files were used that accessed the I/M data description files with the GRACE PERIOD and I/M EXEPTION AGE, those MOBILE6 files could be posted for QA review. **Corrections done.**

April 17, 2013

1. Page 9, Draft Conformity Determination: Instead of using “MVEBs from the latest revisions to the RPF SIP” use a specific SIP revision title and maybe the adoption date. For example:

**March 2010 HGB RFP SIP Revision** (TCEQ Project No. 2009-018-SIP-NR, adopted March 10, 2010) [Houston-Galveston-Brazoria Reasonable Further Progress State Implementation Plan Revision for the 1997 Eight-Hour Ozone Standard](#)

([http://www.tceq.state.tx.us/assets/public/implementation/air/sip/hgb/hgb\\_sip\\_2009/09018SIP\\_ado.pdf](http://www.tceq.state.tx.us/assets/public/implementation/air/sip/hgb/hgb_sip_2009/09018SIP_ado.pdf))- **Done**

2. Page 10, Draft Conformity Determination: Under conformity requirements include it is indicated “analysis based on the latest emission estimation model available.” Actually this conformity is using MOBILE6 because it is allowed under the grace period. This may need clarification. **Done**
3. Second page of the Executive Summary: Under conformity requirements include it is indicated “analysis based on the latest emission estimation model available.” Same comment as above, actually this conformity is using MOBILE6 because it is allowed under the grace period. This may need clarification. **Done**

4. Appendix 8

I/M MODEL YEARS documented in Tables 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56 corresponding to analysis years 2014, 2015, 2017 and 2018 have an incorrect first model year. For 2011, 2025 and 235 the values are correct. Note: the input files were not posted in the indicated location so I was unable to verify whether or not the model year coverage was correct for the input files. **Done**

5. General comment: the MOBILE6 files were not in the indicated location. Normally I would review the input information for consistency with the documentation and the SIP. This part of my review was not possible.

## **TxDOT Comments**

### **June 14, 2013**

22775	23614	Should be 2 lanes - network has 3 in 2011
13110	13113	Should be 1 lane - network has 2 in 2017
13114	13115	Should be 1 lane - network has 2 in 2017
13115	13116	Should be 1 lane - network has 2 in 2017
13113	13114	Should be 1 lane - network has 2 in 2017
6844	6852	could not locate this link in 2011
11085	6844	could not locate this link in 2011

6836	11085	could not locate this link in 2011
8144	11145	could not locate this link in 2011
6841	11082	could not locate this link in 2011
6852	6841	could not locate this link in 2011
6558	6587	2014 network is 1 lane, link list is 2 lanes; same for 2015
6554	6556	2014 network is 1 lane, link list is 2 lanes; same for 2015
6557	6558	2014 network is 1 lane, link list is 2 lanes; same for 2015
6556	6557	2014 network is 1 lane, link list is 2 lanes; same for 2015 2025 and 2035 network and link list match , 2017 & 2018
11361	13565	don't 2025 and 2035 network and link list match , 2017 & 2018
13565	11360	don't 2025 and 2035 network and link list match , 2017 & 2018
50371	50374	don't 2025 and 2035 network and link list match , 2017 & 2018
50374	50375	don't 2025 and 2035 network and link list match , 2017 & 2018
50376	13446	don't 2025 and 2035 network and link list match , 2017 & 2018
13421	50377	don't 2025 and 2035 network and link list match , 2017 & 2018
50375	50376	don't 2025 and 2035 network and link list match , 2017 & 2018
50377	11361	don't
13618	13421	2015, 2011 network and link list don't match
13434	25316	2017, 2018 network and link list don't match
25316	13437	2017, 2018 network and link list don't match
25318	11379	2017, 2018 network and link list don't match
25317	25318	2017, 2018 network and link list don't match
13446	25317	2017, 2018 network and link list don't match
11049	89891	2011, 2014, 2015 network and link list don't match
89891	11258	2011, 2014, 2015 network and link list don't match
9014	9015	2014 network and link list does not match
9009	9014	2014 network and link list does not match
9016	9017	2014 network and link list does not match
12230	7998	networks don't match link listing
10632	25011	2014 network and link list does not match
10629	10633	2014 network and link list does not match
14386	89536	Could not find the 14386 link - transposed form 14368?
5952	15235	2025 lanes between network and link list don't match
5952	5953	2025 lanes between network and link list don't match
5953	8963	2025 lanes between network and link list don't match
5947	5948	2025 lanes between network and link list don't match

8963	5948	2025 lanes between network and link list don't match
12052	12016	2014 lanes between network and link list don't match
12016	13757	2014 lanes between network and link list don't match
13753	12052	2014, 2015 lanes between network and link list don't match
11146	15657	networks don't match link listing
15657	8145	networks don't match link listing
6977	8048	2017 & 2018 network and link listing don't match

Hello Laura,

Here are the answers or reasons for the projects in question. If you have any questions Give me a call (713-993-2463)

Frank Pagliei  
Chief GIS Analyst

11005: Post oak rehab project for a future transit way. No additional lanes were added or taken away.

This project was modeled I transit network

16136: Can be found in PROJ\_IDA field. Link-id 5257-7857, 5253-5257

13712: Was deemed not regionally significant (length .01), so it was not modeled.

16038: Was found in the network, link-id 6421-6422

975: Reconstruct 4 lane blvd. No lanes were added or taken away. Link-ID 11852-11995, 7535-11995, 11851-11852

7524: Was deemed not regionally significant, so it was not modeled.

7582: Project was cancelled

9349: Project was cancelled

10452: Can be found in PROJ\_IDA field. Link-id 5838-5839, 13315-14212, 5837-5838, 5839-5840, 5840-13315

10478: Galveston Trolley, No listed street limits in projects with 0 lanes. Project was not modeled.

11049: Project was completed. Link-id 5681-50309 , 8310-5681.

12725: Was found in the network, link-id 9519-9000

14743: Was found in the network, link-id 12054-12053

14752: Was found in the network, link-id 12559-12054

15477: Project was cancelled

15484: Park & ride facility, not yet added to network.

15502: Project was cancelled

15576: Project found in network, link-id 7547-24643

16031: Project was cancelled.

16032: Project was cancelled.

16034: Project was cancelled.

16073: Can be found in PROJ\_IDA field, Link-id 24865-6818, 6818-13698, 13700-13698

16076: Was found in network, Link-id 7245-14299, 7662-6404

16078: Transit Center, 0 lanes, work with exiting transit center.  
16080: Was found in network, Link-id 30010-30011  
16141: Was deemed not regionally significant (length .01), so was not modeled.  
16181: Was found in network, Link-id 5853-5854, 5852-5853, 5851-5852, 5854-5898

## **EPA Review of HGAC Draft 2013 Transportation Conformity for 2035 RTP Update Amendments and 2013 – 2016 TIP, dated May 9, 2013 6/26/13**

