# APPENDIX G

# 2020 TEXAS STATEWIDE LOCOMOTIVE AND RAIL YARD EMISSIONS INVENTORY AND 2011 THROUGH 2050 TREND INVENTORIES

Howard County Attainment Demonstration State Implementation Plan for the 2010 One-Hour Sulfur Dioxide National Ambient Air Quality Standard

2021-010-SIP-NR

# 2020 Texas Statewide Locomotive and Rail Yard Emissions Inventory and 2011 through 2050 Trend Inventories

FINAL REPORT

Prepared for the Texas Commission on Environmental Quality

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Texas A&M Transportation Institute

# FINAL REPORT

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**TASK 8.2** Final Report

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# LIST OF ACRONYMS AND ABBREVIATIONS

| Acronym | Definition |
|---|---|
| AAR | Association of American Railroads |
| AEO | Annual Energy Outlook |
| AEO | Annual Energy Outlook |
| AERR | Air Emissions Reporting Requirements |
| ASLRRA | American Short Line and Regional Railroad Association |
| ASQ/ANSI | American Society for Quality, American National Standard Institute |
| BNSF | Burlington Northern Sante Fe Corp. Railway |
| BTS | Bureau of Transportation Statistics |
| CAP | Criteria Air Pollutant |
| CERS | Consolidated Emissions Reporting Schema |
| CFR | Code of Federal Regulation |
| CN | Canadian National Railway |
| CO | Carbon Monoxide |
| CP | Canadian Pacific |
| CSX | CSX Transportation |
| DART | Dallas Area Rapid Transit |
| DCTA | Denton County Transit Authority |
| DERI | Diesel Emissions Reduction Incentive |
| DOT | Department of Transportation |
| EI | Emissions Inventory |
| EIA | Energy Information Administration |
| EIS | Emission Inventory System |
| EPA | Environmental Protection Agency |
| ERG | Eastern Research Group |
| ERTAC | Eastern Regional Technical Advisory Committee |
| FAF | Freight Analysis Framework |
| Form R-1 | Class I Railroad Annual Report |
| FRA | Federal Railroad Administration |
| FTA | Federal Transit Administration |
| HAP | Hazardous Air Pollutant |
| HC | Hydrocarbons |
| KCS | Kansas City Southern Railway |
| LADCO | Lake Michigan Air Directors Consortium |
| MGT | Million Gallon-Ton |
| MS | Microsoft |
| NARL | North American Rail Lines |
| NEI | National Emissions Inventory |

| Acronym | Definition |
|---|---|
| $NH_3$ | Ammonia |
| NIS | Not in Service |
| $NO_X$ | Oxides of Nitrogen |
| NS | Norfolk Southern |
| NTAD | National Transportation Atlas Database |
| Pb | Lead |
| PM | Particulate Matter |
| $PM_{10}$ Primary | Primary (filterable + condensable) particulate matter with an aerodynamic diameter equal to or less than 10 microns |
| $PM_{2.5}$ Primary | Primary (filterable + condensable) particulate matter with an aerodynamic diameter equal to or less than 2.5 microns |
| QA/QC | Quality Assurance and Quality Control |
| QAPP | Quality Assurance Project Pla |
| SCC | Source Classification Code |
| SIP | State Implementation Plans |
| $SO_2$ | Sulfur Dioxide |
| STB | Surface Transportation Board |
| TCEQ | Texas Commission on Environmental Quality |
| TERP | Texas Emission Reduction Plan |
| TexAER | Texas Air Emissions Repository |
| TRE | Trinity Railway Express |
| TTI | Texas A&M Transportation Institute |
| TxDOT | Texas Department of Transportation |
| TxLED | Texas Low Emission Diesel |
| ULSD | Ultra-Low-Sulfur Diesel |
| UP | Union Pacific Railroad |
| U.S. | United States |
| XML | Extensible Markup Language |

# EXECUTIVE SUMMARY

The Texas Commission on Environmental Quality (TCEQ) is required to submit periodic emissions inventories for all 254 Texas counties under the Air Emissions Reporting Requirements (AERR) to support the Environmental Protection Agency's (EPA) comprehensive three-year cycle National Emissions Inventory (NEI). Deliverables for this project included the development of the 2020 analysis year locomotive and rail yard nonroad mobile source emissions inventory (EI) data. It is required to be submitted to the EPA per the AERR. In addition to the 2020 AERR EI, statewide controlled and uncontrolled trend EIs were developed by projecting baseline emissions for all locomotive and rail yard source categories to calendar years 2011 through 2050. Annual and average summer weekday EI estimates were developed for criteria air pollutants (CAPs), CAP precursors (i.e., ozone precursors), and hazardous air pollutants (HAPs). These inventories and relevant activity data at the county level were used to develop Extensible Markup Language (XML) data summary files suitable for uploading to the TCEQ's Texas Air Emissions Repository (TexAER) and/or EPA's Emission Inventory System (EIS).

To estimate the county-level inventories, the Texas A&M Transportation Institute (TTI) used information collected from the Phase 1 project (PGA 582-20-11174-016, results submitted to TCEQ in August 2020). The 2019 annual and summer fuel usage for each Texas county developed in the Phase 1 study were used as the baseline from which other year's emissions were estimated by applying the appropriate projection factors. The projection factors for freight[1] and passenger locomotive activity were developed using annual energy outlook (AEO) data and national level fuel usage for Class I operators. This data is available from the Class I Railroad Annual Report (Form R-1) submitted annually by each Class I railroad operator to the Surface Transportation Board (STB).

The EPA-established emission factors for the years 2006 to 2040 for oxides of nitrogen ($NO_X$), and hydrocarbons (HC), carbon monoxide (CO), and particulate matter (PM) are used for estimating emissions; sulfur dioxide ($SO_2$) emissions are calculated based on the locomotive fuel-specific properties; ammonia ($NH_3$) emissions are calculated based on EPA recommended emission factors for nonroad engines; lead (Pb) emissions are computed by speciating PM based on speciation factors from NEI 2011. For all future years, 2040 and later, the 2040 emission factors were used. The HAP emission factors were estimated based on the augmentation factors provided by the EPA. The baseline fuel estimates along with projection factors and EPA's aggregated emission factors were used to estimate the carriers and county-specific locomotive emissions. These

[1] The freight category includes Class I, Class III, and associated yard activities.

locomotive EIs include Class I and III railroad activity and emissions for all counties in the state. Currently, there are no Class II operators in Texas. In addition, to estimate the uncontrolled and controlled emissions, TTI reviewed and considered EPA rulemakings and TCEQ programs such as the Texas low emission diesel (TxLED) program and Texas emission reduction plan (TERP).

Table 1 and Table 2 summarize the 2020 estimates of annual and summer weekday CAP emissions.

**Table 1. 2020 Annual Emissions by Criteria Pollutant[1,2] (tons/year).**

| Category[3] | VOC | CO | NOX | SO2 | NH3 | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|
| Class I | 1,067.54 | 7,497.68 | 26,938.66 | 26.26 | 23.38 | 647.71 | 628.28 |
| Class III | 74.48 | 140.83 | 1,345.44 | 0.56 | 0.50 | 32.04 | 31.08 |
| Passenger (Amtrak) | 10.06 | 82.01 | 275.24 | 0.29 | 0.26 | 6.47 | 6.27 |
| Commuter | 2.76 | 22.49 | 73.69 | 0.08 | 0.07 | 1.77 | 1.72 |
| Class I and Class III Switching Yards | 215.63 | 542.48 | 3,460.67 | 1.82 | 1.62 | 79.96 | 77.56 |
| Total | 1,370.46 | 8,285.49 | 32,093.69 | 29.01 | 25.82 | 767.95 | 744.92 |

[1] VOC = volatile organic compounds, $SO_2$ = sulfur dioxide, $NH_3$ = ammonia, $PM_{10}$ = particulate matter,
[2] Lead (Pb) emissions were less than 1 ton/ year,
[3] Currently, there are no Class II operators in Texas.

**Table 2. 2020 Summer Weekday Emissions by Criteria Pollutant (tons/day).**

| Category[1] | VOC | CO | $NO_X$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|
| Class I | 2.925 | 20.542 | 73.805 | 0.072 | 0.064 | 1.775 | 1.721 |
| Class III | 0.204 | 0.386 | 3.686 | 0.002 | 0.001 | 0.088 | 0.085 |
| Passenger (Amtrak) | 0.028 | 0.225 | 0.754 | 0.001 | 0.001 | 0.018 | 0.017 |
| Commuter | 0.008 | 0.062 | 0.202 | 0.000 | 0.000 | 0.005 | 0.005 |
| Class I and Class III Switching Yards | 0.591 | 1.486 | 9.481 | 0.005 | 0.004 | 0.219 | 0.212 |
| Total | 3.755 | 22.700 | 87.928 | 0.079 | 0.071 | 2.104 | 2.041 |

[1] Currently, there are no Class II operators in Texas.

This EI improved upon the previous EIs by incorporating the estimation of the passenger train (Amtrak) and regional commuter lines (TRE and DCTA) to the EI. The following are some areas where future estimation can be further refined.

- A detailed survey of the switching yards in Texas could improve the existing yard inventory.
- Fuel consumption per ton-mile data is available through FRA; however, this data is difficult to obtain. Using freight analysis framework (FAF) data to develop a tonnage assignment model for railroads would improve fuel consumption estimates without using the FRA tonnage data.

# 1.0 INTRODUCTION

The TCEQ works with local planning districts, the Texas Department of Transportation (TxDOT), and the TTI to develop emissions inventories of air pollutants for meeting various regulatory requirements. Per the EPA's AERR, the state of Texas is required to prepare and submit a comprehensive statewide periodic EI to support the EPA's NEI every three years. The three-year cycle inventory year for this work was 2020 and is due to the EPA by January 15, 2022.

This report describes work conducted by TTI on behalf of the TCEQ. Tasks involved the development of a comprehensive, statewide, nonroad mobile 2020 analysis year locomotive and rail yard source category EI. It is required to be submitted to the EPA per the AERR and to support revisions to various State Implementation Plans (SIP). In addition to the AERR EI, statewide controlled and uncontrolled trend EIs were also required within the project's scope. These were developed by projecting baseline emissions for all locomotive and rail yard source categories to calendar years 2011 through 2050. TTI developed annual (tons per year) and average summer weekday (tons per day) controlled and uncontrolled EI estimates of CAPs, CAP precursors (i.e., ozone precursors), and HAPs.

## 1.1 OBJECTIVE

The purpose of this document is to describe the methods and data used in the development of locomotive and rail yard source EIs for all 254 counties in Texas. The EI development methods described in this document were based on the EPA guidance for estimating locomotive-based EIs. The EIs were developed for each of the analysis years from 2011 through 2050. Annual and average summer weekday controlled and uncontrolled EIs were developed for each of these analysis years.

This project involved the development of electronic deliverables that were post-processed from each county EI into formats described below.

- Statewide 2020 AERR controlled EI for all locomotive and rail yard sources and all other associated data developed in the Consolidated Emissions Reporting Schema (CERS) XML format suitable for loading into the EPA EIS as nonpoint source-ready for locomotive line-haul sources (i.e., the movement of freight between terminals) and point source-ready for rail yard sources.
- Statewide 2020 AERR controlled and uncontrolled EIs for all locomotive and rail yard sources and all other associated data developed in the CERS XML format suitable for loading into TexAER as nonroad sources.

- Statewide 2011 through 2050 controlled and uncontrolled trend EI summary data provided in Microsoft (MS) Excel spreadsheets.
- Statewide 2011 through 2050 controlled and uncontrolled annual and ozone season daily EIs for all locomotive and rail yard source categories and all other associated data developed in the CERS XML format suitable for loading into TexAER as nonroad mobile sources.

## 1.2 ORGANIZATION

This report is organized as follows.

- **Section 2** details the scope of the EIs to include emissions sources and associated source classification codes (SCCs), pollutants, geographic coverage, temporal details, and control programs.
- **Section 3** provides the background information on the rail carriers operating in Texas and different locomotive emission sources.
- **Section 4** details the methodology and inputs used in developing the activity projection factors for passenger rail and Class I and Class III line-haul and yard sources.
- **Section 5** provides details on emissions projection factor development. Projection factors were developed from 2011 to 2050 and were developed with respect to 2019 activity.
- **Section 6** provides details on finalized activity data, emissions factors, forecasting factors, and emissions estimation.
- **Section 7** provides information on the development and preparation of the reporting files per appropriate guidance, including guidance from the TCEQ project manager:
  - 2020 AERR electronic activity data reporting files for all source categories in accordance with guidance provided by EPA.
  - AERR electronic EI reporting files of the locomotive line-haul component of the EI for nonpoint sources and the rail yard component of the EI for point sources for submission to EPA per the AERR.
  - Both locomotive line-haul and rail yard EI components for nonpoint sources are in a format ready to upload to the TCEQ's TexAER database.
- **Section 8** provides information on the quality assurance and quality control (QA/QC) procedures and project management processes employed in developing locomotive and rail yard EIs.
- **Section 9** concludes this report and provides recommendations for future work.

# 2.0 SCOPE OF EMISSIONS INVENTORY DEVELOPMENT

The scope of the EIs was framed in terms of the emissions sources, their SCCs, pollutants, geographic coverage, temporal details, control programs, and the basic emissions estimation methodology, as described below.

## 2.1 EMISSIONS SOURCES AND SCCS

The emissions sources for this EI include six SCCs: four for line-haul locomotives source categories and two for yard locomotives source categories. The line-haul SCCs are all reported under the nonpoint data category. Yard locomotives may be reported using either the SCC nonpoint or point data category, depending on the applicable reporting requirement.

Table 3 summarizes the SCCs, their descriptions, and associated EPA EIS data categories.

**Table 3. Mobile – Locomotives Sector Emissions Sources by SCC and Data Category.**

| SCC[1] | SCC Description (Levels 1 through 4) | Data Category |
|---|---|---|
| 2285002006 | Mobile Sources; Railroad Equipment; Diesel; Line-Haul Locomotives: Class I Operations | Nonpoint |
| 2285002007 | Mobile Sources; Railroad Equipment; Diesel; Line-Haul Locomotives: Class II / III Operations | Nonpoint |
| 2285002008 | Mobile Sources; Railroad Equipment; Diesel; Line-Haul Locomotives: Passenger Trains (Amtrak) | Nonpoint |
| 2285002009 | Mobile Sources; Railroad Equipment; Diesel; Line-Haul Locomotives: Commuter Lines | Nonpoint |
| 2285002010 | Mobile Sources; Railroad Equipment; Diesel; Yard Locomotives | Nonpoint |
| 28500201 | Internal Combustion Engines; Railroad Equipment; Diesel; Yard Locomotives | Point |

[1] These are the active SCCs for reporting locomotive and rail yard emissions (source: https://ofmpub.epa.gov/sccwebservices/sccsearch/. January 3, 2021).

Railroad equipment operations are categorized as line-haul and yard (or switching) operations. Line-haul is primarily the transport of cargo and/or passengers over long distances within a rail network, excluding switching. Based on their operating revenues and geographic coverage, railroad carriers are classified as Class I, II, or III. Class I railroad carriers generate most of the industry's revenues. Class II operators are mid-sized in terms of operating revenues. Currently, there are no Class II operators in Texas. Class III operators are considered local, short-line railroads and are relatively small in

terms of operating revenues. Switcher locomotives are used for maneuvering railroad cars inside rail yards in the process known as switching.[2]

## 2.2 POLLUTANTS

Railroad line-haul and yard EIs were estimated for the following CAPs and their precursors (Table 4) and the following HAPs (Table 5).

**Table 4. Criteria Air Pollutants and Precursors.**

| Pollutant | Description |
|---|---|
| VOC | Volatile organic compounds |
| $NO_X$ | Nitrogen oxides |
| CO | Carbon monoxide |
| $PM_{10}$ Primary | Primary (filterable + condensable) particulate matter with an aerodynamic diameter equal to or less than 10 microns |
| $PM_{2.5}$ Primary | Primary (filterable + condensable) particulate matter with an aerodynamic diameter equal to or less than 2.5 microns |
| Pb and Pb compounds | Lead and lead compounds |
| $NH_3$ | Ammonia |
| $SO_2$ | Sulfur dioxide |

HAP emissions were estimated by applying speciation profiles (or HAP fractions) to the VOC or $PM_{2.5}$ estimates. The latest available HAP fractions were applied[3] to produce EI estimates for the HAPs.

**Table 5. Mobile – Hazardous Air Pollutants.**

| Pollutant* | Pollutant Code | Base Pollutant (Fraction of) |
|---|---|---|
| 1,3-Butadiene | 106990 | VOC |
| 2,2,4-Trimethylpentane | 540841 | VOC |
| Acenaphthene | 83329 | VOC |
| Acenaphthylene | 208968 | VOC |
| Acetaldehyde | 75070 | VOC |
| Acrolein | 107028 | VOC |
| Benzene | 71432 | VOC |
| Ethyl Benzene | 100414 | VOC |

[2] For more detailed information on the types and categories of locomotive operations and specifically on rail operators in Texas, see Development of Statewide Locomotive and Rail Yard Activity Data Set (TTI, August 2020).

[3] Currently, the latest HAP fractions are available in the spreadsheet supplement "2017Rail_HAP_AugmentationProfileAssignmentFactors_20200128.xlsx" to the 2017 National Emissions Inventory Complete Release Technical Support Document (EPA, April 2020) (See Section 4.22.3.1).

| Pollutant* | Pollutant Code | Base Pollutant (Fraction of) |
|---|---|---|
| Formaldehyde | 50000 | VOC |
| Hexane | 110543 | VOC |
| Naphthalene | 91203 | VOC |
| Propionaldehyde | 123386 | VOC |
| Toluene | 108883 | VOC |
| Xylenes (Mixed Isomers) | 1330207 | VOC |
| 1,2,3,4,6,7,8-Heptachlorodibenzofuran | 67562394 | $PM_{2.5}$ Primary |
| 1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin | 35822469 | $PM_{2.5}$ Primary |
| 1,2,3,4,7,8-Hexachlorodibenzofuran | 70648269 | $PM_{2.5}$ Primary |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | 57117449 | $PM_{2.5}$ Primary |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin | 57653857 | $PM_{2.5}$ Primary |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | 72918219 | $PM_{2.5}$ Primary |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin | 19408743 | $PM_{2.5}$ Primary |
| 1,2,3,7,8-Pentachlorodibenzofuran | 57117416 | $PM_{2.5}$ Primary |
| 2,3,4,7,8-Pentachlorodibenzofuran | 57117314 | $PM_{2.5}$ Primary |
| 2,3,7,8-Tetrachlorodibenzofuran | 51207319 | $PM_{2.5}$ Primary |
| 2,3,7,8-Tetrachlorodibenzo-p-Dioxin | 1746016 | $PM_{2.5}$ Primary |
| Anthracene | 120127 | $PM_{2.5}$ Primary |
| Arsenic | 7440382 | $PM_{2.5}$ Primary |
| Benz[a]Anthracene | 56553 | $PM_{2.5}$ Primary |
| Benzo[a]Pyrene | 50328 | $PM_{2.5}$ Primary |
| Benzo[b]Fluoranthene | 205992 | $PM_{2.5}$ Primary |
| Benzo[g,h,i,]Perylene | 191242 | $PM_{2.5}$ Primary |
| Benzo[k]Fluoranthene | 207089 | $PM_{2.5}$ Primary |
| Chromium (VI) | 18540299 | $PM_{2.5}$ Primary |
| Chrysene | 218019 | $PM_{2.5}$ Primary |
| Dibenzo[a,h]Anthracene | 53703 | $PM_{2.5}$ Primary |
| Fluoranthene | 206440 | $PM_{2.5}$ Primary |
| Fluorene | 86737 | $PM_{2.5}$ Primary |
| Indeno[1,2,3-c,d]Pyrene | 193395 | $PM_{2.5}$ Primary |
| Manganese | 7439965 | $PM_{2.5}$ Primary |
| Mercury | 7439976 | $PM_{2.5}$ Primary |
| Nickel | 7440020 | $PM_{2.5}$ Primary |
| Octachlorodibenzofuran | 39001020 | $PM_{2.5}$ Primary |
| Octachlorodibenzo-p-Dioxin | 3268879 | $PM_{2.5}$ Primary |
| Phenanthrene | 85018 | $PM_{2.5}$ Primary |
| Pyrene | 129000 | $PM_{2.5}$ Primary |

* Source: Spreadsheet supplement "2017Rail_HAP_AugmentationProfileAssignmentFactors_20200128.xlsx" to the 2017 National Emissions Inventory Complete Release Technical Support Document (EPA, April 2020) (See Section 4.22.3.1).

## 2.3 Geographic and Temporal Levels of Coverage

The EI for the 2020 AERR and 2011 through 2050 trend EIs were produced at a county level for all 254 Texas counties. The temporal levels of coverage were average summer weekday (in units of tons per day) and annual calendar year (in units of tons per year). Since the variations in the activity do not vary in different seasons, the average daily estimates were used as the average summer weekday.

## 2.4 Control Programs

Emissions reductions were applied for locomotive and yard emissions estimates for the following control programs.

- EPA fleet average emission factors for fleet turnover by calendar year and locomotive type.
- EPA fleet average emission factors for cleaner locomotive diesel fuel.
- TCEQ's TERP grants utilization (for repowering or replacing engines) under the Diesel Emissions Reduction Incentive (DERI) Program.
- TxLED Program credits.

# 3.0 BACKGROUND

Texas has led the nation in terms of the total length of railroad miles within a state since 1911. Currently, the regulation of state railroads is with TxDOT. Rail networks play a major role in the state and national economy by helping to connect people and goods without congesting highways. The state railroad map is shown in Figure 1. *(1)* The Texas railroad system provides access to every region in the United States and to Mexico and Canada. In terms of economic impact for 2019, Texas railroads provided $219.5 billion in annual economic income, $71 billion in wages, and almost $26 billion in tax revenue. *(2)* This section describes the railroad carriers and railyard operations in Texas.

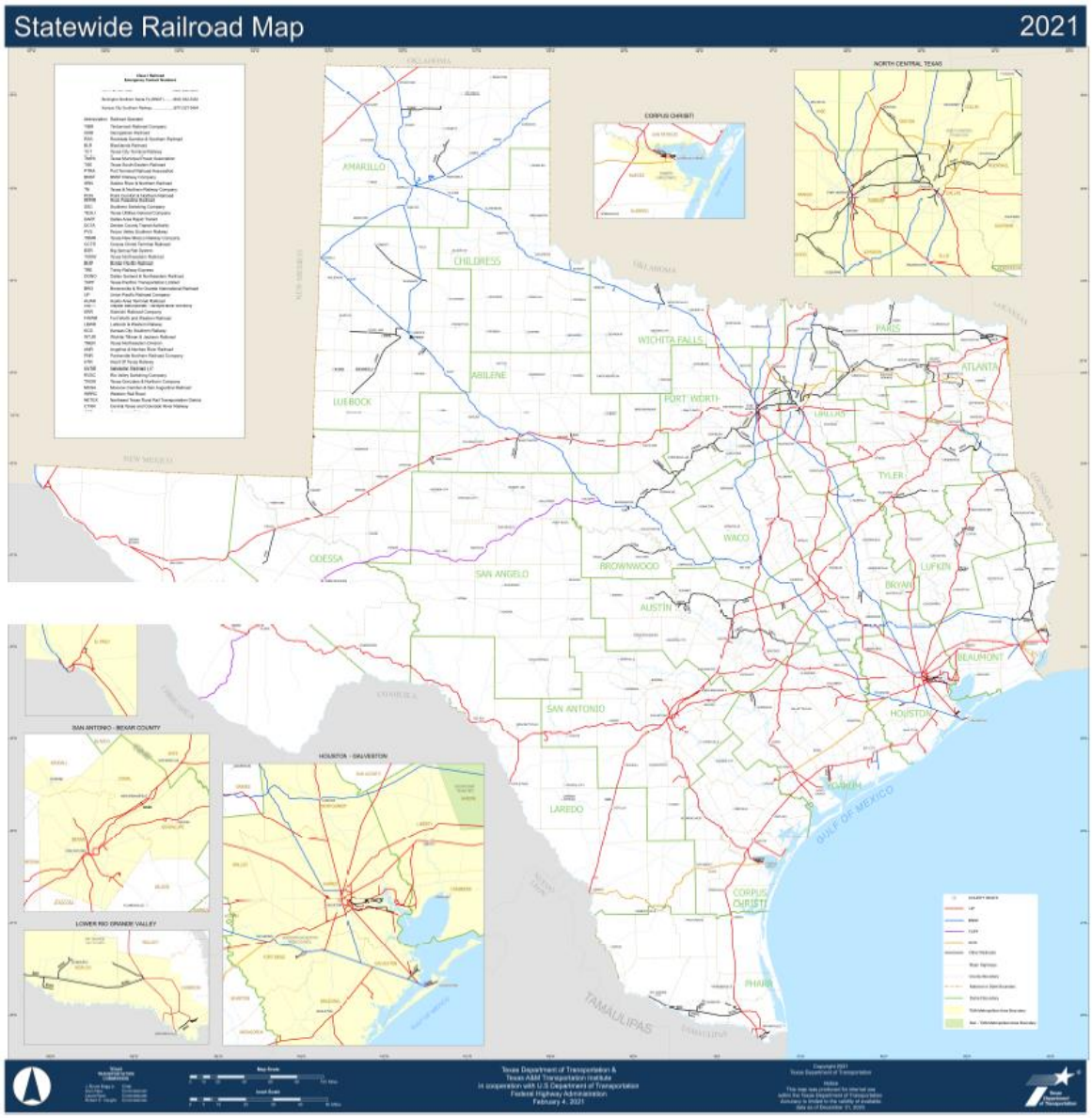


**Figure 1. Texas Railroad Map.**

## 3.1 Railroad Carriers

Rail operations or line-haul refers to freight movement by a carrier over its line, excluding switching or pick-up and delivery. Railroad carriers can be broadly classified into Class I, II, and III based on their operations, operating revenues, and geographic extent of coverage. Class I carriers cover major national and international networks and are more efficient than road transport in terms of moving cargo at an average rate of 10 pounds of freight over 500 miles with each gallon of diesel fuel *(3)* and operate at the highest level in terms of operating revenues amongst the three classes. The major Class I rail carriers operating in Texas consist of these three listed below. *(4)*

- Burlington Northern Sante Fe Corp. Railway (BNSF) – headquartered in Fort Worth, Texas.
- Kansas City Southern Railway (KCS) – headquartered in Kansas City, Missouri.
- Union Pacific Railroad (UP) – headquartered in Omaha, Nebraska.

These Class I operators also connect freight rail traffic with other Class I carriers and Class III carriers at interchange point locations throughout the state. Class II operators are mid-sized in terms of freight-hauling capacities and operating revenues. Currently, there are no Class II operators in Texas.

Class III operators are considered local short-line railroads operating within the state and are considered small in terms of operating revenues. These operators are used for specialized operations and are privately owned. There are approximately 55 Class III operators in Texas. *(4)*

A map of the major railroad carriers in Texas (BNSF, KCS, and UP) is shown in Figure 2. *(2)* The map legend lists all Class I carriers that operate in the United States, which is a total of seven.[4]

[4] The seven Class I freight railroads operating in the United States are BNSF, Canadian National (CN) Railway, Canadian Pacific (CP), CSX Transportation, KCS, Norfolk Southern (NS) Combined Railroad Subsidiaries, and UP. (Federal Railway Administration [FRA]).

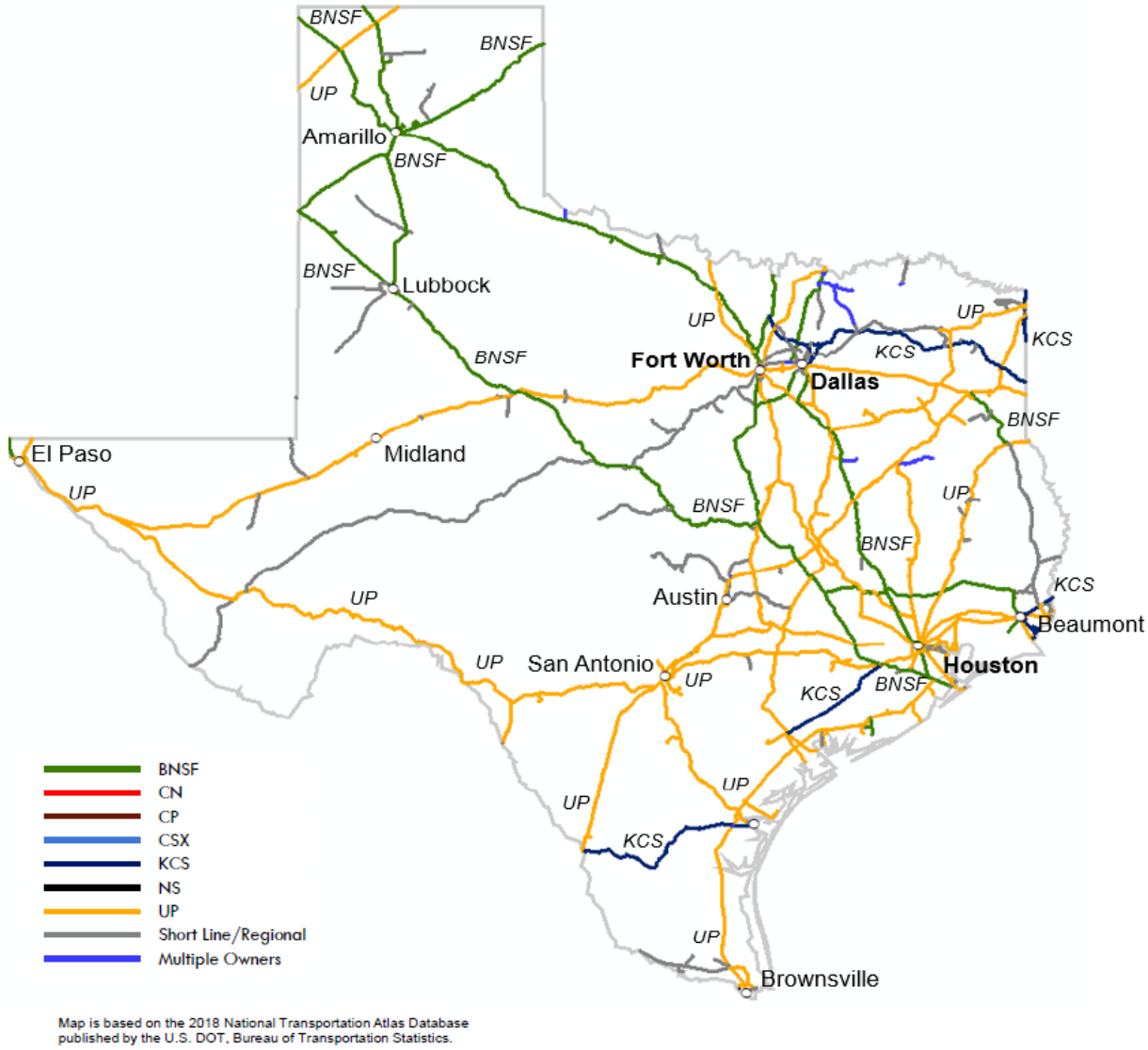


**Figure 2. Map of Major Railroad Carriers in Texas.**

## 3.2 Railyards

Railyards are located at strategic points along railroad corridors for performing activities related to the sorting, storing, loading, and unloading of freight. Railyards are classified into different types, such as switching, marshaling, shunting, freight, and other classifications depending on the type of activity performed. Compared to line-haul operations, yard switching operations generally include more idling activity and involve older locomotives. *(5)* This study includes a total of 292 yards. The list of these yards with their corresponding locations is presented in appendix A.

A map of the railyards in Texas is shown in Figure 3.

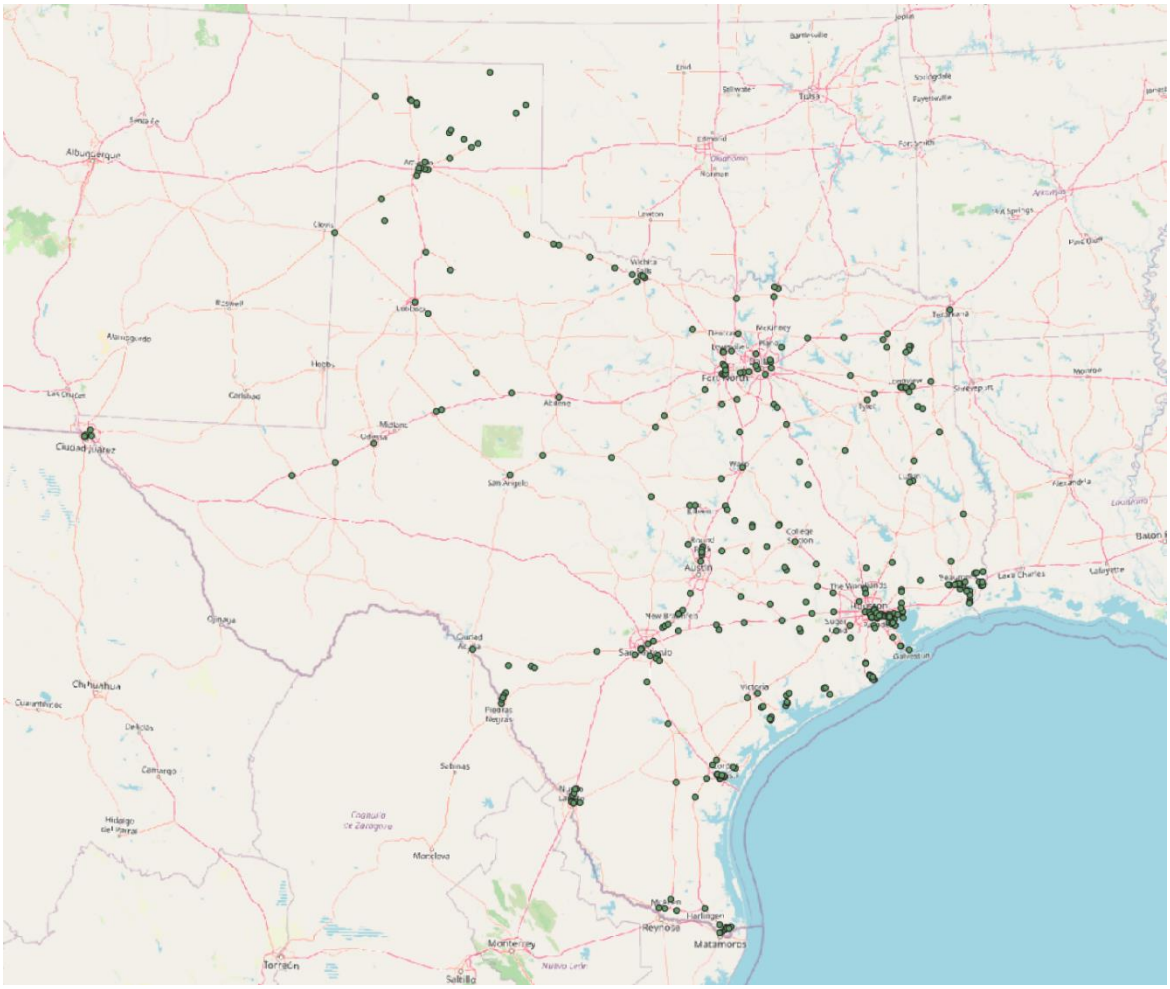


**Figure 3. Map of Class I and Class III Switching Yards in Texas.**

## 3.3 Passenger Trains and Regional Commuter Rail

Passenger trains, such as Amtrak, are considered cross-country passenger carriers. Amtrak relies on other railroads in Texas to operate routes using tracks not owned or controlled by Amtrak. Host railroads are statutorily required to provide Amtrak train "preference" over freight transportation. A map of the Amtrak operating network in Texas is shown in Figure 4. *(6)*

Amtrak operates two national network trains through Texas:

- The Sunset Limited (tri-weekly New Orleans-Los Angeles via Houston, San Antonio, and El Paso).
- The Texas Eagle (daily Chicago-Dallas-San Antonio with tri-weekly car service via the Sunset Limited to Los Angeles).

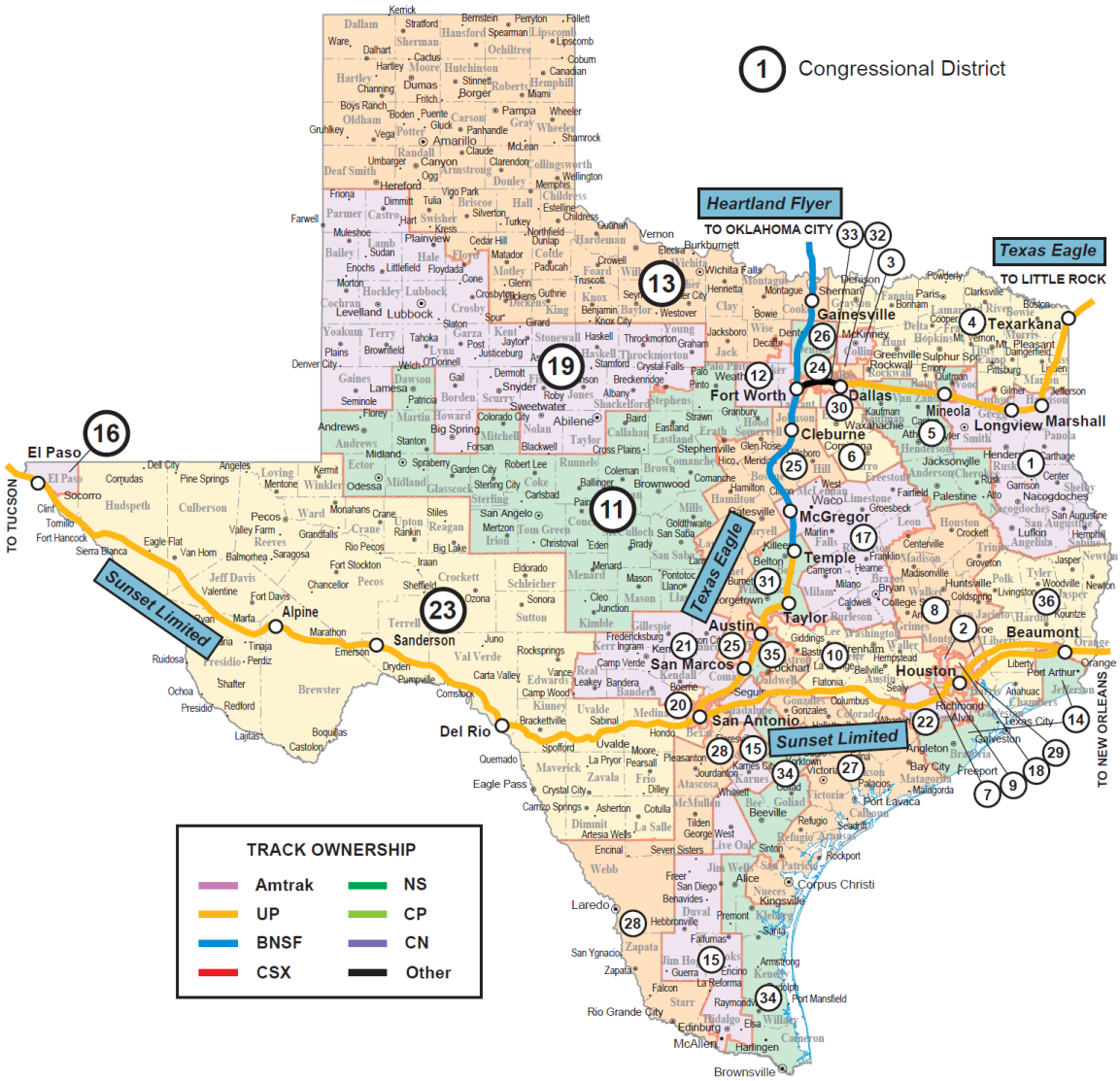


**Figure 4. Map of Amtrak Operating Network in Texas.**

On the other hand, regional commuter lines operate in smaller geographic areas transferring daily commuters from home and work and serving other local trip purposes. These include Dallas Area Rapid Transit (DART), Trinity Railway Express (TRE), Denton County Transit Authority (DCTA), Capital Metro, El Paso Streetcar, and METRORail. TRE and DCTA are the two regional commuter rail operators that use diesel locomotive engines and reported the fuel usage. Emissions are assumed to be zero for locomotives powered with electric engines; the activity of these locomotives is ignored for developing the EIs.

