APPENDIX G

2020 TEXAS STATEWIDE AIRPORT EMISSIONS INVENTORY AND 2011 THROUGH 2050 TREND INVENTORIES

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

2021-012-SIP-NR

2020 Texas Statewide Airport Emissions Inventory and 2011 through 2050 Trend Inventories

FINAL REPORT

Prepared for the Texas Commission on Environmental Quality

October 2021

Texas A&M Transportation Institute

FINAL REPORT

TCEQ Grant Number: 582-16-61286
TCEQ Proposal for Grant Activity No: 582-21-11196-018
TTI Contract No. 615721

TASK 8.2 Final Report

DATE: October 15, 2021

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LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Definition
5010 Dataset	FAA's Airport Master Record Dataset
AEDT	Aviation Environmental Design Tool
AEO	Annual Energy Outlook
AERR	Air Emissions Reporting Requirements
AirNav	A privately-owned website that publishes aeronautical and airport information
APU	Auxiliary Power Unit
ASPM	Aviation System Performance Metrics
ASQ/ANSI	American Society for Quality, American National Standard Institute
BTS	Bureau of Transportation Statistics
CAA	Clean Air Act
CAP	Criteria air pollutants
CERS	Consolidated Emissions Reporting Schema
CH_4	Methane
CNG	Compressed Natural Gas
CO	Carbon monoxide
CO_2	Carbon dioxide
CSA	Commercial Service Airports
DAL	Dallas Love Field International Airport
DFWA	Dallas/Fort Worth International Airport
EDMS	Emissions and Dispersion Modeling System
EI	Emission Inventories
EIA	Energy Information Administration's
EIS	Emissions Inventory System
EPA	Environmental Protection Agency
ERG	Eastern Research Group
FAA	Federal Aviation Administration
GSE	Ground Support Equipment
H_2O	Water
HAP	Hazardous Air Pollutants
HC	Hydrocarbons
LPG	Liquefied Petroleum Gas
LTO	Landing/Takeoff Cycles
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NCTCOG	North Central Texas Council of Governments
NEI	National Emissions Inventory

Acronym	Definition
NEPA	National Environmental Policy Act
NH_3	Ammonia
NO_X	Nitrogen oxides
NPIAS	National Plan of Integrated Airport Systems
OPSNET	FAA Air Traffic Operations and Delays Data
Pb	Lead and lead compounds
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 Plan
SCC	Source Classification Code
SIP	State Implementation Plans
SO_2	Sulfur dioxide
SO_x	Sulfur oxides
TAF	Terminal Area Forecast
TASP	Texas Airport System Plan
TCEQ	Texas Commission on Environmental Quality
TexAER	Texas Air Emissions Repository
TMFSC	Traffic Flow Management System Counts
TOGs	Total Organic Gases
TTI	Texas A&M Transportation Institute
TxDOT	Texas Department of Transportation
U.S.	United States
UHC	Unburned Hydrocarbons
VALE	Voluntary Airport Low Emission
VOC	Volatile organic compounds
XML	Extensible Markup Language

EXECUTIVE SUMMARY

The Texas Commission on Environmental Quality (TCEQ) is required to submit periodic emission inventories (EIs) 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 include the development of the calendar year 2020 aircraft, auxiliary power unit (APU), and ground support equipment (GSE) non-road mobile source EI data 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 aircraft, APU, and GSE source categories to calendar years 2011 through 2050. The pollutants, reporting categories, spatial scope, and temporal scope are as follows.

- Pollutants: Criteria air pollutants (CAP), CAP precursors, hazardous air pollutants (HAPs), and other species of total organic gases (TOGs) reported by the emission modeling software.
- Reporting Categories: The emissions sources for this EI include nine aircraft and aircraft-related sources—six for the aviation and aircraft combination types, one for the APU, and two for the GSE (accounting for different fuel types). The sources are represented by EPA's source classification codes (SCC).
- Spatial scope: The emissions are computed separately for each facility and aggregated based on the reporting requirements. According to the EPA's AERR guidance, emissions for aircraft are only computed for landing/takeoff cycles (LTO) and capped by a mixing height[1] of 3,000 feet (ft) in altitude. An LTO cycle includes taxi-in, taxi-out, climb, and landing.
- Temporal scope: The temporal levels of coverage of the EI's are average summer weekday[2] (in units of tons per day) and annual calendar year (in units of tons per year). To develop the required analysis year EIs, the Texas A&M Transportation Institute (TTI) developed 2019 emissions (baseline) using the Federal Aviation Administration's (FAA) latest version of the Aviation Environmental Design Tool (AEDT)[3] and projected the emissions to historical and future years by applying the appropriate projection factors.

[1] The height of the atmosphere where relatively vigorous mixing of pollutants and other gases takes place. Directly above the mixing height, the atmosphere is fairly stable and there is limited upward dispersion of polluted air. The mixing height varies both diurnally and seasonally.

[2] Since most of the airports do not report operations on a daily basis, the average summer weekday is estimated by dividing annual emissions by 365.

[3] AEDT 3d was released on March 29, 2021 and is the latest version of AEDT.

Based on the activity information, airports were grouped such that priority could be given to the airports with the majority of activity. The airports were divided into the following categories based on the Texas Airport System Plan (TASP) and other attributes from FAA's Airport Master Record (5010) datasets.