### Comments:

1. List of Abbreviations (pg. 5): Suggest revising “CAA – Clean Air Act of 1990” to “CAA – Clean Air Act”, since the Clean Air Act Amendments of 1990 are separately listed/abbreviated. **Done**
2. Executive Summary – Milestones and Background (pg. 9): Suggest revising first sentence of 3<sup>rd</sup> paragraph. The EPA action designating the HGB area marginal nonattainment of the 2008 8-hour ozone standard became effective on July 20, 2012. The action was signed by the administrator on April 30, 2012. This is stated more clearly on pg. 11 (*Conformity Tests*, 1<sup>st</sup> paragraph). **Done**
3. Executive Summary – Milestones and Background (pg. 10): 1<sup>st</sup> paragraph states that this conformity finding will be using MVEBs coming from the “latest revisions” to the Houston AD and RFP SIPs. Suggest clarifying that these MVEBs are from the original 2010 AD & RFP SIPs, not the MOVES-based 2013 revisions adopted by the State of Texas on April 23, 2013. **Done**
4. Executive Summary – Conformity Requirements (pg. 10): “Analysis based on the latest emission estimation model available” is listed as a conformity analysis requirement. It should be noted that the MOVES model is the latest emission estimation model available, but due to the allowance of the MOVES grace period, this conformity analysis is being conducted with MOBILE6.2.03. **Done**
5. Conformity Tests (pg. 11): 1<sup>st</sup> sentence - “as noted in Sectionu” **Done**
6. Conformity Tests (pg. 12): 2<sup>nd</sup> paragraph, 2<sup>nd</sup> sentence – suggest revising to “For the test, the regional emissions analysis must be performed for the attainment year and the horizon year, any years with an associated MVEB, and any years within the timeframe of the plan provided they are not more than ten years apart”. **Done**
7. Modeling (pg. 12): Identify latest version of MOBILE6 model as MOBILE6.2.03 **Done**
8. Section 1.0 – Introduction (pg. 15):
  - a. Suggest revising first sentences of this section to “The CAAA requires each state to submit an area-specific state implementation plan (SIP) for any area in

nonattainment or maintenance of a NAAQS to the U.S. Environmental Protection Agency (EPA). The SIP is a legally binding document that defines the structure through which emissions will be reduced and the applicable NAAQS will be attained. As the guiding document of the air quality planning process, the SIP connects air quality goals and transportation planning goals through the conformity provisions in the CAAA.” Done

- b. Suggest clarifying revisions to 3<sup>rd</sup> paragraph – “With the signing of the Clean Air Act Amendments of 1990 (CAAA) into law, the Houston-Galveston region was designated as “severe” nonattainment for exceeding the 1-hour ozone National Ambient Air Quality Standard (NAAQS) for the pollutant ozone. In 1997, EPA revised the ozone standard from a 1-hour to an 8-hour standard, and in 2004, the Houston-Galveston region was designated as "moderate" nonattainment for the 1997 8-hour ozone standard, with an attainment year of 2009. and given until the year 2009 to attain. The 1-hour ozone NAAQS was revoked through implementation of the 1997 8-hour NAAQS.

Due to the failure to submit an attainment SIP for 2009, the Governor requested to EPA to reclassify the region to “severe”. On September 18, 2008, the EPA granted the governor’s request to voluntarily reclassify the HGB ozone nonattainment area from a “moderate” to a “severe” nonattainment area for the 1997 8-hour ozone standard with an attainment date no later than June 15, 2019. The State of Texas TCEQ submitted an Attainment Demonstration SIP and a Reasonable Further Progress revised SIP on March 10, 2010. EPA has not approved these SIP revisions, but found the motor vehicle emissions budgets contained in the SIP revision adequate for conformity purposes on January 25, 2011 (effective by February 9, 2011).

In addition, the Houston-Galveston-Brazoria region has been designated in non-attainment for the 2008 8-hr ozone standard (effective July 20, 2012), with a classification of “marginal”. This new designation triggered a one year grace period to show conformity to the new attainment year which is 2015. The grace period will expire on July 20, 2013, at which time a conformity lapse will occur if federal approval of the conformity is not obtained. For this reason, H-GAC is undergoing the current conformity determination. Per EPA’s “Transportation Conformity Guidance for 2008 Ozone Nonattainment Areas”, the first conformity determination for the 2008 ozone NAAQS will use the 1997 ozone budgets found adequate on January 25, 2011. Done

9. Section 1.1 – MPO Organization and Role (pg. 16): 1<sup>st</sup> paragraph, suggest adding more specificity to statement “The ozone nonattainment boundaries are the same as the MPO boundaries”. Are the nonattainment boundaries the same as the MPO planning boundaries? Geographic boundaries? Done

10. Section 2.0 – 2035 RTP Update & 2013-2016 TIP Conformity to the SIP (pg. 19): 1<sup>st</sup> sentence, specify that the MVEBs were established in the 2010 AD & RFP SIPs. **Done**
11. Section 2.2 – Submittal Frequency (pg. 19): Last sentence, include nonattainment of a new NAAQS as a conformity trigger, since this is a trigger being addressed by this conformity. **Done**
12. Section 2.8 – Constraints (pg. 23): 1<sup>st</sup> paragraph, last sentence – suggest revising to “Consequently, the RTP and TIP are required to conform to emission limits set by the Texas Commission on Environmental Quality (TCEQ) and approved or found adequate by the EPA”. Although it appears the original wording is intended to represent a general scenario, this conformity is using adequate budgets. **Done**
13. Section 5.3 – CMAQ (pg. 37): 1<sup>st</sup> sentence - Should MAP-21 be mentioned, or is it a situation where CMAQ provisions mentioned are only included through SAFETEA-LU, and MAP-21 did not supersede them? **Done**
14. General: The Phase II conformity analysis utilized a temperature/humidity NOx correction factor to develop the 2018 inventory, whereas this step is not described for development of the 2018 inventory in the Phase III draft report. Please provide explanation as to why this step was not included in the Phase III conformity analysis. If it was included in the Phase III analysis, please include discussion of this step. **Done**

**FHWA Comments**  
**Houston-Galveston Area Council (H-GAC) Transportation Conformity**  
**Determination Comments - Phase 3 Amendments to 2035 Regional Transportation**  
**Plan (RTP) Update**  
**and**  
**FY 2013-2016 Transportation Improvement Program (TIP)**  
**6/28/13**

**Transportation Conformity Determination:**

**Substantial Comments:**

1. Page 5, Table of Contents – List of Appendices: Please revise the document name, “Checklist” to “Pre-Analysis Consensus Template” for consistency with what is presented on the MPO website. Also, it appears that Appendix 1 would ultimately contain Conformity Endorsements/Resolutions; however, this information is listed separately on the website once the conformity determination has been made. Please revise the list to reflect how this information is presented, as appropriate. Lastly, please explain why Appendix 18 does not appear in the TOC - List of Appendices, as it does on the MPO website. **Done**
2. Page 9, Executive Summary - Milestones and Background: Suggest revising the discussion in the first paragraph to state that, “On April 9, 2013, the Federal Highway Administration and the Federal Transit Administration found that the

- amendments to the Houston-Galveston area's 2035 Regional Transportation Plan (RTP) Update and the 2013-2016 Transportation Improvement Program (TIP) met all the requirements for making a joint conformity determination." **Done**
3. Page 9, Executive Summary - Milestones and Background: Recommend the order of the second and third paragraphs in this section be reversed. Also recommend that the first sentence in the (existing) third paragraph be revised to replace "occurred" with "was effective" and that the last sentence in this paragraph be revised to delete "issuance of permits." Additionally, recommend the (existing) second paragraph be revised to clarify that this transportation conformity determination is being conducted to address the requirement that a conformity determination be completed within one-year of the effective date of non-attainment designation of the Houston-Galveston-Brazoria area in accordance with the 2008 8-hour ozone standard and to address additional amendments to H-GAC's 2035 RTP Update and FY 2013-2016 TIP. Also suggest adding the actual attainment date of, December 31, 2015 to the discussion in the (existing) second paragraph. **Done**
  4. Page 9, Executive Summary - Milestones and Background: Recommend that the first sentence in the fifth paragraph in this section be revised as follows: "Due to the seriousness of the July 20, 2013 deadline, this determination ..."**Done**
  5. Page 11, Executive Summary – Conformity Tests: Please revise "Sectio 1.1" to "Section 1.1" and "40 CFR 93, 102(d)" to "40 CFR 93.102(d)" in the first paragraph in this section. Additionally, please revise "40 CFR 93, 122 (d)(2)" to "40 CFR 93.118(d)(2)" in the third and fourth paragraphs in this section. Note that there appears to be a typo in the "Transportation Conformity Guidance for 2008 Ozone Nonattainment Areas" and the correct reference to regional emission analysis is 40 CFR 93.118(d)(2). **Done**
  6. Page 11, Executive Summary – Conformity Tests: It is noted that Section 1.1 of the conformity determination does not appear to address the CAA section 176(c)(6) or 40 CFR 93.102(d), as noted in the first paragraph in this section. Please explain or revise as appropriate. **Done**
  7. Page 11, Executive Summary – Conformity Tests: Recommend revision of the second sentence in the first paragraph in this section as follows: "... ozone NAAQS must be completed within one year of the effective date of nonattainment designations." **Done**
  8. Page 12, Executive Summary – Conformity Analysis Results: The information provided in Table 3 indicates NOx and VOC emissions for the 2011 analysis year and NOx emissions for the 2025 analysis year that are the same as the emission results for H-GAC's previous conformity determination (Phase II). This is unexpected based upon the application of revised HPMS and seasonal

adjustments. Please verify the emission results noted in Table 3 or revise as appropriate. **Done**