The A-train is DCTA's 21-mile commuter rail line connecting Denton and Dallas Counties. The A-train connects with the DART Green Line at the Trinity Mills Station in

Carrollton, Texas. Passengers can transfer to DART's Green Line, which provides access to DART's Red, Orange, and Blue Lines and the TRE. The A-train operates at 30-minute headways on weekdays, with 34 train round-trips per day. A map of the DCTA operating commuter lines is shown in Figure 5. *(7)*

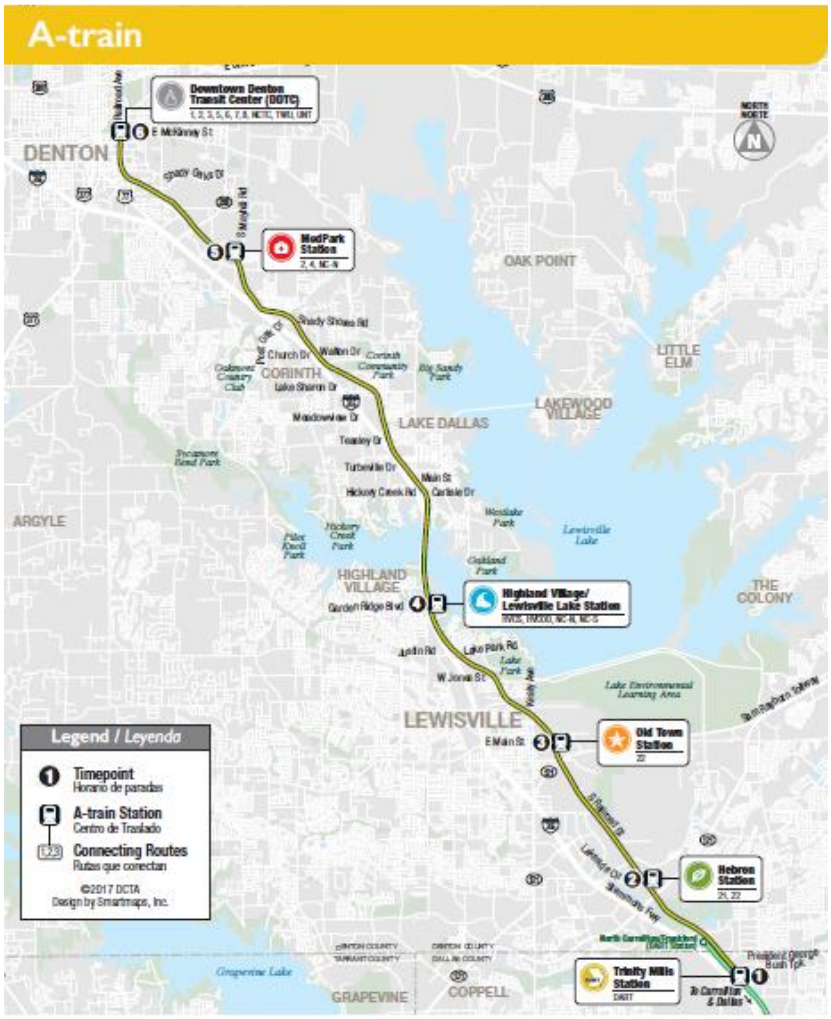


**Figure 5. Map of DCTA A-train Operating Network in Texas.**

The TRE is a 34-mile commuter rail corridor in the Dallas–Fort Worth Metroplex established by an interlocal agreement between DART and Trinity Metro. The corridor is a mix of single track and double track and has limited sidings. Rail traffic on the TRE is bidirectional, with an average daily operation of approximately 70 passenger trains. A map of the TRE operating commuter lines is shown in Figure 6. *(8)*

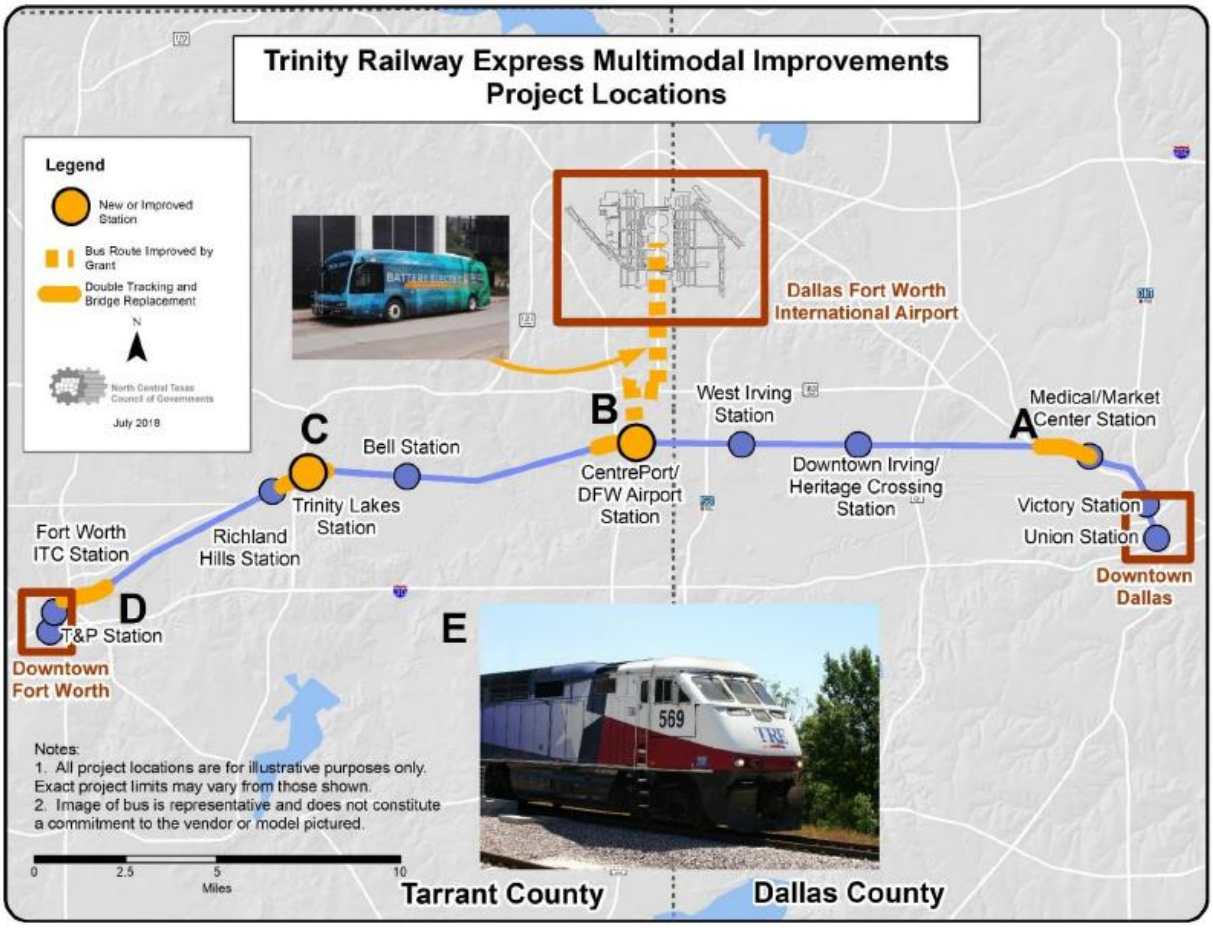


**Figure 6. Map of TRE Operating Network in Texas.**

# 4.0 DATA SOURCES AND EMISSIONS METHODOLOGY

This section describes the different activity datasets that TTI used in developing the emissions methodology. These datasets also assisted in identifying data gaps and in QA/QC. The following are brief descriptions of each dataset. All the data sources were reviewed and analyzed by TTI.

## 4.1 PRIOR STUDIES

The following sections provide details for previous locomotive EI and planning studies conducted at the national level and for Texas. TTI reviewed four studies for this initiative as documented in the following reports.

- "Specification Sheet: Rail 2017 National Emission Inventory", by the Illinois EPA and Lake Michigan Air Directors Consortium (LADCO) for the U.S. EPA, August 2019. *(9)*
- "2014 Texas Statewide Locomotive Emissions Inventory and 2008 through 2040 Trend Inventories", by the Eastern Research Group (ERG) for TCEQ, August 2015. *(10)*
- "Revised Inventory Guidance for Locomotive Emissions," by Sierra Research for the Southeastern States Air Resource Managers, Inc., June 2004. *(11)*
- "2019 Texas Rail Plan", TxDOT, December 2019. *(12)*

The four studies are described below.

### 4.1.1 Specification Sheet: Rail 2017 NEI

The Illinois EPA and LADCO prepared the Rail 2017 NEI report (for the U.S. EPA, August 2019). This report details the methodologies and data sources used to develop locomotive emissions estimates for the nonpoint locomotive (rail line-haul) and point locomotive (railyard) sectors. Five distinct components were included in the 2017 NEI rail inventory.

- Class I Line-Haul
- Class I Yard Switching Engines
- Class III Yard Switching Engines
- Class II and III Line-Haul
- Commuter Railroads

The Class I line-haul emission calculations were updated based on the 2016 million gallon-ton (MGT) per route mile data, an updated locomotive fleet mix provided by the Association of American Railroads (AAR), and 2017 Class I line-haul fuel use data. This is a link-level (each rail segment) inventory that can be aggregated at either state or county level. The Class I yard switching emissions were computed based on the average fuel usage per switcher and the number of switchers operational in a yard. Average fuel usage per switcher is estimated from 2017 fuel usage and switcher count data from the 14 largest railyards operated by BNSF, UP, KCS, and CSX. The average fuel use per switcher value was calculated by dividing the total fuel use by the number of switchers. The fuel usage rate per switcher was then used to allocate fuel use to all yards based on the number of switchers at each location. The age-based emission factors were from the EPA. Emissions calculations for Class III yard switching used the same methodology and data from the 2014 NEI[5].

The Class II and Class III line-haul and yard emissions were calculated based on:

- The nationwide Class II and III fuel use data reported by American Short Line and Regional Railroad Association (ASLRRA),
- The spatial location from the Bureau of Transportation Statistics' (BTS') National Transportation Atlas Database (NTAD),
- The national fleet mix by AAR for 2016, and
- Age-based emission factors from the EPA.

A national fuel use factor of 2,941.5 gallons per mile, which was derived from Delaware, Maryland, Michigan, New Jersey, and the Indiana Harbor Belt Railroad, was applied by the number of route miles operated in the United States to calculate the link-level fuel use of each Class II and III railroads. The emissions were estimated by multiplying fuel

[5] The 2017 NEI rail report (three-page) section entitled "Railyard Methodology" focuses almost entirely on Class I yards but does state for the non-Class I yards: "data… was carried forward from the 2014 NEI." Also the report's executive summary states that Class I line-haul and Class I yard switching were updated using 2017 fuel use data, while the data for the remaining sectors are based on data collected for the 2016v1 rail inventory (see: http://views.cira.colostate.edu/wiki/Attachments/Inventory%20Collaborative/Documentation/2016v1/after_comments/National-Emissions-Collaborative_2016v1_mobile-nonroad-rail_06May2020.pdf.) A note for Table 1 of the introduction in both 2016v1 and 2017 NEI rail inventory reports states "2012 estimated and 2017 reported fuel use data used for Class II/III railroads". As in the 2017 NEI report, the 2016v1 report also states "data… was carried forward from the 2014 NEI." The 2014 NEI rail sector documentation ("2014 ERTAC Rail Locomotive Emission Inventories for the United States" (Matthew Harrell and Mark Janssen, December 2017)) reports data sources for Class II and III Locomotives in Appendix A, as: Annual Total Fuel Use for 2012 (ASLRRA Annual Report [2014]), 2014 Track length and railroad (FRA confidential database), 2014 estimated fleet mix for emission factors (ASLRRA).

usage and age-based emission factors. The commuter rail emissions were calculated similarly to the Class II and Class III railroads except using the Federal Transit Administration (FTA) data from the National Transit Database. The intercity passenger rail emissions were calculated based on Amtrak's 2016 reported average fuel use of 2.2 gallons per passenger train mile, fleet mix information, and company-specific weighted emission factors. Amtrak's emission rates were 25 percent lower than the default Class II and III and commuter railroad emission rates.

### 4.1.2 2014 Texas Statewide Locomotive Emissions Inventory and 2008 through 2040 Trend Inventories

ERG developed the 2014 AERR and 2008 through 2040 trend statewide locomotive and rail yard EIs for annual and average summer weekday emissions (for TCEQ, August 2015). Data was developed for all criteria pollutants, ozone precursors, and HAPs and included controlled and uncontrolled emissions totals. ERG developed these inventories and relevant activity data by SCC for all Texas counties, summing emissions to the county level. During project development, activity data for 2014 were not available; therefore, ERG obtained activity data from 2013, as this represented the most recently available data when the project began. ERG collected activity data for 2013, including receiving line-haul and yard data directly from UP and KCS. BNSF did not provide updated data for 2013; however, they did respond to a previous data request for the 2011 inventory effort. This 2011 county-level fuel usage was extrapolated to 2013. Class II and III railroad companies did not provide line-haul data. As a result, ERG used other locally based data sources to estimate 2014 activity levels. The report associated with this project further describes the inventory approach, including an initial collection of local data, emission calculations, and spatial allocations used to develop the statewide locomotive inventories.

### 4.1.3 Revised Inventory Guidance for Locomotive Emissions

Sierra Research prepared this guide to illustrate how a state or local agency can calculate emissions from diesel-electric locomotives within an inventory area (prepared for Southeastern States Air Resource Managers, Inc., June 2004). Techniques from this 2004 study have been adapted for use in the EPA's subsequent NEIs, for the locomotive sector, and most recently in the 2017 NEI.

The main difference between this document and previous guidance is revised emission factors to account for locomotive emission standards phased in between 2000 and 2005. In addition, estimated adjustment factors to systemwide fuel use were included in this revision. The inventory methodology recommended in this guidance is described in four steps. First, the railroad operations need to be separated into Class I – line-haul, Class II

and Class III line-haul, and yard operations. Second, separate operating information needs to be obtained for each railroad operating in the inventory area. Third, emissions for each pollutant need to be calculated for each railroad by two sources, line-haul and yard. Finally, the total emissions in the inventory area are the sum of emissions for each railroad. Key findings from the study are listed below.

For Class I line-haul locomotives, emissions were calculated by multiplying annual railroad fuel use and appropriate emission factors for the inventory area. The annual railroad fuel use can be derived by dividing railroad traffic with the railroad fuel consumption index. The railroad fuel consumption index is the quotient of systemwide gross ton-miles and the system fuel consumption. Adjustment factor tables were also provided in terms of grade and bulk freight. The EPA provided the emission factors. The basic algorithm for Class II and III line-haul locomotives was the same as for Class I line-haul locomotives, except for Class II and III annual fuel consumption being obtained directly through interviews with each Class II and III railroads. Two different methods were recommended for yard emission calculations considering different data availabilities. The first method was to multiply fuel usage by the yard emission factor to calculate the total. The second method was to multiply the number of locomotives of yard operations by the annual emissions per locomotive.

### 4.1.4 2019 Texas Rail Plan

TxDOT prepared the 2019 Texas Rail Plan report to document the state's vision for rail operations, including reviewing the existing Texas rail system and identifying potential passenger rail and freight rail improvements, investments, and opportunities for the Future Rail Service and Investment Program (TxDOT, December 2019). Key findings from the report are listed below.

The state's 2019 Texas Rail Plan effort was integrated with, and expanded upon, the 2017 Texas Freight Mobility Plan and Texas Transportation Plan 2040. The main goals and objectives were safety, asset preservation and utilization, mobility and reliability, multimodal connectivity, and economic competitiveness. The report provided an overview and inventories of Texas's existing rail system as a baseline for planning and decision-making in the state. The overview provided three aspects: a description of the services and physical characteristics of the state's railroad network as they are today; rail service trends and forecasts; and needs and opportunities. The report also described ongoing, proposed, and potential initiatives to develop or expand the state's high-speed rail, intercity passenger rail, and commuter rail services. The related information presented included the potential changes to existing intercity passenger rail services in Texas that have been studied or considered, the passenger route alternative studies, service development plans, and related federal environmental requirements toward

expanding intercity passenger rail operations in the state and regional studies conducted by TxDOT.

Planned improvements to existing commuter rail services in Texas and potential new commuter rail services were summarized. The report identified the types of improvements and investments in freight rail focused on enhancing access to the state's rail network for shippers; enhancements to the multimodal connectivity; fixing rail service gaps; options for improvements to infrastructure, capacity, safety, and efficiency of rail service and operations, and economic development. The goals and objectives over the next 20 years and how these are to guide TxDOT to collaborate with regional and private stakeholders in future rail projects were described. A compendium of outreach activities that were conducted during the preparation of the Texas Rail Plan was also illustrated in this report.

## 4.2 Other Data Sources

### 4.2.1 STB

The STB collects Class I economic data on an annual basis for regulatory purposes and to monitor the financial health of the freight railroad industry. The data sources include the following.

- Annual R-1 Reports.
- Revenues & Earnings.
- Carloads & Volumes.
- Employment & Wage.
- Fuel Surcharges.

The Annual R-1 Reports contain information about finances and operating statistics, including the fuel usage and locomotive operations for each Class I railroad operator.

### 4.2.2 BTS

The BTS, a unit under the Department of Transportation (DOT), is a source of information on commercial aviation, multimodal freight activity, and transportation economics. Various spatial data sets, surveys, and reports pertaining to railroad activities were downloaded and analyzed. *(13)*

### 4.2.3 Eastern Regional Technical Advisory Committee (ERTAC)

The inventory development methods for locomotive emissions estimates vary dramatically from state to state. State air agencies from twenty-seven states coordinated by the ERTAC identified a need to better characterize and quantify rail-related emissions inventories. The ERTAC Rail Subcommittee was established with active representatives from twelve-member states, three regional planning offices, and the United States (U.S.) EPA. *(14)* The committee's goals are to:

- Standardize agencies' inventory development methods through a collaborative effort,
- Improve the quality of data received and the resulting emission inventories, and
- Reduce the administrative burden on railroad companies of providing data.

## 4.3 Emissions Estimation

Emission estimation for the locomotive sector uses the annual composite emission rates. These rates depend on the engine models and tier levels[6]. EPA provided composite emission factors by factoring in the engine fleet mix for different years. Aggregated emission factors can be combined with activity (fuel usage) to estimate the locomotive emissions specific to the railroad operator. The EI method estimates emissions by multiplying locomotive fleet activity, in terms of fuel usage, by emission rates per unit of fuel used.

The basic equation for calculating emissions from locomotives is shown in Equation 1.

$$E = A * EF \qquad \text{Equation 1}$$

Where:

$E$ = emissions (grams [g])
$A$ = activity of fuel usage (gallons [gal])
$EF$ = emission factor (g/gal)

[6] Tier levels refer to standards that are dependent on the date a locomotive is first manufactured as codified at 40 CFR part 1033. Additional information can be found in Section 5.2 of this report.

# 5.0 DEVELOPMENT OF PROJECTION FACTORS

This section describes the inputs and methodology followed by TTI in developing the projection factors for Class I line-haul, Class III line-haul, yard, and passenger rail operations. The projection factors were used to develop the trend emissions inventories for the years 2011 through 2050. In addition, validation of these factors with other datasets is also described in this section.

## 5.1 INPUT DATA

TTI used the 2020 and 2021 Annual Energy Outlook (AEO) projections *(15)* to develop the projection factors used in the trend analysis. The AEO makes projections and analyses of the United States energy supply, demand, and prices through the projection period of 2050. The projections are based on the Energy Information Administration's (EIA's) National Energy Modeling System, existing legislation, technological advancements, etc. The latest AEO projections for passenger rail and freight rail are shown in Figure 7.

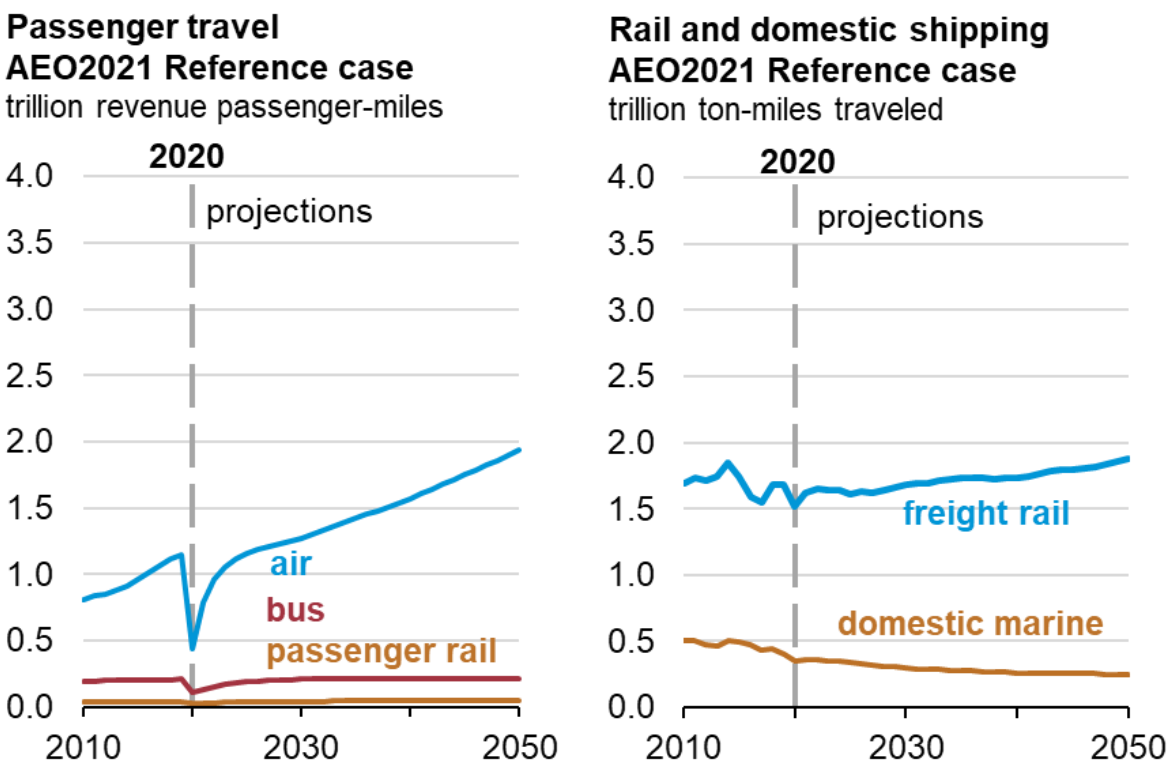


**Figure 7. AEO's Passenger and Freight Rail Projections from 2010-2050.**

In addition to the AEO, TTI used national-level fuel usage for Class I operators from the publicly available Form R-1 submitted to the STB annually. *(16)* TTI obtained the Form R-1 data for UP, BNSF, and KCS for 2011 through 2020. The Class I railroad operators' actual fuel usage was used along with AEO projections to estimate the projection factors needed for this study.

The following sections describe the process of estimating projection factors for Class I, and Class III line-haul and yard, and passenger rail sectors.

## 5.2 Class I Line-Haul and Yard Projection Factors

The key parameters extracted from the Form R-1 annual reports corresponded to freight, work train, and yard switching fuel consumption at the national level. The freight and work train (abbreviated as line-haul) national fuel usage values were multiplied by national freight commodity flows percent (extracted from the BTS) for Texas to develop line-haul fuel consumption for Texas (as shown in Table 6).

**Table 6. Texas-specific Line-haul Fuel Consumption (gallons).**

| Year | Railroad | National Usage (Line-haul) | Texas Consumption Factor | Texas Usage (Line-haul) |
|---|---|---|---|---|
| 2020 | BNSF | 1,153,804,129.00 | 13.57% | 156,575,079.26 |
| 2020 | KCS | 56,241,874.00 | 13.57% | 7,632,210.41 |
| 2020 | UP | 783,196,774.47 | 13.57% | 106,282,421.73 |
| 2019 | BNSF | 1,333,534,997.00 | 13.20% | 177,626,861.60 |
| 2019 | KCS | 63,249,190.00 | 13.20% | 8,424,792.11 |
| 2019 | UP | 881,700,708.32 | 13.20% | 117,442,534.35 |

For estimating yard switching fuel consumption for Texas, the ratios between the national-level yard and line-haul fuel usage (national consumption factor) were applied to Texas-specific line-haul consumption to develop Texas-specific yard fuel consumption, as shown in Table 7.

**Table 7. Texas-specific Yard Switching Fuel Consumption (gallons).**

| Year | Railroad | Texas Usage (Line-haul) | National Consumption Factor | Texas Usage (Yard) |
|---|---|---|---|---|
| 2020 | BNSF | 177,626,861.60 | 3.31% | 5,182,786.88 |
| 2020 | KCS | 8,424,792.11 | 5.80% | 443,019.72 |
| 2020 | UP | 117,442,534.35 | 9.79% | 10,400,229.15 |
| 2019 | BNSF | 181,738,259.72 | 3.52% | 6,258,086.71 |
| 2019 | KCS | 8,264,179.12 | 5.30% | 446,591.05 |
| 2019 | UP | 128,839,533.69 | 9.50% | 11,159,132.43 |

Based on the recommendation from the TCEQ project manager to include the impacts from the COVID-19 pandemic in estimating project factors, TTI staff explored the 2019 and 2020 AEO rail freight travel outlook data. It was confirmed that 2021 AEO data considered the COVID-19 pandemic impacts in their projections (Figure 8); therefore, the 2021 AEO data was used in estimating the projection factors.

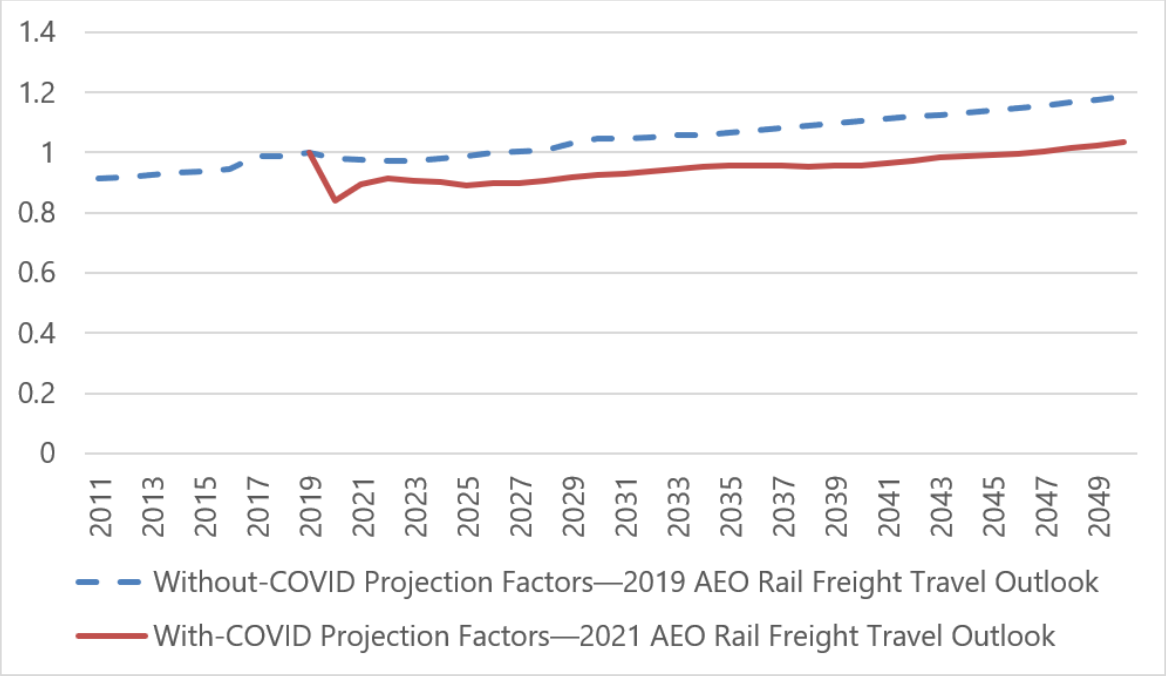


**Figure 8. 2019 and 2020 AEO Rail Freight Travel for Years 2011-2050.**

As stated previously, projection factors were estimated using two data sets. For 2011 through 2020, actual national fuel usage data reported by individual carriers scaled to Texas was used. For years 2021 through 2050, AEO 2021 data was used. The projection factors were developed using 2019 as the baseline (Figure 9). Additional details on the projection factors can be found below in Section 6.3.

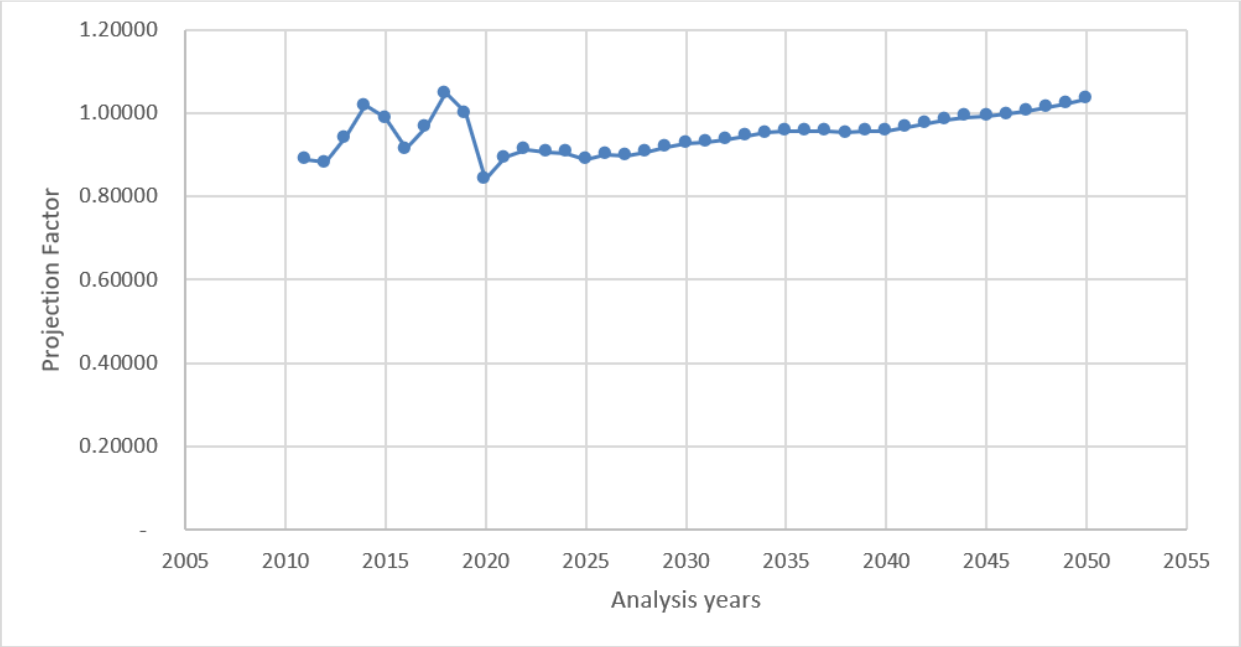


**Figure 9. Class I Line-haul and Yard Projection Factors for Years 2011-2050.**

## 5.3 Passenger Rail

Projection factors for passenger rail were developed using passenger rail travel data extracted from the 2021 AEO Rail Passenger Travel. The projection factors developed are shown in Figure 10. Although there was a drop in 2020 activity, the trend shows that it may bounce back to 2019 levels by 2025.

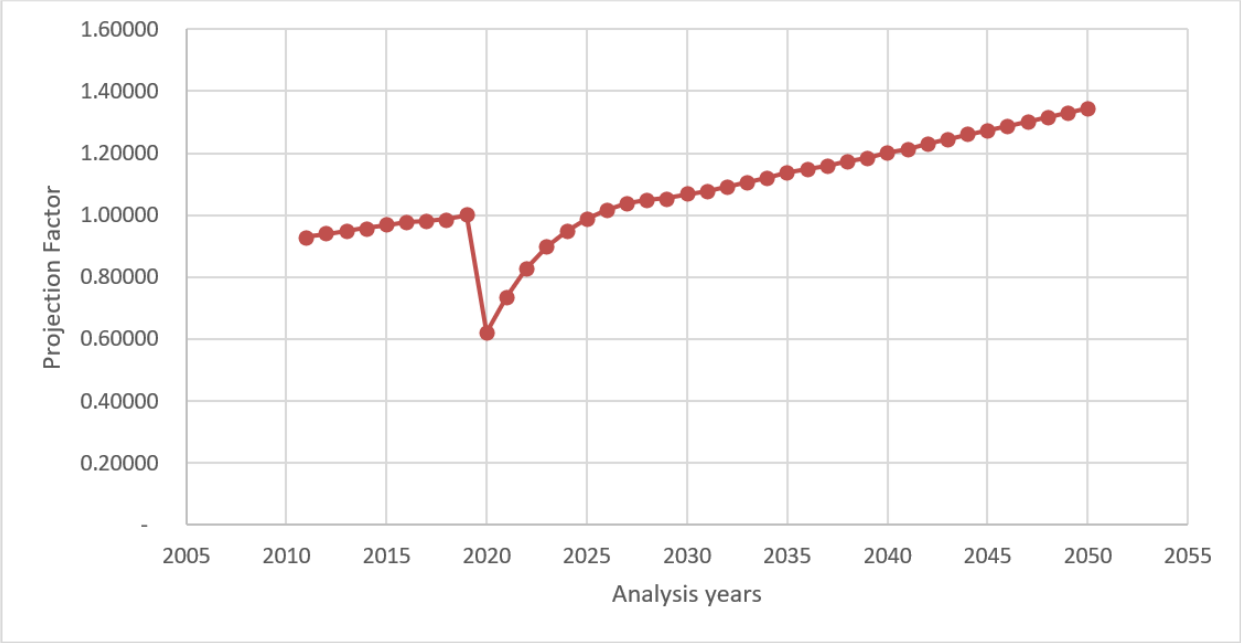


**Figure 10. Passenger Rail Projection Factors for Years 2011-2050.**

## 5.4 Class III Line-Haul and Yard

Class III railway operations are typical "short-line" critical connectors connecting Class I freight to local industries. They typically serve as the last-mile connection between Class I and the respective destination. As the operation of Class III rail is dependent on the operation of Class I, it is assumed that Class III projection rates would be the same as the Class I projection factors.

# 6.0 DEVELOPMENT OF TEXAS COUNTY SPECIFIC EMISSIONS

This section describes how the following EI elements—such as fuel usage, EPA aggregated emission rates, and emission control programs—were used in the development of Texas statewide 2011 through 2050 controlled and uncontrolled annual and average daily EIs. The following sections provide detailed information on each step.

## 6.1 FINALIZING BASELINE FUEL USAGE DATA

The Phase 1 deliverables of the project (submitted to TCEQ in August 2020) provide the 2019 fuel usage data for locomotive and rail yard sources collected by TTI. The 2019 annual and daily fuel usage for each county for all locomotive and rail yard sources was extracted from the appendices of the final Phase 1 report. The datasets used, sources of each dataset, and methodology employed by TTI in estimating the 2019 county-level annual and average daily fuel estimates for locomotive and rail yard operations are also described in the final Phase 1 report (Section 5.2 of the Phase 1 report).

The methodology involved identifying rail network links owned and operated in Texas for individual carriers (by track rights). The identified rail networks were grouped by line-haul/freight (main sub-network + major industrial lead + passing sidings)[7], industrial (minor industrial leads), and yard (yard tracks). Minor industrial and yard categories were grouped under yard operations. All abandoned rail lines were excluded from the analysis and grouped as "not in service" (NIS). Table 8 shows the grouping TTI used for the North American Rail Lines (NARL) rail network links spatial data.

[7] It was assumed that most of the Class I freight operations occur on the main sub network, passing sidings, and major industrial lead. Class I freight operations were grouped as line-haul. Most of the yard operations are limited to yard tracks and minor industrial leads.

**Table 8. TTI Grouping of NARL Rail Network Links.**

| Rail Network Link Description | Network Group |
|---|---|
| Abandoned line that has been physically removed | NIS |
| Abandoned rail line | NIS |
| Main subnetwork | Line-haul/freight |
| Major Industrial Lead | Line-haul/freight |
| Other track (minor industrial leads) | Industrial |
| Out of service line | NIS |
| Passing sidings over 4000 feet long | Line-haul/freight |
| Rail ferry connection | Ferry Slip |
| Trail on a former rail right-of-way | NIS |
| Transit-only rail line or museum/tourist operation | NIS |
| Yard Tracks | Yard Switching |

The following are the steps that were used to estimate baseline fuel usage for all 254 Texas counties for Class I, Class III, passenger, commuter, and yard operations.

**Class I:** Statewide 2019 estimated fuel consumption data for the line-haul/freight category were mapped to each county using the county percent contribution. The county percent contribution was estimated using the 2017 ERTAC supplied Class I operations emissions data for each county in Texas, which was first converted to fuel usage before estimating county percentages. The county percentages were applied to the statewide 2019 fuel estimates to calculate the 2019 total Class I railroad carrier fuel consumption by county.

**Class III:** For each of the ten railroad carriers that reported their fuel usage, the reported fuel usage was used in the EI. For companies that did not report the fuel usage data, an annual fuel consumption rate of 2,420.38 gallons per mile was used. This rate was obtained by dividing the statewide annual Class III fuel usage by the total carrier freight miles operated by the companies in Texas. The average annual fuel consumption rate was multiplied by the total Class III railroad carrier county-level freight miles to estimate the Class III carrier line-haul fuel consumption by county. Fuel usage for different carriers operating in a county was summed to get the Class III county-level fuel usage.

**Passenger Train:** All United States rail network links owned and operated by track rights for Amtrak were extracted from NARL data. The mile-mix (Amtrak link miles to line-haul link miles) for each Amtrak-operated rail network link was calculated by dividing each link's miles by the sum of all Amtrak link miles. The fuel consumption for each link was estimated by multiplying 2019 national Amtrak fuel usage by the estimated mile-mix. The county-level fuel consumption was obtained by summing the fuel consumption across all the links in the county.

**Commuter:** The county- and link-level estimation process is identical to the technique described above for passenger trains. Using the link-level mile-mix (link mile/total miles) for each commuter operator, the total 2019 fuel consumption was distributed to the individual links and counties.

**Class I and III Switching Yards:** Statewide yard fuel consumption was obtained from the R-1 report for Class I carriers. For each of the ten Class III railroad carriers that reported Texas fuel usage, statewide annual yard fuel usage was divided by the total yard and industrial carrier miles operated by the companies in Texas to estimate the average annual fuel consumption rate (gallons per mile). An annual fuel consumption rate of 5,160.48 gallons per mile was used for Class III companies that did not report the fuel usage data. The Class III annual fuel consumption rate is based on the combined statewide fuel consumption and miles of the ten Class III carriers that provided the fuel usage data. The average annual fuel consumption rate was multiplied by the statewide railroad carrier yard-level and industrial miles in Texas to estimate the switching yard fuel consumption by the individual carrier. The statewide yard fuel consumption by the individual carrier was summed across carriers to get the statewide yard fuel consumption. This statewide yard fuel consumption was distributed across different yards in Texas based on yard fuel distribution obtained from the 2017 ERTAC fuel consumption by the yard.

The 2019 finalized total fuel usage estimates for different railroad sectors are presented in Table 9.

**Table 9. Total Estimated 2019 Annual Fuel Usage.**

| Railroad Carrier | 2019 Annual Fuel Usage (gallons) |
|---|---|
| Class I | 303,494,188 |
| Class III | 6,514,925 |
| Passenger (Amtrak) | 4,489,675 |
| Commuter | 1,231,283 |
| Class I and Class III switching yards | 21,039,860 |

## 6.2 Development of Locomotive Emission Factors

The EPA has established emission standards for newly manufactured and remanufactured locomotives (EPA, April 2009)[8]. These standards include several sets of emission standards with applicability dependent on the date a locomotive is first

[8] Emission Factors for Locomotives, EPA Office of Transportation and Air Quality, EPA-420-F-09-025, April 2009.

manufactured and codified at 40 code of federal regulation (CFR) part 1033. The first set of standards (Tier 0) applies to most locomotives originally manufactured before 2001, and the most stringent set of standards (Tier 4) applies to locomotives originally manufactured in 2015 and later. The steady decline due to the penetration of the various tiers of locomotives into the fleet over time has been included in estimating locomotive emission factors for large line-haul, large switch, small railroads, and passenger/commuter. The EPA-established emission factors are available for 2006 to 2040 for $NO_X$, HC, CO, and PM. These were used for estimating emissions. $SO_2$ emissions are calculated based on the locomotive fuel-specific properties. $NH_3$ emissions are calculated based on EPA recommended emission factors for nonroad engines. Pb emissions are computed by speciating $PM_{10}$ based on speciation factors from NEI 2011.

For all future years 2040 and later, the 2040 emission factors were used. The HAP emission factors were estimated based on the augmentation factors provided by EPA. Appendix B (Electronic only) provides the emission rates for all CAP, greenhouse gases, and HAPs for 2011 through 2050.

## 6.3 Development of Forecasting Factors to Project 2019 Baseline EI to the Calendar Years 2011 Through 2050

Section 4 of this report provided the details on the datasets used, sources of each dataset, and methodology employed by TTI to estimate the projection factors for freight and passenger locomotive categories. As per the TCEQ project manager's recommendation, the projection factors were updated to include the impacts to future activity due to the COVID-19 pandemic using the 2021 AEO projections. The projection factors developed are listed in Table 10.

**Table 10. Projection Factors for Class I/III line-haul, Switching Yard, and Passenger Rail Activity.**

| Year | Class I/III Line-haul & Switching Yard | Passenger |
|---|---|---|
| 2011 | 0.88782 | 0.93010 |
| 2012 | 0.88087 | 0.93963 |
| 2013 | 0.94162 | 0.94916 |
| 2014 | 1.01886 | 0.95869 |
| 2015 | 0.98850 | 0.96822 |
| 2016 | 0.91398 | 0.97774 |
| 2017 | 0.96586 | 0.98051 |
| 2018 | 1.04953 | 0.98673 |
| 2019 | 1.00000 | 1.00000 |
| 2020 | 0.84178 | 0.62241 |
| 2021 | 0.89304 | 0.73614 |

| Year | Class I/III Line-haul & Switching Yard | Passenger |
|---|---|---|
| 2022 | 0.91270 | 0.82849 |
| 2023 | 0.90444 | 0.89994 |
| 2024 | 0.90411 | 0.94978 |
| 2025 | 0.88924 | 0.98893 |
| 2026 | 0.89903 | 1.01671 |
| 2027 | 0.89655 | 1.03772 |
| 2028 | 0.90623 | 1.04798 |
| 2029 | 0.91876 | 1.05425 |
| 2030 | 0.92712 | 1.06773 |
| 2031 | 0.93114 | 1.07728 |
| 2032 | 0.93640 | 1.09270 |
| 2033 | 0.94414 | 1.10659 |
| 2034 | 0.95198 | 1.12184 |
| 2035 | 0.95552 | 1.13628 |
| 2036 | 0.95643 | 1.14910 |
| 2037 | 0.95646 | 1.16095 |
| 2038 | 0.95342 | 1.17355 |
| 2039 | 0.95581 | 1.18515 |
| 2040 | 0.95770 | 1.20096 |
| 2041 | 0.96444 | 1.21438 |
| 2042 | 0.97440 | 1.22890 |
| 2043 | 0.98239 | 1.24458 |
| 2044 | 0.98987 | 1.25973 |
| 2045 | 0.99177 | 1.27311 |
| 2046 | 0.99741 | 1.28871 |
| 2047 | 1.00455 | 1.30228 |
| 2048 | 1.01398 | 1.31720 |
| 2049 | 1.02276 | 1.33144 |
| 2050 | 1.03361 | 1.34571 |

## 6.4 Estimation of Line-Haul and Yard EIs

After finalizing the 2019 fuel estimates, Equation 1 was used to estimate the carriers and county-specific locomotive emissions using EPA's aggregated emission factors.

To estimate the uncontrolled and controlled emissions, TTI reviewed various published resources, including EPA rulemaking and TCEQ programs such as the TxLED program and TERP. The details of these rulemakings and programs are provided in the Phase 1 report.

The TTI team used a sulfur content of 500 ppm to obtain an $SO_2$ emission rate for 2011 and a sulfur content of 15 ppm to obtain $SO_2$ emission rates for the years 2012 to 2050

for controlled and uncontrolled emissions. The sulfur content of the fuel was determined based on EPA's 2004 "Clean Air Nonroad Diesel Ruel."[9] This rule requires the sulfur levels for locomotives to be under 500 ppm starting in 2007 and under 15 ppm starting in 2012. TTI considered uncontrolled and controlled emissions in terms of the plans and programs implemented by TCEQ. Emission reductions due to EPA rules were accounted for in both controlled and uncontrolled emissions.

The $NO_X$ emissions were reduced by 6.2 percent for the 110 counties applicable to the TxLED program to develop the controlled EIs.[10] Appendix C provides the list of Texas counties and their TxLED factors. A county has a TxLED adjustment factor of 0.9380 if the TxLED program is applicable in that county.

The TERP program provided funding through the DERI program for retrofitting, repowering, and replacing switchers to reduce $NO_X$ emissions. Appendix D provides the DERI emission quantities for different years, quantities, and source types. These reductions were obtained by uniformly distributing the total emission reductions for different DERI projects in a region, equally across all yards and project life. TTI considered these reductions to be reflected in the fuel consumption data obtained from different carriers; thus, $NO_X$ emissions were increased by the projected DERI benefits to obtain the uncontrolled EIs. Projected TERP (or DERI) benefits were obtained from the TCEQ website.[11]

The projection factors discussed previously were applied to the 2019 county-level emissions to estimate statewide 2011 through 2050 controlled and uncontrolled trend EI county-level emissions for Class I and III line-haul and yard sources, passenger, and commuter operations.

[9] Clean Air Nonroad Diesel Rule (2004). EPA420-F-04–032. United States Environmental Protection Agency, Office of Transportation and Air Quality, p. 5. Available at: https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P10001RN.txt (Accessed: 3 May 2021).

[10] Texas Administrative Code. Available at: https://texreg.sos.state.tx.us/public/readtac%24ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=114&rl=318 (Accessed: 1 May 2021).

[11] TERP Project Summary Reports and Publications. Texas Commission on Environmental Quality. Available at: https://www.tceq.texas.gov/airquality/terp/leg.html (Accessed: 1 May 2021).

# 7.0 EMISSIONS REPORTING

Based on the methodology described in previous sections, the emissions summary and TexAER XML format output were prepared for the following sources.

- Class I Operations (SCC 2285002006)
- Class II / III Operations (SCC 2285002007)
- Passenger Trains-Amtrak (SCC 2285002008)
- Commuter Lines (SCC 2285002009)
- Yard Locomotives (SCC 2285002010).[12]

Appendix E provides the 2020 uncontrolled annual and daily county-level emissions for line-haul and yard switching operations. Appendix F provides the 2020 controlled annual and daily county-level emissions for line-haul and yard switching operations. The detailed emissions inventory results in a comma-delimited file format are also provided in Appendix G.

[12] These are the active SCCs for reporting Locomotive and Rail Yard emissions in EPA's NEI and AERR.

