6. UPDATE ON TRANSPORTATION AIR QUALITY CONFORMITY ANALYSIS

Background

H-GAC is required to ensure that the Regional Transportation Plan (RTP), Transportation Improvement Program (TIP) and amendments thereto are consistent with the region's air quality goals. This determination is referred to as Air Quality Conformity and involves the modeling of emissions produced by vehicles within the 8-county Houston-Galveston-Brazoria Nonattainment Area.

All regionally significant projects, regardless of funding source, must be considered in this analysis and found to conform to these air quality targets before federal actions related to the projects can be taken. These actions include but are not limited to funding obligations, releases for rights-of-way acquisition or final design, and approvals of environmental documents and permits.

In addition, recipients of federal-aid highway and federal transit funds, including local governments and other public agencies, are required to ensure regionally significant projects which do not use federal funds satisfy conformity requirements (40 CFR § 93.121).

To accommodate changes to project scopes and schedules, new conformity analyses are periodically performed.

Current Situation

The transportation conformity determination for the 2045 Regional Transportation Plan (RTP) and 2019-2021 Transportation Improvement Program (TIP) received federal approval on August 2, 2019. Since that time H-GAC has taken action to amend the 2045 RTP and 2021-2024 (TIP). These significant project changes will require a new demonstration of air quality conformity. TxDOT is requesting the following amendments to the RTP:

- a. Reconstruct and widen San Jacinto river bridge on IH 10 E
- b. Reconstruct Houston Ship Channel Bridge on IH 610 E
- c. Reconstruct IH 610 S between SH 35 (Mykawa Rd/SS 5) and SH 288 and IH 610 direct connectors at SH 35 (Mykawa Rd/SS 5)
- d. Widen Grand Parkway (SH 99) by adding Segments E and F.
- e. Reconstruct and Widen Beltway 8 (BW 8) frontage roads between E of Hardy Toll Rd to E of Aldine Westfield Rd
- f. Convert SH 288 to Freeway between future SH 99 to FM 1452
- g. Advance the IH 45 N interchange change at IH 10 W reconstruction and addition of IH 10 express lanes and IH 45 managed lanes part of the North Houston Highway Improvement Project (NHHIP) Segment 3 project to FY 2022.

In accordance with 23 CFR§450.324 all projects are constrained by the financial resources estimated to be reasonably available within the RTP timeframe. A complete listing of the

projects in the RTP and TIP that affect this conformity analysis will be included in Appendix 3 of the conformity report.

Currently, our region is in non-attainment for two ozone standards:

- 2008 8-hr ozone standard (75 ppb) with classification of "serious"
- 2015 8-hr ozone standard (70 ppb) with classification of "marginal"

This conformity will demonstrate compliance to the latest emission budgets based on the revision to the air quality State Implementation Plan (SIP) for the 2008 8-hr Ozone Standard due to the reclassification from moderate to serious with attainment year 2020. The Reasonable Further Progress (RFP) SIP budget was found adequate by the Environmental Protection Agency (EPA) with an approval and effective date of June 9, 2021.

Year	NOx Budget (tons/day)	NOx Emissions (tons/day)	VOC Budget (tons/day)	VOC Emissions (tons/day)	VMT (Daily)
2020	87.69	77.00 ✓	57.70	51.59√	187.7M
2030	87.69	43.71√	57.70	33.41√	228.9M
2040	87.69	38.15√	57.70	25.05√	268.6M
2045	87.69	40.42√	57.70	25.63 🗸	286.7M

Air Quality Analysis Results

Conformity Timeline

- November 17, 2021: Pre-Consensus Conference Call/TAC and TPC announcement to continue Conformity
- November/December 2021: Model Network review (H-GAC/TxDOT/METRO)
- November/December 2021: Pre-Analysis Consensus document review
- February 2022: Travel Demand Model Runs
- March 2022: Air Quality Conformity Model Runs
- April 2022: TAC/TPC Conformity Preview for Amendments to the RTP and TIP
- May 2022: Public comment period May 2nd-June 3rd, 2022
- May 2022: Public meetings May 9th, 2022
- May/June 2022: No Public Comments Received
- June 2022: TAC Recommend Conformity approval to TPC
- June 2022: TPC Approves Conformity
- End of June 2022: Request Partner Review/Approval -- Approval will usually be 3 months after.

Action Requested

Recommend TPC approval.