9. Page 15, Section 1.0: Recommend revision of the last sentence in the second paragraph in this section as follows: “This conformity rule, as amended, requires metropolitan ...” **Done**
10. Page 15, Section 1.0: Please revise the seventh sentence in the third paragraph in this section as follows: “This new non-attainment designation triggered a one-year grace period for the completion of a transportation conformity determination addressing the corresponding December 31, 2015 attainment date.” **Done**
11. Page 15, Section 1.0: Please revise the eighth sentence in the third paragraph in this section as follows: “The grace period will expire on July 20, 2013, at which time a transportation conformity lapse will occur if a federal (U. S. DOT) transportation conformity determination has not been completed.” **Done**
12. Page 15, Section 1.0: Please revise the last sentence in the third paragraph in this section as follows: “In accordance with EPA’s “Transportation Conformity Guidance for 2008 Ozone Nonattainment Areas” this conformity determination will utilize motor vehicle emissions budgets that address the 1997 8-hour ozone NAAQS.” **Done**
13. Page 16, Section 1.1: Please revise the first sentence in the last paragraph in this section as follows: “This conformity determination is necessary to address the requirement that a transportation conformity determination be completed within one-year of the effective date of the area’s non-attainment designation in accordance with the 2008 8-hour ozone NAAQS and to address additional amendments to H-GAC’s 2035 RTP Update and FY 2013-2016 TIP.” **Done**
14. Page 16, Section 1.2: Please clarify the intent of the information in the first bullet in this section. Is this statement intended to address RTP and TIP consistency with the area’s on-road motor vehicle emissions budgets (MVEB)? If so, please revise this information as appropriate. **Done**
15. Page 17, Section 1.6: Please revise the second sentence in the first paragraph in this section as follows: “... used for the conformity determination.” **Done**
16. Page 18, Section 1.6: Recommend deletion of the last sentence in this section concerning the pre-analysis consensus template. **Done**

17. Page 19, Section 2.0: Please revise the first sentence in this section to reflect that this conformity determination is necessary to address the requirement that a transportation conformity determination be completed within one-year of the effective date of the area's non-attainment designation in accordance with the 2008 8-hour ozone NAAQS and to address additional amendments to the 2035 RTP Update and FY 2013-2016 TIP. **Done**
18. Page 19, Section 2.2: Please revise the first sentence in this section as follows: "... Title 23 United States Code (U.S.C.) Section 134, the RTP is required to be updated every four years." **Done**
19. Page 19, Section 2.4: Please revise the discussion in the second, third and fourth sentences in this section concerning the location of projects within H-GAC's 2013-2016 TIP. It is noted that the discussion does not appear consistent with H-GAC's 2013-2016 TIP. **Done**
20. Page 19, Section 2.4: Please revise the last sentence in the first paragraph in this section as follows: "All regionally significant projects are also ..."  
**Done**
21. Page 23, Section 2.8.1: The discussion in the second paragraph in this section indicates that this conformity determination reflects additional revenues that were previously not anticipated in the 2035 RTP Update. It is noted that the revenue and expenditure totals reflected in this discussion are the same as noted in the H-GAC's previous conformity determination (Phase II). Please verify that the revenue and expenditure information reflected in this discussion is consistent with the proposed Phase III amendments to the H-GAC's 2035 RTP Update and FY 2013-2016 TIP, or revise as appropriate. **Done**
22. Page 24, Section 2.8.1: The discussion in the first full paragraph on this page indicates that H-GAC's Policy Council adopted amendments to the 2035 RTP Update at its November 30, 2012 meeting; however it appears that this adoption action reflects H-GAC's Phase II conformity determination rather than the current Phase III conformity determination. Please clarify or revise as appropriate. **Done**
23. Page 27, Section 3.1: Recommend revision of the third sentence in the first full paragraph on this page concerning reference to the "TMA." It is noted that the Houston-Galveston metropolitan planning area contains two designated TMAs. Suggest reference be revised to reflect the Houston-Galveston metropolitan planning area. Similar references elsewhere in the conformity determination should also be revised. **Done**

24. Page 27, Section 3.1: The sixth sentence in the first full paragraph on this page discusses the recalculation of the 2009 household forecast based upon the 2010 census. Was this recalculation and corresponding increase in the number of household completed for this conformity determination analysis or for the Phase I conformity determination in 2012? Please explain or revise as appropriate. **Done**
25. Page 27, Section 3.1: Should the last sentence in the first full paragraph on this page be modified to include the 2011, 2015 and 2018 analysis years as future years? Please clarify or revise as appropriate. **Done**
26. Page 28, Section 3.2.3: Recommend revision of the network development example noted in the second sentence in this section to reflect a future analysis year (e.g., 2014). **Done**
27. Page 29, Section 3.2.4: Please revise the first sentence in the second paragraph on this page as follows: “The seasonal factors were calculated by TTI, using day type and hourly distributions based on factors ...” **Done**
28. Page 29, Section 3.2.4: Please revise the last sentence in the second paragraph on this page as follows: “These seasonal factors have been documented in the TCEQ’s “HGB MOVES-based RFP On-road Inventories and Control Strategy Reductions”, prepared by TTI in February 2012” **Done**
29. Page 32, Section 3.2.6: Recommend revision of the second sentence in the last paragraph on this page to reflect that VMT per day is projected to climb 49.6 percent from 139 million in 2011 to over 208 million in 2035 (based upon the information provided in Table 6 on page 33). **Done**
30. Page 32, Section 3.2.6: The HPMS adjustment factor noted in the third sentence in the last paragraph on this page is not consistent with that noted on page 29 (.95396 versus .90249). Please clarify or revise as appropriate. **Done**
31. Page 34, Section 4.1: The discussion in the third paragraph in this section refers to episode day type VMT. Is this discussion intended to address the regional emissions analysis conducted for this conformity determination or development of emission inventories? Please clarify or revise as appropriate. A reference to “episode day” is also reflected in the Section 4.3 discussion on page 35. **We are always modeling 24 hrs.**