# 8.0 QUALITY ASSURANCE AND QUALITY CONTROL

TTI completed QA/QC of the gathered datasets and estimated activity as outlined in the quality assurance project plan (QAPP). All resulting EIs developed during this project were subjected to internal review and QA/QC procedures outlined in the QAPP, consistent with the requirements of American Society for Quality, American National Standard Institute ASQ/ANSI: E4:2014: Quality Management Systems for Environmental Information and Technology Programs – Requirements with Guidance for Use, February 2014, and the TCEQ's Quality Management Plan. All analyses and results obtained were subjected to appropriate internal review and QA/QC procedures, including independent verification and reasonableness checks. Any deficiencies found during development and end-product quality checks were noted and corrected. The QA/QC results are provided in Appendix H (electronic only). Some of the protocols that TTI followed are outlined below.

## 8.1 PROJECTION FACTORS

Projection factors developed by TTI were compared with the following two sets of data.

- **ERTAC**: Growth factors obtained from ERTAC for 2016 through 2032 were further extrapolated to 2050 and normalized to the 2019 baseline year to compare with TTI's projection factors.
- **ERG**: Projection factors developed by ERG for the years 2008 to 2040 were further extrapolated to 2050 and normalized to the 2019 baseline year to compare with TTI's projection factors.

Based on the comparison, TTI's projection factors (Figure 11) for line-haul and yard activity were similar to the ERG projection factors. The dip around the calendar year 2020 in TTI's curve represents the impact of the COVID-19 pandemic.

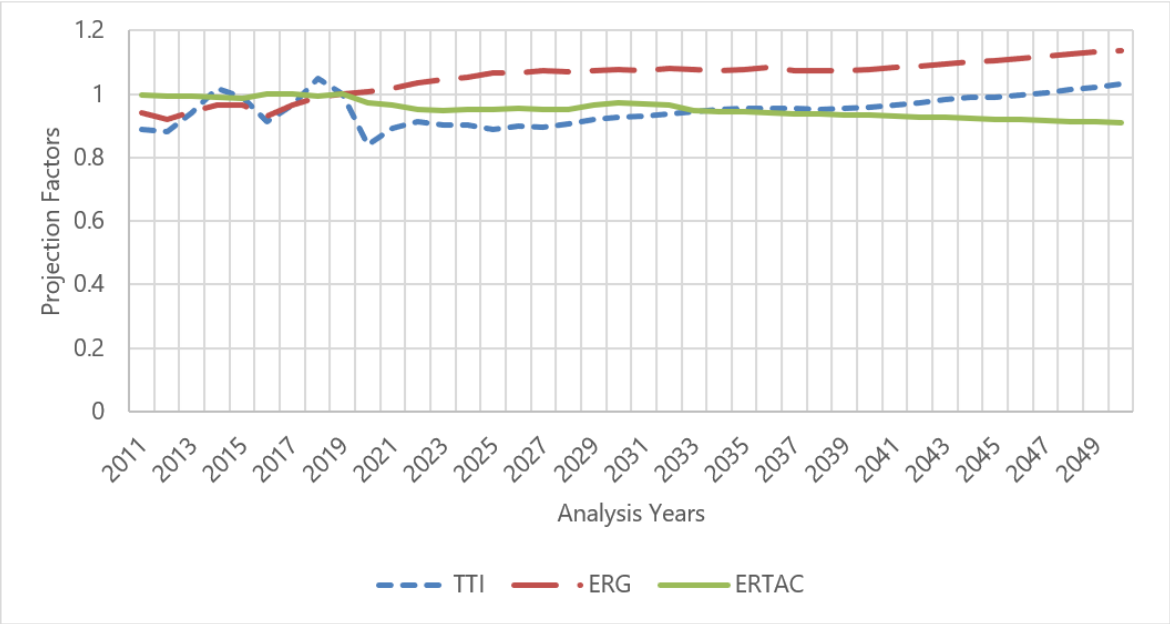


**Figure 11. Comparison of TTI's Class I and Class III Line-haul and Yard projection Factors with ERTAC and ERG's Factors.**

## 8.2 Emission Factors

Emission factors from TTI (based on EPA technical document) were compared with ERTAC's 2016 data for reasonableness. *(17)* The difference in factors is due to different sources used by TTI and ERTAC. TTI used the EPA's emission factors, whereas ERTAC used national-level information such as AAR fleet mixes and Amtrak's fleet mix to develop their emission factors. Table 11 shows the difference between the TTI and ERTAC emission factors.

**Table 11. 2016 TTI and ERTAC Emission Factor Comparison.**

| Source Classification Code Description | Pollutant | TTI Emission Factor (grams/gallon) | ERTAC Emission Factor (grams/gallon) | Percent Difference TTI vs. ERTAC |
|---|---|---|---|---|
| Class I | CO | 26.624 | 26.624 | 0.00% |
| Class I | NH3 | 0.083 | 0.083 | -0.35% |
| Class I | SO2 | 0.093 | 0.094 | -0.67% |
| Class I | NOX | 121.000 | 138.631 | -12.72% |
| Class I | PM10 | 3.100 | 4.117 | -24.70% |
| Class I | PM2.5 | 3.007 | 3.993 | -24.70% |
| Class I | VOC | 5.370 | 6.479 | -17.11% |
| Class III | CO | 23.296 | 26.624 | -12.50% |
| Class III | NH3 | 0.083 | 0.083 | -0.35% |
| Class III | SO2 | 0.093 | 0.094 | -0.67% |
| Class III | NOX | 239.000 | 216.401 | 10.44% |
| Class III | PM10 | 5.500 | 6.314 | -12.90% |

| Source Classification Code Description | Pollutant | TTI Emission Factor (grams/gallon) | ERTAC Emission Factor (grams/gallon) | Percent Difference TTI vs. ERTAC |
|---|---|---|---|---|
| Class III | PM2.5 | 5.335 | 6.125 | -12.90% |
| Class III | VOC | 12.320 | 9.977 | 23.48% |
| Passenger (Amtrak) | CO | 26.624 | 26.624 | 0.00% |
| Passenger (Amtrak) | NH3 | 0.083 | 0.083 | -0.35% |
| Passenger (Amtrak) | SO2 | 0.093 | 0.094 | -0.67% |
| Passenger (Amtrak) | NOX | 119.000 | 183.191 | -35.04% |
| Passenger (Amtrak) | PM10 | 3.100 | 6.469 | -52.08% |
| Passenger (Amtrak) | PM2.5 | 3.007 | 6.275 | -52.08% |
| Passenger (Amtrak) | VOC | 5.476 | 10.218 | -46.41% |
| Class I and III Yard | CO | 27.816 | 27.816 | 0.00% |
| Class I and III Yard | NH3 | 0.083 | 0.083 | -0.35% |
| Class I and III Yard | SO2 | 0.093 | 0.094 | -0.67% |
| Class I and III Yard | NOX | 208.000 | 178.120 | 16.78% |
| Class I and III Yard | PM10 | 4.600 | 4.668 | -1.46% |
| Class I and III Yard | PM2.5 | 4.462 | 4.528 | -1.46% |
| Class I and III Yard | VOC | 12.636 | 11.665 | 8.32% |

## 8.3 Fuel Usage

The Class I fuel usage data was compared with ERTAC data to ensure the distribution for fuel usage was applied appropriately to each county. The fuel usage distribution by county was the same between the two datasets.

## 8.4 Emissions Inventories

Aggregate emission checks were performed using previous EIs. The TTI-developed 2020 emissions were compared with the projected 2020 ERG inventories. As expected, the 2020 TTI inventory is lower than 2020 ERG estimates; this can most likely be attributed to the decrease in 2020 operations due to impacts from the COVID-19 pandemic.

The trend EIs were plotted for all the years to analyze variations. Yearly emission trends for constant emission factor pollutants such as CO, $NH_3$, and $CO_2$ were similar to the projection factors trend. $SO_2$ emissions dropped sharply after 2011 due to regulatory requirements to use ultra-low-sulfur diesel (ULSD) with 15 ppm sulfur content from 2012; this limit was 500 ppm before 2012. $NO_x$, PM, VOC, and HAP emissions decreased over time due to fleet turnover, which reduces the emission rates. The TTI team verified that the TexAER XML reporting data matches the raw data. Additionally, the final EI data was tested to ensure that it was imported into TCEQ's TexAER format.

# 9.0 CONCLUSIONS AND RECOMMENDATIONS

The 2020 total annual emissions estimate for $NO_x$ indicates that Class I line-haul accounted for approximately 90.5 percent of the total locomotive emissions in Texas, followed by switching yards (both Class I and Class III), Class III line-haul, passenger, and regional commuter at 6.5, 1.7 percent, 1 percent, and 0.3 percent respectively. The 2020 total annual VOC estimate indicates that Class I line-haul accounted for approximately 77.9 percent of the total locomotive emissions in Texas, followed by switching yards (both Class I and Class III), Class III line-haul, passenger, and regional commuter at 15.7, 5.4 percent, 0.7 percent, and 0.2 percent respectively. When comparing the projected 2020 EIs developed by ERG from the previous 2015 study with current 2020 TTI estimates, all emissions developed by TTI are lower; this can likely be attributed to the decrease in 2020 operations due to the COVID-19 pandemic. TTI suggests that these emissions estimates can be further improved by additional data collection and refining activity estimation methods.

This EI improved upon previous efforts by incorporating the estimation of the passenger train (Amtrak) and regional commuter lines (TRE and DCTA) to the EI. However, the lack of response or detailed activity data from Class I operators curtailed TTI's ability to distribute the fuel estimates based on Class I railroad activity on each railway network link. Many railroad operators that TTI communicated with felt that the data being requested were proprietary. The yard location and associated fuel usage data need to be improved due to the lack of information from local operators in Texas.

A detailed survey of the switching yards in Texas could improve the existing yard inventory. ERTAC data for Texas indicates 292 yards with non-zero emissions, whereas NARL identifies 178 yards. Based on exploratory data analysis TTI performed during this project, only 34 yards were found to be common between the two datasets. There is a need to investigate the discrepancies between the two datasets and develop a unified dataset to reconcile the differences between the ERTAC and NARL data.

Fuel consumption per ton-mile data is available through FRA; however, this data is difficult to obtain. It would be beneficial to explore other open-source datasets such as freight analysis framework (FAF) data to develop a tonnage assignment model for railroads, thus allowing to improve fuel consumption estimates without using the FRA tonnage data.

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# APPENDIX A: TEXAS RAIL YARDS

**Texas Rail Yards.**

| FIPS | County | EIS Facility Id | Yard Name | Latitude | Longitude |
|---|---|---|---|---|---|
| 48001 | Anderson | 14461911 | PALESTINE | 31.75769 | -95.6358 |
| 48005 | Angelina | 16912511 | Herty | 31.35547 | -94.679 |
| 48005 | Angelina | 16923311 | Lufkin | 31.34436 | -94.7283 |
| 48013 | Atascosa | 16924611 | Pleasanton | 28.97427 | -98.4813 |
| 48015 | Austin | 16914411 | Bellville | 29.92235 | -96.2406 |
| 48015 | Austin | 16918211 | Sealy1 | 29.7818 | -96.1671 |
| 48021 | Bastrop | 16917811 | Smithville | 30.00359 | -97.1575 |
| 48027 | Bell | 14462111 | TEMPLE | 31.11474 | -97.3488 |
| 48027 | Bell | 16917611 | Rogers | 30.93157 | -97.2253 |
| 48027 | Bell | 16933211 | Fort Hood | 31.12551 | -97.7805 |
| 48029 | Bexar | 14462211 | SAN ANTONIO EAST YARD | 29.43578 | -98.4579 |
| 48029 | Bexar | 16914711 | Calaveras Lake | 29.29981 | -98.3221 |
| 48029 | Bexar | 16918311 | San Antonio2 | 29.37695 | -98.5569 |
| 48029 | Bexar | 16922611 | Mitchell Lake | 29.30887 | -98.6406 |
| 48029 | Bexar | 16926311 | ALAMO Junction | 29.26126 | -98.3463 |
| 48029 | Bexar | 16928511 | San Antonio Central | 29.37842 | -98.5413 |
| 48029 | Bexar | 17872311 | SOUTH SAN ANTONIO | 29.37035 | -98.5628 |
| 48039 | Brazoria | 14462411 | Angleton 1 | 29.15718 | -95.4338 |
| 48039 | Brazoria | 16913911 | Brazosport | 28.94955 | -95.3215 |
| 48039 | Brazoria | 16916811 | Clute3 | 28.99836 | -95.3599 |
| 48039 | Brazoria | 16916911 | Clute1 | 29.01099 | -95.3872 |
| 48039 | Brazoria | 16922211 | Oyster Creek2 | 28.97251 | -95.3406 |
| 48039 | Brazoria | 16925111 | Pearland | 29.57753 | -95.2917 |
| 48039 | Brazoria | 16930111 | Angleton 2 | 29.15206 | -95.4335 |
| 48039 | Brazoria | 16931511 | Clute2 | 28.99696 | -95.3758 |
| 48039 | Brazoria | 16933311 | Freeport2 | 28.9528 | -95.3384 |
| 48039 | Brazoria | 16934211 | Oyster Creek1 | 28.98326 | -95.3429 |
| 48041 | Brazos | 17861911 | BRYAN | 30.66182 | -96.3743 |
| 48051 | Burleson | 16917011 | Chriesman | 30.60618 | -96.7753 |
| 48057 | Calhoun | 16921011 | Point Comfort1 | 28.66104 | -96.5537 |
| 48057 | Calhoun | 17869511 | NORTH SEADRIFT | 28.50735 | -96.778 |
| 48061 | Cameron | 14462711 | HARLINGEN | 26.20422 | -97.7068 |
| 48061 | Cameron | 16914911 | Cameron Park1 | 25.94146 | -97.439 |
| 48061 | Cameron | 16919111 | Reid Hope King5 | 25.96909 | -97.4177 |
| 48061 | Cameron | 16919211 | Reid Hope King4 | 25.97543 | -97.3522 |
| 48061 | Cameron | 16934011 | Olmito 1 | 25.99966 | -97.5078 |
| 48061 | Cameron | 16934511 | Reid Hope King2 | 25.95851 | -97.3862 |
| 48061 | Cameron | 16934911 | Reid Hope King1 | 25.9538 | -97.4112 |
| 48061 | Cameron | 16935011 | Reid Hope King3 | 25.95436 | -97.3819 |
| 48065 | Carson | 16918011 | Skellytown 1 | 35.58068 | -101.171 |
| 48065 | Carson | 16925311 | Panhandle | 35.34161 | -101.376 |

| FIPS | County | EIS Facility Id | Yard Name | Latitude | Longitude |
|---|---|---|---|---|---|
| 48067 | Cass | 15528811 | HUGHES SPRINGS | 32.99944 | -94.6389 |
| 48069 | Castro | 16926011 | Dimmitt | 34.55685 | -102.311 |
| 48071 | Chambers | 16913711 | Beach City | 29.69695 | -94.8928 |
| 48071 | Chambers | 16915011 | Baytown2 | 29.7586 | -94.8995 |
| 48071 | Chambers | 16915611 | Mont Belvieu | 29.87164 | -94.9091 |
| 48071 | Chambers | 16930611 | Baytown3 | 29.7726 | -94.8949 |
| 48085 | Collin | 15528911 | WYLIE | 33.03164 | -96.5017 |
| 48089 | Colorado | 16932911 | Eagle Lake2 | 29.60191 | -96.3473 |
| 48091 | Comal | 14463211 | JAMA1 | 29.8067 | -98.024 |
| 48091 | Comal | 16910211 | Garden Ridge | 29.6362 | -98.2581 |
| 48091 | Comal | 16912011 | Hunter | 29.80336 | -98.0366 |
| 48091 | Comal | 16919911 | Northcliff | 29.65388 | -98.2279 |
| 48091 | Comal | 16921111 | New Braunfels3 | 29.67864 | -98.1817 |
| 48099 | Coryell | 16916711 | Copperas Cove | 31.12766 | -97.86 |
| 48111 | Dallam | 16925811 | Dalhart | 36.07067 | -102.515 |
| 48113 | Dallas | 14463411 | BROWDER | 32.77498 | -96.8566 |
| 48113 | Dallas | 16913611 | Garland 2 | 32.88803 | -96.6737 |
| 48113 | Dallas | 16917211 | Carrollton 2 | 32.95916 | -96.8788 |
| 48113 | Dallas | 16927111 | Irving | 32.81345 | -96.8812 |
| 48113 | Dallas | 16927411 | MILLER YARD | 32.71074 | -96.7485 |
| 48113 | Dallas | 16927611 | MESQUITE | 32.78322 | -96.6616 |
| 48113 | Dallas | 17865311 | GRAND PRAIRIE | 32.74551 | -96.9872 |
| 48117 | Deaf Smith | 16926611 | Hereford 2 | 34.82508 | -102.37 |
| 48121 | Denton | 16910711 | Denton | 33.21336 | -97.127 |
| 48121 | Denton | 16911711 | Justin | 32.99691 | -97.3541 |
| 48121 | Denton | 16919011 | Roanoke | 33.00007 | -97.2304 |
| 48121 | Denton | 18343511 | HASLET (ALLIANCE) | 32.99066 | -97.3482 |
| 48135 | Ector | 14488911 | ODESSA | 31.84181 | -102.372 |
| 48139 | Ellis | 16926411 | ENNIS | 32.30099 | -96.5893 |
| 48141 | El Paso | 14463611 | ALFALFA | 31.7642 | -106.393 |
| 48141 | El Paso | 16926111 | El Paso 1 | 31.75331 | -106.493 |
| 48141 | El Paso | 16929411 | Fort Bliss | 31.83636 | -106.415 |
| 48141 | El Paso | 16930911 | El Paso 2 | 31.76565 | -106.48 |
| 48141 | El Paso | 16935211 | EL PASO SOUTH/INTERNATIONAL | 31.74995 | -106.479 |
| 48141 | El Paso | 18343411 | EL PASO | 31.7519 | -106.489 |
| 48143 | Erath | 16910411 | Dublin | 32.08706 | -98.3372 |
| 48143 | Erath | 16922011 | Stephenville | 32.22311 | -98.2094 |
| 48149 | Fayette | 16912911 | Halsted | 29.90784 | -96.7492 |
| 48149 | Fayette | 17864811 | FLATONIA | 29.68709 | -97.1159 |
| 48157 | Fort Bend | 16919811 | Rosenberg | 29.56041 | -95.8286 |
| 48157 | Fort Bend | 16920911 | Thompsons | 29.47294 | -95.6349 |
| 48157 | Fort Bend | 16921911 | Sugar Land | 29.62031 | -95.6405 |
| 48157 | Fort Bend | 16927811 | Kendleton_Intermodal | 29.46353 | -95.9743 |
| 48161 | Freestone | 16929011 | Teague | 31.63 | -96.2878 |
| 48167 | Galveston | 14463711 | GALVESTON | 29.30052 | -94.8237 |

| FIPS | County | EIS Facility Id | Yard Name | Latitude | Longitude |
|---|---|---|---|---|---|
| 48167 | Galveston | 16910611 | Dickinson | 29.45997 | -95.0446 |
| 48177 | Gonzales | 16912611 | Harwood2 | 29.66648 | -97.5015 |
| 48177 | Gonzales | 16912711 | Harwood1 | 29.60512 | -97.4681 |
| 48179 | Gray | 16914511 | Pampa 1 | 35.48265 | -101.052 |
| 48179 | Gray | 16927911 | Pampa 2 | 35.52939 | -100.963 |
| 48181 | Grayson | 16910811 | Denison 1 | 33.7537 | -96.5341 |
| 48181 | Grayson | 16925911 | RAY YARD | 33.77155 | -96.5841 |
| 48183 | Gregg | 16933611 | Greggton 2 | 32.50171 | -94.7886 |
| 48183 | Gregg | 17867911 | LONGVIEW_2 | 32.49455 | -94.7269 |
| 48185 | Grimes | 16921511 | Navasot | 30.38124 | -96.0865 |
| 48187 | Guadalupe | 17869111 | NOLTE SPUR | 29.59392 | -98.0341 |
| 48189 | Hale | 16928111 | Plainview | 34.19269 | -101.697 |
| 48197 | Hardeman | 16913311 | Goodlett 2 | 34.31763 | -99.8242 |
| 48197 | Hardeman | 16928211 | Quanah | 34.30422 | -99.738 |
| 48199 | Hardin | 14464111 | SILSBEE | 30.35854 | -94.189 |
| 48201 | Harris | 14464311 | BOOTH | 29.73578 | -95.2815 |
| 48201 | Harris | 14464611 | ENGLEWOOD | 29.7877 | -95.3153 |
| 48201 | Harris | 14464911 | STRANG | 29.68066 | -95.0397 |
| 48201 | Harris | 14487911 | East 1 | 29.79756 | -95.2922 |
| 48201 | Harris | 14488111 | EUREKA | 29.78273 | -95.4217 |
| 48201 | Harris | 14488511 | MARKET STREET | 29.71777 | -95.2864 |
| 48201 | Harris | 14488811 | NORTH YARD | 29.76418 | -95.293 |
| 48201 | Harris | 14489111 | SETTEGAST | 29.82028 | -95.2896 |
| 48201 | Harris | 14489211 | SOUTH | 29.75061 | -95.3456 |
| 48201 | Harris | 16911111 | Deer Park9 | 29.7132 | -95.1112 |
| 48201 | Harris | 16911211 | Deer Park7 | 29.72755 | -95.0842 |
| 48201 | Harris | 16912111 | Houston3 | 29.70115 | -95.2524 |
| 48201 | Harris | 16912311 | Hockley | 30.02364 | -95.8636 |
| 48201 | Harris | 16913211 | Greens Port | 29.75234 | -95.1968 |
| 48201 | Harris | 16915111 | Bayport North Industrial Park | 29.63986 | -95.09 |
| 48201 | Harris | 16920011 | Woodgate | 29.91347 | -95.5021 |
| 48201 | Harris | 16921411 | Taylor Lake Village | 29.60348 | -95.0108 |
| 48201 | Harris | 16922111 | Spring | 30.05954 | -95.4094 |
| 48201 | Harris | 16924311 | La Porte2 | 29.62428 | -95.0562 |
| 48201 | Harris | 16924411 | La Porte1 | 29.67599 | -95.013 |
| 48201 | Harris | 16925211 | CHEVRON PHILLIPS PASEDENA | 29.72267 | -95.1811 |
| 48201 | Harris | 16926811 | STORAGE YARD | 29.74472 | -95.2765 |
| 48201 | Harris | 16926911 | Houston2 | 29.71513 | -95.2623 |
| 48201 | Harris | 16929811 | Erinwilde | 30.0104 | -95.4004 |
| 48201 | Harris | 16931011 | Pasadena1 | 29.72268 | -95.1994 |
| 48201 | Harris | 16931811 | Deer Park1 | 29.72573 | -95.1539 |
| 48201 | Harris | 16932011 | Deer Park10 | 29.70499 | -95.0853 |
| 48201 | Harris | 16932111 | Deer Park11 | 29.70539 | -95.0625 |
| 48201 | Harris | 16932211 | Deer Park12 | 29.69927 | -95.0629 |
| 48201 | Harris | 16932311 | Deer Park3 | 29.72054 | -95.1246 |

| FIPS | County | EIS Facility Id | Yard Name | Latitude | Longitude |
|---|---|---|---|---|---|
| 48201 | Harris | 16932411 | Deer Park2 | 29.72431 | -95.1434 |
| 48201 | Harris | 16932511 | Deer Park4 | 29.72113 | -95.0999 |
| 48201 | Harris | 16932611 | Deer Park5 | 29.73898 | -95.093 |
| 48201 | Harris | 16932711 | Deer Park6 | 29.73358 | -95.0803 |
| 48201 | Harris | 16932811 | Deer Park8 | 29.71564 | -95.0822 |
| 48201 | Harris | 16935811 | GALENA PARK | 29.74805 | -95.218 |
| 48201 | Harris | 17860911 | Baytown 2 | 29.73514 | -94.967 |
| 48201 | Harris | 17864111 | ELDON | 29.81315 | -94.9196 |
| 48201 | Harris | 17865111 | GLASS YARD | 29.79134 | -95.2885 |
| 48201 | Harris | 17872111 | SINCO | 29.70922 | -95.252 |
| 48201 | Harris | 17874611 | WEST BAYPORT | 29.64678 | -95.0387 |
| 48201 | Harris | 17876311 | TOWER 87 | 29.79939 | -95.2886 |
| 48201 | Harris | 18343611 | HOUSTON SOUTH | 29.71396 | -95.3328 |
| 48201 | Harris | 18343711 | MARKET STREET (UP) | 29.76828 | -95.2601 |
| 48201 | Harris | 18702111 | BAYPORT | 29.63832 | -95.0383 |
| 48201 | Harris | 18702211 | GALENA PARK (UP) | 29.73014 | -95.2224 |
| 48203 | Harrison | 16923411 | Longview Heights | 32.50389 | -94.6396 |
| 48203 | Harrison | 16929611 | Ferguson Creek Reservoir | 32.44093 | -94.6873 |
| 48209 | Hays | 16923511 | Mountain City | 30.05072 | -97.8602 |
| 48211 | Hemphill | 16913411 | Glazier | 36.01184 | -100.258 |
| 48211 | Hemphill | 16917411 | Canadian | 35.90649 | -100.401 |
| 48215 | Hidalgo | 16910111 | Edinburg1 | 26.31866 | -98.164 |
| 48215 | Hidalgo | 16915911 | Alamo | 26.1778 | -98.0883 |
| 48215 | Hidalgo | 16919711 | Kane | 26.20766 | -98.2475 |
| 48215 | Hidalgo | 16922811 | Mission | 26.21456 | -98.3292 |
| 48217 | Hill | 16912411 | Hillsboro | 32.0095 | -97.1335 |
| 48221 | Hood | 16916311 | Cresson | 32.5351 | -97.6218 |
| 48227 | Howard | 14465111 | BIG SPRING | 32.25336 | -101.485 |
| 48227 | Howard | 16928311 | ZILER | 32.27286 | -101.409 |
| 48233 | Hutchinson | 16914011 | Borger 1 | 35.65681 | -101.39 |
| 48233 | Hutchinson | 16924911 | Phillips | 35.68999 | -101.368 |
| 48241 | Jasper | 16927211 | Jasper | 30.92576 | -93.9844 |
| 48245 | Jefferson | 14465511 | CHAISON | 30.05485 | -94.0748 |
| 48245 | Jefferson | 16914611 | Beaumont2 | 30.07598 | -94.0903 |
| 48245 | Jefferson | 16917111 | Central Gardens2 | 29.99969 | -93.9838 |
| 48245 | Jefferson | 16917911 | Smith Island | 30.06122 | -94.0425 |
| 48245 | Jefferson | 16919611 | Port Neches | 29.98408 | -93.9466 |
| 48245 | Jefferson | 16920311 | PORT ARTHUR | 29.85377 | -93.9486 |
| 48245 | Jefferson | 16927311 | Jefferson County1 | 30.07803 | -94.2425 |
| 48245 | Jefferson | 16930711 | Beaumont1 | 30.06882 | -94.0764 |
| 48245 | Jefferson | 16930811 | Beaumont3 | 30.08377 | -94.095 |
| 48245 | Jefferson | 16931411 | Central Gardens1 | 29.98618 | -93.9913 |
| 48245 | Jefferson | 17861011 | Beaumont 0 | 30.07332 | -94.1493 |
| 48251 | Johnson | 16915711 | Alvarado | 32.41015 | -97.1626 |
| 48289 | Leon | 16920811 | Newby | 31.34921 | -96.1694 |

| FIPS | County | EIS Facility Id | Yard Name | Latitude | Longitude |
|---|---|---|---|---|---|
| 48291 | Liberty | 16926711 | Hightower | 30.37232 | -95.0162 |
| 48291 | Liberty | 16928811 | DAYTON(BNSF) | 30.01501 | -94.9034 |
| 48291 | Liberty | 17863211 | DAYTON | 30.03904 | -94.8995 |
| 48297 | Live Oak | 16922311 | Three Rivers | 28.46025 | -98.1867 |
| 48303 | Lubbock | 14466411 | LUBBOCK | 33.58016 | -101.837 |
| 48309 | McLennan | 16923111 | McGregor | 31.44275 | -97.4054 |
| 48309 | McLennan | 16925611 | BELLMEAD | 31.58012 | -97.1015 |
| 48321 | Matagorda | 16920511 | Wadsworth | 28.78965 | -95.9416 |
| 48321 | Matagorda | 16923211 | Matagorda County2 | 28.86291 | -96.0232 |
| 48321 | Matagorda | 16934111 | Matagorda County1 | 28.87115 | -96.0039 |
| 48323 | Maverick | 14466611 | EAGLE PASS | 28.70259 | -100.498 |
| 48323 | Maverick | 16911011 | Elm Creek4 | 28.75816 | -100.487 |
| 48323 | Maverick | 16911811 | Elm Creek1 | 28.83521 | -100.435 |
| 48323 | Maverick | 16933011 | Elm Creek2 | 28.79926 | -100.464 |
| 48323 | Maverick | 16933111 | Elm Creek3 | 28.77227 | -100.473 |
| 48325 | Medina | 16912211 | Hondo | 29.34458 | -99.1762 |
| 48331 | Milam | 16915811 | Alcoa Lake | 30.5611 | -97.0703 |
| 48331 | Milam | 16917511 | Cameron2 | 30.87446 | -96.9782 |
| 48331 | Milam | 16931311 | Cameron1 | 30.8467 | -96.9816 |
| 48339 | Montgomery | 16914811 | Beach2 | 30.31531 | -95.3849 |
| 48341 | Moore | 16913811 | Cactus 1 | 36.04115 | -101.995 |
| 48341 | Moore | 16921611 | Sunray 2 | 35.98202 | -101.891 |
| 48341 | Moore | 16931111 | Sunray 1 | 36.00786 | -101.891 |
| 48341 | Moore | 16931211 | Cactus 2 | 36.02897 | -101.975 |
| 48343 | Morris | 16916111 | Daingerfield | 32.99543 | -94.6592 |
| 48343 | Morris | 16923611 | Lone Star | 32.95318 | -94.6636 |
| 48343 | Morris | 16926211 | TN | 32.92491 | -94.7122 |
| 48347 | Nacogdoches | 16921711 | Nacogdoches | 31.60338 | -94.6592 |
| 48349 | Navarro | 17862911 | CORSICANA | 32.09059 | -96.4621 |
| 48353 | Nolan | 16928911 | Sweetwater | 32.49416 | -100.404 |
| 48355 | Nueces | 14487511 | AGNESSTREETYARD | 27.78563 | -97.4848 |
| 48355 | Nueces | 16914211 | Bishop1 | 27.56649 | -97.8229 |
| 48355 | Nueces | 16916011 | Corpus Christi2 | 27.80859 | -97.4146 |
| 48355 | Nueces | 16916411 | Corpus Christi9 | 27.8417 | -97.5228 |
| 48355 | Nueces | 16916511 | Corpus Christi4 | 27.82113 | -97.4265 |
| 48355 | Nueces | 16918911 | Robstown | 27.78591 | -97.6635 |
| 48355 | Nueces | 16931611 | Corpus Christi6 | 27.81823 | -97.4618 |
| 48355 | Nueces | 16931711 | Corpus Christi7 | 27.81745 | -97.4801 |
| 48355 | Nueces | 16931911 | Corpus Christi8 | 27.83017 | -97.5041 |
| 48355 | Nueces | 16934811 | Corpus Christi1 | 27.824 | -97.4518 |
| 48361 | Orange | 14489011 | ORANGE | 30.08892 | -93.7662 |
| 48361 | Orange | 16918711 | Rose City | 30.08455 | -94.0752 |
| 48361 | Orange | 16921811 | Mule Island | 30.04557 | -93.7794 |
| 48361 | Orange | 16923811 | Lemonville | 30.20868 | -93.8436 |
| 48361 | Orange | 16924511 | Owens-Illinois Reservoir | 30.21484 | -93.7487 |

| FIPS | County | EIS Facility Id | Yard Name | Latitude | Longitude |
|---|---|---|---|---|---|
| 48361 | Orange | 16924711 | Plant Reservoir2 | 30.0564 | -93.7623 |
| 48361 | Orange | 16930211 | Vidor | 30.09905 | -94.0055 |
| 48361 | Orange | 16930411 | West Orange | 30.06885 | -93.7686 |
| 48361 | Orange | 16934411 | Plant Reservoir1 | 30.04928 | -93.7586 |
| 48361 | Orange | 16935711 | Orangefield | 30.09387 | -93.8084 |
| 48365 | Panola | 16925511 | Beckville | 32.23113 | -94.5024 |
| 48369 | Parmer | 16929711 | Farwell | 34.3907 | -103.039 |
| 48375 | Potter | 14466811 | SOUTH AMARILLO | 35.19268 | -101.832 |
| 48375 | Potter | 16915311 | Amarillo 5 | 35.19778 | -101.693 |
| 48375 | Potter | 16915411 | Amarillo 4 | 35.20428 | -101.746 |
| 48375 | Potter | 16915511 | Amarillo 3 | 35.21703 | -101.8 |
| 48375 | Potter | 16930511 | Amarillo 1 | 35.28602 | -101.744 |
| 48375 | Potter | 18343311 | AMARILLO (UP) | 35.21252 | -101.829 |
| 48381 | Randall | 16917311 | Canyon | 35.12128 | -101.857 |
| 48389 | Reeves | 16928011 | Pecos | 31.41264 | -103.519 |
| 48395 | Robertson | 14466911 | HEARNE 1 | 30.87476 | -96.5897 |
| 48399 | Runnels | 16915211 | Ballinger | 31.73824 | -99.9503 |
| 48401 | Rusk | 16910511 | Dirgin | 32.26077 | -94.566 |
| 48409 | San Patricio | 16910911 | Del Sol-Loma Linda | 28.01017 | -97.5294 |
| 48409 | San Patricio | 16918111 | Odem | 27.95241 | -97.5793 |
| 48409 | San Patricio | 16933711 | Gregory1 | 27.92522 | -97.2963 |
| 48419 | Shelby | 16929211 | Tenaha 2 | 31.94053 | -94.2781 |
| 48423 | Smith | 14489411 | TYLER | 32.36012 | -95.2888 |
| 48423 | Smith | 16920111 | Winona | 32.44158 | -95.1871 |
| 48439 | Tarrant | 14467111 | CENTENNIAL | 32.72521 | -97.3768 |
| 48439 | Tarrant | 14467311 | HODGE | 32.80999 | -97.3157 |
| 48439 | Tarrant | 14488711 | NORTH | 32.8244 | -97.332 |
| 48439 | Tarrant | 16914311 | Berkeley Place | 32.71894 | -97.3446 |
| 48439 | Tarrant | 17869011 | NEY YARD | 32.72438 | -97.3228 |
| 48439 | Tarrant | 17876211 | PEACH | 32.76725 | -97.3234 |
| 48441 | Taylor | 16911611 | Abilene | 32.44896 | -99.728 |
| 48449 | Titus | 14467611 | MOUNT PLEASANT | 33.15944 | -94.9661 |
| 48449 | Titus | 16924111 | Lake Monticello | 33.09195 | -95.0337 |
| 48451 | Tom Green | 16918411 | San Angelo 2 | 31.49679 | -100.412 |
| 48453 | Travis | 16918811 | Northtech Business Center | 30.44478 | -97.712 |
| 48463 | Uvalde | 16916211 | Dabney | 29.16328 | -100.091 |
| 48463 | Uvalde | 16922911 | Mine | 29.14162 | -100.04 |
| 48469 | Victoria | 16914111 | Bloomington2 | 28.66192 | -96.8714 |
| 48469 | Victoria | 16919411 | Raisin | 28.7712 | -97.0903 |
| 48469 | Victoria | 16920611 | Victoria2 | 28.82187 | -96.9464 |
| 48473 | Waller | 16911311 | Katy | 29.79234 | -95.8564 |
| 48473 | Waller | 17865711 | HEMPSTEAD | 30.10764 | -96.082 |
| 48475 | Ward | 16922511 | Monahans | 31.59185 | -102.906 |
| 48477 | Washington | 16919511 | Quarry | 30.31569 | -96.5113 |
| 48479 | Webb | 14467911 | LAREDO | 27.52269 | -99.5166 |

| FIPS | County | EIS Facility Id | Yard Name | Latitude | Longitude |
|---|---|---|---|---|---|
| 48479 | Webb | 16911411 | El Cuatro | 27.50614 | -99.5167 |
| 48479 | Webb | 16921211 | Tex-Mex Industrial Park | 27.51163 | -99.4521 |
| 48479 | Webb | 16921311 | Tejas Industrial Park | 27.58783 | -99.5028 |
| 48479 | Webb | 16922711 | Missouri Pacific Railyards | 27.6661 | -99.4456 |
| 48479 | Webb | 16923011 | Milo Distribution Center | 27.6137 | -99.485 |
| 48479 | Webb | 16923911 | LAX | 27.49855 | -99.4903 |
| 48479 | Webb | 16925411 | Laredo_Yard | 27.50113 | -99.4027 |
| 48479 | Webb | 17870311 | PORT LAREDO | 27.67127 | -99.4686 |
| 48485 | Wichita | 16911511 | Electra | 34.02956 | -98.9216 |
| 48485 | Wichita | 16911911 | Iowa Park | 33.94985 | -98.6639 |
| 48485 | Wichita | 16916611 | Kay-Bub | 33.86258 | -98.5909 |
| 48485 | Wichita | 16920211 | Wichita Falls 3 | 33.93106 | -98.5411 |
| 48485 | Wichita | 16929311 | Wichita Falls 2 | 33.90866 | -98.4833 |
| 48485 | Wichita | 16935611 | Wichita Falls 1 | 33.9298 | -98.5023 |
| 48487 | Wilbarger | 16920711 | Vernon | 34.16147 | -99.2838 |
| 48491 | Williamson | 14468011 | TAYLOR | 30.56739 | -97.4145 |
| 48491 | Williamson | 16913511 | Georgetown | 30.62047 | -97.6806 |
| 48491 | Williamson | 16918511 | Round Rock4 | 30.57061 | -97.6983 |
| 48491 | Williamson | 16918611 | Soil Conservation Service Site 10a | 30.58814 | -97.6966 |
| 48491 | Williamson | 16923711 | Liberty Hill | 30.64779 | -97.8858 |
| 48491 | Williamson | 16935111 | Round Rock2 | 30.53806 | -97.6992 |
| 48491 | Williamson | 16935311 | Round Rock1 | 30.523 | -97.6963 |
| 48491 | Williamson | 16935511 | Round Rock3 | 30.55409 | -97.6986 |
| 48493 | Wilson | 16928611 | Mission Rail Elmendorf | 29.2328 | -98.3023 |
| 48497 | Wise | 16925711 | Chico | 33.27493 | -97.7958 |
| 48499 | Wood | 16920411 | West Mineola | 32.66993 | -95.523 |

# APPENDIX B: EMISSION RATES (ELECTRONIC ONLY)

Available from the TCEQ upon request.

# APPENDIX C:
# TEXAS LOW-EMISSION DIESEL PROGRAM FACTORS (ELECTRONIC ONLY)

Available from the TCEQ upon request.

# APPENDIX D: DERI EMISSION QUANTITIES (ELECTRONIC ONLY)

Available from the TCEQ upon request.