32. Page 35, Section 4.3: Please revise the second sentence in this section as follows:  
“In addition, for the 2018 analysis year only, emission factor post processing was used to apply a temperature and humidity adjustment.” **Done**
33. Page 37, Section 5.3: Recommend revision of the first sentence in this section as follows: “The Congestion Mitigation and Air Quality Improvement Program (CMAQ) is a categorical funding program created by ISTEA and continued in subsequent federal legislation.” **Done**
34. Page 37, Section 5.3: Please revise the last sentence in this section as follows:  
“For a listing of proposed CMAQ funded projects, please refer to Chapter 3 of H-GAC’s 2013-2016 TIP.” **Done**
35. Page 38, Section 6.0: Recommend revision of the first sentence in this section to include a reference to “Section 4,” in addition to reference to “this section” concerning emission factor post-process adjustments. It is noted that the application of emission factor post processing is also described in Section 4 of the conformity determination. **Done**
36. Page 38, Section 6.0: Please revise item “2” below the second paragraph in this section as follows: “... used to validate the travel demand model;” **Done**
37. Page 43, Section 6.4: Please revise the first sentence in this section as follows:  
“Mobile source emissions estimated for the amended 2035 RTP Update and 2013-2016 TIP are consistent ...” Also, please clarify the intent/applicability of the reference to the mobile source emissions being “consistent with the most recent projections of population, employment, travel and congestion available” in this sentence. **Done**
38. Page 43, Section 6.4: Please revise the fifth sentence in this section as follows:  
“Therefore, the amended 2035 RTP Update and 2013-2016 TIP pass all conformity ...” **Done**
39. Page 43, Section 6.4: Please revise the second sentence in this section as follows:  
“This conformity determination demonstrates timely ...” Also, please clarify the intent/applicability of the reference to “provides for expeditious implementation of additional measures designed to reduce congestion and vehicular travel demand” in this sentence. **Done**
40. Page 45, Section 8.0: Please revise the discussion in the second paragraph in this section to reflect the extended public involvement period and to provide summary

information concerning the result of public participation (e.g., number of comments received, concerns raised, etc.) **Done**

### Editorial Comments

41. Page 12, Executive Summary – Conformity Tests: Please add a space between the last paragraph on page 11 and the one that follows on page 12. **Done**
42. Page 15, Section 1.0: Please revise the sixth sentence in the third paragraph in this section as follows: “In addition, the Houston-Galveston-Brazoria region has been designated non-attainment for the ...” **Done**
43. Page 23, Section 2.8.1: Please revise the first sentence in the second paragraph in this section as follows: “This conformity determination reflects additional ...” **Done**
44. Page 24, Section 2.8.2: Please revise the second sentence in the first paragraph in this section as follows: “... TxDOT’s 2013 Unified Transportation Program (UTP) for the ...” **Done**
45. Page 28, Section 3.2.1: Please revise the second sentence in this section as follows: “Results from the 2009 base year network are used for comparison ...” **Done**
46. Page 35, Section 4.3: Please revise the first sentence in this section as follows: “... standards for motorcycles.” **Done**
47. Page 37, Section 5.2: Please delete second “.” at the end of the first sentence in the first paragraph on this page. **Done**
48. Page 37, Section 5.3: Please revise the second sentence in this section as follows: “... contribute to meeting the NAAQS. **Done**
49. Page 38, Section 6.0: Please delete second “.” following item “2” below the first paragraph in this section. **Done**
50. Page 38, Section 6.0: Please revise item “4” below the second paragraph in this section as follows: “The last horizon year must be the last year of the transportation plan’s forecast period or at the election ...” **Done**
51. Page 38, Section 6.0: Please revise item “5” below the second paragraph in this section as follows: “If a budget year is ...” **Done**

52. Page 38, Section 6.0: Please revise the second sentence in the third paragraph in this section as follows: “Emissions calculations in the conformity determination must follow ...” **Done**
53. Page 44, Section 7.0: Please replace “conformity finding” with “conformity determination” in the first and second sentences in this section. **Done**
54. Page 45, Section 8.0: Please revise the second sentence in this section as follows: “All documentation for this conformity determination will be distributed ...” Additionally, please add a space between the first and second paragraphs in this section. **Done**

**Appendix 13:**

1. Introduction: The discussion in the second paragraph refers to a November 30, 2012, H-GAC Transportation Policy Council approval of the transportation conformity determination. This appears to reflect a Phase II transportation conformity determination action, not an action addressing the current (Phase III) conformity determination. Please clarify or revise as appropriate.  
**Last conformity we responded to comments on the three projects in the TCM Table in more detail; however we were advised not to make changes to the table because of the length of the responses and because the projects were originally pulled from the TxDOT database. We have shortened the descriptions so that if for clarity purposes you would like us to make the descriptive changes below we can do so...please let us know your preference.**
2. Table: Please provide additional information concerning project description and transportation control measure related improvement (project description) associated with the following projects: Project ID 470, Project ID 7270 and Project ID 10574.  
**Last conformity we responded to comments on the three projects in the TCM Table in more detail; however we were advised not to make changes to the table because of the length of the responses and because the projects were originally pulled from the TxDOT database. We have shortened the descriptions so that if for clarity purposes you would like us to make the descriptive changes below we can do so...please let us know your preference.**

**Appendix 18:**

1. MPO ID 11005: The MPO ID is not found; please verify project.

The project is a Road rehabilitation for a new transitway. No lanes were added or taken away. Transit had been coded on transit model. The MPOID will be coded in PROJ\_ID for reference only.

2. MPO ID 16136: It appears that the project description is for the construction of a 4-lane grade separation over Holmes; however, the lanes are not listed correctly in the spreadsheet. Please verify whether the lanes should be listed as (0,0) or (0,4).

The lanes should be listed as 0,4. The appendices will be corrected.

3. MPO ID 7054: Please verify the project limits as listed in Appendix 18. Kuykendahl from Alden Bridge Rd to Crownridge Dr. Network coding is correct. Location has been verified using STARR MAP.
4. MPO ID 10795: It appears the network lists the number of lanes as (0,4) and the project listing sheet reflects (0,5). Please verify. Project would construct a 4-lane roadway with center left turn lane. Database and appendices will be corrected.

5. MPO ID 13712: The MPO ID is not found; please verify project. The project was not regional significant as indicated in APPX 12 and not coded in the network. The project is internal to the Port of Galveston and will relocate the current access to Harborside Dr. Project is less than one mile in length and represented in the regional travel demand model with centroid connectors.

6. MPO ID 15509: Please verify the project limits as listed in Appendix 18. Fallbrook from Winter Wind Dr to Eldridge Pkway. Network coding is correct. Location has been verified using STARR MAP.

7. MPO ID 16038: It appears that this project as coded in the network is inconsistent with the project listing. The lanes in the network are coded as (0,2) in year 2015, whereas the project listing has (10,10). Also, please verify the project limits.

The project is for 2 single lane DC's. one going north and one going south (2 lane total). The 10, 10 is the total number of mailanes (8) and aux lanes (2) for this stretch of road. The limits show the DC's at IH45 N at N Shepherd. Network coding is correct. Location has been verified using STARR MAP. Project does not construct additional through travel lanes to the mainlanes or frontage roads.

8. MPO ID 136: It appears the network lists the number of lanes as (4,4) and the project listing sheet reflects (0,4). Please verify.  
The south portion is not existing and will be built by 2014 (0,4). The northern portion is an existing 4 lane and will be reconstructed to a 4 lane blvd (4,4). TXDOT's DCIS can only show one set of lane numbers and will usually pick the non-existing portion (0,4) of the project. The project list operates the same way. The roadway can be verified by STARR MAP or Google.
9. MPO ID 620: It appears the network lists the number of lanes as (0,4) and the project listing sheet reflects (2,4). Please verify.  
Beamer RD from Tall ships to Bay area Blvd. The original limits for this project had been changed in DCIS, however the lanes (2,4) were never updated. The southern limit of Beamer rd terminates at Tall Ship Rd. This is a new non-existing road extended to Bay Area Blvd. The network is correct (0, 4) and can be verified by STARR MAP or Google. The appendices will be corrected.
10. MPO ID 975: The MPO ID is not found; please verify project.  
The project is a 4 lane road reconstruction project with no additional lanes. MPOID 975 will be put into the PROJ\_ID for reference, but the network segment is correct at 4 total lanes.
11. MPO ID 7625: It appears the network lists the number of lanes as (2,4) and the project listing sheet reflects (0,4). Please verify.  
The portion shown on the network (garden to Stone) is an existing 2 lane road. The ½ mile portion from Stone to Max is non-existent. This segment has been added to the network as 0,4 in 2025.
12. MPO ID 11049: The MPO ID is not found; please verify project.  
Pansy Rd from Old Vista to Crenshaw , widen from 2 to 4 lanes is complete. MPOID 11049 will be put into PROJ\_ID for reference only.
13. MPO ID 14741: It appears the network lists the number of lanes as (4,4) and the project listing sheet reflects (2,3). Please verify.  
SH 105 widen west bound lane from 2 to 3 lanes totaling 5 lanes in all. The network consists of single line segments that run in both directions. All AB

and BALanes for 2 way segments have to be the same. Therefore 5 lanes were rounded down to 4 (4,4).