# APPENDIX E: UNCONTROLLED 2020 ANNUAL AND DAILY COUNTY-LEVEL EMISSIONS FOR TEXAS

## Uncontrolled 2020 Annual County-Level Emissions by Criteria Pollutant (tons/year)[1].

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Anderson | 2285002006 | 5.5108 | 38.7039 | 143.9187 | 0.1356 | 0.1207 | 3.3436 | 3.2433 |
| Anderson | 2285002007 | 0.8436 | 1.5951 | 15.8173 | 0.0064 | 0.0057 | 0.3629 | 0.3520 |
| Anderson | 2285002010 | 1.2922 | 3.2510 | 23.4615 | 0.0109 | 0.0097 | 0.4792 | 0.4648 |
| Andrews | 2285002007 | 0.1067 | 0.2017 | 2.0004 | 0.0008 | 0.0007 | 0.0459 | 0.0445 |
| Angelina | 2285002006 | 1.5084 | 10.5938 | 39.3924 | 0.0371 | 0.0330 | 0.9152 | 0.8877 |
| Angelina | 2285002007 | 0.0889 | 0.1681 | 1.6669 | 0.0007 | 0.0006 | 0.0382 | 0.0371 |
| Angelina | 2285002010 | 0.4381 | 1.1022 | 24.3672 | 0.0037 | 0.0033 | 0.1625 | 0.1576 |
| Armstrong | 2285002006 | 5.7425 | 40.3313 | 149.9700 | 0.1413 | 0.1257 | 3.4842 | 3.3796 |
| Atascosa | 2285002006 | 1.4953 | 10.5017 | 39.0502 | 0.0368 | 0.0327 | 0.9072 | 0.8800 |
| Atascosa | 2285002010 | 0.0074 | 0.0186 | 1.3910 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Austin | 2285002006 | 8.5045 | 59.7295 | 222.1011 | 0.2092 | 0.1862 | 5.1599 | 5.0051 |
| Austin | 2285002010 | 0.0148 | 0.0372 | 2.9934 | 0.0001 | 0.0001 | 0.0055 | 0.0053 |
| Bailey | 2285002006 | 1.0499 | 7.3739 | 27.4194 | 0.0258 | 0.0230 | 0.6370 | 0.6179 |
| Bastrop | 2285002006 | 4.6068 | 32.3548 | 120.3098 | 0.1133 | 0.1009 | 2.7951 | 2.7112 |
| Bastrop | 2285002007 | 0.5412 | 1.0234 | 10.1475 | 0.0041 | 0.0036 | 0.2328 | 0.2258 |
| Bastrop | 2285002010 | 0.8615 | 2.1673 | 14.5704 | 0.0073 | 0.0065 | 0.3195 | 0.3099 |
| Bell | 2285002006 | 13.3271 | 93.6008 | 348.0499 | 0.3279 | 0.2918 | 8.0860 | 7.8434 |
| Bell | 2285002007 | 0.3884 | 0.7344 | 7.2818 | 0.0029 | 0.0026 | 0.1671 | 0.1621 |
| Bell | 2285002008 | 0.2204 | 1.7980 | 6.2806 | 0.0063 | 0.0056 | 0.1418 | 0.1376 |
| Bell | 2285002010 | 1.8986 | 4.7766 | 32.1118 | 0.0160 | 0.0143 | 0.7041 | 0.6829 |
| Bexar | 2285002006 | 18.4055 | 129.2675 | 480.6746 | 0.4528 | 0.4030 | 11.1672 | 10.8322 |
| Bexar | 2285002007 | 0.3843 | 0.7267 | 7.2061 | 0.0029 | 0.0026 | 0.1653 | 0.1604 |
| Bexar | 2285002008 | 0.5106 | 4.1645 | 14.5471 | 0.0146 | 0.0130 | 0.3285 | 0.3186 |
| Bexar | 2285002010 | 6.6875 | 16.8245 | 121.9696 | 0.0564 | 0.0502 | 2.4799 | 2.4055 |
| Bosque | 2285002006 | 10.1039 | 70.9629 | 263.8719 | 0.2486 | 0.2212 | 6.1304 | 5.9464 |
| Bosque | 2285002008 | 0.2443 | 1.9926 | 6.9603 | 0.0070 | 0.0062 | 0.1572 | 0.1525 |
| Bowie | 2285002006 | 10.2246 | 71.8104 | 267.0232 | 0.2515 | 0.2239 | 6.2036 | 6.0175 |
| Bowie | 2285002007 | 2.6697 | 5.0482 | 50.0569 | 0.0202 | 0.0180 | 1.1485 | 1.1140 |
| Bowie | 2285002008 | 0.0549 | 0.4477 | 1.5640 | 0.0016 | 0.0014 | 0.0353 | 0.0343 |
| Brazoria | 2285002006 | 10.2604 | 72.0622 | 267.9596 | 0.2524 | 0.2247 | 6.2253 | 6.0386 |
| Brazoria | 2285002010 | 5.9116 | 14.8725 | 113.7012 | 0.0499 | 0.0444 | 2.1922 | 2.1264 |
| Brazos | 2285002006 | 7.7306 | 54.2948 | 201.8924 | 0.1902 | 0.1693 | 4.6904 | 4.5497 |
| Brazos | 2285002010 | 0.4307 | 1.0837 | 7.2852 | 0.0036 | 0.0032 | 0.1597 | 0.1549 |
| Brewster | 2285002006 | 6.4231 | 45.1112 | 167.7438 | 0.1580 | 0.1406 | 3.8971 | 3.7802 |
| Brewster | 2285002007 | 0.8678 | 1.6410 | 16.2718 | 0.0066 | 0.0058 | 0.3733 | 0.3621 |
| Brewster | 2285002008 | 0.5030 | 4.1027 | 14.3310 | 0.0144 | 0.0128 | 0.3236 | 0.3139 |
| Brown | 2285002006 | 3.4331 | 24.1120 | 89.6593 | 0.0845 | 0.0752 | 2.0830 | 2.0205 |
| Brown | 2285002007 | 0.8239 | 1.5579 | 15.4479 | 0.0062 | 0.0056 | 0.3544 | 0.3438 |
| Burleson | 2285002006 | 13.6541 | 95.8973 | 356.5893 | 0.3359 | 0.2990 | 8.2844 | 8.0359 |
| Burleson | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Burnet | 2285002007 | 0.8234 | 1.5569 | 15.4381 | 0.0062 | 0.0055 | 0.3542 | 0.3436 |
| Caldwell | 2285002006 | 4.7031 | 33.0315 | 122.8258 | 0.1157 | 0.1030 | 2.8535 | 2.7679 |
| Caldwell | 2285002008 | 0.0647 | 0.5281 | 1.8447 | 0.0018 | 0.0016 | 0.0417 | 0.0404 |
| Calhoun | 2285002007 | 0.0762 | 0.1441 | 1.4287 | 0.0006 | 0.0005 | 0.0328 | 0.0318 |
| Calhoun | 2285002010 | 0.4381 | 1.1022 | 7.4101 | 0.0037 | 0.0033 | 0.1625 | 0.1576 |
| Callahan | 2285002006 | 5.5219 | 38.7820 | 144.2089 | 0.1358 | 0.1209 | 3.3503 | 3.2498 |
| Cameron | 2285002006 | 0.8183 | 5.7470 | 21.3699 | 0.0201 | 0.0179 | 0.4965 | 0.4816 |
| Cameron | 2285002007 | 1.0160 | 1.9211 | 19.0498 | 0.0077 | 0.0068 | 0.4371 | 0.4240 |
| Cameron | 2285002010 | 0.9132 | 2.2974 | 15.4451 | 0.0077 | 0.0069 | 0.3386 | 0.3285 |
| Camp | 2285002006 | 2.8715 | 20.1676 | 74.9924 | 0.0706 | 0.0629 | 1.7422 | 1.6900 |
| Camp | 2285002007 | 0.2022 | 0.3824 | 3.7921 | 0.0015 | 0.0014 | 0.0870 | 0.0844 |
| Carson | 2285002006 | 23.6010 | 165.7575 | 616.3608 | 0.5806 | 0.5168 | 14.3195 | 13.8899 |
| Carson | 2285002007 | 0.9005 | 1.7027 | 16.8839 | 0.0068 | 0.0061 | 0.3874 | 0.3758 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Carson | 2285002010 | 0.0148 | 0.0372 | 0.2499 | 0.0001 | 0.0001 | 0.0055 | 0.0053 |
| Cass | 2285002006 | 11.0138 | 77.3533 | 287.6342 | 0.2710 | 0.2412 | 6.6824 | 6.4819 |
| Cass | 2285002008 | 0.2060 | 1.6803 | 5.8693 | 0.0059 | 0.0052 | 0.1325 | 0.1286 |
| Cass | 2285002010 | 0.3384 | 0.8514 | 7.3296 | 0.0029 | 0.0025 | 0.1255 | 0.1217 |
| Castro | 2285002006 | 1.7404 | 12.2232 | 45.4514 | 0.0428 | 0.0381 | 1.0559 | 1.0243 |
| Castro | 2285002007 | 0.5767 | 1.0904 | 10.8123 | 0.0044 | 0.0039 | 0.2481 | 0.2406 |
| Castro | 2285002010 | 1.0476 | 2.6355 | 17.7180 | 0.0088 | 0.0079 | 0.3885 | 0.3768 |
| Chambers | 2285002006 | 0.2697 | 1.8943 | 7.0438 | 0.0066 | 0.0059 | 0.1636 | 0.1587 |
| Chambers | 2285002010 | 0.8836 | 2.2231 | 20.4321 | 0.0075 | 0.0066 | 0.3277 | 0.3178 |
| Cherokee | 2285002006 | 4.7027 | 33.0284 | 122.8145 | 0.1157 | 0.1030 | 2.8533 | 2.7677 |
| Cherokee | 2285002007 | 0.7484 | 1.4151 | 14.0319 | 0.0057 | 0.0050 | 0.3219 | 0.3123 |
| Childress | 2285002006 | 4.9989 | 35.1090 | 130.5511 | 0.1230 | 0.1095 | 3.0330 | 2.9420 |
| Clay | 2285002006 | 5.5036 | 38.6533 | 143.7302 | 0.1354 | 0.1205 | 3.3392 | 3.2390 |
| Cochran | 2285002007 | 0.0271 | 0.0513 | 0.5082 | 0.0002 | 0.0002 | 0.0117 | 0.0113 |
| Coleman | 2285002006 | 4.5890 | 32.2302 | 119.8462 | 0.1129 | 0.1005 | 2.7843 | 2.7008 |
| Coleman | 2285002007 | 0.5284 | 0.9992 | 9.9075 | 0.0040 | 0.0036 | 0.2273 | 0.2205 |
| Collin | 2285002006 | 3.6222 | 25.4402 | 94.5981 | 0.0891 | 0.0793 | 2.1977 | 2.1318 |
| Collin | 2285002007 | 1.5616 | 2.9529 | 29.2803 | 0.0118 | 0.0105 | 0.6718 | 0.6516 |
| Collin | 2285002010 | 0.6768 | 1.7028 | 24.4682 | 0.0057 | 0.0051 | 0.2510 | 0.2435 |
| Colorado | 2285002006 | 5.9817 | 42.0113 | 156.2169 | 0.1472 | 0.1310 | 3.6293 | 3.5204 |
| Colorado | 2285002008 | 0.2362 | 1.9264 | 6.7292 | 0.0067 | 0.0060 | 0.1520 | 0.1474 |
| Colorado | 2285002010 | 0.8615 | 2.1673 | 15.9421 | 0.0073 | 0.0065 | 0.3195 | 0.3099 |
| Comal | 2285002006 | 3.7349 | 26.2316 | 97.5407 | 0.0919 | 0.0818 | 2.2661 | 2.1981 |
| Comal | 2285002007 | 0.0489 | 0.0925 | 0.9177 | 0.0004 | 0.0003 | 0.0211 | 0.0204 |
| Comal | 2285002008 | 0.3145 | 2.5647 | 8.9587 | 0.0090 | 0.0080 | 0.2023 | 0.1962 |
| Comal | 2285002010 | 1.7451 | 4.3904 | 35.8459 | 0.0147 | 0.0131 | 0.6471 | 0.6277 |
| Comanche | 2285002007 | 1.3358 | 2.5258 | 25.0456 | 0.0101 | 0.0090 | 0.5746 | 0.5574 |
| Cooke | 2285002006 | 4.8746 | 34.2361 | 127.3052 | 0.1199 | 0.1067 | 2.9576 | 2.8689 |
| Cooke | 2285002008 | 0.1369 | 1.1169 | 3.9016 | 0.0039 | 0.0035 | 0.0881 | 0.0855 |
| Coryell | 2285002006 | 1.1614 | 8.1572 | 30.3323 | 0.0286 | 0.0254 | 0.7047 | 0.6835 |
| Coryell | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Crane | 2285002006 | 0.1880 | 1.3204 | 4.9099 | 0.0046 | 0.0041 | 0.1141 | 0.1106 |
| Crane | 2285002007 | 0.0875 | 0.1654 | 1.6403 | 0.0007 | 0.0006 | 0.0376 | 0.0365 |
| Crockett | 2285002007 | 0.0125 | 0.0237 | 0.2346 | 0.0001 | 0.0001 | 0.0054 | 0.0052 |
| Culberson | 2285002006 | 7.4210 | 52.1203 | 193.8066 | 0.1826 | 0.1625 | 4.5026 | 4.3675 |
| Culberson | 2285002008 | 0.1173 | 0.9568 | 3.3423 | 0.0034 | 0.0030 | 0.0755 | 0.0732 |
| Dallam | 2285002006 | 7.8733 | 55.2965 | 205.6173 | 0.1937 | 0.1724 | 4.7770 | 4.6337 |
| Dallam | 2285002010 | 1.2922 | 3.2510 | 21.8556 | 0.0109 | 0.0097 | 0.4792 | 0.4648 |
| Dallas | 2285002006 | 9.8381 | 69.0959 | 256.9295 | 0.2420 | 0.2154 | 5.9691 | 5.7900 |
| Dallas | 2285002007 | 3.3104 | 6.2596 | 62.0693 | 0.0251 | 0.0223 | 1.4241 | 1.3814 |
| Dallas | 2285002008 | 0.2255 | 1.8391 | 6.4240 | 0.0064 | 0.0057 | 0.1451 | 0.1407 |
| Dallas | 2285002009 | 0.9239 | 7.5358 | 26.3231 | 0.0264 | 0.0235 | 0.5944 | 0.5766 |
| Dallas | 2285002010 | 7.1743 | 18.0491 | 212.4862 | 0.0605 | 0.0539 | 2.6604 | 2.5806 |
| De Witt | 2285002006 | 0.5570 | 3.9122 | 14.5472 | 0.0137 | 0.0122 | 0.3380 | 0.3278 |
| Deaf Smith | 2285002006 | 16.9825 | 119.2734 | 443.5122 | 0.4178 | 0.3719 | 10.3038 | 9.9947 |
| Deaf Smith | 2285002010 | 0.3492 | 0.8785 | 5.9060 | 0.0029 | 0.0026 | 0.1295 | 0.1256 |
| Delta | 2285002007 | 0.0162 | 0.0306 | 0.3035 | 0.0001 | 0.0001 | 0.0070 | 0.0068 |
| Denton | 2285002006 | 15.5560 | 109.2545 | 406.2575 | 0.3827 | 0.3406 | 9.4383 | 9.1552 |
| Denton | 2285002007 | 0.7447 | 1.4082 | 13.9639 | 0.0056 | 0.0050 | 0.3204 | 0.3108 |
| Denton | 2285002008 | 0.2062 | 1.6818 | 5.8746 | 0.0059 | 0.0052 | 0.1327 | 0.1287 |
| Denton | 2285002009 | 0.5372 | 4.3814 | 15.3047 | 0.0153 | 0.0137 | 0.3456 | 0.3352 |
| Denton | 2285002010 | 3.3881 | 8.5237 | 109.3866 | 0.0286 | 0.0254 | 1.2564 | 1.2187 |
| Donley | 2285002006 | 6.8016 | 47.7699 | 177.6301 | 0.1673 | 0.1489 | 4.1268 | 4.0030 |
| Duval | 2285002006 | 4.8671 | 34.1835 | 127.1095 | 0.1197 | 0.1066 | 2.9530 | 2.8645 |
| Eastland | 2285002006 | 5.6947 | 39.9960 | 148.7230 | 0.1401 | 0.1247 | 3.4552 | 3.3515 |
| Eastland | 2285002007 | 0.0190 | 0.0359 | 0.3559 | 0.0001 | 0.0001 | 0.0082 | 0.0079 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Ector | 2285002006 | 4.1156 | 28.9051 | 107.4823 | 0.1012 | 0.0901 | 2.4971 | 2.4222 |
| Ector | 2285002010 | 2.5844 | 6.5020 | 43.7111 | 0.0218 | 0.0194 | 0.9584 | 0.9296 |
| El Paso | 2285002006 | 15.9211 | 111.8189 | 415.7931 | 0.3917 | 0.3486 | 9.6598 | 9.3700 |
| El Paso | 2285002007 | 0.3001 | 0.5674 | 5.6262 | 0.0023 | 0.0020 | 0.1291 | 0.1252 |
| El Paso | 2285002008 | 0.3200 | 2.6101 | 9.1172 | 0.0091 | 0.0081 | 0.2059 | 0.1997 |
| El Paso | 2285002010 | 8.4930 | 21.3667 | 143.6428 | 0.0716 | 0.0638 | 3.1494 | 3.0549 |
| Ellis | 2285002006 | 7.5372 | 52.9365 | 196.8417 | 0.1854 | 0.1650 | 4.5731 | 4.4359 |
| Ellis | 2285002010 | 3.0152 | 7.5856 | 64.0172 | 0.0254 | 0.0226 | 1.1181 | 1.0846 |
| Erath | 2285002007 | 1.3079 | 2.4731 | 24.5234 | 0.0099 | 0.0088 | 0.5627 | 0.5458 |
| Erath | 2285002010 | 0.0148 | 0.0372 | 26.2918 | 0.0001 | 0.0001 | 0.0055 | 0.0053 |
| Falls | 2285002006 | 4.1730 | 29.3080 | 108.9803 | 0.1027 | 0.0914 | 2.5319 | 2.4559 |
| Fannin | 2285002007 | 1.4541 | 2.7495 | 27.2633 | 0.0110 | 0.0098 | 0.6255 | 0.6068 |
| Fayette | 2285002006 | 12.9114 | 90.6809 | 337.1922 | 0.3176 | 0.2827 | 7.8338 | 7.5987 |
| Fayette | 2285002008 | 0.1433 | 1.1691 | 4.0838 | 0.0041 | 0.0036 | 0.0922 | 0.0894 |
| Fayette | 2285002010 | 0.8689 | 2.1859 | 14.6953 | 0.0073 | 0.0065 | 0.3222 | 0.3125 |
| Fisher | 2285002006 | 1.7755 | 12.4701 | 46.3696 | 0.0437 | 0.0389 | 1.0773 | 1.0450 |
| Fort Bend | 2285002006 | 16.8164 | 118.1070 | 439.1748 | 0.4137 | 0.3682 | 10.2031 | 9.8970 |
| Fort Bend | 2285002007 | 0.0802 | 0.1516 | 1.5030 | 0.0006 | 0.0005 | 0.0345 | 0.0334 |
| Fort Bend | 2285002008 | 0.2119 | 1.7286 | 6.0382 | 0.0061 | 0.0054 | 0.1363 | 0.1323 |
| Fort Bend | 2285002010 | 0.5293 | 1.3316 | 14.4390 | 0.0045 | 0.0040 | 0.1963 | 0.1904 |
| Franklin | 2285002006 | 0.3628 | 2.5479 | 9.4743 | 0.0089 | 0.0079 | 0.2201 | 0.2135 |
| Franklin | 2285002007 | 0.1875 | 0.3546 | 3.5162 | 0.0014 | 0.0013 | 0.0807 | 0.0783 |
| Freestone | 2285002006 | 3.2033 | 22.4975 | 83.6558 | 0.0788 | 0.0701 | 1.9435 | 1.8852 |
| Freestone | 2285002010 | 0.6984 | 1.7570 | 11.8120 | 0.0059 | 0.0052 | 0.2590 | 0.2512 |
| Frio | 2285002006 | 4.7085 | 33.0692 | 122.9660 | 0.1158 | 0.1031 | 2.8568 | 2.7711 |
| Gaines | 2285002007 | 0.0955 | 0.1806 | 1.7906 | 0.0007 | 0.0006 | 0.0411 | 0.0398 |
| Galveston | 2285002006 | 4.1249 | 28.9704 | 107.7249 | 0.1015 | 0.0903 | 2.5027 | 2.4276 |
| Galveston | 2285002007 | 0.9418 | 1.7808 | 17.6577 | 0.0071 | 0.0063 | 0.4051 | 0.3930 |
| Galveston | 2285002010 | 1.2996 | 3.2696 | 24.7240 | 0.0110 | 0.0098 | 0.4819 | 0.4675 |
| Garza | 2285002006 | 3.6649 | 25.7400 | 95.7129 | 0.0902 | 0.0803 | 2.2236 | 2.1569 |
| Goliad | 2285002006 | 0.0363 | 0.2552 | 0.9490 | 0.0009 | 0.0008 | 0.0220 | 0.0214 |
| Gonzales | 2285002006 | 5.1988 | 36.5127 | 135.7705 | 0.1279 | 0.1138 | 3.1543 | 3.0596 |
| Gonzales | 2285002007 | 2.3709 | 4.4831 | 44.4537 | 0.0179 | 0.0160 | 1.0199 | 0.9893 |
| Gonzales | 2285002008 | 0.1407 | 1.1476 | 4.0087 | 0.0040 | 0.0036 | 0.0905 | 0.0878 |
| Gonzales | 2285002010 | 0.0148 | 0.0372 | 0.2499 | 0.0001 | 0.0001 | 0.0055 | 0.0053 |
| Gray | 2285002006 | 12.5880 | 88.4099 | 328.7477 | 0.3097 | 0.2756 | 7.6376 | 7.4084 |
| Gray | 2285002010 | 0.7058 | 1.7756 | 11.9369 | 0.0060 | 0.0053 | 0.2617 | 0.2539 |
| Grayson | 2285002006 | 13.2947 | 93.3730 | 347.2026 | 0.3271 | 0.2911 | 8.0663 | 7.8243 |
| Grayson | 2285002007 | 3.4262 | 6.4785 | 64.2404 | 0.0259 | 0.0231 | 1.4739 | 1.4297 |
| Grayson | 2285002010 | 2.1611 | 5.4369 | 62.5928 | 0.0182 | 0.0162 | 0.8014 | 0.7773 |
| Gregg | 2285002006 | 4.7166 | 33.1262 | 123.1781 | 0.1160 | 0.1033 | 2.8617 | 2.7759 |
| Gregg | 2285002008 | 0.0996 | 0.8122 | 2.8369 | 0.0028 | 0.0025 | 0.0641 | 0.0621 |
| Gregg | 2285002010 | 3.4459 | 8.6693 | 61.4933 | 0.0291 | 0.0259 | 1.2778 | 1.2395 |
| Grimes | 2285002006 | 6.2781 | 44.0930 | 163.9577 | 0.1544 | 0.1375 | 3.8091 | 3.6948 |
| Grimes | 2285002007 | 0.2860 | 0.5407 | 5.3617 | 0.0022 | 0.0019 | 0.1230 | 0.1193 |
| Grimes | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Guadalupe | 2285002006 | 8.4570 | 59.3963 | 220.8623 | 0.2081 | 0.1852 | 5.1311 | 4.9772 |
| Guadalupe | 2285002008 | 0.2298 | 1.8746 | 6.5482 | 0.0066 | 0.0058 | 0.1479 | 0.1434 |
| Guadalupe | 2285002010 | 0.8615 | 2.1673 | 15.8364 | 0.0073 | 0.0065 | 0.3195 | 0.3099 |
| Hale | 2285002006 | 3.2646 | 22.9284 | 85.2582 | 0.0803 | 0.0715 | 1.9807 | 1.9213 |
| Hale | 2285002007 | 0.6698 | 1.2666 | 12.5590 | 0.0051 | 0.0045 | 0.2881 | 0.2795 |
| Hale | 2285002010 | 1.4235 | 3.5812 | 24.0755 | 0.0120 | 0.0107 | 0.5279 | 0.5120 |
| Hall | 2285002006 | 3.1160 | 21.8850 | 81.3782 | 0.0767 | 0.0682 | 1.8906 | 1.8339 |
| Hansford | 2285002007 | 0.0188 | 0.0355 | 0.3516 | 0.0001 | 0.0001 | 0.0081 | 0.0078 |
| Hardeman | 2285002006 | 5.6694 | 39.8179 | 148.0608 | 0.1395 | 0.1241 | 3.4398 | 3.3366 |
| Hardeman | 2285002007 | 0.2299 | 0.4347 | 4.3103 | 0.0017 | 0.0015 | 0.0989 | 0.0959 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Hardeman | 2285002010 | 0.7058 | 1.7756 | 11.9369 | 0.0060 | 0.0053 | 0.2617 | 0.2539 |
| Hardin | 2285002006 | 3.0677 | 21.5454 | 80.1153 | 0.0755 | 0.0672 | 1.8613 | 1.8054 |
| Hardin | 2285002007 | 0.2662 | 0.5034 | 4.9918 | 0.0020 | 0.0018 | 0.1145 | 0.1111 |
| Hardin | 2285002010 | 2.5118 | 6.3192 | 50.9611 | 0.0212 | 0.0189 | 0.9314 | 0.9035 |
| Harris | 2285002006 | 32.7718 | 230.1671 | 855.8647 | 0.8062 | 0.7176 | 19.8837 | 19.2872 |
| Harris | 2285002007 | 3.4246 | 6.4755 | 64.2099 | 0.0259 | 0.0231 | 1.4732 | 1.4290 |
| Harris | 2285002008 | 0.2900 | 2.3652 | 8.2619 | 0.0083 | 0.0074 | 0.1866 | 0.1810 |
| Harris | 2285002010 | 64.4292 | 162.0913 | 1152.7988 | 0.5434 | 0.4837 | 23.8918 | 23.1751 |
| Harrison | 2285002006 | 12.1002 | 84.9834 | 316.0064 | 0.2977 | 0.2650 | 7.3416 | 7.1213 |
| Harrison | 2285002008 | 0.2035 | 1.6596 | 5.7971 | 0.0058 | 0.0052 | 0.1309 | 0.1270 |
| Harrison | 2285002010 | 0.4381 | 1.1022 | 10.6220 | 0.0037 | 0.0033 | 0.1625 | 0.1576 |
| Hartley | 2285002006 | 7.7217 | 54.2320 | 201.6588 | 0.1900 | 0.1691 | 4.6850 | 4.5445 |
| Hays | 2285002006 | 3.1153 | 21.8794 | 81.3575 | 0.0766 | 0.0682 | 1.8901 | 1.8334 |
| Hays | 2285002008 | 0.1578 | 1.2873 | 4.4968 | 0.0045 | 0.0040 | 0.1015 | 0.0985 |
| Hays | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Hemphill | 2285002006 | 20.5941 | 144.6390 | 537.8330 | 0.5066 | 0.4510 | 12.4951 | 12.1203 |
| Hemphill | 2285002010 | 0.0148 | 0.0372 | 0.2499 | 0.0001 | 0.0001 | 0.0055 | 0.0053 |
| Henderson | 2285002006 | 2.9325 | 20.5962 | 76.5858 | 0.0721 | 0.0642 | 1.7793 | 1.7259 |
| Hidalgo | 2285002007 | 1.9882 | 3.7595 | 37.2791 | 0.0151 | 0.0134 | 0.8553 | 0.8297 |
| Hidalgo | 2285002010 | 0.0296 | 0.0743 | 0.4998 | 0.0002 | 0.0002 | 0.0110 | 0.0106 |
| Hill | 2285002006 | 6.7697 | 47.5456 | 176.7960 | 0.1665 | 0.1482 | 4.1074 | 3.9842 |
| Hill | 2285002008 | 0.0604 | 0.4930 | 1.7222 | 0.0017 | 0.0015 | 0.0389 | 0.0377 |
| Hill | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Hockley | 2285002006 | 0.4124 | 2.8962 | 10.7692 | 0.0101 | 0.0090 | 0.2502 | 0.2427 |
| Hockley | 2285002007 | 0.8917 | 1.6861 | 16.7194 | 0.0067 | 0.0060 | 0.3836 | 0.3721 |
| Hood | 2285002007 | 1.2322 | 2.3300 | 23.1042 | 0.0093 | 0.0083 | 0.5301 | 0.5142 |
| Hood | 2285002010 | 0.0074 | 0.0186 | 13.1459 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Hopkins | 2285002006 | 3.3225 | 23.3351 | 86.7704 | 0.0817 | 0.0728 | 2.0159 | 1.9554 |
| Hopkins | 2285002007 | 1.1102 | 2.0992 | 20.8153 | 0.0084 | 0.0075 | 0.4776 | 0.4633 |
| Houston | 2285002006 | 3.3428 | 23.4774 | 87.2994 | 0.0822 | 0.0732 | 2.0282 | 1.9673 |
| Howard | 2285002006 | 4.8003 | 33.7139 | 125.3635 | 0.1181 | 0.1051 | 2.9125 | 2.8251 |
| Howard | 2285002007 | 0.0587 | 0.1110 | 1.1007 | 0.0004 | 0.0004 | 0.0253 | 0.0245 |
| Howard | 2285002010 | 3.0152 | 7.5856 | 50.9963 | 0.0254 | 0.0226 | 1.1181 | 1.0846 |
| Hudspeth | 2285002006 | 16.1031 | 113.0970 | 420.5456 | 0.3962 | 0.3526 | 9.7703 | 9.4771 |
| Hudspeth | 2285002008 | 0.4893 | 3.9905 | 13.9393 | 0.0140 | 0.0124 | 0.3148 | 0.3053 |
| Hunt | 2285002006 | 1.9794 | 13.9019 | 51.6935 | 0.0487 | 0.0433 | 1.2010 | 1.1649 |
| Hunt | 2285002007 | 1.7686 | 3.3442 | 33.1609 | 0.0134 | 0.0119 | 0.7608 | 0.7380 |
| Hutchinson | 2285002007 | 0.5220 | 0.9871 | 9.7882 | 0.0040 | 0.0035 | 0.2246 | 0.2178 |
| Hutchinson | 2285002010 | 0.0148 | 0.0372 | 0.2499 | 0.0001 | 0.0001 | 0.0055 | 0.0053 |
| Irion | 2285002007 | 1.0211 | 1.9309 | 19.1461 | 0.0077 | 0.0069 | 0.4393 | 0.4261 |
| Jackson | 2285002006 | 4.0898 | 28.7240 | 106.8088 | 0.1006 | 0.0896 | 2.4814 | 2.4070 |
| Jackson | 2285002007 | 0.2610 | 0.4934 | 4.8928 | 0.0020 | 0.0018 | 0.1123 | 0.1089 |
| Jasper | 2285002007 | 2.6741 | 5.0565 | 50.1393 | 0.0202 | 0.0180 | 1.1504 | 1.1159 |
| Jasper | 2285002010 | 0.6984 | 1.7570 | 20.2905 | 0.0059 | 0.0052 | 0.2590 | 0.2512 |
| Jeff Davis | 2285002006 | 2.5340 | 17.7970 | 66.1772 | 0.0623 | 0.0555 | 1.5375 | 1.4913 |
| Jeff Davis | 2285002008 | 0.1630 | 1.3292 | 4.6430 | 0.0047 | 0.0041 | 0.1048 | 0.1017 |
| Jefferson | 2285002006 | 6.8509 | 48.1162 | 178.9178 | 0.1685 | 0.1500 | 4.1567 | 4.0320 |
| Jefferson | 2285002008 | 0.1369 | 1.1165 | 3.9000 | 0.0039 | 0.0035 | 0.0881 | 0.0854 |
| Jefferson | 2285002010 | 8.2782 | 20.8264 | 233.2743 | 0.0698 | 0.0621 | 3.0697 | 2.9777 |
| Jim Hogg | 2285002006 | 1.3199 | 9.2704 | 34.4713 | 0.0325 | 0.0289 | 0.8008 | 0.7768 |
| Jim Wells | 2285002006 | 2.0389 | 14.3196 | 53.2467 | 0.0502 | 0.0446 | 1.2370 | 1.1999 |
| Johnson | 2285002006 | 10.2827 | 72.2187 | 268.5416 | 0.2530 | 0.2252 | 6.2388 | 6.0517 |
| Johnson | 2285002007 | 0.6249 | 1.1816 | 11.7165 | 0.0047 | 0.0042 | 0.2688 | 0.2608 |
| Johnson | 2285002008 | 0.1564 | 1.2756 | 4.4557 | 0.0045 | 0.0040 | 0.1006 | 0.0976 |
| Johnson | 2285002010 | 0.0074 | 0.0186 | 13.1459 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Kaufman | 2285002006 | 3.7031 | 26.0084 | 96.7109 | 0.0911 | 0.0811 | 2.2468 | 2.1794 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Kaufman | 2285002008 | 0.1669 | 1.3612 | 4.7547 | 0.0048 | 0.0042 | 0.1074 | 0.1041 |
| Kenedy | 2285002006 | 1.2184 | 8.5574 | 31.8203 | 0.0300 | 0.0267 | 0.7393 | 0.7171 |
| Kinney | 2285002006 | 7.5258 | 52.8561 | 196.5426 | 0.1851 | 0.1648 | 4.5661 | 4.4292 |
| Kinney | 2285002008 | 0.2819 | 2.2995 | 8.0323 | 0.0081 | 0.0072 | 0.1814 | 0.1759 |
| Kleberg | 2285002006 | 0.5575 | 3.9156 | 14.5600 | 0.0137 | 0.0122 | 0.3383 | 0.3281 |
| La Salle | 2285002006 | 4.8004 | 33.7150 | 125.3674 | 0.1181 | 0.1051 | 2.9126 | 2.8252 |
| Lamar | 2285002007 | 0.6421 | 1.2141 | 12.0388 | 0.0049 | 0.0043 | 0.2762 | 0.2679 |
| Lamb | 2285002006 | 1.7544 | 12.3215 | 45.8167 | 0.0432 | 0.0384 | 1.0644 | 1.0325 |
| Lampasas | 2285002006 | 4.7508 | 33.3665 | 124.0715 | 0.1169 | 0.1040 | 2.8825 | 2.7960 |
| Lampasas | 2285002007 | 0.3843 | 0.7268 | 7.2065 | 0.0029 | 0.0026 | 0.1653 | 0.1604 |
| Lavaca | 2285002006 | 0.4904 | 3.4443 | 12.8074 | 0.0121 | 0.0107 | 0.2975 | 0.2886 |
| Lee | 2285002006 | 5.2497 | 36.8704 | 137.1008 | 0.1291 | 0.1150 | 3.1852 | 3.0896 |
| Lee | 2285002007 | 0.1615 | 0.3054 | 3.0280 | 0.0012 | 0.0011 | 0.0695 | 0.0674 |
| Leon | 2285002006 | 5.1881 | 36.4379 | 135.4924 | 0.1276 | 0.1136 | 3.1478 | 3.0534 |
| Leon | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Liberty | 2285002006 | 12.3282 | 86.5848 | 321.9612 | 0.3033 | 0.2700 | 7.4799 | 7.2555 |
| Liberty | 2285002008 | 0.2212 | 1.8044 | 6.3029 | 0.0063 | 0.0056 | 0.1423 | 0.1381 |
| Liberty | 2285002010 | 13.4030 | 33.7193 | 230.8016 | 0.1131 | 0.1006 | 4.9701 | 4.8210 |
| Limestone | 2285002006 | 6.4390 | 45.2233 | 168.1605 | 0.1584 | 0.1410 | 3.9068 | 3.7896 |
| Lipscomb | 2285002006 | 7.2242 | 50.7380 | 188.6666 | 0.1777 | 0.1582 | 4.3832 | 4.2517 |
| Live Oak | 2285002006 | 1.4794 | 10.3906 | 38.6371 | 0.0364 | 0.0324 | 0.8976 | 0.8707 |
| Live Oak | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Llano | 2285002007 | 0.3718 | 0.7031 | 6.9721 | 0.0028 | 0.0025 | 0.1600 | 0.1552 |
| Lubbock | 2285002006 | 3.6799 | 25.8449 | 96.1030 | 0.0905 | 0.0806 | 2.2327 | 2.1657 |
| Lubbock | 2285002007 | 1.8891 | 3.5720 | 35.4195 | 0.0143 | 0.0127 | 0.8127 | 0.7883 |
| Lubbock | 2285002010 | 3.1398 | 7.8990 | 53.1032 | 0.0265 | 0.0236 | 1.1643 | 1.1294 |
| Lynn | 2285002006 | 0.1921 | 1.3493 | 5.0171 | 0.0047 | 0.0042 | 0.1166 | 0.1131 |
| Lynn | 2285002007 | 0.0483 | 0.0914 | 0.9059 | 0.0004 | 0.0003 | 0.0208 | 0.0202 |
| Madison | 2285002006 | 0.7944 | 5.5796 | 20.7473 | 0.0195 | 0.0174 | 0.4820 | 0.4675 |
| Marion | 2285002006 | 4.8818 | 34.2865 | 127.4927 | 0.1201 | 0.1069 | 2.9620 | 2.8731 |
| Marion | 2285002008 | 0.0851 | 0.6943 | 2.4252 | 0.0024 | 0.0022 | 0.0548 | 0.0531 |
| Martin | 2285002006 | 1.6765 | 11.7746 | 43.7832 | 0.0412 | 0.0367 | 1.0172 | 0.9867 |
| Matagorda | 2285002006 | 3.1576 | 22.1768 | 82.4634 | 0.0777 | 0.0691 | 1.9158 | 1.8583 |
| Matagorda | 2285002007 | 0.0587 | 0.1109 | 1.1002 | 0.0004 | 0.0004 | 0.0252 | 0.0245 |
| Matagorda | 2285002010 | 0.0222 | 0.0558 | 4.4900 | 0.0002 | 0.0002 | 0.0082 | 0.0080 |
| Maverick | 2285002006 | 3.7698 | 26.4765 | 98.4516 | 0.0927 | 0.0825 | 2.2873 | 2.2186 |
| Maverick | 2285002007 | 0.0234 | 0.0442 | 0.4378 | 0.0002 | 0.0002 | 0.0100 | 0.0097 |
| Maverick | 2285002010 | 0.4603 | 1.1580 | 7.7850 | 0.0039 | 0.0035 | 0.1707 | 0.1656 |
| McCulloch | 2285002007 | 0.5183 | 0.9800 | 9.7178 | 0.0039 | 0.0035 | 0.2230 | 0.2163 |
| McLennan | 2285002006 | 12.2449 | 85.9997 | 319.7857 | 0.3012 | 0.2681 | 7.4294 | 7.2065 |
| McLennan | 2285002008 | 0.1777 | 1.4496 | 5.0637 | 0.0051 | 0.0045 | 0.1143 | 0.1109 |
| McLennan | 2285002010 | 5.6070 | 14.1062 | 94.8324 | 0.0473 | 0.0421 | 2.0792 | 2.0168 |
| Medina | 2285002006 | 11.7872 | 82.7855 | 307.8337 | 0.2900 | 0.2581 | 7.1517 | 6.9371 |
| Medina | 2285002007 | 0.0485 | 0.0917 | 0.9092 | 0.0004 | 0.0003 | 0.0209 | 0.0202 |
| Medina | 2285002008 | 0.2677 | 2.1836 | 7.6273 | 0.0076 | 0.0068 | 0.1722 | 0.1671 |
| Medina | 2285002010 | 0.0074 | 0.0186 | 1.3910 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Midland | 2285002006 | 3.4554 | 24.2684 | 90.2407 | 0.0850 | 0.0757 | 2.0965 | 2.0336 |
| Milam | 2285002006 | 15.6683 | 110.0431 | 409.1898 | 0.3855 | 0.3431 | 9.5064 | 9.2212 |
| Milam | 2285002007 | 0.1782 | 0.3370 | 3.3413 | 0.0013 | 0.0012 | 0.0767 | 0.0744 |
| Milam | 2285002010 | 0.0222 | 0.0558 | 0.3749 | 0.0002 | 0.0002 | 0.0082 | 0.0080 |
| Mills | 2285002006 | 3.8618 | 27.1224 | 100.8532 | 0.0950 | 0.0846 | 2.3431 | 2.2728 |
| Mills | 2285002007 | 0.0163 | 0.0308 | 0.3053 | 0.0001 | 0.0001 | 0.0070 | 0.0068 |
| Mitchell | 2285002006 | 5.0170 | 35.2361 | 131.0235 | 0.1234 | 0.1099 | 3.0440 | 2.9527 |
| Montague | 2285002006 | 4.7643 | 33.4613 | 124.4241 | 0.1172 | 0.1043 | 2.8907 | 2.8039 |
| Montgomery | 2285002006 | 9.6112 | 67.5022 | 251.0035 | 0.2364 | 0.2105 | 5.8314 | 5.6565 |
| Montgomery | 2285002010 | 0.0074 | 0.0186 | 1.4967 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Moore | 2285002006 | 6.9679 | 48.9378 | 181.9726 | 0.1714 | 0.1526 | 4.2276 | 4.1008 |
| Moore | 2285002007 | 0.9776 | 1.8485 | 18.3296 | 0.0074 | 0.0066 | 0.4205 | 0.4079 |
| Moore | 2285002010 | 0.7206 | 1.8128 | 12.1868 | 0.0061 | 0.0054 | 0.2672 | 0.2592 |
| Morris | 2285002006 | 2.3693 | 16.6405 | 61.8768 | 0.0583 | 0.0519 | 1.4375 | 1.3944 |
| Morris | 2285002007 | 0.1853 | 0.3504 | 3.4743 | 0.0014 | 0.0012 | 0.0797 | 0.0773 |
| Morris | 2285002010 | 0.0563 | 0.1416 | 5.7696 | 0.0005 | 0.0004 | 0.0209 | 0.0202 |
| Nacogdoches | 2285002006 | 2.5804 | 18.1232 | 67.3902 | 0.0635 | 0.0565 | 1.5656 | 1.5187 |
| Nacogdoches | 2285002010 | 0.8615 | 2.1673 | 23.0489 | 0.0073 | 0.0065 | 0.3195 | 0.3099 |
| Navarro | 2285002006 | 8.6079 | 60.4558 | 224.8017 | 0.2118 | 0.1885 | 5.2227 | 5.0660 |
| Navarro | 2285002010 | 0.8615 | 2.1673 | 27.5913 | 0.0073 | 0.0065 | 0.3195 | 0.3099 |
| Newton | 2285002006 | 0.8953 | 6.2878 | 23.3808 | 0.0220 | 0.0196 | 0.5432 | 0.5269 |
| Newton | 2285002007 | 0.5025 | 0.9502 | 9.4225 | 0.0038 | 0.0034 | 0.2162 | 0.2097 |
| Nolan | 2285002006 | 6.9225 | 48.6187 | 180.7862 | 0.1703 | 0.1516 | 4.2001 | 4.0741 |
| Nolan | 2285002007 | 0.3099 | 0.5861 | 5.8113 | 0.0023 | 0.0021 | 0.1333 | 0.1293 |
| Nolan | 2285002010 | 0.3492 | 0.8785 | 5.9060 | 0.0029 | 0.0026 | 0.1295 | 0.1256 |
| Nueces | 2285002006 | 3.6890 | 25.9092 | 96.3420 | 0.0908 | 0.0808 | 2.2382 | 2.1711 |
| Nueces | 2285002007 | 0.3600 | 0.6807 | 6.7502 | 0.0027 | 0.0024 | 0.1549 | 0.1502 |
| Nueces | 2285002010 | 3.3821 | 8.5087 | 57.2021 | 0.0285 | 0.0254 | 1.2542 | 1.2165 |
| Oldham | 2285002006 | 1.1937 | 8.3836 | 31.1738 | 0.0294 | 0.0261 | 0.7242 | 0.7025 |
| Orange | 2285002006 | 6.8040 | 47.7868 | 177.6929 | 0.1674 | 0.1490 | 4.1282 | 4.0044 |
| Orange | 2285002007 | 0.7008 | 1.3251 | 13.1392 | 0.0053 | 0.0047 | 0.3015 | 0.2924 |
| Orange | 2285002008 | 0.2045 | 1.6683 | 5.8276 | 0.0058 | 0.0052 | 0.1316 | 0.1276 |
| Orange | 2285002010 | 1.3587 | 3.4183 | 107.7654 | 0.0115 | 0.0102 | 0.5038 | 0.4887 |
| Palo Pinto | 2285002006 | 6.5907 | 46.2884 | 172.1210 | 0.1621 | 0.1443 | 3.9988 | 3.8788 |
| Panola | 2285002006 | 0.7308 | 5.1326 | 19.0851 | 0.0180 | 0.0160 | 0.4434 | 0.4301 |
| Panola | 2285002007 | 0.5331 | 1.0080 | 9.9951 | 0.0040 | 0.0036 | 0.2293 | 0.2224 |
| Panola | 2285002010 | 0.6984 | 1.7570 | 13.4179 | 0.0059 | 0.0052 | 0.2590 | 0.2512 |
| Parker | 2285002006 | 6.2693 | 44.0315 | 163.7287 | 0.1542 | 0.1373 | 3.8038 | 3.6897 |
| Parker | 2285002007 | 0.0118 | 0.0223 | 0.2215 | 0.0001 | 0.0001 | 0.0051 | 0.0049 |
| Parmer | 2285002006 | 30.0378 | 210.9648 | 784.4621 | 0.7390 | 0.6577 | 18.2249 | 17.6781 |
| Parmer | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Pecos | 2285002006 | 0.6783 | 4.7637 | 17.7136 | 0.0167 | 0.0149 | 0.4115 | 0.3992 |
| Pecos | 2285002007 | 1.6609 | 3.1406 | 31.1415 | 0.0126 | 0.0112 | 0.7145 | 0.6931 |
| Pecos | 2285002008 | 0.0531 | 0.4333 | 1.5137 | 0.0015 | 0.0014 | 0.0342 | 0.0332 |
| Polk | 2285002006 | 2.3383 | 16.4229 | 61.0678 | 0.0575 | 0.0512 | 1.4187 | 1.3762 |
| Polk | 2285002007 | 0.0650 | 0.1229 | 1.2191 | 0.0005 | 0.0004 | 0.0280 | 0.0271 |
| Potter | 2285002006 | 23.0568 | 161.9356 | 602.1492 | 0.5672 | 0.5049 | 13.9893 | 13.5696 |
| Potter | 2285002010 | 7.3967 | 18.6087 | 125.1013 | 0.0624 | 0.0555 | 2.7429 | 2.6606 |
| Presidio | 2285002006 | 3.5305 | 24.7959 | 92.2023 | 0.0869 | 0.0773 | 2.1421 | 2.0778 |
| Presidio | 2285002007 | 1.8668 | 3.5299 | 35.0018 | 0.0141 | 0.0126 | 0.8031 | 0.7790 |
| Presidio | 2285002008 | 0.2765 | 2.2553 | 7.8779 | 0.0079 | 0.0070 | 0.1779 | 0.1726 |
| Randall | 2285002006 | 24.4612 | 171.7986 | 638.8246 | 0.6018 | 0.5356 | 14.8414 | 14.3961 |
| Randall | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Reagan | 2285002007 | 0.7360 | 1.3916 | 13.7990 | 0.0056 | 0.0050 | 0.3166 | 0.3071 |
| Reeves | 2285002006 | 5.6424 | 39.6284 | 147.3561 | 0.1388 | 0.1236 | 3.4234 | 3.3207 |
| Reeves | 2285002007 | 0.8500 | 1.6072 | 15.9371 | 0.0064 | 0.0057 | 0.3657 | 0.3547 |
| Reeves | 2285002010 | 0.0103 | 0.0259 | 0.1738 | 0.0001 | 0.0001 | 0.0038 | 0.0037 |
| Refugio | 2285002006 | 4.5377 | 31.8697 | 118.5059 | 0.1116 | 0.0994 | 2.7532 | 2.6706 |
| Roberts | 2285002006 | 11.3532 | 79.7374 | 296.4994 | 0.2793 | 0.2486 | 6.8884 | 6.6817 |
| Robertson | 2285002006 | 14.6760 | 103.0743 | 383.2765 | 0.3610 | 0.3214 | 8.9044 | 8.6373 |
| Robertson | 2285002010 | 1.2922 | 3.2510 | 21.8556 | 0.0109 | 0.0097 | 0.4792 | 0.4648 |
| Rockwall | 2285002007 | 0.3966 | 0.7499 | 7.4361 | 0.0030 | 0.0027 | 0.1706 | 0.1655 |
| Runnels | 2285002007 | 0.8284 | 1.5664 | 15.5321 | 0.0063 | 0.0056 | 0.3564 | 0.3457 |
| Runnels | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Rusk | 2285002006 | 1.6420 | 11.5325 | 42.8831 | 0.0404 | 0.0360 | 0.9963 | 0.9664 |
| Rusk | 2285002007 | 0.3523 | 0.6663 | 6.6065 | 0.0027 | 0.0024 | 0.1516 | 0.1470 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Rusk | 2285002010 | 0.0074 | 0.0186 | 1.7309 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Sabine | 2285002007 | 0.5400 | 1.0211 | 10.1254 | 0.0041 | 0.0036 | 0.2323 | 0.2253 |
| San Augustine | 2285002007 | 0.4914 | 0.9292 | 9.2136 | 0.0037 | 0.0033 | 0.2114 | 0.2051 |
| San Jacinto | 2285002006 | 0.7849 | 5.5129 | 20.4995 | 0.0193 | 0.0172 | 0.4763 | 0.4620 |
| San Patricio | 2285002006 | 3.4077 | 23.9335 | 88.9955 | 0.0838 | 0.0746 | 2.0676 | 2.0055 |
| San Patricio | 2285002010 | 0.8763 | 2.2045 | 14.8203 | 0.0074 | 0.0066 | 0.3249 | 0.3152 |
| San Saba | 2285002007 | 1.0771 | 2.0367 | 20.1953 | 0.0082 | 0.0073 | 0.4634 | 0.4495 |
| Scurry | 2285002006 | 3.4620 | 24.3151 | 90.4144 | 0.0852 | 0.0758 | 2.1005 | 2.0375 |
| Shelby | 2285002006 | 2.4752 | 17.3839 | 64.6410 | 0.0609 | 0.0542 | 1.5018 | 1.4567 |
| Shelby | 2285002007 | 0.8114 | 1.5342 | 15.2129 | 0.0061 | 0.0055 | 0.3490 | 0.3386 |
| Shelby | 2285002010 | 0.6984 | 1.7570 | 20.2905 | 0.0059 | 0.0052 | 0.2590 | 0.2512 |
| Sherman | 2285002006 | 9.7683 | 68.6056 | 255.1063 | 0.2403 | 0.2139 | 5.9267 | 5.7489 |
| Smith | 2285002006 | 4.6449 | 32.6224 | 121.3047 | 0.1143 | 0.1017 | 2.8182 | 2.7336 |
| Smith | 2285002008 | 0.0101 | 0.0820 | 0.2864 | 0.0003 | 0.0003 | 0.0065 | 0.0063 |
| Smith | 2285002010 | 1.7230 | 4.3346 | 32.3526 | 0.0145 | 0.0129 | 0.6389 | 0.6197 |
| Somervell | 2285002007 | 0.0550 | 0.1040 | 1.0308 | 0.0004 | 0.0004 | 0.0236 | 0.0229 |
| Starr | 2285002007 | 0.4666 | 0.8822 | 8.7478 | 0.0035 | 0.0031 | 0.2007 | 0.1947 |
| Stephens | 2285002006 | 1.0255 | 7.2025 | 26.7823 | 0.0252 | 0.0225 | 0.6222 | 0.6035 |
| Swisher | 2285002006 | 2.4680 | 17.3335 | 64.4537 | 0.0607 | 0.0540 | 1.4974 | 1.4525 |
| Swisher | 2285002007 | 0.0434 | 0.0820 | 0.8128 | 0.0003 | 0.0003 | 0.0186 | 0.0181 |
| Tarrant | 2285002006 | 29.1925 | 205.0285 | 762.3883 | 0.7182 | 0.6392 | 17.7121 | 17.1807 |
| Tarrant | 2285002007 | 2.3437 | 4.4316 | 43.9434 | 0.0177 | 0.0158 | 1.0082 | 0.9780 |
| Tarrant | 2285002008 | 0.3567 | 2.9091 | 10.1619 | 0.0102 | 0.0091 | 0.2295 | 0.2226 |
| Tarrant | 2285002009 | 1.2965 | 10.5741 | 36.9362 | 0.0370 | 0.0330 | 0.8340 | 0.8090 |
| Tarrant | 2285002010 | 15.0662 | 37.9036 | 332.9418 | 0.1271 | 0.1131 | 5.5869 | 5.4193 |
| Taylor | 2285002006 | 9.4412 | 66.3083 | 246.5639 | 0.2323 | 0.2067 | 5.7283 | 5.5564 |
| Taylor | 2285002007 | 0.2558 | 0.4836 | 4.7955 | 0.0019 | 0.0017 | 0.1100 | 0.1067 |
| Taylor | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Terrell | 2285002006 | 4.7217 | 33.1620 | 123.3113 | 0.1162 | 0.1034 | 2.8648 | 2.7789 |
| Terrell | 2285002008 | 0.3735 | 3.0462 | 10.6406 | 0.0107 | 0.0095 | 0.2403 | 0.2331 |
| Terry | 2285002007 | 0.8743 | 1.6533 | 16.3938 | 0.0066 | 0.0059 | 0.3761 | 0.3649 |
| Titus | 2285002006 | 2.2696 | 15.9405 | 59.2738 | 0.0558 | 0.0497 | 1.3771 | 1.3358 |
| Titus | 2285002007 | 0.7566 | 1.4307 | 14.1869 | 0.0057 | 0.0051 | 0.3255 | 0.3157 |
| Titus | 2285002010 | 0.8689 | 2.1859 | 17.9072 | 0.0073 | 0.0065 | 0.3222 | 0.3125 |
| Tom Green | 2285002007 | 0.8437 | 1.5953 | 15.8183 | 0.0064 | 0.0057 | 0.3629 | 0.3520 |
| Tom Green | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Travis | 2285002006 | 3.4020 | 23.8935 | 88.8468 | 0.0837 | 0.0745 | 2.0641 | 2.0022 |
| Travis | 2285002007 | 1.1701 | 2.2125 | 21.9392 | 0.0089 | 0.0079 | 0.5034 | 0.4883 |
| Travis | 2285002008 | 0.1648 | 1.3441 | 4.6951 | 0.0047 | 0.0042 | 0.1060 | 0.1028 |
| Travis | 2285002010 | 0.2004 | 0.5042 | 3.3898 | 0.0017 | 0.0015 | 0.0743 | 0.0721 |
| Trinity | 2285002006 | 1.4599 | 10.2532 | 38.1259 | 0.0359 | 0.0320 | 0.8858 | 0.8592 |
| Upshur | 2285002006 | 4.8475 | 34.0453 | 126.5958 | 0.1193 | 0.1061 | 2.9411 | 2.8529 |
| Upshur | 2285002008 | 0.0733 | 0.5979 | 2.0884 | 0.0021 | 0.0019 | 0.0472 | 0.0457 |
| Upton | 2285002007 | 0.8098 | 1.5313 | 15.1838 | 0.0061 | 0.0055 | 0.3484 | 0.3379 |
| Uvalde | 2285002006 | 10.5859 | 74.3481 | 276.4598 | 0.2604 | 0.2318 | 6.4228 | 6.2301 |
| Uvalde | 2285002008 | 0.2829 | 2.3077 | 8.0609 | 0.0081 | 0.0072 | 0.1820 | 0.1766 |
| Uvalde | 2285002010 | 0.8689 | 2.1859 | 17.2274 | 0.0073 | 0.0065 | 0.3222 | 0.3125 |
| Val Verde | 2285002006 | 7.2269 | 50.7565 | 188.7356 | 0.1778 | 0.1582 | 4.3848 | 4.2532 |
| Val Verde | 2285002008 | 0.5665 | 4.6201 | 16.1384 | 0.0162 | 0.0144 | 0.3644 | 0.3535 |
| Van Zandt | 2285002006 | 3.9404 | 27.6749 | 102.9078 | 0.0969 | 0.0863 | 2.3908 | 2.3191 |
| Van Zandt | 2285002008 | 0.1776 | 1.4489 | 5.0611 | 0.0051 | 0.0045 | 0.1143 | 0.1109 |
| Victoria | 2285002006 | 5.5914 | 39.2702 | 146.0243 | 0.1376 | 0.1224 | 3.3925 | 3.2907 |
| Victoria | 2285002010 | 2.1685 | 5.4555 | 36.6758 | 0.0183 | 0.0163 | 0.8041 | 0.7800 |
| Walker | 2285002006 | 2.4414 | 17.1469 | 63.7599 | 0.0601 | 0.0535 | 1.4813 | 1.4369 |
| Waller | 2285002006 | 0.5089 | 3.5743 | 13.2908 | 0.0125 | 0.0111 | 0.3088 | 0.2995 |
| Waller | 2285002010 | 0.8689 | 2.1859 | 17.4388 | 0.0073 | 0.0065 | 0.3222 | 0.3125 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Ward | 2285002006 | 5.6356 | 39.5803 | 147.1775 | 0.1386 | 0.1234 | 3.4193 | 3.3167 |
| Ward | 2285002007 | 0.2038 | 0.3853 | 3.8205 | 0.0015 | 0.0014 | 0.0877 | 0.0850 |
| Ward | 2285002010 | 0.8615 | 2.1673 | 14.5704 | 0.0073 | 0.0065 | 0.3195 | 0.3099 |
| Washington | 2285002006 | 3.3182 | 23.3051 | 86.6587 | 0.0816 | 0.0727 | 2.0133 | 1.9529 |
| Washington | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Webb | 2285002006 | 9.5566 | 67.1191 | 249.5788 | 0.2351 | 0.2093 | 5.7983 | 5.6243 |
| Webb | 2285002010 | 3.1210 | 7.8517 | 52.7851 | 0.0263 | 0.0234 | 1.1573 | 1.1226 |
| Wharton | 2285002006 | 6.3766 | 44.7848 | 166.5301 | 0.1569 | 0.1396 | 3.8689 | 3.7528 |
| Wharton | 2285002008 | 0.0769 | 0.6274 | 2.1916 | 0.0022 | 0.0020 | 0.0495 | 0.0480 |
| Wichita | 2285002006 | 5.8517 | 41.0983 | 152.8218 | 0.1440 | 0.1281 | 3.5504 | 3.4439 |
| Wichita | 2285002007 | 0.5187 | 0.9808 | 9.7253 | 0.0039 | 0.0035 | 0.2231 | 0.2164 |
| Wichita | 2285002010 | 0.3861 | 0.9714 | 6.5308 | 0.0033 | 0.0029 | 0.1432 | 0.1389 |
| Wilbarger | 2285002006 | 6.0373 | 42.4016 | 157.6681 | 0.1485 | 0.1322 | 3.6630 | 3.5531 |
| Wilbarger | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Willacy | 2285002006 | 0.4699 | 3.3005 | 12.2728 | 0.0116 | 0.0103 | 0.2851 | 0.2766 |
| Williamson | 2285002006 | 5.7328 | 40.2635 | 149.7179 | 0.1410 | 0.1255 | 3.4783 | 3.3739 |
| Williamson | 2285002007 | 1.8277 | 3.4560 | 34.2697 | 0.0138 | 0.0123 | 0.7863 | 0.7627 |
| Williamson | 2285002008 | 0.2356 | 1.9216 | 6.7123 | 0.0067 | 0.0060 | 0.1516 | 0.1470 |
| Williamson | 2285002010 | 0.9132 | 2.2974 | 15.4451 | 0.0077 | 0.0069 | 0.3386 | 0.3285 |
| Wilson | 2285002010 | 1.2922 | 3.2510 | 23.1216 | 0.0109 | 0.0097 | 0.4792 | 0.4648 |
| Winkler | 2285002007 | 0.7495 | 1.4172 | 14.0529 | 0.0057 | 0.0050 | 0.3224 | 0.3128 |
| Wise | 2285002006 | 8.4642 | 59.4468 | 221.0499 | 0.2082 | 0.1853 | 5.1355 | 4.9814 |
| Wise | 2285002010 | 1.2922 | 3.2510 | 34.8765 | 0.0109 | 0.0097 | 0.4792 | 0.4648 |
| Wood | 2285002006 | 4.0335 | 28.3286 | 105.3385 | 0.0992 | 0.0883 | 2.4473 | 2.3738 |
| Wood | 2285002008 | 0.1591 | 1.2975 | 4.5323 | 0.0045 | 0.0040 | 0.1023 | 0.0993 |
| Wood | 2285002010 | 1.7230 | 4.3346 | 30.7467 | 0.0145 | 0.0129 | 0.6389 | 0.6197 |

[1] Pb emissions were less than 1 ton/ year,

[2] SCC represents the following categories: 2285002006: Line Haul Locomotives: Class I Operations, 2285002007: Line Haul Locomotives: Class II / III Operations, 2285002008: Line Haul Locomotives: Passenger Trains (Amtrak), 2285002009: Line Haul Locomotives: Commuter Lines, and 2285002010: Yard Locomotives.

## Uncontrolled 2020 Summer Weekday County-Level Emissions by Criteria Pollutant (tons/day).

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Anderson | 2285002006 | 0.0151 | 0.1060 | 0.3943 | 0.0004 | 0.0003 | 0.0092 | 0.0089 |
| Anderson | 2285002007 | 0.0023 | 0.0044 | 0.0433 | 0.0000 | 0.0000 | 0.0010 | 0.0010 |
| Anderson | 2285002010 | 0.0035 | 0.0089 | 0.0643 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Andrews | 2285002007 | 0.0003 | 0.0006 | 0.0055 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Angelina | 2285002006 | 0.0041 | 0.0290 | 0.1079 | 0.0001 | 0.0001 | 0.0025 | 0.0024 |
| Angelina | 2285002007 | 0.0002 | 0.0005 | 0.0046 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Angelina | 2285002010 | 0.0012 | 0.0030 | 0.0668 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Armstrong | 2285002006 | 0.0157 | 0.1105 | 0.4109 | 0.0004 | 0.0003 | 0.0095 | 0.0093 |
| Atascosa | 2285002006 | 0.0041 | 0.0288 | 0.1070 | 0.0001 | 0.0001 | 0.0025 | 0.0024 |
| Atascosa | 2285002010 | 0.0000 | 0.0001 | 0.0038 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Austin | 2285002006 | 0.0233 | 0.1636 | 0.6085 | 0.0006 | 0.0005 | 0.0141 | 0.0137 |
| Austin | 2285002010 | 0.0000 | 0.0001 | 0.0082 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Bailey | 2285002006 | 0.0029 | 0.0202 | 0.0751 | 0.0001 | 0.0001 | 0.0017 | 0.0017 |
| Bastrop | 2285002006 | 0.0126 | 0.0886 | 0.3296 | 0.0003 | 0.0003 | 0.0077 | 0.0074 |
| Bastrop | 2285002007 | 0.0015 | 0.0028 | 0.0278 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Bastrop | 2285002010 | 0.0024 | 0.0059 | 0.0399 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Bell | 2285002006 | 0.0365 | 0.2564 | 0.9536 | 0.0009 | 0.0008 | 0.0222 | 0.0215 |
| Bell | 2285002007 | 0.0011 | 0.0020 | 0.0200 | 0.0000 | 0.0000 | 0.0005 | 0.0004 |
| Bell | 2285002008 | 0.0006 | 0.0049 | 0.0172 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Bell | 2285002010 | 0.0052 | 0.0131 | 0.0880 | 0.0000 | 0.0000 | 0.0019 | 0.0019 |
| Bexar | 2285002006 | 0.0504 | 0.3542 | 1.3169 | 0.0012 | 0.0011 | 0.0306 | 0.0297 |
| Bexar | 2285002007 | 0.0011 | 0.0020 | 0.0197 | 0.0000 | 0.0000 | 0.0005 | 0.0004 |
| Bexar | 2285002008 | 0.0014 | 0.0114 | 0.0399 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Bexar | 2285002010 | 0.0183 | 0.0461 | 0.3342 | 0.0002 | 0.0001 | 0.0068 | 0.0066 |
| Bosque | 2285002006 | 0.0277 | 0.1944 | 0.7229 | 0.0007 | 0.0006 | 0.0168 | 0.0163 |
| Bosque | 2285002008 | 0.0007 | 0.0055 | 0.0191 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Bowie | 2285002006 | 0.0280 | 0.1967 | 0.7316 | 0.0007 | 0.0006 | 0.0170 | 0.0165 |
| Bowie | 2285002007 | 0.0073 | 0.0138 | 0.1371 | 0.0001 | 0.0000 | 0.0031 | 0.0031 |
| Bowie | 2285002008 | 0.0002 | 0.0012 | 0.0043 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Brazoria | 2285002006 | 0.0281 | 0.1974 | 0.7341 | 0.0007 | 0.0006 | 0.0171 | 0.0165 |
| Brazoria | 2285002010 | 0.0162 | 0.0407 | 0.3115 | 0.0001 | 0.0001 | 0.0060 | 0.0058 |
| Brazos | 2285002006 | 0.0212 | 0.1488 | 0.5531 | 0.0005 | 0.0005 | 0.0129 | 0.0125 |
| Brazos | 2285002010 | 0.0012 | 0.0030 | 0.0200 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Brewster | 2285002006 | 0.0176 | 0.1236 | 0.4596 | 0.0004 | 0.0004 | 0.0107 | 0.0104 |
| Brewster | 2285002007 | 0.0024 | 0.0045 | 0.0446 | 0.0000 | 0.0000 | 0.0010 | 0.0010 |
| Brewster | 2285002008 | 0.0014 | 0.0112 | 0.0393 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Brown | 2285002006 | 0.0094 | 0.0661 | 0.2456 | 0.0002 | 0.0002 | 0.0057 | 0.0055 |
| Brown | 2285002007 | 0.0023 | 0.0043 | 0.0423 | 0.0000 | 0.0000 | 0.0010 | 0.0009 |
| Burleson | 2285002006 | 0.0374 | 0.2627 | 0.9770 | 0.0009 | 0.0008 | 0.0227 | 0.0220 |
| Burleson | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Burnet | 2285002007 | 0.0023 | 0.0043 | 0.0423 | 0.0000 | 0.0000 | 0.0010 | 0.0009 |
| Caldwell | 2285002006 | 0.0129 | 0.0905 | 0.3365 | 0.0003 | 0.0003 | 0.0078 | 0.0076 |
| Caldwell | 2285002008 | 0.0002 | 0.0014 | 0.0051 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Calhoun | 2285002007 | 0.0002 | 0.0004 | 0.0039 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Calhoun | 2285002010 | 0.0012 | 0.0030 | 0.0203 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Callahan | 2285002006 | 0.0151 | 0.1063 | 0.3951 | 0.0004 | 0.0003 | 0.0092 | 0.0089 |
| Cameron | 2285002006 | 0.0022 | 0.0157 | 0.0585 | 0.0001 | 0.0000 | 0.0014 | 0.0013 |
| Cameron | 2285002007 | 0.0028 | 0.0053 | 0.0522 | 0.0000 | 0.0000 | 0.0012 | 0.0012 |
| Cameron | 2285002010 | 0.0025 | 0.0063 | 0.0423 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Camp | 2285002006 | 0.0079 | 0.0553 | 0.2055 | 0.0002 | 0.0002 | 0.0048 | 0.0046 |
| Camp | 2285002007 | 0.0006 | 0.0010 | 0.0104 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Carson | 2285002006 | 0.0647 | 0.4541 | 1.6887 | 0.0016 | 0.0014 | 0.0392 | 0.0381 |
| Carson | 2285002007 | 0.0025 | 0.0047 | 0.0463 | 0.0000 | 0.0000 | 0.0011 | 0.0010 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Carson | 2285002010 | 0.0000 | 0.0001 | 0.0007 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cass | 2285002006 | 0.0302 | 0.2119 | 0.7880 | 0.0007 | 0.0007 | 0.0183 | 0.0178 |
| Cass | 2285002008 | 0.0006 | 0.0046 | 0.0161 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Cass | 2285002010 | 0.0009 | 0.0023 | 0.0201 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Castro | 2285002006 | 0.0048 | 0.0335 | 0.1245 | 0.0001 | 0.0001 | 0.0029 | 0.0028 |
| Castro | 2285002007 | 0.0016 | 0.0030 | 0.0296 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Castro | 2285002010 | 0.0029 | 0.0072 | 0.0485 | 0.0000 | 0.0000 | 0.0011 | 0.0010 |
| Chambers | 2285002006 | 0.0007 | 0.0052 | 0.0193 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Chambers | 2285002010 | 0.0024 | 0.0061 | 0.0560 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Cherokee | 2285002006 | 0.0129 | 0.0905 | 0.3365 | 0.0003 | 0.0003 | 0.0078 | 0.0076 |
| Cherokee | 2285002007 | 0.0021 | 0.0039 | 0.0384 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Childress | 2285002006 | 0.0137 | 0.0962 | 0.3577 | 0.0003 | 0.0003 | 0.0083 | 0.0081 |
| Clay | 2285002006 | 0.0151 | 0.1059 | 0.3938 | 0.0004 | 0.0003 | 0.0091 | 0.0089 |
| Cochran | 2285002007 | 0.0001 | 0.0001 | 0.0014 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Coleman | 2285002006 | 0.0126 | 0.0883 | 0.3283 | 0.0003 | 0.0003 | 0.0076 | 0.0074 |
| Coleman | 2285002007 | 0.0014 | 0.0027 | 0.0271 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Collin | 2285002006 | 0.0099 | 0.0697 | 0.2592 | 0.0002 | 0.0002 | 0.0060 | 0.0058 |
| Collin | 2285002007 | 0.0043 | 0.0081 | 0.0802 | 0.0000 | 0.0000 | 0.0018 | 0.0018 |
| Collin | 2285002010 | 0.0019 | 0.0047 | 0.0670 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Colorado | 2285002006 | 0.0164 | 0.1151 | 0.4280 | 0.0004 | 0.0004 | 0.0099 | 0.0096 |
| Colorado | 2285002008 | 0.0006 | 0.0053 | 0.0184 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Colorado | 2285002010 | 0.0024 | 0.0059 | 0.0437 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Comal | 2285002006 | 0.0102 | 0.0719 | 0.2672 | 0.0003 | 0.0002 | 0.0062 | 0.0060 |
| Comal | 2285002007 | 0.0001 | 0.0003 | 0.0025 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Comal | 2285002008 | 0.0009 | 0.0070 | 0.0245 | 0.0000 | 0.0000 | 0.0006 | 0.0005 |
| Comal | 2285002010 | 0.0048 | 0.0120 | 0.0982 | 0.0000 | 0.0000 | 0.0018 | 0.0017 |
| Comanche | 2285002007 | 0.0037 | 0.0069 | 0.0686 | 0.0000 | 0.0000 | 0.0016 | 0.0015 |
| Cooke | 2285002006 | 0.0134 | 0.0938 | 0.3488 | 0.0003 | 0.0003 | 0.0081 | 0.0079 |
| Cooke | 2285002008 | 0.0004 | 0.0031 | 0.0107 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Coryell | 2285002006 | 0.0032 | 0.0223 | 0.0831 | 0.0001 | 0.0001 | 0.0019 | 0.0019 |
| Coryell | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Crane | 2285002006 | 0.0005 | 0.0036 | 0.0135 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Crane | 2285002007 | 0.0002 | 0.0005 | 0.0045 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Crockett | 2285002007 | 0.0000 | 0.0001 | 0.0006 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Culberson | 2285002006 | 0.0203 | 0.1428 | 0.5310 | 0.0005 | 0.0004 | 0.0123 | 0.0120 |
| Culberson | 2285002008 | 0.0003 | 0.0026 | 0.0092 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Dallam | 2285002006 | 0.0216 | 0.1515 | 0.5633 | 0.0005 | 0.0005 | 0.0131 | 0.0127 |
| Dallam | 2285002010 | 0.0035 | 0.0089 | 0.0599 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Dallas | 2285002006 | 0.0270 | 0.1893 | 0.7039 | 0.0007 | 0.0006 | 0.0164 | 0.0159 |
| Dallas | 2285002007 | 0.0091 | 0.0171 | 0.1701 | 0.0001 | 0.0001 | 0.0039 | 0.0038 |
| Dallas | 2285002008 | 0.0006 | 0.0050 | 0.0176 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Dallas | 2285002009 | 0.0025 | 0.0206 | 0.0721 | 0.0001 | 0.0001 | 0.0016 | 0.0016 |
| Dallas | 2285002010 | 0.0197 | 0.0494 | 0.5822 | 0.0002 | 0.0001 | 0.0073 | 0.0071 |
| De Witt | 2285002006 | 0.0015 | 0.0107 | 0.0399 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Deaf Smith | 2285002006 | 0.0465 | 0.3268 | 1.2151 | 0.0011 | 0.0010 | 0.0282 | 0.0274 |
| Deaf Smith | 2285002010 | 0.0010 | 0.0024 | 0.0162 | 0.0000 | 0.0000 | 0.0004 | 0.0003 |
| Delta | 2285002007 | 0.0000 | 0.0001 | 0.0008 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Denton | 2285002006 | 0.0426 | 0.2993 | 1.1130 | 0.0010 | 0.0009 | 0.0259 | 0.0251 |
| Denton | 2285002007 | 0.0020 | 0.0039 | 0.0383 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Denton | 2285002008 | 0.0006 | 0.0046 | 0.0161 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Denton | 2285002009 | 0.0015 | 0.0120 | 0.0419 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Denton | 2285002010 | 0.0093 | 0.0234 | 0.2997 | 0.0001 | 0.0001 | 0.0034 | 0.0033 |
| Donley | 2285002006 | 0.0186 | 0.1309 | 0.4867 | 0.0005 | 0.0004 | 0.0113 | 0.0110 |
| Duval | 2285002006 | 0.0133 | 0.0937 | 0.3482 | 0.0003 | 0.0003 | 0.0081 | 0.0078 |
| Eastland | 2285002006 | 0.0156 | 0.1096 | 0.4075 | 0.0004 | 0.0003 | 0.0095 | 0.0092 |
| Eastland | 2285002007 | 0.0001 | 0.0001 | 0.0010 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Ector | 2285002006 | 0.0113 | 0.0792 | 0.2945 | 0.0003 | 0.0002 | 0.0068 | 0.0066 |
| Ector | 2285002010 | 0.0071 | 0.0178 | 0.1198 | 0.0001 | 0.0001 | 0.0026 | 0.0025 |
| El Paso | 2285002006 | 0.0436 | 0.3064 | 1.1392 | 0.0011 | 0.0010 | 0.0265 | 0.0257 |
| El Paso | 2285002007 | 0.0008 | 0.0016 | 0.0154 | 0.0000 | 0.0000 | 0.0004 | 0.0003 |
| El Paso | 2285002008 | 0.0009 | 0.0072 | 0.0250 | 0.0000 | 0.0000 | 0.0006 | 0.0005 |
| El Paso | 2285002010 | 0.0233 | 0.0585 | 0.3935 | 0.0002 | 0.0002 | 0.0086 | 0.0084 |
| Ellis | 2285002006 | 0.0206 | 0.1450 | 0.5393 | 0.0005 | 0.0005 | 0.0125 | 0.0122 |
| Ellis | 2285002010 | 0.0083 | 0.0208 | 0.1754 | 0.0001 | 0.0001 | 0.0031 | 0.0030 |
| Erath | 2285002007 | 0.0036 | 0.0068 | 0.0672 | 0.0000 | 0.0000 | 0.0015 | 0.0015 |
| Erath | 2285002010 | 0.0000 | 0.0001 | 0.0720 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Falls | 2285002006 | 0.0114 | 0.0803 | 0.2986 | 0.0003 | 0.0003 | 0.0069 | 0.0067 |
| Fannin | 2285002007 | 0.0040 | 0.0075 | 0.0747 | 0.0000 | 0.0000 | 0.0017 | 0.0017 |
| Fayette | 2285002006 | 0.0354 | 0.2484 | 0.9238 | 0.0009 | 0.0008 | 0.0215 | 0.0208 |
| Fayette | 2285002008 | 0.0004 | 0.0032 | 0.0112 | 0.0000 | 0.0000 | 0.0003 | 0.0002 |
| Fayette | 2285002010 | 0.0024 | 0.0060 | 0.0403 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Fisher | 2285002006 | 0.0049 | 0.0342 | 0.1270 | 0.0001 | 0.0001 | 0.0030 | 0.0029 |
| Fort Bend | 2285002006 | 0.0461 | 0.3236 | 1.2032 | 0.0011 | 0.0010 | 0.0280 | 0.0271 |
| Fort Bend | 2285002007 | 0.0002 | 0.0004 | 0.0041 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Fort Bend | 2285002008 | 0.0006 | 0.0047 | 0.0165 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Fort Bend | 2285002010 | 0.0015 | 0.0036 | 0.0396 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Franklin | 2285002006 | 0.0010 | 0.0070 | 0.0260 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Franklin | 2285002007 | 0.0005 | 0.0010 | 0.0096 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Freestone | 2285002006 | 0.0088 | 0.0616 | 0.2292 | 0.0002 | 0.0002 | 0.0053 | 0.0052 |
| Freestone | 2285002010 | 0.0019 | 0.0048 | 0.0324 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Frio | 2285002006 | 0.0129 | 0.0906 | 0.3369 | 0.0003 | 0.0003 | 0.0078 | 0.0076 |
| Gaines | 2285002007 | 0.0003 | 0.0005 | 0.0049 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Galveston | 2285002006 | 0.0113 | 0.0794 | 0.2951 | 0.0003 | 0.0002 | 0.0069 | 0.0067 |
| Galveston | 2285002007 | 0.0026 | 0.0049 | 0.0484 | 0.0000 | 0.0000 | 0.0011 | 0.0011 |
| Galveston | 2285002010 | 0.0036 | 0.0090 | 0.0677 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Garza | 2285002006 | 0.0100 | 0.0705 | 0.2622 | 0.0002 | 0.0002 | 0.0061 | 0.0059 |
| Goliad | 2285002006 | 0.0001 | 0.0007 | 0.0026 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Gonzales | 2285002006 | 0.0142 | 0.1000 | 0.3720 | 0.0004 | 0.0003 | 0.0086 | 0.0084 |
| Gonzales | 2285002007 | 0.0065 | 0.0123 | 0.1218 | 0.0000 | 0.0000 | 0.0028 | 0.0027 |
| Gonzales | 2285002008 | 0.0004 | 0.0031 | 0.0110 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Gonzales | 2285002010 | 0.0000 | 0.0001 | 0.0007 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Gray | 2285002006 | 0.0345 | 0.2422 | 0.9007 | 0.0008 | 0.0008 | 0.0209 | 0.0203 |
| Gray | 2285002010 | 0.0019 | 0.0049 | 0.0327 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Grayson | 2285002006 | 0.0364 | 0.2558 | 0.9512 | 0.0009 | 0.0008 | 0.0221 | 0.0214 |
| Grayson | 2285002007 | 0.0094 | 0.0177 | 0.1760 | 0.0001 | 0.0001 | 0.0040 | 0.0039 |
| Grayson | 2285002010 | 0.0059 | 0.0149 | 0.1715 | 0.0000 | 0.0000 | 0.0022 | 0.0021 |
| Gregg | 2285002006 | 0.0129 | 0.0908 | 0.3375 | 0.0003 | 0.0003 | 0.0078 | 0.0076 |
| Gregg | 2285002008 | 0.0003 | 0.0022 | 0.0078 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Gregg | 2285002010 | 0.0094 | 0.0238 | 0.1685 | 0.0001 | 0.0001 | 0.0035 | 0.0034 |
| Grimes | 2285002006 | 0.0172 | 0.1208 | 0.4492 | 0.0004 | 0.0004 | 0.0104 | 0.0101 |
| Grimes | 2285002007 | 0.0008 | 0.0015 | 0.0147 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Grimes | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Guadalupe | 2285002006 | 0.0232 | 0.1627 | 0.6051 | 0.0006 | 0.0005 | 0.0141 | 0.0136 |
| Guadalupe | 2285002008 | 0.0006 | 0.0051 | 0.0179 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Guadalupe | 2285002010 | 0.0024 | 0.0059 | 0.0434 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Hale | 2285002006 | 0.0089 | 0.0628 | 0.2336 | 0.0002 | 0.0002 | 0.0054 | 0.0053 |
| Hale | 2285002007 | 0.0018 | 0.0035 | 0.0344 | 0.0000 | 0.0000 | 0.0008 | 0.0008 |
| Hale | 2285002010 | 0.0039 | 0.0098 | 0.0660 | 0.0000 | 0.0000 | 0.0014 | 0.0014 |
| Hall | 2285002006 | 0.0085 | 0.0600 | 0.2230 | 0.0002 | 0.0002 | 0.0052 | 0.0050 |
| Hansford | 2285002007 | 0.0001 | 0.0001 | 0.0010 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hardeman | 2285002006 | 0.0155 | 0.1091 | 0.4056 | 0.0004 | 0.0003 | 0.0094 | 0.0091 |
| Hardeman | 2285002007 | 0.0006 | 0.0012 | 0.0118 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Hardeman | 2285002010 | 0.0019 | 0.0049 | 0.0327 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Hardin | 2285002006 | 0.0084 | 0.0590 | 0.2195 | 0.0002 | 0.0002 | 0.0051 | 0.0049 |
| Hardin | 2285002007 | 0.0007 | 0.0014 | 0.0137 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Hardin | 2285002010 | 0.0069 | 0.0173 | 0.1396 | 0.0001 | 0.0001 | 0.0026 | 0.0025 |
| Harris | 2285002006 | 0.0898 | 0.6306 | 2.3448 | 0.0022 | 0.0020 | 0.0545 | 0.0528 |
| Harris | 2285002007 | 0.0094 | 0.0177 | 0.1759 | 0.0001 | 0.0001 | 0.0040 | 0.0039 |
| Harris | 2285002008 | 0.0008 | 0.0065 | 0.0226 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Harris | 2285002010 | 0.1765 | 0.4441 | 3.1584 | 0.0015 | 0.0013 | 0.0655 | 0.0635 |
| Harrison | 2285002006 | 0.0332 | 0.2328 | 0.8658 | 0.0008 | 0.0007 | 0.0201 | 0.0195 |
| Harrison | 2285002008 | 0.0006 | 0.0045 | 0.0159 | 0.0000 | 0.0000 | 0.0004 | 0.0003 |
| Harrison | 2285002010 | 0.0012 | 0.0030 | 0.0291 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Hartley | 2285002006 | 0.0212 | 0.1486 | 0.5525 | 0.0005 | 0.0005 | 0.0128 | 0.0125 |
| Hays | 2285002006 | 0.0085 | 0.0599 | 0.2229 | 0.0002 | 0.0002 | 0.0052 | 0.0050 |
| Hays | 2285002008 | 0.0004 | 0.0035 | 0.0123 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Hays | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hemphill | 2285002006 | 0.0564 | 0.3963 | 1.4735 | 0.0014 | 0.0012 | 0.0342 | 0.0332 |
| Hemphill | 2285002010 | 0.0000 | 0.0001 | 0.0007 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Henderson | 2285002006 | 0.0080 | 0.0564 | 0.2098 | 0.0002 | 0.0002 | 0.0049 | 0.0047 |
| Hidalgo | 2285002007 | 0.0054 | 0.0103 | 0.1021 | 0.0000 | 0.0000 | 0.0023 | 0.0023 |
| Hidalgo | 2285002010 | 0.0001 | 0.0002 | 0.0014 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hill | 2285002006 | 0.0185 | 0.1303 | 0.4844 | 0.0005 | 0.0004 | 0.0113 | 0.0109 |
| Hill | 2285002008 | 0.0002 | 0.0014 | 0.0047 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Hill | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hockley | 2285002006 | 0.0011 | 0.0079 | 0.0295 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Hockley | 2285002007 | 0.0024 | 0.0046 | 0.0458 | 0.0000 | 0.0000 | 0.0011 | 0.0010 |
| Hood | 2285002007 | 0.0034 | 0.0064 | 0.0633 | 0.0000 | 0.0000 | 0.0015 | 0.0014 |
| Hood | 2285002010 | 0.0000 | 0.0001 | 0.0360 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hopkins | 2285002006 | 0.0091 | 0.0639 | 0.2377 | 0.0002 | 0.0002 | 0.0055 | 0.0054 |
| Hopkins | 2285002007 | 0.0030 | 0.0058 | 0.0570 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Houston | 2285002006 | 0.0092 | 0.0643 | 0.2392 | 0.0002 | 0.0002 | 0.0056 | 0.0054 |
| Howard | 2285002006 | 0.0132 | 0.0924 | 0.3435 | 0.0003 | 0.0003 | 0.0080 | 0.0077 |
| Howard | 2285002007 | 0.0002 | 0.0003 | 0.0030 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Howard | 2285002010 | 0.0083 | 0.0208 | 0.1397 | 0.0001 | 0.0001 | 0.0031 | 0.0030 |
| Hudspeth | 2285002006 | 0.0441 | 0.3099 | 1.1522 | 0.0011 | 0.0010 | 0.0268 | 0.0260 |
| Hudspeth | 2285002008 | 0.0013 | 0.0109 | 0.0382 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Hunt | 2285002006 | 0.0054 | 0.0381 | 0.1416 | 0.0001 | 0.0001 | 0.0033 | 0.0032 |
| Hunt | 2285002007 | 0.0048 | 0.0092 | 0.0909 | 0.0000 | 0.0000 | 0.0021 | 0.0020 |
| Hutchinson | 2285002007 | 0.0014 | 0.0027 | 0.0268 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Hutchinson | 2285002010 | 0.0000 | 0.0001 | 0.0007 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Irion | 2285002007 | 0.0028 | 0.0053 | 0.0525 | 0.0000 | 0.0000 | 0.0012 | 0.0012 |
| Jackson | 2285002006 | 0.0112 | 0.0787 | 0.2926 | 0.0003 | 0.0002 | 0.0068 | 0.0066 |
| Jackson | 2285002007 | 0.0007 | 0.0014 | 0.0134 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Jasper | 2285002007 | 0.0073 | 0.0139 | 0.1374 | 0.0001 | 0.0000 | 0.0032 | 0.0031 |
| Jasper | 2285002010 | 0.0019 | 0.0048 | 0.0556 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Jeff Davis | 2285002006 | 0.0069 | 0.0488 | 0.1813 | 0.0002 | 0.0002 | 0.0042 | 0.0041 |
| Jeff Davis | 2285002008 | 0.0004 | 0.0036 | 0.0127 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Jefferson | 2285002006 | 0.0188 | 0.1318 | 0.4902 | 0.0005 | 0.0004 | 0.0114 | 0.0110 |
| Jefferson | 2285002008 | 0.0004 | 0.0031 | 0.0107 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Jefferson | 2285002010 | 0.0227 | 0.0571 | 0.6391 | 0.0002 | 0.0002 | 0.0084 | 0.0082 |
| Jim Hogg | 2285002006 | 0.0036 | 0.0254 | 0.0944 | 0.0001 | 0.0001 | 0.0022 | 0.0021 |
| Jim Wells | 2285002006 | 0.0056 | 0.0392 | 0.1459 | 0.0001 | 0.0001 | 0.0034 | 0.0033 |
| Johnson | 2285002006 | 0.0282 | 0.1979 | 0.7357 | 0.0007 | 0.0006 | 0.0171 | 0.0166 |
| Johnson | 2285002007 | 0.0017 | 0.0032 | 0.0321 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Johnson | 2285002008 | 0.0004 | 0.0035 | 0.0122 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Johnson | 2285002010 | 0.0000 | 0.0001 | 0.0360 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Kaufman | 2285002006 | 0.0101 | 0.0713 | 0.2650 | 0.0002 | 0.0002 | 0.0062 | 0.0060 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Kaufman | 2285002008 | 0.0005 | 0.0037 | 0.0130 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Kenedy | 2285002006 | 0.0033 | 0.0234 | 0.0872 | 0.0001 | 0.0001 | 0.0020 | 0.0020 |
| Kinney | 2285002006 | 0.0206 | 0.1448 | 0.5385 | 0.0005 | 0.0005 | 0.0125 | 0.0121 |
| Kinney | 2285002008 | 0.0008 | 0.0063 | 0.0220 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Kleberg | 2285002006 | 0.0015 | 0.0107 | 0.0399 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| La Salle | 2285002006 | 0.0132 | 0.0924 | 0.3435 | 0.0003 | 0.0003 | 0.0080 | 0.0077 |
| Lamar | 2285002007 | 0.0018 | 0.0033 | 0.0330 | 0.0000 | 0.0000 | 0.0008 | 0.0007 |
| Lamb | 2285002006 | 0.0048 | 0.0338 | 0.1255 | 0.0001 | 0.0001 | 0.0029 | 0.0028 |
| Lampasas | 2285002006 | 0.0130 | 0.0914 | 0.3399 | 0.0003 | 0.0003 | 0.0079 | 0.0077 |
| Lampasas | 2285002007 | 0.0011 | 0.0020 | 0.0197 | 0.0000 | 0.0000 | 0.0005 | 0.0004 |
| Lavaca | 2285002006 | 0.0013 | 0.0094 | 0.0351 | 0.0000 | 0.0000 | 0.0008 | 0.0008 |
| Lee | 2285002006 | 0.0144 | 0.1010 | 0.3756 | 0.0004 | 0.0003 | 0.0087 | 0.0085 |
| Lee | 2285002007 | 0.0004 | 0.0008 | 0.0083 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Leon | 2285002006 | 0.0142 | 0.0998 | 0.3712 | 0.0003 | 0.0003 | 0.0086 | 0.0084 |
| Leon | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Liberty | 2285002006 | 0.0338 | 0.2372 | 0.8821 | 0.0008 | 0.0007 | 0.0205 | 0.0199 |
| Liberty | 2285002008 | 0.0006 | 0.0049 | 0.0173 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Liberty | 2285002010 | 0.0367 | 0.0924 | 0.6323 | 0.0003 | 0.0003 | 0.0136 | 0.0132 |
| Limestone | 2285002006 | 0.0176 | 0.1239 | 0.4607 | 0.0004 | 0.0004 | 0.0107 | 0.0104 |
| Lipscomb | 2285002006 | 0.0198 | 0.1390 | 0.5169 | 0.0005 | 0.0004 | 0.0120 | 0.0116 |
| Live Oak | 2285002006 | 0.0041 | 0.0285 | 0.1059 | 0.0001 | 0.0001 | 0.0025 | 0.0024 |
| Live Oak | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Llano | 2285002007 | 0.0010 | 0.0019 | 0.0191 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Lubbock | 2285002006 | 0.0101 | 0.0708 | 0.2633 | 0.0002 | 0.0002 | 0.0061 | 0.0059 |
| Lubbock | 2285002007 | 0.0052 | 0.0098 | 0.0970 | 0.0000 | 0.0000 | 0.0022 | 0.0022 |
| Lubbock | 2285002010 | 0.0086 | 0.0216 | 0.1455 | 0.0001 | 0.0001 | 0.0032 | 0.0031 |
| Lynn | 2285002006 | 0.0005 | 0.0037 | 0.0137 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Lynn | 2285002007 | 0.0001 | 0.0003 | 0.0025 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Madison | 2285002006 | 0.0022 | 0.0153 | 0.0568 | 0.0001 | 0.0000 | 0.0013 | 0.0013 |
| Marion | 2285002006 | 0.0134 | 0.0939 | 0.3493 | 0.0003 | 0.0003 | 0.0081 | 0.0079 |
| Marion | 2285002008 | 0.0002 | 0.0019 | 0.0066 | 0.0000 | 0.0000 | 0.0002 | 0.0001 |
| Martin | 2285002006 | 0.0046 | 0.0323 | 0.1200 | 0.0001 | 0.0001 | 0.0028 | 0.0027 |
| Matagorda | 2285002006 | 0.0087 | 0.0608 | 0.2259 | 0.0002 | 0.0002 | 0.0052 | 0.0051 |
| Matagorda | 2285002007 | 0.0002 | 0.0003 | 0.0030 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Matagorda | 2285002010 | 0.0001 | 0.0002 | 0.0123 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Maverick | 2285002006 | 0.0103 | 0.0725 | 0.2697 | 0.0003 | 0.0002 | 0.0063 | 0.0061 |
| Maverick | 2285002007 | 0.0001 | 0.0001 | 0.0012 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Maverick | 2285002010 | 0.0013 | 0.0032 | 0.0213 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| McCulloch | 2285002007 | 0.0014 | 0.0027 | 0.0266 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| McLennan | 2285002006 | 0.0335 | 0.2356 | 0.8761 | 0.0008 | 0.0007 | 0.0204 | 0.0197 |
| McLennan | 2285002008 | 0.0005 | 0.0040 | 0.0139 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| McLennan | 2285002010 | 0.0154 | 0.0386 | 0.2598 | 0.0001 | 0.0001 | 0.0057 | 0.0055 |
| Medina | 2285002006 | 0.0323 | 0.2268 | 0.8434 | 0.0008 | 0.0007 | 0.0196 | 0.0190 |
| Medina | 2285002007 | 0.0001 | 0.0003 | 0.0025 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Medina | 2285002008 | 0.0007 | 0.0060 | 0.0209 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Medina | 2285002010 | 0.0000 | 0.0001 | 0.0038 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Midland | 2285002006 | 0.0095 | 0.0665 | 0.2472 | 0.0002 | 0.0002 | 0.0057 | 0.0056 |
| Milam | 2285002006 | 0.0429 | 0.3015 | 1.1211 | 0.0011 | 0.0009 | 0.0260 | 0.0253 |
| Milam | 2285002007 | 0.0005 | 0.0009 | 0.0092 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Milam | 2285002010 | 0.0001 | 0.0002 | 0.0010 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mills | 2285002006 | 0.0106 | 0.0743 | 0.2763 | 0.0003 | 0.0002 | 0.0064 | 0.0062 |
| Mills | 2285002007 | 0.0000 | 0.0001 | 0.0008 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mitchell | 2285002006 | 0.0137 | 0.0965 | 0.3590 | 0.0003 | 0.0003 | 0.0083 | 0.0081 |
| Montague | 2285002006 | 0.0131 | 0.0917 | 0.3409 | 0.0003 | 0.0003 | 0.0079 | 0.0077 |
| Montgomery | 2285002006 | 0.0263 | 0.1849 | 0.6877 | 0.0006 | 0.0006 | 0.0160 | 0.0155 |
| Montgomery | 2285002010 | 0.0000 | 0.0001 | 0.0041 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Moore | 2285002006 | 0.0191 | 0.1341 | 0.4986 | 0.0005 | 0.0004 | 0.0116 | 0.0112 |
| Moore | 2285002007 | 0.0027 | 0.0051 | 0.0502 | 0.0000 | 0.0000 | 0.0012 | 0.0011 |
| Moore | 2285002010 | 0.0020 | 0.0050 | 0.0334 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Morris | 2285002006 | 0.0065 | 0.0456 | 0.1695 | 0.0002 | 0.0001 | 0.0039 | 0.0038 |
| Morris | 2285002007 | 0.0005 | 0.0010 | 0.0095 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Morris | 2285002010 | 0.0002 | 0.0004 | 0.0158 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Nacogdoches | 2285002006 | 0.0071 | 0.0497 | 0.1846 | 0.0002 | 0.0002 | 0.0043 | 0.0042 |
| Nacogdoches | 2285002010 | 0.0024 | 0.0059 | 0.0631 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Navarro | 2285002006 | 0.0236 | 0.1656 | 0.6159 | 0.0006 | 0.0005 | 0.0143 | 0.0139 |
| Navarro | 2285002010 | 0.0024 | 0.0059 | 0.0756 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Newton | 2285002006 | 0.0025 | 0.0172 | 0.0641 | 0.0001 | 0.0001 | 0.0015 | 0.0014 |
| Newton | 2285002007 | 0.0014 | 0.0026 | 0.0258 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Nolan | 2285002006 | 0.0190 | 0.1332 | 0.4953 | 0.0005 | 0.0004 | 0.0115 | 0.0112 |
| Nolan | 2285002007 | 0.0008 | 0.0016 | 0.0159 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Nolan | 2285002010 | 0.0010 | 0.0024 | 0.0162 | 0.0000 | 0.0000 | 0.0004 | 0.0003 |
| Nueces | 2285002006 | 0.0101 | 0.0710 | 0.2640 | 0.0002 | 0.0002 | 0.0061 | 0.0059 |
| Nueces | 2285002007 | 0.0010 | 0.0019 | 0.0185 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Nueces | 2285002010 | 0.0093 | 0.0233 | 0.1567 | 0.0001 | 0.0001 | 0.0034 | 0.0033 |
| Oldham | 2285002006 | 0.0033 | 0.0230 | 0.0854 | 0.0001 | 0.0001 | 0.0020 | 0.0019 |
| Orange | 2285002006 | 0.0186 | 0.1309 | 0.4868 | 0.0005 | 0.0004 | 0.0113 | 0.0110 |
| Orange | 2285002007 | 0.0019 | 0.0036 | 0.0360 | 0.0000 | 0.0000 | 0.0008 | 0.0008 |
| Orange | 2285002008 | 0.0006 | 0.0046 | 0.0160 | 0.0000 | 0.0000 | 0.0004 | 0.0003 |
| Orange | 2285002010 | 0.0037 | 0.0094 | 0.2952 | 0.0000 | 0.0000 | 0.0014 | 0.0013 |
| Palo Pinto | 2285002006 | 0.0181 | 0.1268 | 0.4716 | 0.0004 | 0.0004 | 0.0110 | 0.0106 |
| Panola | 2285002006 | 0.0020 | 0.0141 | 0.0523 | 0.0000 | 0.0000 | 0.0012 | 0.0012 |
| Panola | 2285002007 | 0.0015 | 0.0028 | 0.0274 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Panola | 2285002010 | 0.0019 | 0.0048 | 0.0368 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Parker | 2285002006 | 0.0172 | 0.1206 | 0.4486 | 0.0004 | 0.0004 | 0.0104 | 0.0101 |
| Parker | 2285002007 | 0.0000 | 0.0001 | 0.0006 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parmer | 2285002006 | 0.0823 | 0.5780 | 2.1492 | 0.0020 | 0.0018 | 0.0499 | 0.0484 |
| Parmer | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Pecos | 2285002006 | 0.0019 | 0.0131 | 0.0485 | 0.0000 | 0.0000 | 0.0011 | 0.0011 |
| Pecos | 2285002007 | 0.0046 | 0.0086 | 0.0853 | 0.0000 | 0.0000 | 0.0020 | 0.0019 |
| Pecos | 2285002008 | 0.0001 | 0.0012 | 0.0041 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Polk | 2285002006 | 0.0064 | 0.0450 | 0.1673 | 0.0002 | 0.0001 | 0.0039 | 0.0038 |
| Polk | 2285002007 | 0.0002 | 0.0003 | 0.0033 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Potter | 2285002006 | 0.0632 | 0.4437 | 1.6497 | 0.0016 | 0.0014 | 0.0383 | 0.0372 |
| Potter | 2285002010 | 0.0203 | 0.0510 | 0.3427 | 0.0002 | 0.0002 | 0.0075 | 0.0073 |
| Presidio | 2285002006 | 0.0097 | 0.0679 | 0.2526 | 0.0002 | 0.0002 | 0.0059 | 0.0057 |
| Presidio | 2285002007 | 0.0051 | 0.0097 | 0.0959 | 0.0000 | 0.0000 | 0.0022 | 0.0021 |
| Presidio | 2285002008 | 0.0008 | 0.0062 | 0.0216 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Randall | 2285002006 | 0.0670 | 0.4707 | 1.7502 | 0.0016 | 0.0015 | 0.0407 | 0.0394 |
| Randall | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Reagan | 2285002007 | 0.0020 | 0.0038 | 0.0378 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Reeves | 2285002006 | 0.0155 | 0.1086 | 0.4037 | 0.0004 | 0.0003 | 0.0094 | 0.0091 |
| Reeves | 2285002007 | 0.0023 | 0.0044 | 0.0437 | 0.0000 | 0.0000 | 0.0010 | 0.0010 |
| Reeves | 2285002010 | 0.0000 | 0.0001 | 0.0005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Refugio | 2285002006 | 0.0124 | 0.0873 | 0.3247 | 0.0003 | 0.0003 | 0.0075 | 0.0073 |
| Roberts | 2285002006 | 0.0311 | 0.2185 | 0.8123 | 0.0008 | 0.0007 | 0.0189 | 0.0183 |
| Robertson | 2285002006 | 0.0402 | 0.2824 | 1.0501 | 0.0010 | 0.0009 | 0.0244 | 0.0237 |
| Robertson | 2285002010 | 0.0035 | 0.0089 | 0.0599 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Rockwall | 2285002007 | 0.0011 | 0.0021 | 0.0204 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Runnels | 2285002007 | 0.0023 | 0.0043 | 0.0426 | 0.0000 | 0.0000 | 0.0010 | 0.0009 |
| Runnels | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Rusk | 2285002006 | 0.0045 | 0.0316 | 0.1175 | 0.0001 | 0.0001 | 0.0027 | 0.0026 |
| Rusk | 2285002007 | 0.0010 | 0.0018 | 0.0181 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Rusk | 2285002010 | 0.0000 | 0.0001 | 0.0047 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Sabine | 2285002007 | 0.0015 | 0.0028 | 0.0277 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| San Augustine | 2285002007 | 0.0013 | 0.0025 | 0.0252 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| San Jacinto | 2285002006 | 0.0022 | 0.0151 | 0.0562 | 0.0001 | 0.0000 | 0.0013 | 0.0013 |
| San Patricio | 2285002006 | 0.0093 | 0.0656 | 0.2438 | 0.0002 | 0.0002 | 0.0057 | 0.0055 |
| San Patricio | 2285002010 | 0.0024 | 0.0060 | 0.0406 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| San Saba | 2285002007 | 0.0030 | 0.0056 | 0.0553 | 0.0000 | 0.0000 | 0.0013 | 0.0012 |
| Scurry | 2285002006 | 0.0095 | 0.0666 | 0.2477 | 0.0002 | 0.0002 | 0.0058 | 0.0056 |
| Shelby | 2285002006 | 0.0068 | 0.0476 | 0.1771 | 0.0002 | 0.0001 | 0.0041 | 0.0040 |
| Shelby | 2285002007 | 0.0022 | 0.0042 | 0.0417 | 0.0000 | 0.0000 | 0.0010 | 0.0009 |
| Shelby | 2285002010 | 0.0019 | 0.0048 | 0.0556 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Sherman | 2285002006 | 0.0268 | 0.1880 | 0.6989 | 0.0007 | 0.0006 | 0.0162 | 0.0158 |
| Smith | 2285002006 | 0.0127 | 0.0894 | 0.3323 | 0.0003 | 0.0003 | 0.0077 | 0.0075 |
| Smith | 2285002008 | 0.0000 | 0.0002 | 0.0008 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Smith | 2285002010 | 0.0047 | 0.0119 | 0.0886 | 0.0000 | 0.0000 | 0.0018 | 0.0017 |
| Somervell | 2285002007 | 0.0002 | 0.0003 | 0.0028 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Starr | 2285002007 | 0.0013 | 0.0024 | 0.0240 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Stephens | 2285002006 | 0.0028 | 0.0197 | 0.0734 | 0.0001 | 0.0001 | 0.0017 | 0.0017 |
| Swisher | 2285002006 | 0.0068 | 0.0475 | 0.1766 | 0.0002 | 0.0001 | 0.0041 | 0.0040 |
| Swisher | 2285002007 | 0.0001 | 0.0002 | 0.0022 | 0.0000 | 0.0000 | 0.0001 | 0.0000 |
| Tarrant | 2285002006 | 0.0800 | 0.5617 | 2.0887 | 0.0020 | 0.0018 | 0.0485 | 0.0471 |
| Tarrant | 2285002007 | 0.0064 | 0.0121 | 0.1204 | 0.0000 | 0.0000 | 0.0028 | 0.0027 |
| Tarrant | 2285002008 | 0.0010 | 0.0080 | 0.0278 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Tarrant | 2285002009 | 0.0036 | 0.0290 | 0.1012 | 0.0001 | 0.0001 | 0.0023 | 0.0022 |
| Tarrant | 2285002010 | 0.0413 | 0.1038 | 0.9122 | 0.0003 | 0.0003 | 0.0153 | 0.0148 |
| Taylor | 2285002006 | 0.0259 | 0.1817 | 0.6755 | 0.0006 | 0.0006 | 0.0157 | 0.0152 |
| Taylor | 2285002007 | 0.0007 | 0.0013 | 0.0131 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Taylor | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Terrell | 2285002006 | 0.0129 | 0.0909 | 0.3378 | 0.0003 | 0.0003 | 0.0078 | 0.0076 |
| Terrell | 2285002008 | 0.0010 | 0.0083 | 0.0292 | 0.0000 | 0.0000 | 0.0007 | 0.0006 |
| Terry | 2285002007 | 0.0024 | 0.0045 | 0.0449 | 0.0000 | 0.0000 | 0.0010 | 0.0010 |
| Titus | 2285002006 | 0.0062 | 0.0437 | 0.1624 | 0.0002 | 0.0001 | 0.0038 | 0.0037 |
| Titus | 2285002007 | 0.0021 | 0.0039 | 0.0389 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Titus | 2285002010 | 0.0024 | 0.0060 | 0.0491 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Tom Green | 2285002007 | 0.0023 | 0.0044 | 0.0433 | 0.0000 | 0.0000 | 0.0010 | 0.0010 |
| Tom Green | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Travis | 2285002006 | 0.0093 | 0.0655 | 0.2434 | 0.0002 | 0.0002 | 0.0057 | 0.0055 |
| Travis | 2285002007 | 0.0032 | 0.0061 | 0.0601 | 0.0000 | 0.0000 | 0.0014 | 0.0013 |
| Travis | 2285002008 | 0.0005 | 0.0037 | 0.0129 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Travis | 2285002010 | 0.0005 | 0.0014 | 0.0093 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Trinity | 2285002006 | 0.0040 | 0.0281 | 0.1045 | 0.0001 | 0.0001 | 0.0024 | 0.0024 |
| Upshur | 2285002006 | 0.0133 | 0.0933 | 0.3468 | 0.0003 | 0.0003 | 0.0081 | 0.0078 |
| Upshur | 2285002008 | 0.0002 | 0.0016 | 0.0057 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Upton | 2285002007 | 0.0022 | 0.0042 | 0.0416 | 0.0000 | 0.0000 | 0.0010 | 0.0009 |
| Uvalde | 2285002006 | 0.0290 | 0.2037 | 0.7574 | 0.0007 | 0.0006 | 0.0176 | 0.0171 |
| Uvalde | 2285002008 | 0.0008 | 0.0063 | 0.0221 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Uvalde | 2285002010 | 0.0024 | 0.0060 | 0.0472 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Val Verde | 2285002006 | 0.0198 | 0.1391 | 0.5171 | 0.0005 | 0.0004 | 0.0120 | 0.0117 |
| Val Verde | 2285002008 | 0.0016 | 0.0127 | 0.0442 | 0.0000 | 0.0000 | 0.0010 | 0.0010 |
| Van Zandt | 2285002006 | 0.0108 | 0.0758 | 0.2819 | 0.0003 | 0.0002 | 0.0066 | 0.0064 |
| Van Zandt | 2285002008 | 0.0005 | 0.0040 | 0.0139 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Victoria | 2285002006 | 0.0153 | 0.1076 | 0.4001 | 0.0004 | 0.0003 | 0.0093 | 0.0090 |
| Victoria | 2285002010 | 0.0059 | 0.0149 | 0.1005 | 0.0001 | 0.0000 | 0.0022 | 0.0021 |
| Walker | 2285002006 | 0.0067 | 0.0470 | 0.1747 | 0.0002 | 0.0001 | 0.0041 | 0.0039 |
| Waller | 2285002006 | 0.0014 | 0.0098 | 0.0364 | 0.0000 | 0.0000 | 0.0008 | 0.0008 |
| Waller | 2285002010 | 0.0024 | 0.0060 | 0.0478 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Ward | 2285002006 | 0.0154 | 0.1084 | 0.4032 | 0.0004 | 0.0003 | 0.0094 | 0.0091 |
| Ward | 2285002007 | 0.0006 | 0.0011 | 0.0105 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Ward | 2285002010 | 0.0024 | 0.0059 | 0.0399 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Washington | 2285002006 | 0.0091 | 0.0638 | 0.2374 | 0.0002 | 0.0002 | 0.0055 | 0.0054 |
| Washington | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Webb | 2285002006 | 0.0262 | 0.1839 | 0.6838 | 0.0006 | 0.0006 | 0.0159 | 0.0154 |
| Webb | 2285002010 | 0.0086 | 0.0215 | 0.1446 | 0.0001 | 0.0001 | 0.0032 | 0.0031 |
| Wharton | 2285002006 | 0.0175 | 0.1227 | 0.4562 | 0.0004 | 0.0004 | 0.0106 | 0.0103 |
| Wharton | 2285002008 | 0.0002 | 0.0017 | 0.0060 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Wichita | 2285002006 | 0.0160 | 0.1126 | 0.4187 | 0.0004 | 0.0004 | 0.0097 | 0.0094 |
| Wichita | 2285002007 | 0.0014 | 0.0027 | 0.0266 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Wichita | 2285002010 | 0.0011 | 0.0027 | 0.0179 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Wilbarger | 2285002006 | 0.0165 | 0.1162 | 0.4320 | 0.0004 | 0.0004 | 0.0100 | 0.0097 |
| Wilbarger | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Willacy | 2285002006 | 0.0013 | 0.0090 | 0.0336 | 0.0000 | 0.0000 | 0.0008 | 0.0008 |
| Williamson | 2285002006 | 0.0157 | 0.1103 | 0.4102 | 0.0004 | 0.0003 | 0.0095 | 0.0092 |
| Williamson | 2285002007 | 0.0050 | 0.0095 | 0.0939 | 0.0000 | 0.0000 | 0.0022 | 0.0021 |
| Williamson | 2285002008 | 0.0006 | 0.0053 | 0.0184 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Williamson | 2285002010 | 0.0025 | 0.0063 | 0.0423 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Wilson | 2285002010 | 0.0035 | 0.0089 | 0.0633 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Winkler | 2285002007 | 0.0021 | 0.0039 | 0.0385 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Wise | 2285002006 | 0.0232 | 0.1629 | 0.6056 | 0.0006 | 0.0005 | 0.0141 | 0.0136 |
| Wise | 2285002010 | 0.0035 | 0.0089 | 0.0956 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Wood | 2285002006 | 0.0111 | 0.0776 | 0.2886 | 0.0003 | 0.0002 | 0.0067 | 0.0065 |
| Wood | 2285002008 | 0.0004 | 0.0036 | 0.0124 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Wood | 2285002010 | 0.0047 | 0.0119 | 0.0842 | 0.0000 | 0.0000 | 0.0018 | 0.0017 |