14. MPO ID 16078: The MPO ID is not found; please verify project.

Multimodal Transit Park & ride is found in the transit model.

15. MPO ID 9912: It appears the network lists the number of lanes as (0,2) and the project listing sheet reflects (4,8). Please verify.

The project is a 2 way (in and outbound) diamond lane along US 59 S by 2017. The diamond lane is coded 0,2. The (4,8) reference is for the parallel main lanes.

The segments are coded correctly.

**FHWA Comments**  
**H-GAC Phase III Amendments to 2035 RTP Update and FY 2013-2016 TIP**  
**July 3, 2013**

1. MPO Project ID 668: Please confirm 2017 project completion date based upon a 2016 letting date and an assumed 2-year construction cycle.  
Project selected in 2013 TIP Call for Projects. Construction programmed in FY 2015 through Amendment #31, included in June OOC STIP revisions. Appendices dated 5-24-13 show correct implementation fiscal year. Conformity year is 2017.
2. MPO Project ID 7874: Our previous approval of this project as part of the FY 2013-2016 STIP is suspended pending approval of the June 2013 Out-Of-Cycle STIP revisions that revise the project's proposed letting year.  
Understood. No implementation or final design funds will be obligated prior to Federal approval of this conformity and June OOC STIP revisions. Modeling in conformity networks is correct.
3. MPO Project ID 7622: Please confirm 2017 project completion date based upon a 2013 letting date and an assumed 2-year construction cycle.  
Project schedule has been delayed. Though the project may yet let in FY 2013, it is not expected to be open to traffic within 2015 (at this time). Conformity year remains 2017.
4. MPO Project IDs 13765 and 11864: Our previous approval of these projects as part of the FY 2013-2016 STIP is suspended pending revision of the TIP/STIP to address changes in project limits.

Understood. Amendment to the TIP expected to be included in August Quarterly revisions.

5. MPO Project ID 13753: Our previous approval of this project as part of the FY 2013-2016 STIP is suspended pending revision of the TIP/STIP to address change in proposed letting date and anticipated completion date. Also need to confirm 2018 completion date based upon a 2017 letting date and an assumed 2-year construction cycle.

Understood. Amendment to the TIP expected to be included in August Quarterly revisions. Per sponsor, project fiscal year is 2017 and anticipated open to traffic in 2018. Conformity year is 2018.

6. MPO Project IDs 14752, 15561 and 16043: Please confirm 2015 completion date based upon a 2014 letting date and an assumed 2-year construction cycle.

Per project sponsor(s), the Cane Island projects are anticipated to be open to traffic in 2015. Conformity year is 2015.

7. MPO Project ID 975: Our previous approval of this project as part of the FY 2013-2016 STIP is suspended pending revision of the TIP/STIP to address change in project scope.

Understood. Amendment to the TIP expected to be included in August Quarterly revisions.

8. MPO Project IDs 13760, 15511, 15512, 15514, 15515, 15520, 15521, 10023 and 13521: Our previous approval of these projects as part of the FY 2013-2016 STIP is suspended pending revision of the TIP/STIP to address changes in proposed letting years.

Understood. Amendment to the TIP expected to be included in August Quarterly revisions. MPOID 15520 should be FY 2014, Appendices will be corrected as appropriate. Modeling of above listed projects is correct.

9. MPO Project ID 13712: Please provide clarification concerning determination that the proposed project is non-regional significant based upon project scope provided.

The project is internal to the Port of Galveston and will relocate the current access to Harborside Dr. Project is less than one mile in length and represented in the regional travel demand model with centroid connectors.

10. MPO Project IDs 10478, 2977, 10794, 11039, 11001, 10024, 15587, 7465, 11048, 10452,, 11005, 11054, 913, 11032, 914 and 241: Our previous approval of these projects as part of the FY 2013-2016 STIP is suspended based upon changes in proposed letting year and transportation conformity analysis year. These changes appear to require deletion of these projects from the FY 2013-2016 TIP/STIP.

Understood. All but 11005 will be included in amendment to the TIP expected to be included in August Quarterly revisions.

11005 (Post Oak Blvd reconstruction w/ transitway) now includes entire scope from 11009 without modifying timing of the added capacity transitway from the approved 2013-2016

STIP. Project selected for federal funding by TPC, TIP amendment programming funds anticipated to be approved by TPC in August and included in November STIP revisions (or earlier OOC, if possible).

11. MPO Project ID 13518: Our previous approval of this project as part of the FY 2013-2016 STIP is suspended pending revision of the TIP/STIP to address change in proposed letting year and clarification of project scope. Bridge work is not included in project description provided in 2035 RTP Update.

Understood. Amendment to the TIP expected to be included in August Quarterly revisions.

12. MPO Project IDs 14226, 7936, 307, 216, 15485 and 384: Our previous approval of these projects as part of the FY 2013-2016 STIP is suspended pending revision of the TIP/STIP to address changes in proposed letting year and transportation conformity analysis year.

Understood. Amendment to the TIP expected to be included in August Quarterly revisions.

13. MPO Project ID 14580: Please provide clarification concerning project scope (e.g., number of lanes).

Unclear what the question is. Project scope is unchanged, will widen Cedar Bayou Lynchburg St. to four (4) lanes between N Main and Sjolander. Timing of project was delayed to post-2018 open-to-traffic, now included in 2025 network.

14. MPO Project ID 11572: Please confirm project completion date based upon a 2013 letting year and an assumed 2-year construction cycle (i.e., 2015 versus 2017 transportation conformity analysis year).

Project let in fiscal year 2013 with a 2.5-3 year build out (per sponsor). Appropriate conformity year is 2017.

15. MPO Project ID 13856: Our previous approval of this project as part of the FY 2013-2016 STIP is suspended pending revision of the TIP/STIP to address change in project scope, control-section-job number (CSJ), project limits, proposed project letting year and transportation conformity analysis year.

Understood. Amendment to the TIP expected to be included in August Quarterly revisions.

Concerned that change of identification number (CSJ) would be considered grounds to withhold project approvals and authorizations.

16. MPO Project IDs 16072 and 16075: Please confirm the transportation conformity analysis year for these projects. The amended 2035 RTP Update project listing included in Appendix 12 does not reflect a transportation conformity analysis year for these projects.

Both projects have a fiscal year of 2014 and a conformity year of 2017.

Correct conformity year is 2017 for both projects. Corrected in appendices dated 5-24-13 (reflecting TPC approval of conformity determination).

17. MPO Project ID 502: Noted transportation conformity analysis year is inconsistent with transportation conformity year reflected in the amended 2035 RTP Update project listing included in Appendix 12. Please verify the appropriate transportation conformity analysis year.  
**Correct conformity year is 2017. Modeling appears to be correct, database and appendices will be corrected. Schedule change was included in amendment #31, submitted in June OOC STIP revisions.**
18. MPO Project IDs 14743 and 16044: Our previous approval of these projects as part of the FY 2013-2016 STIP is suspended pending confirmation of a 2015 project completion date based upon a 2014 letting date and an assumed 2-year construction cycle.  
**Per project sponsor(s), the Cane Island projects are anticipated to be open to traffic in 2015. Conformity year is 2015.**
19. MPO Project IDs 15563 and 7668: The amended 2035 RTP Update project listing included in Appendix 12 indicates a 2015 transportation conformity analysis year for these projects. Please confirm the anticipated completion dates of these projects.  
**Both projects let in fiscal year 2013 and are not anticipated to be open to traffic during 2014. Conformity year of 2015 is correct.**
20. MPO Project IDs 11659, 10611, 13823, 15516, 5006, 11859, 8000 and 381: The amended 2035 RTP Update project listing included in Appendix 12 indicates a 2011 transportation conformity analysis year for these projects. Please confirm the anticipated completion dates of these projects.  
**All projects were completed (per sponsor). Conformity year for all projects is 2011.**
21. MPO Project IDs 15517 and 15522: The amended 2035 RTP Update project listing included in Appendix 12 indicates a 2014 transportation conformity analysis year for these projects. Please confirm the anticipated completion dates of these projects based upon a proposed 2013 letting year and an assumed 2-year construction cycle.  
**Per project sponsors, the projects were completed after 2011 or are anticipated to be open to traffic by the end of 2014**
22. MPO Project ID 15519: The amended 2035 RTP Update project listing included in Appendix 12 indicates project limits of Porter Road and SH 99 rather than Porter Road and Williamette Drive as noted in Appendix 18. Please verify the limits of this project and the project's consistency with the proposed Phase III conformity determination.  
**Locally sponsored project. Sponsor provided corrections to limits and/or street names of 15519 and 7478 subsequent to project letting(s). Combined, they widen the facility to 4 lanes over the same overall limits. See appendix 12 for corrected project description and timing information.**

23. MPO Project ID 8075: The amended 2035 RTP Update project listing included in Appendix 12 indicates a 2015 transportation conformity analysis year for this project. Please confirm the anticipated completion date of this project.  
**Project has a fiscal year of 2013 and a conformity year of 2015.**
24. MPO Project ID 11576: The amended 2035 RTP Update project listing included in Appendix 12 indicates a 2017 transportation conformity analysis year for this project. Please confirm the anticipated completion date of this project.  
**Project let in fiscal year 2013 with a 2.5-3 year build out (per sponsor). Appropriate conformity year is 2017.**
25. MPO Project IDs 15473 and 7056: The amended 2035 RTP Update project listing included in Appendix 12 indicates a 2014 transportation conformity analysis year for these projects. Please confirm the anticipated completion dates of these projects.  
**Per project sponsor, both projects are anticipated to be open to traffic by the end of 2014. The appropriate conformity year is 2014.**
26. MPO Project ID 11009: The combining of MPO Project IDs 11009 and 11005 requires a revision of the TIP/STIP. As such, our previous approval of MPO Project IDs 11009 and 11005 as part of the FY 2013-2016 STIP is suspended pending revision of the TIP/STIP to address the combining of these projects.  
**As noted above (#10), 11005 (Post Oak Blvd reconstruction w/ transitway) now includes entire scope from 11009 without modifying timing of the added capacity transitway from the approved 2013-2016 STIP (11009). Project selected for federal funding by TPC, TIP amendment programming funds anticipated to be approved by TPC in August and included in November STIP revisions (or earlier OOC, if possible).**

## **HGB Conformity Phase III**

### **TCEQ Review Comments**

**Chris Kite**

**July 5, 2013**

**From:** Chris Kite

**Sent:** Friday, July 05, 2013 3:48 PM

**To:** Holly Brightwell Ferguson

**Cc:** Zarena Post; Jamie Zech; Heather Evans; Daphne McMurrer

**Subject:** FW: Phase III Conformity Review

Holly,

Attached are my comments on the H-GAC draft conformity report dated 4-18-2013 available on the web site they referenced at [http://www.h-gac.com/taq/airquality\\_model/conformity/2013\\_phase3/default.aspx](http://www.h-gac.com/taq/airquality_model/conformity/2013_phase3/default.aspx). The report was in PDF, so I highlighted/commented the problem areas. For reference, I've also attached the e-mail I sent on 4-16-2013 with my first set of Phase III review comments because some of them have not been addressed by H-GAC.

When I went to the FTP site they reference ([ftp://ftp.h-gac.com/Pub/Transportation/Conformity/Phase3\\_conf/](ftp://ftp.h-gac.com/Pub/Transportation/Conformity/Phase3_conf/)) to review the MOBILE6 input files, emission summary output files, etc., I found a version of the draft report dated 5-9-2013. Since I had already spent several hours reviewing the 4-18-2013 version from their web site, I have not transferred the highlights/comments over to this new version, and will leave it to H-GAC to make the corrections as appropriate from the 4-18-2013 version I reviewed. I did check that the VMT and emission numbers between the two versions did not change to any appreciable degree.

I have a few overall issues I'd like to emphasize:

1. This time around, I pointed out the obvious grammatical and formatting errors throughout the report. Sometimes in the past, I have not done this. However, when we don't do this, rather sloppy draft reports continue to be submitted and they take longer to review. I'm not being overly picky about small items. It's just that the bare minimum expected is for a grammatical, spelling, and basic formatting check be done by H-GAC before a draft is sent for our review. I don't recall previous H-GAC conformity reports from 2005 ([http://www.h-gac.com/taq/airquality\\_model/conformity/2005/default.aspx](http://www.h-gac.com/taq/airquality_model/conformity/2005/default.aspx)), 2007 ([http://www.h-gac.com/taq/airquality\\_model/conformity/2007/default.aspx](http://www.h-gac.com/taq/airquality_model/conformity/2007/default.aspx)), and 2009 ([http://www.h-gac.com/taq/airquality\\_model/conformity/2009/default.aspx](http://www.h-gac.com/taq/airquality_model/conformity/2009/default.aspx)) having these problems.
2. I reviewed the electronic files (MOBILE6 inputs, reference files, summary tables, etc.) on the FTP site mentioned above and found them to be acceptable.
3. Table 6 on page 33 summarizes the total VMT estimates by calendar year. Provided that the VMT estimates for 2018, 2025, and 2035 are acceptable to TxDOT and/or FHWA, we can approve the emission totals associated with these years. However, we are not a transportation agency with the expertise to approve VMT, so our final approval of total on-road emission estimates should be conditional upon TxDOT and/or FHWA approval of VMT. I only mention 2018, 2025, and 2035 here because they are the analysis years subject to the 2018 attainment demonstration MVEB. The other years reported of 2011, 2014, 2015, and 2017 are subject to RFP MVEBs, and Mary is the appropriate staff person for review/approval of those emission totals.
4. In Section 6.2 on page 42, H-GAC needs to report the magnitude of the temperature/humidity NOx correction step for the 2018 analysis year. This was reported on a regular basis with the 2005, 2007, and 2009 conformity reviews referenced above. For some reason, H-GAC was very resistant to reporting this item

during the Phase II conformity analysis, but we required them to do so and it is listed in that report as 1.70 NOx tpd ([http://www.h-gac.com/taq/airquality\\_model/conformity/2012\\_phase2/default.aspx](http://www.h-gac.com/taq/airquality_model/conformity/2012_phase2/default.aspx)). The magnitude of this adjustment for the Phase III analysis needs to be included in this latest report.

Please let me know if you have any questions. Thanks.