# APPENDIX F: CONTROLLED 2020 ANNUAL AND DAILY COUNTY-LEVEL EMISSIONS FOR TEXAS

## Controlled 2020 Annual County-Level Emissions by Criteria Pollutant (tons/year)[1].

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Anderson | 2285002006 | 5.5108 | 38.7039 | 134.9957 | 0.1356 | 0.1207 | 3.3436 | 3.2433 |
| Anderson | 2285002007 | 0.8436 | 1.5951 | 14.8366 | 0.0064 | 0.0057 | 0.3629 | 0.3520 |
| Anderson | 2285002010 | 1.2922 | 3.2510 | 20.5005 | 0.0109 | 0.0097 | 0.4792 | 0.4648 |
| Andrews | 2285002007 | 0.1067 | 0.2017 | 2.0004 | 0.0008 | 0.0007 | 0.0459 | 0.0445 |
| Angelina | 2285002006 | 1.5084 | 10.5938 | 36.9500 | 0.0371 | 0.0330 | 0.9152 | 0.8877 |
| Angelina | 2285002007 | 0.0889 | 0.1681 | 1.5636 | 0.0007 | 0.0006 | 0.0382 | 0.0371 |
| Angelina | 2285002010 | 0.4381 | 1.1022 | 6.9507 | 0.0037 | 0.0033 | 0.1625 | 0.1576 |
| Armstrong | 2285002006 | 5.7425 | 40.3313 | 149.9700 | 0.1413 | 0.1257 | 3.4842 | 3.3796 |
| Atascosa | 2285002006 | 1.4953 | 10.5017 | 36.6290 | 0.0368 | 0.0327 | 0.9072 | 0.8800 |
| Atascosa | 2285002010 | 0.0074 | 0.0186 | 0.1172 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Austin | 2285002006 | 8.5045 | 59.7295 | 208.3308 | 0.2092 | 0.1862 | 5.1599 | 5.0051 |
| Austin | 2285002010 | 0.0148 | 0.0372 | 0.2344 | 0.0001 | 0.0001 | 0.0055 | 0.0053 |
| Bailey | 2285002006 | 1.0499 | 7.3739 | 27.4194 | 0.0258 | 0.0230 | 0.6370 | 0.6179 |
| Bastrop | 2285002006 | 4.6068 | 32.3548 | 112.8506 | 0.1133 | 0.1009 | 2.7951 | 2.7112 |
| Bastrop | 2285002007 | 0.5412 | 1.0234 | 9.5184 | 0.0041 | 0.0036 | 0.2328 | 0.2258 |
| Bastrop | 2285002010 | 0.8615 | 2.1673 | 13.6670 | 0.0073 | 0.0065 | 0.3195 | 0.3099 |
| Bell | 2285002006 | 13.3271 | 93.6008 | 326.4708 | 0.3279 | 0.2918 | 8.0860 | 7.8434 |
| Bell | 2285002007 | 0.3884 | 0.7344 | 6.8304 | 0.0029 | 0.0026 | 0.1671 | 0.1621 |
| Bell | 2285002008 | 0.2204 | 1.7980 | 5.8912 | 0.0063 | 0.0056 | 0.1418 | 0.1376 |
| Bell | 2285002010 | 1.8986 | 4.7766 | 30.1209 | 0.0160 | 0.0143 | 0.7041 | 0.6829 |
| Bexar | 2285002006 | 18.4055 | 129.2675 | 450.8728 | 0.4528 | 0.4030 | 11.1672 | 10.8322 |
| Bexar | 2285002007 | 0.3843 | 0.7267 | 6.7593 | 0.0029 | 0.0026 | 0.1653 | 0.1604 |
| Bexar | 2285002008 | 0.5106 | 4.1645 | 13.6452 | 0.0146 | 0.0130 | 0.3285 | 0.3186 |
| Bexar | 2285002010 | 6.6875 | 16.8245 | 106.0946 | 0.0564 | 0.0502 | 2.4799 | 2.4055 |
| Bosque | 2285002006 | 10.1039 | 70.9629 | 247.5118 | 0.2486 | 0.2212 | 6.1304 | 5.9464 |
| Bosque | 2285002008 | 0.2443 | 1.9926 | 6.5288 | 0.0070 | 0.0062 | 0.1572 | 0.1525 |
| Bowie | 2285002006 | 10.2246 | 71.8104 | 250.4678 | 0.2515 | 0.2239 | 6.2036 | 6.0175 |
| Bowie | 2285002007 | 2.6697 | 5.0482 | 46.9534 | 0.0202 | 0.0180 | 1.1485 | 1.1140 |
| Bowie | 2285002008 | 0.0549 | 0.4477 | 1.4671 | 0.0016 | 0.0014 | 0.0353 | 0.0343 |
| Brazoria | 2285002006 | 10.2604 | 72.0622 | 251.3461 | 0.2524 | 0.2247 | 6.2253 | 6.0386 |
| Brazoria | 2285002010 | 5.9116 | 14.8725 | 93.7849 | 0.0499 | 0.0444 | 2.1922 | 2.1264 |
| Brazos | 2285002006 | 7.7306 | 54.2948 | 189.3751 | 0.1902 | 0.1693 | 4.6904 | 4.5497 |
| Brazos | 2285002010 | 0.4307 | 1.0837 | 6.8335 | 0.0036 | 0.0032 | 0.1597 | 0.1549 |
| Brewster | 2285002006 | 6.4231 | 45.1112 | 167.7438 | 0.1580 | 0.1406 | 3.8971 | 3.7802 |
| Brewster | 2285002007 | 0.8678 | 1.6410 | 16.2718 | 0.0066 | 0.0058 | 0.3733 | 0.3621 |
| Brewster | 2285002008 | 0.5030 | 4.1027 | 14.3310 | 0.0144 | 0.0128 | 0.3236 | 0.3139 |
| Brown | 2285002006 | 3.4331 | 24.1120 | 89.6593 | 0.0845 | 0.0752 | 2.0830 | 2.0205 |
| Brown | 2285002007 | 0.8239 | 1.5579 | 15.4479 | 0.0062 | 0.0056 | 0.3544 | 0.3438 |
| Burleson | 2285002006 | 13.6541 | 95.8973 | 334.4808 | 0.3359 | 0.2990 | 8.2844 | 8.0359 |
| Burleson | 2285002010 | 0.0074 | 0.0186 | 0.1172 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Burnet | 2285002007 | 0.8234 | 1.5569 | 15.4381 | 0.0062 | 0.0055 | 0.3542 | 0.3436 |
| Caldwell | 2285002006 | 4.7031 | 33.0315 | 115.2106 | 0.1157 | 0.1030 | 2.8535 | 2.7679 |
| Caldwell | 2285002008 | 0.0647 | 0.5281 | 1.7304 | 0.0018 | 0.0016 | 0.0417 | 0.0404 |
| Calhoun | 2285002007 | 0.0762 | 0.1441 | 1.3401 | 0.0006 | 0.0005 | 0.0328 | 0.0318 |
| Calhoun | 2285002010 | 0.4381 | 1.1022 | 6.9507 | 0.0037 | 0.0033 | 0.1625 | 0.1576 |
| Callahan | 2285002006 | 5.5219 | 38.7820 | 144.2089 | 0.1358 | 0.1209 | 3.3503 | 3.2498 |
| Cameron | 2285002006 | 0.8183 | 5.7470 | 21.3699 | 0.0201 | 0.0179 | 0.4965 | 0.4816 |
| Cameron | 2285002007 | 1.0160 | 1.9211 | 19.0498 | 0.0077 | 0.0068 | 0.4371 | 0.4240 |
| Cameron | 2285002010 | 0.9132 | 2.2974 | 15.4451 | 0.0077 | 0.0069 | 0.3386 | 0.3285 |
| Camp | 2285002006 | 2.8715 | 20.1676 | 70.3428 | 0.0706 | 0.0629 | 1.7422 | 1.6900 |
| Camp | 2285002007 | 0.2022 | 0.3824 | 3.5570 | 0.0015 | 0.0014 | 0.0870 | 0.0844 |
| Carson | 2285002006 | 23.6010 | 165.7575 | 616.3608 | 0.5806 | 0.5168 | 14.3195 | 13.8899 |
| Carson | 2285002007 | 0.9005 | 1.7027 | 16.8839 | 0.0068 | 0.0061 | 0.3874 | 0.3758 |
| Carson | 2285002010 | 0.0148 | 0.0372 | 0.2499 | 0.0001 | 0.0001 | 0.0055 | 0.0053 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Cass | 2285002006 | 11.0138 | 77.3533 | 269.8009 | 0.2710 | 0.2412 | 6.6824 | 6.4819 |
| Cass | 2285002008 | 0.2060 | 1.6803 | 5.5054 | 0.0059 | 0.0052 | 0.1325 | 0.1286 |
| Cass | 2285002010 | 0.3384 | 0.8514 | 5.3688 | 0.0029 | 0.0025 | 0.1255 | 0.1217 |
| Castro | 2285002006 | 1.7404 | 12.2232 | 45.4514 | 0.0428 | 0.0381 | 1.0559 | 1.0243 |
| Castro | 2285002007 | 0.5767 | 1.0904 | 10.8123 | 0.0044 | 0.0039 | 0.2481 | 0.2406 |
| Castro | 2285002010 | 1.0476 | 2.6355 | 17.7180 | 0.0088 | 0.0079 | 0.3885 | 0.3768 |
| Chambers | 2285002006 | 0.2697 | 1.8943 | 6.6071 | 0.0066 | 0.0059 | 0.1636 | 0.1587 |
| Chambers | 2285002010 | 0.8836 | 2.2231 | 14.0186 | 0.0075 | 0.0066 | 0.3277 | 0.3178 |
| Cherokee | 2285002006 | 4.7027 | 33.0284 | 115.2000 | 0.1157 | 0.1030 | 2.8533 | 2.7677 |
| Cherokee | 2285002007 | 0.7484 | 1.4151 | 13.1619 | 0.0057 | 0.0050 | 0.3219 | 0.3123 |
| Childress | 2285002006 | 4.9989 | 35.1090 | 130.5511 | 0.1230 | 0.1095 | 3.0330 | 2.9420 |
| Clay | 2285002006 | 5.5036 | 38.6533 | 143.7302 | 0.1354 | 0.1205 | 3.3392 | 3.2390 |
| Cochran | 2285002007 | 0.0271 | 0.0513 | 0.5082 | 0.0002 | 0.0002 | 0.0117 | 0.0113 |
| Coleman | 2285002006 | 4.5890 | 32.2302 | 119.8462 | 0.1129 | 0.1005 | 2.7843 | 2.7008 |
| Coleman | 2285002007 | 0.5284 | 0.9992 | 9.9075 | 0.0040 | 0.0036 | 0.2273 | 0.2205 |
| Collin | 2285002006 | 3.6222 | 25.4402 | 88.7330 | 0.0891 | 0.0793 | 2.1977 | 2.1318 |
| Collin | 2285002007 | 1.5616 | 2.9529 | 27.4649 | 0.0118 | 0.0105 | 0.6718 | 0.6516 |
| Collin | 2285002010 | 0.6768 | 1.7028 | 10.7376 | 0.0057 | 0.0051 | 0.2510 | 0.2435 |
| Colorado | 2285002006 | 5.9817 | 42.0113 | 146.5314 | 0.1472 | 0.1310 | 3.6293 | 3.5204 |
| Colorado | 2285002008 | 0.2362 | 1.9264 | 6.3120 | 0.0067 | 0.0060 | 0.1520 | 0.1474 |
| Colorado | 2285002010 | 0.8615 | 2.1673 | 13.6670 | 0.0073 | 0.0065 | 0.3195 | 0.3099 |
| Comal | 2285002006 | 3.7349 | 26.2316 | 91.4932 | 0.0919 | 0.0818 | 2.2661 | 2.1981 |
| Comal | 2285002007 | 0.0489 | 0.0925 | 0.8608 | 0.0004 | 0.0003 | 0.0211 | 0.0204 |
| Comal | 2285002008 | 0.3145 | 2.5647 | 8.4033 | 0.0090 | 0.0080 | 0.2023 | 0.1962 |
| Comal | 2285002010 | 1.7451 | 4.3904 | 27.6856 | 0.0147 | 0.0131 | 0.6471 | 0.6277 |
| Comanche | 2285002007 | 1.3358 | 2.5258 | 25.0456 | 0.0101 | 0.0090 | 0.5746 | 0.5574 |
| Cooke | 2285002006 | 4.8746 | 34.2361 | 119.4123 | 0.1199 | 0.1067 | 2.9576 | 2.8689 |
| Cooke | 2285002008 | 0.1369 | 1.1169 | 3.6597 | 0.0039 | 0.0035 | 0.0881 | 0.0855 |
| Coryell | 2285002006 | 1.1614 | 8.1572 | 28.4517 | 0.0286 | 0.0254 | 0.7047 | 0.6835 |
| Coryell | 2285002010 | 0.0074 | 0.0186 | 0.1172 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Crane | 2285002006 | 0.1880 | 1.3204 | 4.9099 | 0.0046 | 0.0041 | 0.1141 | 0.1106 |
| Crane | 2285002007 | 0.0875 | 0.1654 | 1.6403 | 0.0007 | 0.0006 | 0.0376 | 0.0365 |
| Crockett | 2285002007 | 0.0125 | 0.0237 | 0.2346 | 0.0001 | 0.0001 | 0.0054 | 0.0052 |
| Culberson | 2285002006 | 7.4210 | 52.1203 | 193.8066 | 0.1826 | 0.1625 | 4.5026 | 4.3675 |
| Culberson | 2285002008 | 0.1173 | 0.9568 | 3.3423 | 0.0034 | 0.0030 | 0.0755 | 0.0732 |
| Dallam | 2285002006 | 7.8733 | 55.2965 | 205.6173 | 0.1937 | 0.1724 | 4.7770 | 4.6337 |
| Dallam | 2285002010 | 1.2922 | 3.2510 | 21.8556 | 0.0109 | 0.0097 | 0.4792 | 0.4648 |
| Dallas | 2285002006 | 9.8381 | 69.0959 | 240.9999 | 0.2420 | 0.2154 | 5.9691 | 5.7900 |
| Dallas | 2285002007 | 3.3104 | 6.2596 | 58.2210 | 0.0251 | 0.0223 | 1.4241 | 1.3814 |
| Dallas | 2285002008 | 0.2255 | 1.8391 | 6.0257 | 0.0064 | 0.0057 | 0.1451 | 0.1407 |
| Dallas | 2285002009 | 0.9239 | 7.5358 | 24.6911 | 0.0264 | 0.0235 | 0.5944 | 0.5766 |
| Dallas | 2285002010 | 7.1743 | 18.0491 | 113.8166 | 0.0605 | 0.0539 | 2.6604 | 2.5806 |
| De Witt | 2285002006 | 0.5570 | 3.9122 | 13.6453 | 0.0137 | 0.0122 | 0.3380 | 0.3278 |
| Deaf Smith | 2285002006 | 16.9825 | 119.2734 | 443.5122 | 0.4178 | 0.3719 | 10.3038 | 9.9947 |
| Deaf Smith | 2285002010 | 0.3492 | 0.8785 | 5.9060 | 0.0029 | 0.0026 | 0.1295 | 0.1256 |
| Delta | 2285002007 | 0.0162 | 0.0306 | 0.2847 | 0.0001 | 0.0001 | 0.0070 | 0.0068 |
| Denton | 2285002006 | 15.5560 | 109.2545 | 381.0695 | 0.3827 | 0.3406 | 9.4383 | 9.1552 |
| Denton | 2285002007 | 0.7447 | 1.4082 | 13.0981 | 0.0056 | 0.0050 | 0.3204 | 0.3108 |
| Denton | 2285002008 | 0.2062 | 1.6818 | 5.5104 | 0.0059 | 0.0052 | 0.1327 | 0.1287 |
| Denton | 2285002009 | 0.5372 | 4.3814 | 14.3558 | 0.0153 | 0.0137 | 0.3456 | 0.3352 |
| Denton | 2285002010 | 3.3881 | 8.5237 | 53.7500 | 0.0286 | 0.0254 | 1.2564 | 1.2187 |
| Donley | 2285002006 | 6.8016 | 47.7699 | 177.6301 | 0.1673 | 0.1489 | 4.1268 | 4.0030 |
| Duval | 2285002006 | 4.8671 | 34.1835 | 127.1095 | 0.1197 | 0.1066 | 2.9530 | 2.8645 |
| Eastland | 2285002006 | 5.6947 | 39.9960 | 148.7230 | 0.1401 | 0.1247 | 3.4552 | 3.3515 |
| Eastland | 2285002007 | 0.0190 | 0.0359 | 0.3559 | 0.0001 | 0.0001 | 0.0082 | 0.0079 |
| Ector | 2285002006 | 4.1156 | 28.9051 | 107.4823 | 0.1012 | 0.0901 | 2.4971 | 2.4222 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Ector | 2285002010 | 2.5844 | 6.5020 | 43.7111 | 0.0218 | 0.0194 | 0.9584 | 0.9296 |
| El Paso | 2285002006 | 15.9211 | 111.8189 | 415.7931 | 0.3917 | 0.3486 | 9.6598 | 9.3700 |
| El Paso | 2285002007 | 0.3001 | 0.5674 | 5.6262 | 0.0023 | 0.0020 | 0.1291 | 0.1252 |
| El Paso | 2285002008 | 0.3200 | 2.6101 | 9.1172 | 0.0091 | 0.0081 | 0.2059 | 0.1997 |
| El Paso | 2285002010 | 8.4930 | 21.3667 | 143.6428 | 0.0716 | 0.0638 | 3.1494 | 3.0549 |
| Ellis | 2285002006 | 7.5372 | 52.9365 | 184.6375 | 0.1854 | 0.1650 | 4.5731 | 4.4359 |
| Ellis | 2285002010 | 3.0152 | 7.5856 | 47.8345 | 0.0254 | 0.0226 | 1.1181 | 1.0846 |
| Erath | 2285002007 | 1.3079 | 2.4731 | 24.5234 | 0.0099 | 0.0088 | 0.5627 | 0.5458 |
| Erath | 2285002010 | 0.0148 | 0.0372 | 0.2499 | 0.0001 | 0.0001 | 0.0055 | 0.0053 |
| Falls | 2285002006 | 4.1730 | 29.3080 | 102.2236 | 0.1027 | 0.0914 | 2.5319 | 2.4559 |
| Fannin | 2285002007 | 1.4541 | 2.7495 | 25.5729 | 0.0110 | 0.0098 | 0.6255 | 0.6068 |
| Fayette | 2285002006 | 12.9114 | 90.6809 | 316.2863 | 0.3176 | 0.2827 | 7.8338 | 7.5987 |
| Fayette | 2285002008 | 0.1433 | 1.1691 | 3.8306 | 0.0041 | 0.0036 | 0.0922 | 0.0894 |
| Fayette | 2285002010 | 0.8689 | 2.1859 | 13.7842 | 0.0073 | 0.0065 | 0.3222 | 0.3125 |
| Fisher | 2285002006 | 1.7755 | 12.4701 | 46.3696 | 0.0437 | 0.0389 | 1.0773 | 1.0450 |
| Fort Bend | 2285002006 | 16.8164 | 118.1070 | 411.9460 | 0.4137 | 0.3682 | 10.2031 | 9.8970 |
| Fort Bend | 2285002007 | 0.0802 | 0.1516 | 1.4098 | 0.0006 | 0.0005 | 0.0345 | 0.0334 |
| Fort Bend | 2285002008 | 0.2119 | 1.7286 | 5.6638 | 0.0061 | 0.0054 | 0.1363 | 0.1323 |
| Fort Bend | 2285002010 | 0.5293 | 1.3316 | 8.3971 | 0.0045 | 0.0040 | 0.1963 | 0.1904 |
| Franklin | 2285002006 | 0.3628 | 2.5479 | 8.8869 | 0.0089 | 0.0079 | 0.2201 | 0.2135 |
| Franklin | 2285002007 | 0.1875 | 0.3546 | 3.2982 | 0.0014 | 0.0013 | 0.0807 | 0.0783 |
| Freestone | 2285002006 | 3.2033 | 22.4975 | 78.4692 | 0.0788 | 0.0701 | 1.9435 | 1.8852 |
| Freestone | 2285002010 | 0.6984 | 1.7570 | 11.0796 | 0.0059 | 0.0052 | 0.2590 | 0.2512 |
| Frio | 2285002006 | 4.7085 | 33.0692 | 122.9660 | 0.1158 | 0.1031 | 2.8568 | 2.7711 |
| Gaines | 2285002007 | 0.0955 | 0.1806 | 1.7906 | 0.0007 | 0.0006 | 0.0411 | 0.0398 |
| Galveston | 2285002006 | 4.1249 | 28.9704 | 101.0460 | 0.1015 | 0.0903 | 2.5027 | 2.4276 |
| Galveston | 2285002007 | 0.9418 | 1.7808 | 16.5630 | 0.0071 | 0.0063 | 0.4051 | 0.3930 |
| Galveston | 2285002010 | 1.2996 | 3.2696 | 20.6177 | 0.0110 | 0.0098 | 0.4819 | 0.4675 |
| Garza | 2285002006 | 3.6649 | 25.7400 | 95.7129 | 0.0902 | 0.0803 | 2.2236 | 2.1569 |
| Goliad | 2285002006 | 0.0363 | 0.2552 | 0.8902 | 0.0009 | 0.0008 | 0.0220 | 0.0214 |
| Gonzales | 2285002006 | 5.1988 | 36.5127 | 127.3527 | 0.1279 | 0.1138 | 3.1543 | 3.0596 |
| Gonzales | 2285002007 | 2.3709 | 4.4831 | 41.6976 | 0.0179 | 0.0160 | 1.0199 | 0.9893 |
| Gonzales | 2285002008 | 0.1407 | 1.1476 | 3.7602 | 0.0040 | 0.0036 | 0.0905 | 0.0878 |
| Gonzales | 2285002010 | 0.0148 | 0.0372 | 0.2344 | 0.0001 | 0.0001 | 0.0055 | 0.0053 |
| Gray | 2285002006 | 12.5880 | 88.4099 | 328.7477 | 0.3097 | 0.2756 | 7.6376 | 7.4084 |
| Gray | 2285002010 | 0.7058 | 1.7756 | 11.9369 | 0.0060 | 0.0053 | 0.2617 | 0.2539 |
| Grayson | 2285002006 | 13.2947 | 93.3730 | 325.6760 | 0.3271 | 0.2911 | 8.0663 | 7.8243 |
| Grayson | 2285002007 | 3.4262 | 6.4785 | 60.2575 | 0.0259 | 0.0231 | 1.4739 | 1.4297 |
| Grayson | 2285002010 | 2.1611 | 5.4369 | 34.2847 | 0.0182 | 0.0162 | 0.8014 | 0.7773 |
| Gregg | 2285002006 | 4.7166 | 33.1262 | 115.5410 | 0.1160 | 0.1033 | 2.8617 | 2.7759 |
| Gregg | 2285002008 | 0.0996 | 0.8122 | 2.6611 | 0.0028 | 0.0025 | 0.0641 | 0.0621 |
| Gregg | 2285002010 | 3.4459 | 8.6693 | 54.6680 | 0.0291 | 0.0259 | 1.2778 | 1.2395 |
| Grimes | 2285002006 | 6.2781 | 44.0930 | 153.7923 | 0.1544 | 0.1375 | 3.8091 | 3.6948 |
| Grimes | 2285002007 | 0.2860 | 0.5407 | 5.0292 | 0.0022 | 0.0019 | 0.1230 | 0.1193 |
| Grimes | 2285002010 | 0.0074 | 0.0186 | 0.1172 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Guadalupe | 2285002006 | 8.4570 | 59.3963 | 207.1688 | 0.2081 | 0.1852 | 5.1311 | 4.9772 |
| Guadalupe | 2285002008 | 0.2298 | 1.8746 | 6.1422 | 0.0066 | 0.0058 | 0.1479 | 0.1434 |
| Guadalupe | 2285002010 | 0.8615 | 2.1673 | 13.6670 | 0.0073 | 0.0065 | 0.3195 | 0.3099 |
| Hale | 2285002006 | 3.2646 | 22.9284 | 85.2582 | 0.0803 | 0.0715 | 1.9807 | 1.9213 |
| Hale | 2285002007 | 0.6698 | 1.2666 | 12.5590 | 0.0051 | 0.0045 | 0.2881 | 0.2795 |
| Hale | 2285002010 | 1.4235 | 3.5812 | 24.0755 | 0.0120 | 0.0107 | 0.5279 | 0.5120 |
| Hall | 2285002006 | 3.1160 | 21.8850 | 81.3782 | 0.0767 | 0.0682 | 1.8906 | 1.8339 |
| Hansford | 2285002007 | 0.0188 | 0.0355 | 0.3516 | 0.0001 | 0.0001 | 0.0081 | 0.0078 |
| Hardeman | 2285002006 | 5.6694 | 39.8179 | 148.0608 | 0.1395 | 0.1241 | 3.4398 | 3.3366 |
| Hardeman | 2285002007 | 0.2299 | 0.4347 | 4.3103 | 0.0017 | 0.0015 | 0.0989 | 0.0959 |
| Hardeman | 2285002010 | 0.7058 | 1.7756 | 11.9369 | 0.0060 | 0.0053 | 0.2617 | 0.2539 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Hardin | 2285002006 | 3.0677 | 21.5454 | 75.1482 | 0.0755 | 0.0672 | 1.8613 | 1.8054 |
| Hardin | 2285002007 | 0.2662 | 0.5034 | 4.6823 | 0.0020 | 0.0018 | 0.1145 | 0.1111 |
| Hardin | 2285002010 | 2.5118 | 6.3192 | 39.8486 | 0.0212 | 0.0189 | 0.9314 | 0.9035 |
| Harris | 2285002006 | 32.7718 | 230.1671 | 802.8011 | 0.8062 | 0.7176 | 19.8837 | 19.2872 |
| Harris | 2285002007 | 3.4246 | 6.4755 | 60.2289 | 0.0259 | 0.0231 | 1.4732 | 1.4290 |
| Harris | 2285002008 | 0.2900 | 2.3652 | 7.7497 | 0.0083 | 0.0074 | 0.1866 | 0.1810 |
| Harris | 2285002010 | 64.4292 | 162.0913 | 1022.1381 | 0.5434 | 0.4837 | 23.8918 | 23.1751 |
| Harrison | 2285002006 | 12.1002 | 84.9834 | 296.4140 | 0.2977 | 0.2650 | 7.3416 | 7.1213 |
| Harrison | 2285002008 | 0.2035 | 1.6596 | 5.4377 | 0.0058 | 0.0052 | 0.1309 | 0.1270 |
| Harrison | 2285002010 | 0.4381 | 1.1022 | 6.9507 | 0.0037 | 0.0033 | 0.1625 | 0.1576 |
| Hartley | 2285002006 | 7.7217 | 54.2320 | 201.6588 | 0.1900 | 0.1691 | 4.6850 | 4.5445 |
| Hays | 2285002006 | 3.1153 | 21.8794 | 76.3133 | 0.0766 | 0.0682 | 1.8901 | 1.8334 |
| Hays | 2285002008 | 0.1578 | 1.2873 | 4.2180 | 0.0045 | 0.0040 | 0.1015 | 0.0985 |
| Hays | 2285002010 | 0.0074 | 0.0186 | 0.1172 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Hemphill | 2285002006 | 20.5941 | 144.6390 | 537.8330 | 0.5066 | 0.4510 | 12.4951 | 12.1203 |
| Hemphill | 2285002010 | 0.0148 | 0.0372 | 0.2499 | 0.0001 | 0.0001 | 0.0055 | 0.0053 |
| Henderson | 2285002006 | 2.9325 | 20.5962 | 71.8375 | 0.0721 | 0.0642 | 1.7793 | 1.7259 |
| Hidalgo | 2285002007 | 1.9882 | 3.7595 | 37.2791 | 0.0151 | 0.0134 | 0.8553 | 0.8297 |
| Hidalgo | 2285002010 | 0.0296 | 0.0743 | 0.4998 | 0.0002 | 0.0002 | 0.0110 | 0.0106 |
| Hill | 2285002006 | 6.7697 | 47.5456 | 165.8346 | 0.1665 | 0.1482 | 4.1074 | 3.9842 |
| Hill | 2285002008 | 0.0604 | 0.4930 | 1.6154 | 0.0017 | 0.0015 | 0.0389 | 0.0377 |
| Hill | 2285002010 | 0.0074 | 0.0186 | 0.1172 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Hockley | 2285002006 | 0.4124 | 2.8962 | 10.7692 | 0.0101 | 0.0090 | 0.2502 | 0.2427 |
| Hockley | 2285002007 | 0.8917 | 1.6861 | 16.7194 | 0.0067 | 0.0060 | 0.3836 | 0.3721 |
| Hood | 2285002007 | 1.2322 | 2.3300 | 21.6718 | 0.0093 | 0.0083 | 0.5301 | 0.5142 |
| Hood | 2285002010 | 0.0074 | 0.0186 | 0.1172 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Hopkins | 2285002006 | 3.3225 | 23.3351 | 81.3906 | 0.0817 | 0.0728 | 2.0159 | 1.9554 |
| Hopkins | 2285002007 | 1.1102 | 2.0992 | 19.5247 | 0.0084 | 0.0075 | 0.4776 | 0.4633 |
| Houston | 2285002006 | 3.3428 | 23.4774 | 81.8868 | 0.0822 | 0.0732 | 2.0282 | 1.9673 |
| Howard | 2285002006 | 4.8003 | 33.7139 | 125.3635 | 0.1181 | 0.1051 | 2.9125 | 2.8251 |
| Howard | 2285002007 | 0.0587 | 0.1110 | 1.1007 | 0.0004 | 0.0004 | 0.0253 | 0.0245 |
| Howard | 2285002010 | 3.0152 | 7.5856 | 50.9963 | 0.0254 | 0.0226 | 1.1181 | 1.0846 |
| Hudspeth | 2285002006 | 16.1031 | 113.0970 | 420.5456 | 0.3962 | 0.3526 | 9.7703 | 9.4771 |
| Hudspeth | 2285002008 | 0.4893 | 3.9905 | 13.9393 | 0.0140 | 0.0124 | 0.3148 | 0.3053 |
| Hunt | 2285002006 | 1.9794 | 13.9019 | 48.4885 | 0.0487 | 0.0433 | 1.2010 | 1.1649 |
| Hunt | 2285002007 | 1.7686 | 3.3442 | 31.1049 | 0.0134 | 0.0119 | 0.7608 | 0.7380 |
| Hutchinson | 2285002007 | 0.5220 | 0.9871 | 9.7882 | 0.0040 | 0.0035 | 0.2246 | 0.2178 |
| Hutchinson | 2285002010 | 0.0148 | 0.0372 | 0.2499 | 0.0001 | 0.0001 | 0.0055 | 0.0053 |
| Irion | 2285002007 | 1.0211 | 1.9309 | 19.1461 | 0.0077 | 0.0069 | 0.4393 | 0.4261 |
| Jackson | 2285002006 | 4.0898 | 28.7240 | 100.1866 | 0.1006 | 0.0896 | 2.4814 | 2.4070 |
| Jackson | 2285002007 | 0.2610 | 0.4934 | 4.5894 | 0.0020 | 0.0018 | 0.1123 | 0.1089 |
| Jasper | 2285002007 | 2.6741 | 5.0565 | 47.0307 | 0.0202 | 0.0180 | 1.1504 | 1.1159 |