Chris

**HGB Conformity Phase III  
TCEQ Review Comments – main Document**

**Chris Kite**

**July 5, 2013**

- Page 5: Consolidated Metropolitan Statistical Area (CMSA) is an outdated term no longer used by the U.S. Census Bureau. Terms such as combined statistical area and core based statistical area are now used. Refer to the U.S. Census web page for the updated geographic coverage and terms. **Done**
- Page 9: The left-hand margins are misaligned in this section. **Done**
- Page 9: Remove space after dash. **Done**
- Page 9: Throughout the report, various versions of this are used: 8 hour, 8-hour, 8hr, and 8 hr. Just pick one and be consistent. **Done**
- Page 9: The margins are misaligned and/or there is no need for a separate paragraph without a space break here. **Done**
- Page 10: The left-hand margin doesn't match below. **Done**
- Page 12: Is this a separate paragraph? If so, put a line space between. If not, no need to start the sentence on the next line. **Done**
- Page 15: This portion of the sentence needs some rewording and/or restructuring to flow better. **Done**
- Page 15: Delete excessive space **Done**
- Page 15: Just say "designated nonattainment" instead of "designated in nonattainment" **Done**
- Page 18: Elaboration is needed here about why consensus could not be reached, what parameters were in dispute, what inputs were chosen instead, etc. **Done**
- Page 19: Say SIPs or SIP revisions. **Done**
- Page 19: CMSA is obsolete. See comment above in the list of abbreviations. **Done**

- Page 19: No need to start the sentence on the next line here. **Done**
- Page 20: Delete excessive space here. **Done**
- Page 24: Delete space before period. **Done**
- Page 27: May need to add "each" before TAZ. **Done**
- Page 27: May need to add "the" before general here. **Done**
- Page 27: Do 2015 and 2018 need to be added here? **Done**
- Page 28: Add a dash between of and day. **Done**
- Page 28: Add "revisions" after SIP or say "SIPs". **Done**
- Page 28: This sounds like old language that needs to be updated since the operational roadways at the end of FY 2011 should be known by now. **Done**
- Page 28: Redundant period. **Done**
- Page 29: No need for jumping to the next line here. **Done**
- Page 29: Delete period here. **Done**
- Page 29: Change to "in". **Done**
- Page 29: If you're referring to just a generic census, it should not be capitalized, but if referring to the U.S. Census taken every ten years, it should be capitalized. **Done**
- Page 29: Probably need "the" after incorporate. **Done**
- Page 30: Correct the space problem here. **Done**
- Page 32: This isn't quite true. MOBILE6 is used to estimate emission rates in grams per mile, so the VMT and speed per link is not a MOBILE6 input. Instead, the rates output from the MOBILE6 model are multiplied by VMT for an appropriate combination of roadway type, speed, hour, vehicle type, etc. **Done**
- Page 33: TxDOT and or FHWA needs to confirm that these estimates of total VMT are correct. The TCEQ does not have the transportation expertise to determine if these VMT totals are valid. Since VMT is the primary activity input to the overall MVEB analysis, TCEQ approval of total emission estimates is not complete without concurrent approval of VMT by TxDOT and/or FHWA. **OK.**
- Page 34: Say SIPs or SIP revisions. **Done**
- Page 35: SIPs or SIP revisions. **Done**
- Page 35: Change comma to period. **Done**
- Page 35: Reword this sentence. **Done**
- Page 35: Add a dash. **Done**

- Page 37: Emphasize in the sentence that these are NOx reductions. **Done**
- Page 37: Say "VMEP measures" or "VMEPSs" and not VMEPS. **Done**
- Page 37: Capitalize "on-road". **Done**  
Change VMEPS to either "VMEP" or "VMEP measures". **Done**
- Page 37: Capitalize legislature. **Done**
- Page 37: This wording is not really correct. It would be better to say that the AD and RFP SIPs (or SIP revisions) did not account for TERP credit as a post-processing measure when establishing the MVEBs. **Done**
- Page 37: No carriage return is needed here. **Done**
- Page 38: Delete extra space. **Done**
- Page 38: Redundant period. **Done**
- Page 38: This sentence is quite long and may need to be restructured. **Done**
- Page 38: Delete the "." after period. **Done**
- Page 38: Delete the two quotation mark references here, and just put one at the end. **Done**
- Page 41: It looks like an extra blank page got added here by accident. **Done**
- Page 42: Section 6.2 on page 40 of the Phase II conformity document (dated 3-18-2013) indicates that the magnitude of this adjustment is 1.70 NOx tpd. What is the magnitude for this analysis? It needs to be referenced here. The magnitude of this adjustment was also referenced in previous conformity analyses done by H-GAC in 2005, 2007, and 2009. **Done**

#### **FHWA Follow-up Comments**

**July 16, 2013**

**Houston-Galveston Area Council (H-GAC) Transportation Conformity  
Determination Comments - Phase 3 Amendments to 2035 Regional Transportation  
Plan (RTP) Update  
and  
FY 2013-2016 Transportation Improvement Program (TIP)**

#### **Transportation Conformity Determination:**

##### **Substantial Comments:**

1. **Previous Comment #2:** Page 9, Executive Summary - Milestones and Background: Suggest revising the discussion in the first paragraph to state that, "On April 9, 2013, the Federal Highway Administration and the Federal Transit Administration found that the amendments to the Houston-Galveston area's 2035 Regional Transportation Plan (RTP) Update and the 2013-2016 Transportation

Improvement Program (TIP) met all the requirements for making a joint conformity determination.”

**Follow-up Comment:** The recommend revision does not appear to have been addressed. Please explain or revise as appropriate.

**H-GAC:** The text says: On April 9, 2013, the Federal Highway Administration and the Federal Transit Administration certified that the amendments to the Houston-Galveston area’s 2035 Regional Transportation Plan (RTP) Update and the 2013-2016 Transportation Improvement Program (TIP) met all the requirements for making a joint conformity determination to the State Implementation Plan for the Houston-Galveston ozone nonattainment area.

2. **Previous Comment #4:** Page 9, Executive Summary - Milestones and Background: Recommend that the first sentence in the fifth paragraph in this section be revised as follows: “Due to the seriousness of the July 20, 2013 deadline, this determination ...”

**Follow-up Comment:** The recommend revision does not appear to have been addressed. Please explain or revise as appropriate.

**H-GAC:** The text says: Due to the seriousness of the July 20th deadline, this determination....

3. **Previous Comment #7:** Page 11, Executive Summary – Conformity Tests: Recommend revision of the second sentence in the first paragraph in this section as follows: “... ozone NAAQS must be completed within one year of the effective date of nonattainment designations.”

**Follow-up Comment:** The recommended revision does not appear to have been addressed. Please explain or revise as appropriate.

**H-GAC:** The text says: ozone NAAQS must be completed within one of the effective date of nonattainment designations.

We will be adding the word “year”

4. **Previous Comment #10:** Page 15, Section 1.0: Please revise the seventh sentence in the third paragraph in this section as follows: “This new non-attainment designation triggered a one-year grace period for the completion of a transportation conformity determination addressing the corresponding December 31, 2015 attainment date.”

**Follow-up Comment:** The recommended revision does not appear to have been addressed. Please explain or revise as appropriate.

H-GAC: We could not find the 7<sup>th</sup> sentence of the 3<sup>rd</sup> paragraph....we believe FHWA has been looking at an old version of the document.

5. **Previous Comment #26:** Page 28, Section 3.2.3: Recommend revision of the network development example noted in the second sentence in this section to reflect a future analysis year (e.g., 2014).

**Follow-up Comment:** Please verify/confirm reference to end of fiscal year (FY) when determining the appropriate analysis year for transportation projects as discussed in this section. It is our understanding that inclusion in an analysis year was based upon a project being completed by the end of the respective calendar year (CY).

H-GAC: We just changed FY for CY.

6. **Previous Comment #29:** Page 32, Section 3.2.6: Recommend revision of the second sentence in the last paragraph on this page to reflect that VMT per day is projected to climb 49.6 percent from 139 million in 2011 to over 208 million in 2035 (based upon the information provided in Table 6 on page 33).

**Follow-up Comment:** Additional revision of the noted percent increase in VMT is required based upon revised VMT data (48.1 percent versus 49.6 percent).

H-GAC: The text says: The results of the travel models reflect the expected demographic trends in the region over the next couple of decades, as shown in Table 6. From 2011 to 2035, VMT is projected to climb about 50 percent from about 140 million in 2011 to a total of over 208 million VMT per day in 2035 for the eight county region.

We believe FHWA is looking at an old version of the document.

7. **Previous Comment #31:** Page 34, Section 4.1: The discussion in the third paragraph in this section refers to episode day type VMT. Is this discussion intended to address the regional emissions analysis conducted for this conformity determination or development of emission inventories? Please clarify or revise as appropriate. A reference to “episode day” is also reflected in the Section 4.3 discussion on page 35.

**Follow-up Comment:** Our previous comment does not appear to have been addressed. Please explain or revise as appropriate.

H-GAC: I did answer this in Appendix 15. The reference to episode day is because we always model a 24 hour period.

8. **Previous Comment #35:** Page 38, Section 6.0: Recommend revision of the first sentence in this section to include a reference to “Section 4,” in addition to reference to “this section” concerning emission factor post-process adjustments. It is noted that the application of emission factor post processing is also described in Section 4 of the conformity determination.

**Follow-up Comment:** The recommended revision does not appear to have been addressed. Please explain or revise as appropriate.

H-GAC: The text says: Estimates of on-road mobile source emissions are based on recent model runs of H-GAC's travel demand forecasting models (Section 3), the EPA's MOBILE6.2.03 emission factor model and emission factors post process adjustments (Section 4 and 6), and off-model credits (Section 5).

#### Editorial Comments

9. **Previous Comment #50:** Page 38, Section 6.0: Please revise item “4” below the second paragraph in this section as follows: “The last horizon year must be the last year of the transportation plan’s forecast period or at the election ...”

**Follow-up Comment:** The recommend revision does not appear to have been addressed; however the discussion in item 4 was substantially revised. Please explain or revise as appropriate.

H-GAC: the text says: The last horizon year must be the last year of the transportation plan's forecast period. If the timeframe of the conformity determination has been shortened under paragraph (d) of § 91.106, the last year of the timeframe of the conformity determination must be a horizon year.

#### Appendix 18:

1. **Previous Comment #2:** MPO ID 16136: It appears that the project description is for the construction of a 4-lane grade separation over Holmes; however, the lanes are not listed correctly in the spreadsheet. Please verify whether the lanes should be listed as (0,0) or (0,4).

**Follow-up Comment:** This project is reflected in the spreadsheet provided by H-GAC indicating Travel Demand Modeling changes associated with this conformity determination. However, the project does not appear to be included in Appendix 18 (Status of Regionally Significant Projects). Please explain. Additionally, the response indicates that the appendices will be corrected. Please provide the corrected appendices.

H-GAC Response: Appendix 18 dated 5-24-13 contained said project, however, the lane information remains to be corrected per H-GAC response on 7-10-13. Please see attached appendices dated 07-16-13.

2. **Previous Comment #4:** MPO ID 10795: It appears the network lists the number of lanes as (0,4) and the project listing sheet reflects (0,5). Please verify.

**Follow-up Comment:** Please provide the corrected appendices noted in the response.

H-GAC Response: Please see attached appendices dated 07-16-13.

3. **Previous Comment #7:** MPO ID 16038: It appears that this project as coded in the network is inconsistent with the project listing. The lanes in the network are coded as (0,2) in year 2015, whereas the project listing has (10,10). Also, please verify the project limits.

**Follow-up Comment:** Response indicates that the project listing reflecting (10,10) is based upon the existing 8-main lanes and 2 auxiliary lanes. It is our understanding that auxiliary lanes are noted coded in the network. Please explain. Additionally, the response indicates that the network coding of (0,2) corresponds to the proposed direct connectors. This appears to indicate that the direct connectors are coded on the same portion of roadway, which is unexpected as the direct connectors appear to be providing for traffic movements in opposite directions. Please explain.

H-GAC Response: Correct. Auxiliary lanes are not coded in the network. Lane information shown in the appendices was taken from DCIS. This information is incorrect. As correctly modeled, at this location IH 45 N currently has 8 continuous GP lanes, one reversible HOV/HOT lane, and two continuous 2-lane frontage roads.

The project in question, which has let to contract and is under construction, will not modify the number of continuous lanes on IH 45 N, North Fwy frontage roads, or the HOV/HOT facility.

To be consistent with other direct connector projects in the RTP, we will revise the project database and appendix 12 to show (2,2) main lanes and (0,0) frontage lanes. Please see attached appendix dated 07-16-13.

With regard to the network coding, independent one-way direct connectors are often represented on the same “bi-directional” link to reduce network complexity. This has no effect on the performance or results obtained from the model.

4. **Previous Comment #8:** MPO ID 136: It appears the network lists the number of lanes as (4,4) and the project listing sheet reflects (0,4). Please verify.

**Follow-up Comment:** This project is reflected in the spreadsheet provided by H-GAC indicating Travel Demand Modeling changes associated with this conformity determination. However, the project does not appear to be included in Appendix 18 (Status of Regionally Significant Projects). Please explain.

H-GAC response: Appendix 18 dated 4-24-13 inadvertently omitted the referenced project. Please see appendices dated 5-24-13 or 7-16-13.

5. **Previous Comment #9:** MPO ID 620: It appears the network lists the number of lanes as (0,4) and the project listing sheet reflects (2,4). Please verify.

**Follow-up Comment:** Please provide the corrected appendices noted in the response.

H-GAC Response: Please see attached appendices dated 07-16-13.

6. **Previous Comment #12:** MPO ID 11049: The MPO ID is not found; please verify project.

**Follow-up Comment:** The response provided indicates that this project is complete. However, the project is reflected in the spreadsheet provided by H-GAC indicating Travel Demand Modeling changes associated with this conformity determination. Please explain. Additionally, the project does not appear to be included in Appendix 18 (Status of Regionally Significant Projects). Please explain.

H-GAC Response: Project was not listed in the currently approved conformity documents but was reflected as complete in the 2011 model network. Project sponsor informed H-GAC that said project was not complete as previously

assumed and should be removed from the 2011 network. Due to database coding error, the project was omitted from the appendix dated 4-24-13, but was added to appendix 18 dated 5-24-13 to reflect this model change. Please note that as it is complete the project will not be the subject of an action to amend the MTP or TIP. Please see attached appendices dated 07-16-13.

**FHWA Comments**

**H-GAC Phase III Amendments to 2035 RTP Update and FY 2013-2016 TIP  
July 3, 2013**

1. **Previous Comment #22:** MPO Project ID 15519: The amended 2035 RTP Update project listing included in Appendix 12 indicates project limits of Porter Road and SH 99 rather than Porter Road and Williamette Drive as noted in Appendix 18. Please verify the limits of this project and the project's consistency with the proposed Phase III conformity determination.

**Follow-up Comment:** Based upon the response provided it is expected that MPO Project IDs 15519 and 7478 would have a common project limit. However, Mason Road and SH 99 do not appear to be a common project limit. Please explain.

H-GAC response: It is our understanding that both project descriptions are accurate. As the 15519 project went to construction subsequent to the SH 99 project, it is our assumption that the limit was modified to reflect work performed under the SH 99 Seg E project contract (ie, the Morton Rd underpass and associated intersections/transitions).