| Jasper | 2285002010 | 0.6984 | 1.7570 | 11.0796 | 0.0059 | 0.0052 | 0.2590 | 0.2512 |
| Jeff Davis | 2285002006 | 2.5340 | 17.7970 | 66.1772 | 0.0623 | 0.0555 | 1.5375 | 1.4913 |
| Jeff Davis | 2285002008 | 0.1630 | 1.3292 | 4.6430 | 0.0047 | 0.0041 | 0.1048 | 0.1017 |
| Jefferson | 2285002006 | 6.8509 | 48.1162 | 167.8249 | 0.1685 | 0.1500 | 4.1567 | 4.0320 |
| Jefferson | 2285002008 | 0.1369 | 1.1165 | 3.6582 | 0.0039 | 0.0035 | 0.0881 | 0.0854 |
| Jefferson | 2285002010 | 8.2782 | 20.8264 | 131.3298 | 0.0698 | 0.0621 | 3.0697 | 2.9777 |
| Jim Hogg | 2285002006 | 1.3199 | 9.2704 | 34.4713 | 0.0325 | 0.0289 | 0.8008 | 0.7768 |
| Jim Wells | 2285002006 | 2.0389 | 14.3196 | 53.2467 | 0.0502 | 0.0446 | 1.2370 | 1.1999 |
| Johnson | 2285002006 | 10.2827 | 72.2187 | 251.8921 | 0.2530 | 0.2252 | 6.2388 | 6.0517 |
| Johnson | 2285002007 | 0.6249 | 1.1816 | 10.9901 | 0.0047 | 0.0042 | 0.2688 | 0.2608 |
| Johnson | 2285002008 | 0.1564 | 1.2756 | 4.1795 | 0.0045 | 0.0040 | 0.1006 | 0.0976 |
| Johnson | 2285002010 | 0.0074 | 0.0186 | 0.1172 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Kaufman | 2285002006 | 3.7031 | 26.0084 | 90.7148 | 0.0911 | 0.0811 | 2.2468 | 2.1794 |
| Kaufman | 2285002008 | 0.1669 | 1.3612 | 4.4599 | 0.0048 | 0.0042 | 0.1074 | 0.1041 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Kenedy | 2285002006 | 1.2184 | 8.5574 | 31.8203 | 0.0300 | 0.0267 | 0.7393 | 0.7171 |
| Kinney | 2285002006 | 7.5258 | 52.8561 | 196.5426 | 0.1851 | 0.1648 | 4.5661 | 4.4292 |
| Kinney | 2285002008 | 0.2819 | 2.2995 | 8.0323 | 0.0081 | 0.0072 | 0.1814 | 0.1759 |
| Kleberg | 2285002006 | 0.5575 | 3.9156 | 14.5600 | 0.0137 | 0.0122 | 0.3383 | 0.3281 |
| La Salle | 2285002006 | 4.8004 | 33.7150 | 125.3674 | 0.1181 | 0.1051 | 2.9126 | 2.8252 |
| Lamar | 2285002007 | 0.6421 | 1.2141 | 11.2924 | 0.0049 | 0.0043 | 0.2762 | 0.2679 |
| Lamb | 2285002006 | 1.7544 | 12.3215 | 45.8167 | 0.0432 | 0.0384 | 1.0644 | 1.0325 |
| Lampasas | 2285002006 | 4.7508 | 33.3665 | 124.0715 | 0.1169 | 0.1040 | 2.8825 | 2.7960 |
| Lampasas | 2285002007 | 0.3843 | 0.7268 | 7.2065 | 0.0029 | 0.0026 | 0.1653 | 0.1604 |
| Lavaca | 2285002006 | 0.4904 | 3.4443 | 12.0133 | 0.0121 | 0.0107 | 0.2975 | 0.2886 |
| Lee | 2285002006 | 5.2497 | 36.8704 | 128.6005 | 0.1291 | 0.1150 | 3.1852 | 3.0896 |
| Lee | 2285002007 | 0.1615 | 0.3054 | 2.8402 | 0.0012 | 0.0011 | 0.0695 | 0.0674 |
| Leon | 2285002006 | 5.1881 | 36.4379 | 127.0919 | 0.1276 | 0.1136 | 3.1478 | 3.0534 |
| Leon | 2285002010 | 0.0074 | 0.0186 | 0.1172 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Liberty | 2285002006 | 12.3282 | 86.5848 | 301.9996 | 0.3033 | 0.2700 | 7.4799 | 7.2555 |
| Liberty | 2285002008 | 0.2212 | 1.8044 | 5.9122 | 0.0063 | 0.0056 | 0.1423 | 0.1381 |
| Liberty | 2285002010 | 13.4030 | 33.7193 | 212.6319 | 0.1131 | 0.1006 | 4.9701 | 4.8210 |
| Limestone | 2285002006 | 6.4390 | 45.2233 | 157.7345 | 0.1584 | 0.1410 | 3.9068 | 3.7896 |
| Lipscomb | 2285002006 | 7.2242 | 50.7380 | 188.6666 | 0.1777 | 0.1582 | 4.3832 | 4.2517 |
| Live Oak | 2285002006 | 1.4794 | 10.3906 | 36.2416 | 0.0364 | 0.0324 | 0.8976 | 0.8707 |
| Live Oak | 2285002010 | 0.0074 | 0.0186 | 0.1172 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Llano | 2285002007 | 0.3718 | 0.7031 | 6.9721 | 0.0028 | 0.0025 | 0.1600 | 0.1552 |
| Lubbock | 2285002006 | 3.6799 | 25.8449 | 96.1030 | 0.0905 | 0.0806 | 2.2327 | 2.1657 |
| Lubbock | 2285002007 | 1.8891 | 3.5720 | 35.4195 | 0.0143 | 0.0127 | 0.8127 | 0.7883 |
| Lubbock | 2285002010 | 3.1398 | 7.8990 | 53.1032 | 0.0265 | 0.0236 | 1.1643 | 1.1294 |
| Lynn | 2285002006 | 0.1921 | 1.3493 | 5.0171 | 0.0047 | 0.0042 | 0.1166 | 0.1131 |
| Lynn | 2285002007 | 0.0483 | 0.0914 | 0.9059 | 0.0004 | 0.0003 | 0.0208 | 0.0202 |
| Madison | 2285002006 | 0.7944 | 5.5796 | 19.4610 | 0.0195 | 0.0174 | 0.4820 | 0.4675 |
| Marion | 2285002006 | 4.8818 | 34.2865 | 119.5882 | 0.1201 | 0.1069 | 2.9620 | 2.8731 |
| Marion | 2285002008 | 0.0851 | 0.6943 | 2.2748 | 0.0024 | 0.0022 | 0.0548 | 0.0531 |
| Martin | 2285002006 | 1.6765 | 11.7746 | 43.7832 | 0.0412 | 0.0367 | 1.0172 | 0.9867 |
| Matagorda | 2285002006 | 3.1576 | 22.1768 | 77.3507 | 0.0777 | 0.0691 | 1.9158 | 1.8583 |
| Matagorda | 2285002007 | 0.0587 | 0.1109 | 1.0320 | 0.0004 | 0.0004 | 0.0252 | 0.0245 |
| Matagorda | 2285002010 | 0.0222 | 0.0558 | 0.3516 | 0.0002 | 0.0002 | 0.0082 | 0.0080 |
| Maverick | 2285002006 | 3.7698 | 26.4765 | 98.4516 | 0.0927 | 0.0825 | 2.2873 | 2.2186 |
| Maverick | 2285002007 | 0.0234 | 0.0442 | 0.4378 | 0.0002 | 0.0002 | 0.0100 | 0.0097 |
| Maverick | 2285002010 | 0.4603 | 1.1580 | 7.7850 | 0.0039 | 0.0035 | 0.1707 | 0.1656 |
| McCulloch | 2285002007 | 0.5183 | 0.9800 | 9.7178 | 0.0039 | 0.0035 | 0.2230 | 0.2163 |
| McLennan | 2285002006 | 12.2449 | 85.9997 | 299.9590 | 0.3012 | 0.2681 | 7.4294 | 7.2065 |
| McLennan | 2285002008 | 0.1777 | 1.4496 | 4.7497 | 0.0051 | 0.0045 | 0.1143 | 0.1109 |
| McLennan | 2285002010 | 5.6070 | 14.1062 | 88.9528 | 0.0473 | 0.0421 | 2.0792 | 2.0168 |
| Medina | 2285002006 | 11.7872 | 82.7855 | 307.8337 | 0.2900 | 0.2581 | 7.1517 | 6.9371 |
| Medina | 2285002007 | 0.0485 | 0.0917 | 0.9092 | 0.0004 | 0.0003 | 0.0209 | 0.0202 |
| Medina | 2285002008 | 0.2677 | 2.1836 | 7.6273 | 0.0076 | 0.0068 | 0.1722 | 0.1671 |
| Medina | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Midland | 2285002006 | 3.4554 | 24.2684 | 90.2407 | 0.0850 | 0.0757 | 2.0965 | 2.0336 |
| Milam | 2285002006 | 15.6683 | 110.0431 | 383.8201 | 0.3855 | 0.3431 | 9.5064 | 9.2212 |
| Milam | 2285002007 | 0.1782 | 0.3370 | 3.1341 | 0.0013 | 0.0012 | 0.0767 | 0.0744 |
| Milam | 2285002010 | 0.0222 | 0.0558 | 0.3516 | 0.0002 | 0.0002 | 0.0082 | 0.0080 |
| Mills | 2285002006 | 3.8618 | 27.1224 | 100.8532 | 0.0950 | 0.0846 | 2.3431 | 2.2728 |
| Mills | 2285002007 | 0.0163 | 0.0308 | 0.3053 | 0.0001 | 0.0001 | 0.0070 | 0.0068 |
| Mitchell | 2285002006 | 5.0170 | 35.2361 | 131.0235 | 0.1234 | 0.1099 | 3.0440 | 2.9527 |
| Montague | 2285002006 | 4.7643 | 33.4613 | 124.4241 | 0.1172 | 0.1043 | 2.8907 | 2.8039 |
| Montgomery | 2285002006 | 9.6112 | 67.5022 | 235.4413 | 0.2364 | 0.2105 | 5.8314 | 5.6565 |
| Montgomery | 2285002010 | 0.0074 | 0.0186 | 0.1172 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Moore | 2285002006 | 6.9679 | 48.9378 | 181.9726 | 0.1714 | 0.1526 | 4.2276 | 4.1008 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Moore | 2285002007 | 0.9776 | 1.8485 | 18.3296 | 0.0074 | 0.0066 | 0.4205 | 0.4079 |
| Moore | 2285002010 | 0.7206 | 1.8128 | 12.1868 | 0.0061 | 0.0054 | 0.2672 | 0.2592 |
| Morris | 2285002006 | 2.3693 | 16.6405 | 58.0404 | 0.0583 | 0.0519 | 1.4375 | 1.3944 |
| Morris | 2285002007 | 0.1853 | 0.3504 | 3.2589 | 0.0014 | 0.0012 | 0.0797 | 0.0773 |
| Morris | 2285002010 | 0.0563 | 0.1416 | 0.8929 | 0.0005 | 0.0004 | 0.0209 | 0.0202 |
| Nacogdoches | 2285002006 | 2.5804 | 18.1232 | 63.2120 | 0.0635 | 0.0565 | 1.5656 | 1.5187 |
| Nacogdoches | 2285002010 | 0.8615 | 2.1673 | 13.6670 | 0.0073 | 0.0065 | 0.3195 | 0.3099 |
| Navarro | 2285002006 | 8.6079 | 60.4558 | 210.8640 | 0.2118 | 0.1885 | 5.2227 | 5.0660 |
| Navarro | 2285002010 | 0.8615 | 2.1673 | 13.6670 | 0.0073 | 0.0065 | 0.3195 | 0.3099 |
| Newton | 2285002006 | 0.8953 | 6.2878 | 21.9312 | 0.0220 | 0.0196 | 0.5432 | 0.5269 |
| Newton | 2285002007 | 0.5025 | 0.9502 | 8.8383 | 0.0038 | 0.0034 | 0.2162 | 0.2097 |
| Nolan | 2285002006 | 6.9225 | 48.6187 | 180.7862 | 0.1703 | 0.1516 | 4.2001 | 4.0741 |
| Nolan | 2285002007 | 0.3099 | 0.5861 | 5.8113 | 0.0023 | 0.0021 | 0.1333 | 0.1293 |
| Nolan | 2285002010 | 0.3492 | 0.8785 | 5.9060 | 0.0029 | 0.0026 | 0.1295 | 0.1256 |
| Nueces | 2285002006 | 3.6890 | 25.9092 | 90.3688 | 0.0908 | 0.0808 | 2.2382 | 2.1711 |
| Nueces | 2285002007 | 0.3600 | 0.6807 | 6.3317 | 0.0027 | 0.0024 | 0.1549 | 0.1502 |
| Nueces | 2285002010 | 3.3821 | 8.5087 | 53.6555 | 0.0285 | 0.0254 | 1.2542 | 1.2165 |
| Oldham | 2285002006 | 1.1937 | 8.3836 | 31.1738 | 0.0294 | 0.0261 | 0.7242 | 0.7025 |
| Orange | 2285002006 | 6.8040 | 47.7868 | 166.6760 | 0.1674 | 0.1490 | 4.1282 | 4.0044 |
| Orange | 2285002007 | 0.7008 | 1.3251 | 12.3245 | 0.0053 | 0.0047 | 0.3015 | 0.2924 |
| Orange | 2285002008 | 0.2045 | 1.6683 | 5.4663 | 0.0058 | 0.0052 | 0.1316 | 0.1276 |
| Orange | 2285002010 | 1.3587 | 3.4183 | 21.5554 | 0.0115 | 0.0102 | 0.5038 | 0.4887 |
| Palo Pinto | 2285002006 | 6.5907 | 46.2884 | 172.1210 | 0.1621 | 0.1443 | 3.9988 | 3.8788 |
| Panola | 2285002006 | 0.7308 | 5.1326 | 17.9019 | 0.0180 | 0.0160 | 0.4434 | 0.4301 |
| Panola | 2285002007 | 0.5331 | 1.0080 | 9.3754 | 0.0040 | 0.0036 | 0.2293 | 0.2224 |
| Panola | 2285002010 | 0.6984 | 1.7570 | 11.0796 | 0.0059 | 0.0052 | 0.2590 | 0.2512 |
| Parker | 2285002006 | 6.2693 | 44.0315 | 153.5775 | 0.1542 | 0.1373 | 3.8038 | 3.6897 |
| Parker | 2285002007 | 0.0118 | 0.0223 | 0.2078 | 0.0001 | 0.0001 | 0.0051 | 0.0049 |
| Parmer | 2285002006 | 30.0378 | 210.9648 | 784.4621 | 0.7390 | 0.6577 | 18.2249 | 17.6781 |
| Parmer | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Pecos | 2285002006 | 0.6783 | 4.7637 | 17.7136 | 0.0167 | 0.0149 | 0.4115 | 0.3992 |
| Pecos | 2285002007 | 1.6609 | 3.1406 | 31.1415 | 0.0126 | 0.0112 | 0.7145 | 0.6931 |
| Pecos | 2285002008 | 0.0531 | 0.4333 | 1.5137 | 0.0015 | 0.0014 | 0.0342 | 0.0332 |
| Polk | 2285002006 | 2.3383 | 16.4229 | 57.2816 | 0.0575 | 0.0512 | 1.4187 | 1.3762 |
| Polk | 2285002007 | 0.0650 | 0.1229 | 1.1435 | 0.0005 | 0.0004 | 0.0280 | 0.0271 |
| Potter | 2285002006 | 23.0568 | 161.9356 | 602.1492 | 0.5672 | 0.5049 | 13.9893 | 13.5696 |
| Potter | 2285002010 | 7.3967 | 18.6087 | 125.1013 | 0.0624 | 0.0555 | 2.7429 | 2.6606 |
| Presidio | 2285002006 | 3.5305 | 24.7959 | 92.2023 | 0.0869 | 0.0773 | 2.1421 | 2.0778 |
| Presidio | 2285002007 | 1.8668 | 3.5299 | 35.0018 | 0.0141 | 0.0126 | 0.8031 | 0.7790 |
| Presidio | 2285002008 | 0.2765 | 2.2553 | 7.8779 | 0.0079 | 0.0070 | 0.1779 | 0.1726 |
| Randall | 2285002006 | 24.4612 | 171.7986 | 638.8246 | 0.6018 | 0.5356 | 14.8414 | 14.3961 |
| Randall | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Reagan | 2285002007 | 0.7360 | 1.3916 | 13.7990 | 0.0056 | 0.0050 | 0.3166 | 0.3071 |
| Reeves | 2285002006 | 5.6424 | 39.6284 | 147.3561 | 0.1388 | 0.1236 | 3.4234 | 3.3207 |
| Reeves | 2285002007 | 0.8500 | 1.6072 | 15.9371 | 0.0064 | 0.0057 | 0.3657 | 0.3547 |
| Reeves | 2285002010 | 0.0103 | 0.0259 | 0.1738 | 0.0001 | 0.0001 | 0.0038 | 0.0037 |
| Refugio | 2285002006 | 4.5377 | 31.8697 | 111.1585 | 0.1116 | 0.0994 | 2.7532 | 2.6706 |
| Roberts | 2285002006 | 11.3532 | 79.7374 | 296.4994 | 0.2793 | 0.2486 | 6.8884 | 6.6817 |
| Robertson | 2285002006 | 14.6760 | 103.0743 | 359.5134 | 0.3610 | 0.3214 | 8.9044 | 8.6373 |
| Robertson | 2285002010 | 1.2922 | 3.2510 | 20.5005 | 0.0109 | 0.0097 | 0.4792 | 0.4648 |
| Rockwall | 2285002007 | 0.3966 | 0.7499 | 6.9751 | 0.0030 | 0.0027 | 0.1706 | 0.1655 |
| Runnels | 2285002007 | 0.8284 | 1.5664 | 15.5321 | 0.0063 | 0.0056 | 0.3564 | 0.3457 |
| Runnels | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Rusk | 2285002006 | 1.6420 | 11.5325 | 40.2243 | 0.0404 | 0.0360 | 0.9963 | 0.9664 |
| Rusk | 2285002007 | 0.3523 | 0.6663 | 6.1969 | 0.0027 | 0.0024 | 0.1516 | 0.1470 |
| Rusk | 2285002010 | 0.0074 | 0.0186 | 0.1172 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Sabine | 2285002007 | 0.5400 | 1.0211 | 9.4976 | 0.0041 | 0.0036 | 0.2323 | 0.2253 |
| San Augustine | 2285002007 | 0.4914 | 0.9292 | 8.6424 | 0.0037 | 0.0033 | 0.2114 | 0.2051 |
| San Jacinto | 2285002006 | 0.7849 | 5.5129 | 19.2285 | 0.0193 | 0.0172 | 0.4763 | 0.4620 |
| San Patricio | 2285002006 | 3.4077 | 23.9335 | 83.4778 | 0.0838 | 0.0746 | 2.0676 | 2.0055 |
| San Patricio | 2285002010 | 0.8763 | 2.2045 | 13.9014 | 0.0074 | 0.0066 | 0.3249 | 0.3152 |
| San Saba | 2285002007 | 1.0771 | 2.0367 | 20.1953 | 0.0082 | 0.0073 | 0.4634 | 0.4495 |
| Scurry | 2285002006 | 3.4620 | 24.3151 | 90.4144 | 0.0852 | 0.0758 | 2.1005 | 2.0375 |
| Shelby | 2285002006 | 2.4752 | 17.3839 | 60.6333 | 0.0609 | 0.0542 | 1.5018 | 1.4567 |
| Shelby | 2285002007 | 0.8114 | 1.5342 | 14.2697 | 0.0061 | 0.0055 | 0.3490 | 0.3386 |
| Shelby | 2285002010 | 0.6984 | 1.7570 | 11.0796 | 0.0059 | 0.0052 | 0.2590 | 0.2512 |
| Sherman | 2285002006 | 9.7683 | 68.6056 | 255.1063 | 0.2403 | 0.2139 | 5.9267 | 5.7489 |
| Smith | 2285002006 | 4.6449 | 32.6224 | 113.7838 | 0.1143 | 0.1017 | 2.8182 | 2.7336 |
| Smith | 2285002008 | 0.0101 | 0.0820 | 0.2687 | 0.0003 | 0.0003 | 0.0065 | 0.0063 |
| Smith | 2285002010 | 1.7230 | 4.3346 | 27.3340 | 0.0145 | 0.0129 | 0.6389 | 0.6197 |
| Somervell | 2285002007 | 0.0550 | 0.1040 | 0.9669 | 0.0004 | 0.0004 | 0.0236 | 0.0229 |
| Starr | 2285002007 | 0.4666 | 0.8822 | 8.7478 | 0.0035 | 0.0031 | 0.2007 | 0.1947 |
| Stephens | 2285002006 | 1.0255 | 7.2025 | 26.7823 | 0.0252 | 0.0225 | 0.6222 | 0.6035 |
| Swisher | 2285002006 | 2.4680 | 17.3335 | 64.4537 | 0.0607 | 0.0540 | 1.4974 | 1.4525 |
| Swisher | 2285002007 | 0.0434 | 0.0820 | 0.8128 | 0.0003 | 0.0003 | 0.0186 | 0.0181 |
| Tarrant | 2285002006 | 29.1925 | 205.0285 | 715.1202 | 0.7182 | 0.6392 | 17.7121 | 17.1807 |
| Tarrant | 2285002007 | 2.3437 | 4.4316 | 41.2189 | 0.0177 | 0.0158 | 1.0082 | 0.9780 |
| Tarrant | 2285002008 | 0.3567 | 2.9091 | 9.5319 | 0.0102 | 0.0091 | 0.2295 | 0.2226 |
| Tarrant | 2285002009 | 1.2965 | 10.5741 | 34.6461 | 0.0370 | 0.0330 | 0.8340 | 0.8090 |
| Tarrant | 2285002010 | 15.0662 | 37.9036 | 239.0176 | 0.1271 | 0.1131 | 5.5869 | 5.4193 |
| Taylor | 2285002006 | 9.4412 | 66.3083 | 246.5639 | 0.2323 | 0.2067 | 5.7283 | 5.5564 |
| Taylor | 2285002007 | 0.2558 | 0.4836 | 4.7955 | 0.0019 | 0.0017 | 0.1100 | 0.1067 |
| Taylor | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Terrell | 2285002006 | 4.7217 | 33.1620 | 123.3113 | 0.1162 | 0.1034 | 2.8648 | 2.7789 |
| Terrell | 2285002008 | 0.3735 | 3.0462 | 10.6406 | 0.0107 | 0.0095 | 0.2403 | 0.2331 |
| Terry | 2285002007 | 0.8743 | 1.6533 | 16.3938 | 0.0066 | 0.0059 | 0.3761 | 0.3649 |
| Titus | 2285002006 | 2.2696 | 15.9405 | 55.5988 | 0.0558 | 0.0497 | 1.3771 | 1.3358 |
| Titus | 2285002007 | 0.7566 | 1.4307 | 13.3074 | 0.0057 | 0.0051 | 0.3255 | 0.3157 |
| Titus | 2285002010 | 0.8689 | 2.1859 | 13.7842 | 0.0073 | 0.0065 | 0.3222 | 0.3125 |
| Tom Green | 2285002007 | 0.8437 | 1.5953 | 15.8183 | 0.0064 | 0.0057 | 0.3629 | 0.3520 |
| Tom Green | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Travis | 2285002006 | 3.4020 | 23.8935 | 83.3383 | 0.0837 | 0.0745 | 2.0641 | 2.0022 |
| Travis | 2285002007 | 1.1701 | 2.2125 | 20.5790 | 0.0089 | 0.0079 | 0.5034 | 0.4883 |
| Travis | 2285002008 | 0.1648 | 1.3441 | 4.4040 | 0.0047 | 0.0042 | 0.1060 | 0.1028 |
| Travis | 2285002010 | 0.2004 | 0.5042 | 3.1796 | 0.0017 | 0.0015 | 0.0743 | 0.0721 |
| Trinity | 2285002006 | 1.4599 | 10.2532 | 35.7621 | 0.0359 | 0.0320 | 0.8858 | 0.8592 |
| Upshur | 2285002006 | 4.8475 | 34.0453 | 118.7469 | 0.1193 | 0.1061 | 2.9411 | 2.8529 |
| Upshur | 2285002008 | 0.0733 | 0.5979 | 1.9590 | 0.0021 | 0.0019 | 0.0472 | 0.0457 |
| Upton | 2285002007 | 0.8098 | 1.5313 | 15.1838 | 0.0061 | 0.0055 | 0.3484 | 0.3379 |
| Uvalde | 2285002006 | 10.5859 | 74.3481 | 276.4598 | 0.2604 | 0.2318 | 6.4228 | 6.2301 |
| Uvalde | 2285002008 | 0.2829 | 2.3077 | 8.0609 | 0.0081 | 0.0072 | 0.1820 | 0.1766 |
| Uvalde | 2285002010 | 0.8689 | 2.1859 | 14.6953 | 0.0073 | 0.0065 | 0.3222 | 0.3125 |
| Val Verde | 2285002006 | 7.2269 | 50.7565 | 188.7356 | 0.1778 | 0.1582 | 4.3848 | 4.2532 |
| Val Verde | 2285002008 | 0.5665 | 4.6201 | 16.1384 | 0.0162 | 0.0144 | 0.3644 | 0.3535 |
| Van Zandt | 2285002006 | 3.9404 | 27.6749 | 96.5275 | 0.0969 | 0.0863 | 2.3908 | 2.3191 |
| Van Zandt | 2285002008 | 0.1776 | 1.4489 | 4.7473 | 0.0051 | 0.0045 | 0.1143 | 0.1109 |
| Victoria | 2285002006 | 5.5914 | 39.2702 | 136.9708 | 0.1376 | 0.1224 | 3.3925 | 3.2907 |
| Victoria | 2285002010 | 2.1685 | 5.4555 | 34.4019 | 0.0183 | 0.0163 | 0.8041 | 0.7800 |
| Walker | 2285002006 | 2.4414 | 17.1469 | 59.8068 | 0.0601 | 0.0535 | 1.4813 | 1.4369 |
| Waller | 2285002006 | 0.5089 | 3.5743 | 12.4668 | 0.0125 | 0.0111 | 0.3088 | 0.2995 |
| Waller | 2285002010 | 0.8689 | 2.1859 | 13.7842 | 0.0073 | 0.0065 | 0.3222 | 0.3125 |
| Ward | 2285002006 | 5.6356 | 39.5803 | 147.1775 | 0.1386 | 0.1234 | 3.4193 | 3.3167 |

| County | SCC[2] | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Ward | 2285002007 | 0.2038 | 0.3853 | 3.8205 | 0.0015 | 0.0014 | 0.0877 | 0.0850 |
| Ward | 2285002010 | 0.8615 | 2.1673 | 14.5704 | 0.0073 | 0.0065 | 0.3195 | 0.3099 |
| Washington | 2285002006 | 3.3182 | 23.3051 | 81.2859 | 0.0816 | 0.0727 | 2.0133 | 1.9529 |
| Washington | 2285002010 | 0.0074 | 0.0186 | 0.1172 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Webb | 2285002006 | 9.5566 | 67.1191 | 249.5788 | 0.2351 | 0.2093 | 5.7983 | 5.6243 |
| Webb | 2285002010 | 3.1210 | 7.8517 | 52.7851 | 0.0263 | 0.0234 | 1.1573 | 1.1226 |
| Wharton | 2285002006 | 6.3766 | 44.7848 | 156.2053 | 0.1569 | 0.1396 | 3.8689 | 3.7528 |
| Wharton | 2285002008 | 0.0769 | 0.6274 | 2.0557 | 0.0022 | 0.0020 | 0.0495 | 0.0480 |
| Wichita | 2285002006 | 5.8517 | 41.0983 | 152.8218 | 0.1440 | 0.1281 | 3.5504 | 3.4439 |
| Wichita | 2285002007 | 0.5187 | 0.9808 | 9.7253 | 0.0039 | 0.0035 | 0.2231 | 0.2164 |
| Wichita | 2285002010 | 0.3861 | 0.9714 | 6.5308 | 0.0033 | 0.0029 | 0.1432 | 0.1389 |
| Wilbarger | 2285002006 | 6.0373 | 42.4016 | 157.6681 | 0.1485 | 0.1322 | 3.6630 | 3.5531 |
| Wilbarger | 2285002010 | 0.0074 | 0.0186 | 0.1250 | 0.0001 | 0.0001 | 0.0027 | 0.0027 |
| Willacy | 2285002006 | 0.4699 | 3.3005 | 12.2728 | 0.0116 | 0.0103 | 0.2851 | 0.2766 |
| Williamson | 2285002006 | 5.7328 | 40.2635 | 140.4354 | 0.1410 | 0.1255 | 3.4783 | 3.3739 |
| Williamson | 2285002007 | 1.8277 | 3.4560 | 32.1450 | 0.0138 | 0.0123 | 0.7863 | 0.7627 |
| Williamson | 2285002008 | 0.2356 | 1.9216 | 6.2961 | 0.0067 | 0.0060 | 0.1516 | 0.1470 |
| Williamson | 2285002010 | 0.9132 | 2.2974 | 14.4875 | 0.0077 | 0.0069 | 0.3386 | 0.3285 |
| Wilson | 2285002010 | 1.2922 | 3.2510 | 20.5005 | 0.0109 | 0.0097 | 0.4792 | 0.4648 |
| Winkler | 2285002007 | 0.7495 | 1.4172 | 14.0529 | 0.0057 | 0.0050 | 0.3224 | 0.3128 |
| Wise | 2285002006 | 8.4642 | 59.4468 | 207.3448 | 0.2082 | 0.1853 | 5.1355 | 4.9814 |
| Wise | 2285002010 | 1.2922 | 3.2510 | 20.5005 | 0.0109 | 0.0097 | 0.4792 | 0.4648 |
| Wood | 2285002006 | 4.0335 | 28.3286 | 98.8075 | 0.0992 | 0.0883 | 2.4473 | 2.3738 |
| Wood | 2285002008 | 0.1591 | 1.2975 | 4.2513 | 0.0045 | 0.0040 | 0.1023 | 0.0993 |
| Wood | 2285002010 | 1.7230 | 4.3346 | 27.3340 | 0.0145 | 0.0129 | 0.6389 | 0.6197 |

[1] Pb emissions were less than 1 ton/ year,

[2] SCC represents the following categories: 2285002006: Line Haul Locomotives: Class I Operations, 2285002007: Line Haul Locomotives: Class II / III Operations, 2285002008: Line Haul Locomotives: Passenger Trains (Amtrak), 2285002009: Line Haul Locomotives: Commuter Lines, and 2285002010: Yard Locomotives.

## Controlled 2020 Summer Weekday County-Level Emissions by Criteria Pollutant (tons/day).

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Anderson | 2285002006 | 0.0151 | 0.1060 | 0.3699 | 0.0004 | 0.0003 | 0.0092 | 0.0089 |
| Anderson | 2285002007 | 0.0023 | 0.0044 | 0.0406 | 0.0000 | 0.0000 | 0.0010 | 0.0010 |
| Anderson | 2285002010 | 0.0035 | 0.0089 | 0.0562 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Andrews | 2285002007 | 0.0003 | 0.0006 | 0.0055 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Angelina | 2285002006 | 0.0041 | 0.0290 | 0.1012 | 0.0001 | 0.0001 | 0.0025 | 0.0024 |
| Angelina | 2285002007 | 0.0002 | 0.0005 | 0.0043 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Angelina | 2285002010 | 0.0012 | 0.0030 | 0.0190 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Armstrong | 2285002006 | 0.0157 | 0.1105 | 0.4109 | 0.0004 | 0.0003 | 0.0095 | 0.0093 |
| Atascosa | 2285002006 | 0.0041 | 0.0288 | 0.1004 | 0.0001 | 0.0001 | 0.0025 | 0.0024 |
| Atascosa | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Austin | 2285002006 | 0.0233 | 0.1636 | 0.5708 | 0.0006 | 0.0005 | 0.0141 | 0.0137 |
| Austin | 2285002010 | 0.0000 | 0.0001 | 0.0006 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Bailey | 2285002006 | 0.0029 | 0.0202 | 0.0751 | 0.0001 | 0.0001 | 0.0017 | 0.0017 |
| Bastrop | 2285002006 | 0.0126 | 0.0886 | 0.3092 | 0.0003 | 0.0003 | 0.0077 | 0.0074 |
| Bastrop | 2285002007 | 0.0015 | 0.0028 | 0.0261 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Bastrop | 2285002010 | 0.0024 | 0.0059 | 0.0374 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Bell | 2285002006 | 0.0365 | 0.2564 | 0.8944 | 0.0009 | 0.0008 | 0.0222 | 0.0215 |
| Bell | 2285002007 | 0.0011 | 0.0020 | 0.0187 | 0.0000 | 0.0000 | 0.0005 | 0.0004 |
| Bell | 2285002008 | 0.0006 | 0.0049 | 0.0161 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Bell | 2285002010 | 0.0052 | 0.0131 | 0.0825 | 0.0000 | 0.0000 | 0.0019 | 0.0019 |
| Bexar | 2285002006 | 0.0504 | 0.3542 | 1.2353 | 0.0012 | 0.0011 | 0.0306 | 0.0297 |
| Bexar | 2285002007 | 0.0011 | 0.0020 | 0.0185 | 0.0000 | 0.0000 | 0.0005 | 0.0004 |
| Bexar | 2285002008 | 0.0014 | 0.0114 | 0.0374 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Bexar | 2285002010 | 0.0183 | 0.0461 | 0.2907 | 0.0002 | 0.0001 | 0.0068 | 0.0066 |
| Bosque | 2285002006 | 0.0277 | 0.1944 | 0.6781 | 0.0007 | 0.0006 | 0.0168 | 0.0163 |
| Bosque | 2285002008 | 0.0007 | 0.0055 | 0.0179 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Bowie | 2285002006 | 0.0280 | 0.1967 | 0.6862 | 0.0007 | 0.0006 | 0.0170 | 0.0165 |
| Bowie | 2285002007 | 0.0073 | 0.0138 | 0.1286 | 0.0001 | 0.0000 | 0.0031 | 0.0031 |
| Bowie | 2285002008 | 0.0002 | 0.0012 | 0.0040 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Brazoria | 2285002006 | 0.0281 | 0.1974 | 0.6886 | 0.0007 | 0.0006 | 0.0171 | 0.0165 |
| Brazoria | 2285002010 | 0.0162 | 0.0407 | 0.2569 | 0.0001 | 0.0001 | 0.0060 | 0.0058 |
| Brazos | 2285002006 | 0.0212 | 0.1488 | 0.5188 | 0.0005 | 0.0005 | 0.0129 | 0.0125 |
| Brazos | 2285002010 | 0.0012 | 0.0030 | 0.0187 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Brewster | 2285002006 | 0.0176 | 0.1236 | 0.4596 | 0.0004 | 0.0004 | 0.0107 | 0.0104 |
| Brewster | 2285002007 | 0.0024 | 0.0045 | 0.0446 | 0.0000 | 0.0000 | 0.0010 | 0.0010 |
| Brewster | 2285002008 | 0.0014 | 0.0112 | 0.0393 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Brown | 2285002006 | 0.0094 | 0.0661 | 0.2456 | 0.0002 | 0.0002 | 0.0057 | 0.0055 |
| Brown | 2285002007 | 0.0023 | 0.0043 | 0.0423 | 0.0000 | 0.0000 | 0.0010 | 0.0009 |
| Burleson | 2285002006 | 0.0374 | 0.2627 | 0.9164 | 0.0009 | 0.0008 | 0.0227 | 0.0220 |
| Burleson | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Burnet | 2285002007 | 0.0023 | 0.0043 | 0.0423 | 0.0000 | 0.0000 | 0.0010 | 0.0009 |
| Caldwell | 2285002006 | 0.0129 | 0.0905 | 0.3156 | 0.0003 | 0.0003 | 0.0078 | 0.0076 |
| Caldwell | 2285002008 | 0.0002 | 0.0014 | 0.0047 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Calhoun | 2285002007 | 0.0002 | 0.0004 | 0.0037 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Calhoun | 2285002010 | 0.0012 | 0.0030 | 0.0190 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Callahan | 2285002006 | 0.0151 | 0.1063 | 0.3951 | 0.0004 | 0.0003 | 0.0092 | 0.0089 |
| Cameron | 2285002006 | 0.0022 | 0.0157 | 0.0585 | 0.0001 | 0.0000 | 0.0014 | 0.0013 |
| Cameron | 2285002007 | 0.0028 | 0.0053 | 0.0522 | 0.0000 | 0.0000 | 0.0012 | 0.0012 |
| Cameron | 2285002010 | 0.0025 | 0.0063 | 0.0423 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Camp | 2285002006 | 0.0079 | 0.0553 | 0.1927 | 0.0002 | 0.0002 | 0.0048 | 0.0046 |
| Camp | 2285002007 | 0.0006 | 0.0010 | 0.0097 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Carson | 2285002006 | 0.0647 | 0.4541 | 1.6887 | 0.0016 | 0.0014 | 0.0392 | 0.0381 |
| Carson | 2285002007 | 0.0025 | 0.0047 | 0.0463 | 0.0000 | 0.0000 | 0.0011 | 0.0010 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Carson | 2285002010 | 0.0000 | 0.0001 | 0.0007 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Cass | 2285002006 | 0.0302 | 0.2119 | 0.7392 | 0.0007 | 0.0007 | 0.0183 | 0.0178 |
| Cass | 2285002008 | 0.0006 | 0.0046 | 0.0151 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Cass | 2285002010 | 0.0009 | 0.0023 | 0.0147 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Castro | 2285002006 | 0.0048 | 0.0335 | 0.1245 | 0.0001 | 0.0001 | 0.0029 | 0.0028 |
| Castro | 2285002007 | 0.0016 | 0.0030 | 0.0296 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Castro | 2285002010 | 0.0029 | 0.0072 | 0.0485 | 0.0000 | 0.0000 | 0.0011 | 0.0010 |
| Chambers | 2285002006 | 0.0007 | 0.0052 | 0.0181 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Chambers | 2285002010 | 0.0024 | 0.0061 | 0.0384 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Cherokee | 2285002006 | 0.0129 | 0.0905 | 0.3156 | 0.0003 | 0.0003 | 0.0078 | 0.0076 |
| Cherokee | 2285002007 | 0.0021 | 0.0039 | 0.0361 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Childress | 2285002006 | 0.0137 | 0.0962 | 0.3577 | 0.0003 | 0.0003 | 0.0083 | 0.0081 |
| Clay | 2285002006 | 0.0151 | 0.1059 | 0.3938 | 0.0004 | 0.0003 | 0.0091 | 0.0089 |
| Cochran | 2285002007 | 0.0001 | 0.0001 | 0.0014 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Coleman | 2285002006 | 0.0126 | 0.0883 | 0.3283 | 0.0003 | 0.0003 | 0.0076 | 0.0074 |
| Coleman | 2285002007 | 0.0014 | 0.0027 | 0.0271 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Collin | 2285002006 | 0.0099 | 0.0697 | 0.2431 | 0.0002 | 0.0002 | 0.0060 | 0.0058 |
| Collin | 2285002007 | 0.0043 | 0.0081 | 0.0752 | 0.0000 | 0.0000 | 0.0018 | 0.0018 |
| Collin | 2285002010 | 0.0019 | 0.0047 | 0.0294 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Colorado | 2285002006 | 0.0164 | 0.1151 | 0.4015 | 0.0004 | 0.0004 | 0.0099 | 0.0096 |
| Colorado | 2285002008 | 0.0006 | 0.0053 | 0.0173 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Colorado | 2285002010 | 0.0024 | 0.0059 | 0.0374 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Comal | 2285002006 | 0.0102 | 0.0719 | 0.2507 | 0.0003 | 0.0002 | 0.0062 | 0.0060 |
| Comal | 2285002007 | 0.0001 | 0.0003 | 0.0024 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Comal | 2285002008 | 0.0009 | 0.0070 | 0.0230 | 0.0000 | 0.0000 | 0.0006 | 0.0005 |
| Comal | 2285002010 | 0.0048 | 0.0120 | 0.0759 | 0.0000 | 0.0000 | 0.0018 | 0.0017 |
| Comanche | 2285002007 | 0.0037 | 0.0069 | 0.0686 | 0.0000 | 0.0000 | 0.0016 | 0.0015 |
| Cooke | 2285002006 | 0.0134 | 0.0938 | 0.3272 | 0.0003 | 0.0003 | 0.0081 | 0.0079 |
| Cooke | 2285002008 | 0.0004 | 0.0031 | 0.0100 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Coryell | 2285002006 | 0.0032 | 0.0223 | 0.0779 | 0.0001 | 0.0001 | 0.0019 | 0.0019 |
| Coryell | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Crane | 2285002006 | 0.0005 | 0.0036 | 0.0135 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Crane | 2285002007 | 0.0002 | 0.0005 | 0.0045 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Crockett | 2285002007 | 0.0000 | 0.0001 | 0.0006 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Culberson | 2285002006 | 0.0203 | 0.1428 | 0.5310 | 0.0005 | 0.0004 | 0.0123 | 0.0120 |
| Culberson | 2285002008 | 0.0003 | 0.0026 | 0.0092 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Dallam | 2285002006 | 0.0216 | 0.1515 | 0.5633 | 0.0005 | 0.0005 | 0.0131 | 0.0127 |
| Dallam | 2285002010 | 0.0035 | 0.0089 | 0.0599 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Dallas | 2285002006 | 0.0270 | 0.1893 | 0.6603 | 0.0007 | 0.0006 | 0.0164 | 0.0159 |
| Dallas | 2285002007 | 0.0091 | 0.0171 | 0.1595 | 0.0001 | 0.0001 | 0.0039 | 0.0038 |
| Dallas | 2285002008 | 0.0006 | 0.0050 | 0.0165 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Dallas | 2285002009 | 0.0025 | 0.0206 | 0.0676 | 0.0001 | 0.0001 | 0.0016 | 0.0016 |
| Dallas | 2285002010 | 0.0197 | 0.0494 | 0.3118 | 0.0002 | 0.0001 | 0.0073 | 0.0071 |
| De Witt | 2285002006 | 0.0015 | 0.0107 | 0.0374 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Deaf Smith | 2285002006 | 0.0465 | 0.3268 | 1.2151 | 0.0011 | 0.0010 | 0.0282 | 0.0274 |
| Deaf Smith | 2285002010 | 0.0010 | 0.0024 | 0.0162 | 0.0000 | 0.0000 | 0.0004 | 0.0003 |
| Delta | 2285002007 | 0.0000 | 0.0001 | 0.0008 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Denton | 2285002006 | 0.0426 | 0.2993 | 1.0440 | 0.0010 | 0.0009 | 0.0259 | 0.0251 |
| Denton | 2285002007 | 0.0020 | 0.0039 | 0.0359 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Denton | 2285002008 | 0.0006 | 0.0046 | 0.0151 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Denton | 2285002009 | 0.0015 | 0.0120 | 0.0393 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Denton | 2285002010 | 0.0093 | 0.0234 | 0.1473 | 0.0001 | 0.0001 | 0.0034 | 0.0033 |
| Donley | 2285002006 | 0.0186 | 0.1309 | 0.4867 | 0.0005 | 0.0004 | 0.0113 | 0.0110 |
| Duval | 2285002006 | 0.0133 | 0.0937 | 0.3482 | 0.0003 | 0.0003 | 0.0081 | 0.0078 |
| Eastland | 2285002006 | 0.0156 | 0.1096 | 0.4075 | 0.0004 | 0.0003 | 0.0095 | 0.0092 |
| Eastland | 2285002007 | 0.0001 | 0.0001 | 0.0010 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Ector | 2285002006 | 0.0113 | 0.0792 | 0.2945 | 0.0003 | 0.0002 | 0.0068 | 0.0066 |
| Ector | 2285002010 | 0.0071 | 0.0178 | 0.1198 | 0.0001 | 0.0001 | 0.0026 | 0.0025 |
| El Paso | 2285002006 | 0.0436 | 0.3064 | 1.1392 | 0.0011 | 0.0010 | 0.0265 | 0.0257 |
| El Paso | 2285002007 | 0.0008 | 0.0016 | 0.0154 | 0.0000 | 0.0000 | 0.0004 | 0.0003 |
| El Paso | 2285002008 | 0.0009 | 0.0072 | 0.0250 | 0.0000 | 0.0000 | 0.0006 | 0.0005 |
| El Paso | 2285002010 | 0.0233 | 0.0585 | 0.3935 | 0.0002 | 0.0002 | 0.0086 | 0.0084 |
| Ellis | 2285002006 | 0.0206 | 0.1450 | 0.5059 | 0.0005 | 0.0005 | 0.0125 | 0.0122 |
| Ellis | 2285002010 | 0.0083 | 0.0208 | 0.1311 | 0.0001 | 0.0001 | 0.0031 | 0.0030 |
| Erath | 2285002007 | 0.0036 | 0.0068 | 0.0672 | 0.0000 | 0.0000 | 0.0015 | 0.0015 |
| Erath | 2285002010 | 0.0000 | 0.0001 | 0.0007 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Falls | 2285002006 | 0.0114 | 0.0803 | 0.2801 | 0.0003 | 0.0003 | 0.0069 | 0.0067 |
| Fannin | 2285002007 | 0.0040 | 0.0075 | 0.0701 | 0.0000 | 0.0000 | 0.0017 | 0.0017 |
| Fayette | 2285002006 | 0.0354 | 0.2484 | 0.8665 | 0.0009 | 0.0008 | 0.0215 | 0.0208 |
| Fayette | 2285002008 | 0.0004 | 0.0032 | 0.0105 | 0.0000 | 0.0000 | 0.0003 | 0.0002 |
| Fayette | 2285002010 | 0.0024 | 0.0060 | 0.0378 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Fisher | 2285002006 | 0.0049 | 0.0342 | 0.1270 | 0.0001 | 0.0001 | 0.0030 | 0.0029 |
| Fort Bend | 2285002006 | 0.0461 | 0.3236 | 1.1286 | 0.0011 | 0.0010 | 0.0280 | 0.0271 |
| Fort Bend | 2285002007 | 0.0002 | 0.0004 | 0.0039 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Fort Bend | 2285002008 | 0.0006 | 0.0047 | 0.0155 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Fort Bend | 2285002010 | 0.0015 | 0.0036 | 0.0230 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Franklin | 2285002006 | 0.0010 | 0.0070 | 0.0243 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Franklin | 2285002007 | 0.0005 | 0.0010 | 0.0090 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Freestone | 2285002006 | 0.0088 | 0.0616 | 0.2150 | 0.0002 | 0.0002 | 0.0053 | 0.0052 |
| Freestone | 2285002010 | 0.0019 | 0.0048 | 0.0304 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Frio | 2285002006 | 0.0129 | 0.0906 | 0.3369 | 0.0003 | 0.0003 | 0.0078 | 0.0076 |
| Gaines | 2285002007 | 0.0003 | 0.0005 | 0.0049 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Galveston | 2285002006 | 0.0113 | 0.0794 | 0.2768 | 0.0003 | 0.0002 | 0.0069 | 0.0067 |
| Galveston | 2285002007 | 0.0026 | 0.0049 | 0.0454 | 0.0000 | 0.0000 | 0.0011 | 0.0011 |
| Galveston | 2285002010 | 0.0036 | 0.0090 | 0.0565 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Garza | 2285002006 | 0.0100 | 0.0705 | 0.2622 | 0.0002 | 0.0002 | 0.0061 | 0.0059 |
| Goliad | 2285002006 | 0.0001 | 0.0007 | 0.0024 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Gonzales | 2285002006 | 0.0142 | 0.1000 | 0.3489 | 0.0004 | 0.0003 | 0.0086 | 0.0084 |
| Gonzales | 2285002007 | 0.0065 | 0.0123 | 0.1142 | 0.0000 | 0.0000 | 0.0028 | 0.0027 |
| Gonzales | 2285002008 | 0.0004 | 0.0031 | 0.0103 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Gonzales | 2285002010 | 0.0000 | 0.0001 | 0.0006 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Gray | 2285002006 | 0.0345 | 0.2422 | 0.9007 | 0.0008 | 0.0008 | 0.0209 | 0.0203 |
| Gray | 2285002010 | 0.0019 | 0.0049 | 0.0327 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Grayson | 2285002006 | 0.0364 | 0.2558 | 0.8923 | 0.0009 | 0.0008 | 0.0221 | 0.0214 |
| Grayson | 2285002007 | 0.0094 | 0.0177 | 0.1651 | 0.0001 | 0.0001 | 0.0040 | 0.0039 |
| Grayson | 2285002010 | 0.0059 | 0.0149 | 0.0939 | 0.0000 | 0.0000 | 0.0022 | 0.0021 |
| Gregg | 2285002006 | 0.0129 | 0.0908 | 0.3166 | 0.0003 | 0.0003 | 0.0078 | 0.0076 |
| Gregg | 2285002008 | 0.0003 | 0.0022 | 0.0073 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Gregg | 2285002010 | 0.0094 | 0.0238 | 0.1498 | 0.0001 | 0.0001 | 0.0035 | 0.0034 |
| Grimes | 2285002006 | 0.0172 | 0.1208 | 0.4213 | 0.0004 | 0.0004 | 0.0104 | 0.0101 |
| Grimes | 2285002007 | 0.0008 | 0.0015 | 0.0138 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Grimes | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Guadalupe | 2285002006 | 0.0232 | 0.1627 | 0.5676 | 0.0006 | 0.0005 | 0.0141 | 0.0136 |
| Guadalupe | 2285002008 | 0.0006 | 0.0051 | 0.0168 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Guadalupe | 2285002010 | 0.0024 | 0.0059 | 0.0374 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Hale | 2285002006 | 0.0089 | 0.0628 | 0.2336 | 0.0002 | 0.0002 | 0.0054 | 0.0053 |
| Hale | 2285002007 | 0.0018 | 0.0035 | 0.0344 | 0.0000 | 0.0000 | 0.0008 | 0.0008 |
| Hale | 2285002010 | 0.0039 | 0.0098 | 0.0660 | 0.0000 | 0.0000 | 0.0014 | 0.0014 |
| Hall | 2285002006 | 0.0085 | 0.0600 | 0.2230 | 0.0002 | 0.0002 | 0.0052 | 0.0050 |
| Hansford | 2285002007 | 0.0001 | 0.0001 | 0.0010 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hardeman | 2285002006 | 0.0155 | 0.1091 | 0.4056 | 0.0004 | 0.0003 | 0.0094 | 0.0091 |
| Hardeman | 2285002007 | 0.0006 | 0.0012 | 0.0118 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Hardeman | 2285002010 | 0.0019 | 0.0049 | 0.0327 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Hardin | 2285002006 | 0.0084 | 0.0590 | 0.2059 | 0.0002 | 0.0002 | 0.0051 | 0.0049 |
| Hardin | 2285002007 | 0.0007 | 0.0014 | 0.0128 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Hardin | 2285002010 | 0.0069 | 0.0173 | 0.1092 | 0.0001 | 0.0001 | 0.0026 | 0.0025 |
| Harris | 2285002006 | 0.0898 | 0.6306 | 2.1995 | 0.0022 | 0.0020 | 0.0545 | 0.0528 |
| Harris | 2285002007 | 0.0094 | 0.0177 | 0.1650 | 0.0001 | 0.0001 | 0.0040 | 0.0039 |
| Harris | 2285002008 | 0.0008 | 0.0065 | 0.0212 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Harris | 2285002010 | 0.1765 | 0.4441 | 2.8004 | 0.0015 | 0.0013 | 0.0655 | 0.0635 |
| Harrison | 2285002006 | 0.0332 | 0.2328 | 0.8121 | 0.0008 | 0.0007 | 0.0201 | 0.0195 |
| Harrison | 2285002008 | 0.0006 | 0.0045 | 0.0149 | 0.0000 | 0.0000 | 0.0004 | 0.0003 |
| Harrison | 2285002010 | 0.0012 | 0.0030 | 0.0190 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Hartley | 2285002006 | 0.0212 | 0.1486 | 0.5525 | 0.0005 | 0.0005 | 0.0128 | 0.0125 |
| Hays | 2285002006 | 0.0085 | 0.0599 | 0.2091 | 0.0002 | 0.0002 | 0.0052 | 0.0050 |
| Hays | 2285002008 | 0.0004 | 0.0035 | 0.0116 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Hays | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hemphill | 2285002006 | 0.0564 | 0.3963 | 1.4735 | 0.0014 | 0.0012 | 0.0342 | 0.0332 |
| Hemphill | 2285002010 | 0.0000 | 0.0001 | 0.0007 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Henderson | 2285002006 | 0.0080 | 0.0564 | 0.1968 | 0.0002 | 0.0002 | 0.0049 | 0.0047 |
| Hidalgo | 2285002007 | 0.0054 | 0.0103 | 0.1021 | 0.0000 | 0.0000 | 0.0023 | 0.0023 |
| Hidalgo | 2285002010 | 0.0001 | 0.0002 | 0.0014 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hill | 2285002006 | 0.0185 | 0.1303 | 0.4543 | 0.0005 | 0.0004 | 0.0113 | 0.0109 |
| Hill | 2285002008 | 0.0002 | 0.0014 | 0.0044 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Hill | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hockley | 2285002006 | 0.0011 | 0.0079 | 0.0295 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Hockley | 2285002007 | 0.0024 | 0.0046 | 0.0458 | 0.0000 | 0.0000 | 0.0011 | 0.0010 |
| Hood | 2285002007 | 0.0034 | 0.0064 | 0.0594 | 0.0000 | 0.0000 | 0.0015 | 0.0014 |
| Hood | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hopkins | 2285002006 | 0.0091 | 0.0639 | 0.2230 | 0.0002 | 0.0002 | 0.0055 | 0.0054 |
| Hopkins | 2285002007 | 0.0030 | 0.0058 | 0.0535 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Houston | 2285002006 | 0.0092 | 0.0643 | 0.2243 | 0.0002 | 0.0002 | 0.0056 | 0.0054 |
| Howard | 2285002006 | 0.0132 | 0.0924 | 0.3435 | 0.0003 | 0.0003 | 0.0080 | 0.0077 |
| Howard | 2285002007 | 0.0002 | 0.0003 | 0.0030 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Howard | 2285002010 | 0.0083 | 0.0208 | 0.1397 | 0.0001 | 0.0001 | 0.0031 | 0.0030 |
| Hudspeth | 2285002006 | 0.0441 | 0.3099 | 1.1522 | 0.0011 | 0.0010 | 0.0268 | 0.0260 |
| Hudspeth | 2285002008 | 0.0013 | 0.0109 | 0.0382 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Hunt | 2285002006 | 0.0054 | 0.0381 | 0.1328 | 0.0001 | 0.0001 | 0.0033 | 0.0032 |
| Hunt | 2285002007 | 0.0048 | 0.0092 | 0.0852 | 0.0000 | 0.0000 | 0.0021 | 0.0020 |
| Hutchinson | 2285002007 | 0.0014 | 0.0027 | 0.0268 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Hutchinson | 2285002010 | 0.0000 | 0.0001 | 0.0007 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Irion | 2285002007 | 0.0028 | 0.0053 | 0.0525 | 0.0000 | 0.0000 | 0.0012 | 0.0012 |
| Jackson | 2285002006 | 0.0112 | 0.0787 | 0.2745 | 0.0003 | 0.0002 | 0.0068 | 0.0066 |
| Jackson | 2285002007 | 0.0007 | 0.0014 | 0.0126 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Jasper | 2285002007 | 0.0073 | 0.0139 | 0.1289 | 0.0001 | 0.0000 | 0.0032 | 0.0031 |
| Jasper | 2285002010 | 0.0019 | 0.0048 | 0.0304 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Jeff Davis | 2285002006 | 0.0069 | 0.0488 | 0.1813 | 0.0002 | 0.0002 | 0.0042 | 0.0041 |
| Jeff Davis | 2285002008 | 0.0004 | 0.0036 | 0.0127 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Jefferson | 2285002006 | 0.0188 | 0.1318 | 0.4598 | 0.0005 | 0.0004 | 0.0114 | 0.0110 |
| Jefferson | 2285002008 | 0.0004 | 0.0031 | 0.0100 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Jefferson | 2285002010 | 0.0227 | 0.0571 | 0.3598 | 0.0002 | 0.0002 | 0.0084 | 0.0082 |
| Jim Hogg | 2285002006 | 0.0036 | 0.0254 | 0.0944 | 0.0001 | 0.0001 | 0.0022 | 0.0021 |
| Jim Wells | 2285002006 | 0.0056 | 0.0392 | 0.1459 | 0.0001 | 0.0001 | 0.0034 | 0.0033 |
| Johnson | 2285002006 | 0.0282 | 0.1979 | 0.6901 | 0.0007 | 0.0006 | 0.0171 | 0.0166 |
| Johnson | 2285002007 | 0.0017 | 0.0032 | 0.0301 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Johnson | 2285002008 | 0.0004 | 0.0035 | 0.0115 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Johnson | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Kaufman | 2285002006 | 0.0101 | 0.0713 | 0.2485 | 0.0002 | 0.0002 | 0.0062 | 0.0060 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Kaufman | 2285002008 | 0.0005 | 0.0037 | 0.0122 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Kenedy | 2285002006 | 0.0033 | 0.0234 | 0.0872 | 0.0001 | 0.0001 | 0.0020 | 0.0020 |
| Kinney | 2285002006 | 0.0206 | 0.1448 | 0.5385 | 0.0005 | 0.0005 | 0.0125 | 0.0121 |
| Kinney | 2285002008 | 0.0008 | 0.0063 | 0.0220 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Kleberg | 2285002006 | 0.0015 | 0.0107 | 0.0399 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| La Salle | 2285002006 | 0.0132 | 0.0924 | 0.3435 | 0.0003 | 0.0003 | 0.0080 | 0.0077 |
| Lamar | 2285002007 | 0.0018 | 0.0033 | 0.0309 | 0.0000 | 0.0000 | 0.0008 | 0.0007 |
| Lamb | 2285002006 | 0.0048 | 0.0338 | 0.1255 | 0.0001 | 0.0001 | 0.0029 | 0.0028 |
| Lampasas | 2285002006 | 0.0130 | 0.0914 | 0.3399 | 0.0003 | 0.0003 | 0.0079 | 0.0077 |
| Lampasas | 2285002007 | 0.0011 | 0.0020 | 0.0197 | 0.0000 | 0.0000 | 0.0005 | 0.0004 |
| Lavaca | 2285002006 | 0.0013 | 0.0094 | 0.0329 | 0.0000 | 0.0000 | 0.0008 | 0.0008 |
| Lee | 2285002006 | 0.0144 | 0.1010 | 0.3523 | 0.0004 | 0.0003 | 0.0087 | 0.0085 |
| Lee | 2285002007 | 0.0004 | 0.0008 | 0.0078 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Leon | 2285002006 | 0.0142 | 0.0998 | 0.3482 | 0.0003 | 0.0003 | 0.0086 | 0.0084 |
| Leon | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Liberty | 2285002006 | 0.0338 | 0.2372 | 0.8274 | 0.0008 | 0.0007 | 0.0205 | 0.0199 |
| Liberty | 2285002008 | 0.0006 | 0.0049 | 0.0162 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Liberty | 2285002010 | 0.0367 | 0.0924 | 0.5826 | 0.0003 | 0.0003 | 0.0136 | 0.0132 |
| Limestone | 2285002006 | 0.0176 | 0.1239 | 0.4321 | 0.0004 | 0.0004 | 0.0107 | 0.0104 |
| Lipscomb | 2285002006 | 0.0198 | 0.1390 | 0.5169 | 0.0005 | 0.0004 | 0.0120 | 0.0116 |
| Live Oak | 2285002006 | 0.0041 | 0.0285 | 0.0993 | 0.0001 | 0.0001 | 0.0025 | 0.0024 |
| Live Oak | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Llano | 2285002007 | 0.0010 | 0.0019 | 0.0191 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Lubbock | 2285002006 | 0.0101 | 0.0708 | 0.2633 | 0.0002 | 0.0002 | 0.0061 | 0.0059 |
| Lubbock | 2285002007 | 0.0052 | 0.0098 | 0.0970 | 0.0000 | 0.0000 | 0.0022 | 0.0022 |
| Lubbock | 2285002010 | 0.0086 | 0.0216 | 0.1455 | 0.0001 | 0.0001 | 0.0032 | 0.0031 |
| Lynn | 2285002006 | 0.0005 | 0.0037 | 0.0137 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Lynn | 2285002007 | 0.0001 | 0.0003 | 0.0025 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Madison | 2285002006 | 0.0022 | 0.0153 | 0.0533 | 0.0001 | 0.0000 | 0.0013 | 0.0013 |
| Marion | 2285002006 | 0.0134 | 0.0939 | 0.3276 | 0.0003 | 0.0003 | 0.0081 | 0.0079 |
| Marion | 2285002008 | 0.0002 | 0.0019 | 0.0062 | 0.0000 | 0.0000 | 0.0002 | 0.0001 |
| Martin | 2285002006 | 0.0046 | 0.0323 | 0.1200 | 0.0001 | 0.0001 | 0.0028 | 0.0027 |
| Matagorda | 2285002006 | 0.0087 | 0.0608 | 0.2119 | 0.0002 | 0.0002 | 0.0052 | 0.0051 |
| Matagorda | 2285002007 | 0.0002 | 0.0003 | 0.0028 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Matagorda | 2285002010 | 0.0001 | 0.0002 | 0.0010 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Maverick | 2285002006 | 0.0103 | 0.0725 | 0.2697 | 0.0003 | 0.0002 | 0.0063 | 0.0061 |
| Maverick | 2285002007 | 0.0001 | 0.0001 | 0.0012 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Maverick | 2285002010 | 0.0013 | 0.0032 | 0.0213 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| McCulloch | 2285002007 | 0.0014 | 0.0027 | 0.0266 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| McLennan | 2285002006 | 0.0335 | 0.2356 | 0.8218 | 0.0008 | 0.0007 | 0.0204 | 0.0197 |
| McLennan | 2285002008 | 0.0005 | 0.0040 | 0.0130 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| McLennan | 2285002010 | 0.0154 | 0.0386 | 0.2437 | 0.0001 | 0.0001 | 0.0057 | 0.0055 |
| Medina | 2285002006 | 0.0323 | 0.2268 | 0.8434 | 0.0008 | 0.0007 | 0.0196 | 0.0190 |
| Medina | 2285002007 | 0.0001 | 0.0003 | 0.0025 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Medina | 2285002008 | 0.0007 | 0.0060 | 0.0209 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Medina | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Midland | 2285002006 | 0.0095 | 0.0665 | 0.2472 | 0.0002 | 0.0002 | 0.0057 | 0.0056 |
| Milam | 2285002006 | 0.0429 | 0.3015 | 1.0516 | 0.0011 | 0.0009 | 0.0260 | 0.0253 |
| Milam | 2285002007 | 0.0005 | 0.0009 | 0.0086 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Milam | 2285002010 | 0.0001 | 0.0002 | 0.0010 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mills | 2285002006 | 0.0106 | 0.0743 | 0.2763 | 0.0003 | 0.0002 | 0.0064 | 0.0062 |
| Mills | 2285002007 | 0.0000 | 0.0001 | 0.0008 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mitchell | 2285002006 | 0.0137 | 0.0965 | 0.3590 | 0.0003 | 0.0003 | 0.0083 | 0.0081 |
| Montague | 2285002006 | 0.0131 | 0.0917 | 0.3409 | 0.0003 | 0.0003 | 0.0079 | 0.0077 |
| Montgomery | 2285002006 | 0.0263 | 0.1849 | 0.6450 | 0.0006 | 0.0006 | 0.0160 | 0.0155 |
| Montgomery | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Moore | 2285002006 | 0.0191 | 0.1341 | 0.4986 | 0.0005 | 0.0004 | 0.0116 | 0.0112 |
| Moore | 2285002007 | 0.0027 | 0.0051 | 0.0502 | 0.0000 | 0.0000 | 0.0012 | 0.0011 |
| Moore | 2285002010 | 0.0020 | 0.0050 | 0.0334 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Morris | 2285002006 | 0.0065 | 0.0456 | 0.1590 | 0.0002 | 0.0001 | 0.0039 | 0.0038 |
| Morris | 2285002007 | 0.0005 | 0.0010 | 0.0089 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Morris | 2285002010 | 0.0002 | 0.0004 | 0.0024 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Nacogdoches | 2285002006 | 0.0071 | 0.0497 | 0.1732 | 0.0002 | 0.0002 | 0.0043 | 0.0042 |
| Nacogdoches | 2285002010 | 0.0024 | 0.0059 | 0.0374 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Navarro | 2285002006 | 0.0236 | 0.1656 | 0.5777 | 0.0006 | 0.0005 | 0.0143 | 0.0139 |
| Navarro | 2285002010 | 0.0024 | 0.0059 | 0.0374 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Newton | 2285002006 | 0.0025 | 0.0172 | 0.0601 | 0.0001 | 0.0001 | 0.0015 | 0.0014 |
| Newton | 2285002007 | 0.0014 | 0.0026 | 0.0242 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Nolan | 2285002006 | 0.0190 | 0.1332 | 0.4953 | 0.0005 | 0.0004 | 0.0115 | 0.0112 |
| Nolan | 2285002007 | 0.0008 | 0.0016 | 0.0159 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Nolan | 2285002010 | 0.0010 | 0.0024 | 0.0162 | 0.0000 | 0.0000 | 0.0004 | 0.0003 |
| Nueces | 2285002006 | 0.0101 | 0.0710 | 0.2476 | 0.0002 | 0.0002 | 0.0061 | 0.0059 |
| Nueces | 2285002007 | 0.0010 | 0.0019 | 0.0173 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Nueces | 2285002010 | 0.0093 | 0.0233 | 0.1470 | 0.0001 | 0.0001 | 0.0034 | 0.0033 |
| Oldham | 2285002006 | 0.0033 | 0.0230 | 0.0854 | 0.0001 | 0.0001 | 0.0020 | 0.0019 |
| Orange | 2285002006 | 0.0186 | 0.1309 | 0.4566 | 0.0005 | 0.0004 | 0.0113 | 0.0110 |
| Orange | 2285002007 | 0.0019 | 0.0036 | 0.0338 | 0.0000 | 0.0000 | 0.0008 | 0.0008 |
| Orange | 2285002008 | 0.0006 | 0.0046 | 0.0150 | 0.0000 | 0.0000 | 0.0004 | 0.0003 |
| Orange | 2285002010 | 0.0037 | 0.0094 | 0.0591 | 0.0000 | 0.0000 | 0.0014 | 0.0013 |
| Palo Pinto | 2285002006 | 0.0181 | 0.1268 | 0.4716 | 0.0004 | 0.0004 | 0.0110 | 0.0106 |
| Panola | 2285002006 | 0.0020 | 0.0141 | 0.0490 | 0.0000 | 0.0000 | 0.0012 | 0.0012 |
| Panola | 2285002007 | 0.0015 | 0.0028 | 0.0257 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Panola | 2285002010 | 0.0019 | 0.0048 | 0.0304 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Parker | 2285002006 | 0.0172 | 0.1206 | 0.4208 | 0.0004 | 0.0004 | 0.0104 | 0.0101 |
| Parker | 2285002007 | 0.0000 | 0.0001 | 0.0006 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parmer | 2285002006 | 0.0823 | 0.5780 | 2.1492 | 0.0020 | 0.0018 | 0.0499 | 0.0484 |
| Parmer | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Pecos | 2285002006 | 0.0019 | 0.0131 | 0.0485 | 0.0000 | 0.0000 | 0.0011 | 0.0011 |
| Pecos | 2285002007 | 0.0046 | 0.0086 | 0.0853 | 0.0000 | 0.0000 | 0.0020 | 0.0019 |
| Pecos | 2285002008 | 0.0001 | 0.0012 | 0.0041 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Polk | 2285002006 | 0.0064 | 0.0450 | 0.1569 | 0.0002 | 0.0001 | 0.0039 | 0.0038 |
| Polk | 2285002007 | 0.0002 | 0.0003 | 0.0031 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Potter | 2285002006 | 0.0632 | 0.4437 | 1.6497 | 0.0016 | 0.0014 | 0.0383 | 0.0372 |
| Potter | 2285002010 | 0.0203 | 0.0510 | 0.3427 | 0.0002 | 0.0002 | 0.0075 | 0.0073 |
| Presidio | 2285002006 | 0.0097 | 0.0679 | 0.2526 | 0.0002 | 0.0002 | 0.0059 | 0.0057 |
| Presidio | 2285002007 | 0.0051 | 0.0097 | 0.0959 | 0.0000 | 0.0000 | 0.0022 | 0.0021 |
| Presidio | 2285002008 | 0.0008 | 0.0062 | 0.0216 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Randall | 2285002006 | 0.0670 | 0.4707 | 1.7502 | 0.0016 | 0.0015 | 0.0407 | 0.0394 |
| Randall | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Reagan | 2285002007 | 0.0020 | 0.0038 | 0.0378 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Reeves | 2285002006 | 0.0155 | 0.1086 | 0.4037 | 0.0004 | 0.0003 | 0.0094 | 0.0091 |
| Reeves | 2285002007 | 0.0023 | 0.0044 | 0.0437 | 0.0000 | 0.0000 | 0.0010 | 0.0010 |
| Reeves | 2285002010 | 0.0000 | 0.0001 | 0.0005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Refugio | 2285002006 | 0.0124 | 0.0873 | 0.3045 | 0.0003 | 0.0003 | 0.0075 | 0.0073 |
| Roberts | 2285002006 | 0.0311 | 0.2185 | 0.8123 | 0.0008 | 0.0007 | 0.0189 | 0.0183 |
| Robertson | 2285002006 | 0.0402 | 0.2824 | 0.9850 | 0.0010 | 0.0009 | 0.0244 | 0.0237 |
| Robertson | 2285002010 | 0.0035 | 0.0089 | 0.0562 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Rockwall | 2285002007 | 0.0011 | 0.0021 | 0.0191 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Runnels | 2285002007 | 0.0023 | 0.0043 | 0.0426 | 0.0000 | 0.0000 | 0.0010 | 0.0009 |
| Runnels | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Rusk | 2285002006 | 0.0045 | 0.0316 | 0.1102 | 0.0001 | 0.0001 | 0.0027 | 0.0026 |
| Rusk | 2285002007 | 0.0010 | 0.0018 | 0.0170 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Rusk | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Sabine | 2285002007 | 0.0015 | 0.0028 | 0.0260 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| San Augustine | 2285002007 | 0.0013 | 0.0025 | 0.0237 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| San Jacinto | 2285002006 | 0.0022 | 0.0151 | 0.0527 | 0.0001 | 0.0000 | 0.0013 | 0.0013 |
| San Patricio | 2285002006 | 0.0093 | 0.0656 | 0.2287 | 0.0002 | 0.0002 | 0.0057 | 0.0055 |
| San Patricio | 2285002010 | 0.0024 | 0.0060 | 0.0381 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| San Saba | 2285002007 | 0.0030 | 0.0056 | 0.0553 | 0.0000 | 0.0000 | 0.0013 | 0.0012 |
| Scurry | 2285002006 | 0.0095 | 0.0666 | 0.2477 | 0.0002 | 0.0002 | 0.0058 | 0.0056 |
| Shelby | 2285002006 | 0.0068 | 0.0476 | 0.1661 | 0.0002 | 0.0001 | 0.0041 | 0.0040 |
| Shelby | 2285002007 | 0.0022 | 0.0042 | 0.0391 | 0.0000 | 0.0000 | 0.0010 | 0.0009 |
| Shelby | 2285002010 | 0.0019 | 0.0048 | 0.0304 | 0.0000 | 0.0000 | 0.0007 | 0.0007 |
| Sherman | 2285002006 | 0.0268 | 0.1880 | 0.6989 | 0.0007 | 0.0006 | 0.0162 | 0.0158 |
| Smith | 2285002006 | 0.0127 | 0.0894 | 0.3117 | 0.0003 | 0.0003 | 0.0077 | 0.0075 |
| Smith | 2285002008 | 0.0000 | 0.0002 | 0.0007 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Smith | 2285002010 | 0.0047 | 0.0119 | 0.0749 | 0.0000 | 0.0000 | 0.0018 | 0.0017 |
| Somervell | 2285002007 | 0.0002 | 0.0003 | 0.0026 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Starr | 2285002007 | 0.0013 | 0.0024 | 0.0240 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Stephens | 2285002006 | 0.0028 | 0.0197 | 0.0734 | 0.0001 | 0.0001 | 0.0017 | 0.0017 |
| Swisher | 2285002006 | 0.0068 | 0.0475 | 0.1766 | 0.0002 | 0.0001 | 0.0041 | 0.0040 |
| Swisher | 2285002007 | 0.0001 | 0.0002 | 0.0022 | 0.0000 | 0.0000 | 0.0001 | 0.0000 |
| Tarrant | 2285002006 | 0.0800 | 0.5617 | 1.9592 | 0.0020 | 0.0018 | 0.0485 | 0.0471 |
| Tarrant | 2285002007 | 0.0064 | 0.0121 | 0.1129 | 0.0000 | 0.0000 | 0.0028 | 0.0027 |
| Tarrant | 2285002008 | 0.0010 | 0.0080 | 0.0261 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Tarrant | 2285002009 | 0.0036 | 0.0290 | 0.0949 | 0.0001 | 0.0001 | 0.0023 | 0.0022 |
| Tarrant | 2285002010 | 0.0413 | 0.1038 | 0.6548 | 0.0003 | 0.0003 | 0.0153 | 0.0148 |
| Taylor | 2285002006 | 0.0259 | 0.1817 | 0.6755 | 0.0006 | 0.0006 | 0.0157 | 0.0152 |
| Taylor | 2285002007 | 0.0007 | 0.0013 | 0.0131 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Taylor | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Terrell | 2285002006 | 0.0129 | 0.0909 | 0.3378 | 0.0003 | 0.0003 | 0.0078 | 0.0076 |
| Terrell | 2285002008 | 0.0010 | 0.0083 | 0.0292 | 0.0000 | 0.0000 | 0.0007 | 0.0006 |
| Terry | 2285002007 | 0.0024 | 0.0045 | 0.0449 | 0.0000 | 0.0000 | 0.0010 | 0.0010 |
| Titus | 2285002006 | 0.0062 | 0.0437 | 0.1523 | 0.0002 | 0.0001 | 0.0038 | 0.0037 |
| Titus | 2285002007 | 0.0021 | 0.0039 | 0.0365 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Titus | 2285002010 | 0.0024 | 0.0060 | 0.0378 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Tom Green | 2285002007 | 0.0023 | 0.0044 | 0.0433 | 0.0000 | 0.0000 | 0.0010 | 0.0010 |
| Tom Green | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Travis | 2285002006 | 0.0093 | 0.0655 | 0.2283 | 0.0002 | 0.0002 | 0.0057 | 0.0055 |
| Travis | 2285002007 | 0.0032 | 0.0061 | 0.0564 | 0.0000 | 0.0000 | 0.0014 | 0.0013 |
| Travis | 2285002008 | 0.0005 | 0.0037 | 0.0121 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Travis | 2285002010 | 0.0005 | 0.0014 | 0.0087 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Trinity | 2285002006 | 0.0040 | 0.0281 | 0.0980 | 0.0001 | 0.0001 | 0.0024 | 0.0024 |
| Upshur | 2285002006 | 0.0133 | 0.0933 | 0.3253 | 0.0003 | 0.0003 | 0.0081 | 0.0078 |
| Upshur | 2285002008 | 0.0002 | 0.0016 | 0.0054 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Upton | 2285002007 | 0.0022 | 0.0042 | 0.0416 | 0.0000 | 0.0000 | 0.0010 | 0.0009 |
| Uvalde | 2285002006 | 0.0290 | 0.2037 | 0.7574 | 0.0007 | 0.0006 | 0.0176 | 0.0171 |
| Uvalde | 2285002008 | 0.0008 | 0.0063 | 0.0221 | 0.0000 | 0.0000 | 0.0005 | 0.0005 |
| Uvalde | 2285002010 | 0.0024 | 0.0060 | 0.0403 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Val Verde | 2285002006 | 0.0198 | 0.1391 | 0.5171 | 0.0005 | 0.0004 | 0.0120 | 0.0117 |
| Val Verde | 2285002008 | 0.0016 | 0.0127 | 0.0442 | 0.0000 | 0.0000 | 0.0010 | 0.0010 |
| Van Zandt | 2285002006 | 0.0108 | 0.0758 | 0.2645 | 0.0003 | 0.0002 | 0.0066 | 0.0064 |
| Van Zandt | 2285002008 | 0.0005 | 0.0040 | 0.0130 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Victoria | 2285002006 | 0.0153 | 0.1076 | 0.3753 | 0.0004 | 0.0003 | 0.0093 | 0.0090 |
| Victoria | 2285002010 | 0.0059 | 0.0149 | 0.0943 | 0.0001 | 0.0000 | 0.0022 | 0.0021 |
| Walker | 2285002006 | 0.0067 | 0.0470 | 0.1639 | 0.0002 | 0.0001 | 0.0041 | 0.0039 |
| Waller | 2285002006 | 0.0014 | 0.0098 | 0.0342 | 0.0000 | 0.0000 | 0.0008 | 0.0008 |
| Waller | 2285002010 | 0.0024 | 0.0060 | 0.0378 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |

| County | SCC | VOC | CO | $NO_x$ | $SO_2$ | $NH_3$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|---|---|
| Ward | 2285002006 | 0.0154 | 0.1084 | 0.4032 | 0.0004 | 0.0003 | 0.0094 | 0.0091 |
| Ward | 2285002007 | 0.0006 | 0.0011 | 0.0105 | 0.0000 | 0.0000 | 0.0002 | 0.0002 |
| Ward | 2285002010 | 0.0024 | 0.0059 | 0.0399 | 0.0000 | 0.0000 | 0.0009 | 0.0008 |
| Washington | 2285002006 | 0.0091 | 0.0638 | 0.2227 | 0.0002 | 0.0002 | 0.0055 | 0.0054 |
| Washington | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Webb | 2285002006 | 0.0262 | 0.1839 | 0.6838 | 0.0006 | 0.0006 | 0.0159 | 0.0154 |
| Webb | 2285002010 | 0.0086 | 0.0215 | 0.1446 | 0.0001 | 0.0001 | 0.0032 | 0.0031 |
| Wharton | 2285002006 | 0.0175 | 0.1227 | 0.4280 | 0.0004 | 0.0004 | 0.0106 | 0.0103 |
| Wharton | 2285002008 | 0.0002 | 0.0017 | 0.0056 | 0.0000 | 0.0000 | 0.0001 | 0.0001 |
| Wichita | 2285002006 | 0.0160 | 0.1126 | 0.4187 | 0.0004 | 0.0004 | 0.0097 | 0.0094 |
| Wichita | 2285002007 | 0.0014 | 0.0027 | 0.0266 | 0.0000 | 0.0000 | 0.0006 | 0.0006 |
| Wichita | 2285002010 | 0.0011 | 0.0027 | 0.0179 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Wilbarger | 2285002006 | 0.0165 | 0.1162 | 0.4320 | 0.0004 | 0.0004 | 0.0100 | 0.0097 |
| Wilbarger | 2285002010 | 0.0000 | 0.0001 | 0.0003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Willacy | 2285002006 | 0.0013 | 0.0090 | 0.0336 | 0.0000 | 0.0000 | 0.0008 | 0.0008 |
| Williamson | 2285002006 | 0.0157 | 0.1103 | 0.3848 | 0.0004 | 0.0003 | 0.0095 | 0.0092 |
| Williamson | 2285002007 | 0.0050 | 0.0095 | 0.0881 | 0.0000 | 0.0000 | 0.0022 | 0.0021 |
| Williamson | 2285002008 | 0.0006 | 0.0053 | 0.0172 | 0.0000 | 0.0000 | 0.0004 | 0.0004 |
| Williamson | 2285002010 | 0.0025 | 0.0063 | 0.0397 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Wilson | 2285002010 | 0.0035 | 0.0089 | 0.0562 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Winkler | 2285002007 | 0.0021 | 0.0039 | 0.0385 | 0.0000 | 0.0000 | 0.0009 | 0.0009 |
| Wise | 2285002006 | 0.0232 | 0.1629 | 0.5681 | 0.0006 | 0.0005 | 0.0141 | 0.0136 |
| Wise | 2285002010 | 0.0035 | 0.0089 | 0.0562 | 0.0000 | 0.0000 | 0.0013 | 0.0013 |
| Wood | 2285002006 | 0.0111 | 0.0776 | 0.2707 | 0.0003 | 0.0002 | 0.0067 | 0.0065 |
| Wood | 2285002008 | 0.0004 | 0.0036 | 0.0116 | 0.0000 | 0.0000 | 0.0003 | 0.0003 |
| Wood | 2285002010 | 0.0047 | 0.0119 | 0.0749 | 0.0000 | 0.0000 | 0.0018 | 0.0017 |

# APPENDIX G: DETAILED EMISSIONS INVENTORY RESULTS (ELECTRONIC ONLY)

Available from the TCEQ upon request.

# APPENDIX H:
# QUALITY ASSURANCE AND QUALITY CONTROL RESULTS (ELECTRONIC ONLY)

Available from the TCEQ upon request.