- Commercial Service Airports
- Reliever Airports
- Other TASP Facilities
- Military Airports
- Medical Facility Heliports
- Farm or Ranch Facilities
- Other Public and Private Facilities

The 2019 activity data collected in the previous study (PGA 582-20-10956-014, results submitted to TCEQ in August 2020), such as LTO's, fleet mix, taxi times, and other critical data elements, were updated with more recently obtained activity data when available during the completion of this project. Detailed activity data was available for commercial and reliever airports. Since limited activity data were available for other facility groups, appropriate data reconciliation methods were used to obtain activity data for the facilities within these groups. Controlled emissions were obtained by considering two control measures: gate electrification and GSE electrification. Only the facilities where control measure information was available are included. The only difference between the uncontrolled and controlled inventories occurs for the GSE and APU categories.

As commercial and reliever airports had detailed activity data and had a significant impact on overall emissions in the EI, they were modeled individually. All other facility groups with less detailed data and overall emissions contributions to the EIs were modeled using a representative facility for each applicable facility group. AEDT provided emission rates for different modes for the aircraft operating in the facility group. These rates were then converted to emissions quantities based on the fleet mix and operations for individual airports.

The resulting emissions developed for this study were compared with previous aircraft EI for reasonableness. The total percent difference in LTOs between the studies is within one percent. Table 1 and Table 2 show the statewide controlled annual and average summer weekday criteria emissions, respectively.

The results showed that commercial and reliever airports account for the majority of the emissions. This percentage is even higher when considering the combined emissions from commercial, reliever, and TASP airports. This shows the significance of these airports to statewide emissions and warrants future studies that improve upon these facilities' activity data and emission models.

Developing EIs for these sources could be further refined by soliciting GSE and APU usage data from commercial service airports (CSA), exploring aircraft and engine-type mapping datasets, and developing prediction models to predict aircraft operations and fleet mix. See Chapter 8 of this report for further details.

Table 1. Controlled 2020 Annual Emissions by Criteria Pollutant (Tons/Year).

SCC Description	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Commercial Aviation	1,442.72	7,272.28	8,682.06	65.53	689.2	0.78
Air Taxi: Turbine	148.74	716.18	489.49	8.9	53.96	-
General Aviation: Piston	457	27.95	23,751.64	12.7	24.4	13.77
General Aviation: Turbine	2,171.01	1,872.74	6,030.63	35.38	230.19	-
Military	788.67	511.48	4,466.01	10.11	87.34	0.12
APU	17.26	190.95	345.05	25.48	32.61	-
GSE: Gasoline-fueled	58.04	124.01	2,098.00	-	-	-
GSE: Diesel-fueled	19.19	140.58	38.63	4.13	-	-
Total	5,102.71	10,856.96	45,902.59	162.23	1,117.82	14.67

VOC = volatile organic compounds; NO_X = oxides of nitrogen; CO = carbon monoxide; PM_{10} = particulate matter of less than 10 microns in diameter; $PM_{2.5}$ = particulate matter of less than 2.5 microns in diameter; SO_2 = sulfur dioxide; Pb = Lead.

Table 2. Controlled 2020 Summer Weekday Emissions by Criteria Pollutant (Tons/Day).

SCC Description	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Commercial Aviation	3.953	19.924	23.786	0.180	1.888	0.002
Air Taxi: Turbine	0.408	1.962	1.341	0.024	0.148	-
General Aviation: Piston	1.252	0.077	65.073	0.035	0.067	0.038
General Aviation: Turbine	5.948	5.131	16.522	0.097	0.631	-
Military	2.161	1.401	12.236	0.028	0.239	0.0003
APU	0.047	0.523	0.945	0.070	0.089	-
GSE: Gasoline-fueled	0.159	0.340	5.748	-	-	-
GSE: Diesel-fueled	0.053	0.385	0.106	0.011	-	-
Total	13.980	29.745	125.761	0.444	3.063	0.040

1.0 INTRODUCTION

The TCEQ works with local planning districts, the Texas Department of Transportation (TxDOT), and TTI to develop EIs of air pollutants for meeting various regulatory requirements. Per the EPA's AERR, TCEQ 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, non-road mobile 2020 analysis year aircraft, GSE, and APU source category EI required to be submitted to the EPA per the AERR and support revisions to various State Implementation Plans (SIP). In addition to the 2020 AERR EI, statewide controlled and uncontrolled trend EI's were also required within the project's scope. These were developed by projecting baseline emissions for all aircraft, GSE, and APU 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, and HAPs.

1.1 Objective

The purpose of this document is to describe the methods and data used in the development of aircraft, GSE, and APU source category EI's for all 254 counties in Texas. The EI development methods described in this document were based on the EPA guidance for estimating non-road mobile airport source emissions. The EIs were developed for each of the analysis years from 2011 through 2050. An annual and average summer weekday controlled and uncontrolled EI is developed for each of these analysis years.

The following are the primary deliverables submitted for the 2020 AERR EI.

- Statewide projected 2020 AERR controlled and uncontrolled EIs for all airport facility sources, including aircraft, APU, and GSE, in a plain text file format.
- Statewide 2020 AERR controlled and uncontrolled EIs for all airport sources including aircraft, APU, and GSE developed in the Consolidated Emissions Reporting Schema (CERS) Extensible Markup Language (XML) format for loading into the Texas Air Emissions Repository (TexAER) as non-road sources.
- Statewide 2020 AERR controlled EI for all airport sources, including aircraft, APUs, and GSE developed in the CERS XML format for loading into the EPA Emissions Inventory System (EIS) as point sources.

The following are the primary deliverables submitted for 2011 through 2050 trend EIs.

- Statewide 2011 through 2050 controlled and uncontrolled annual and ozone season daily EIs for all airport facility sources, including aircraft, APU, and GSE in a plain text file format.
- Statewide 2011 through 2050 controlled and uncontrolled EIs for all airport sources, including aircraft, APUs, and GSE developed in the CERS XML format for loading into TexAER as non-road sources.

1.2 Emissions Inventory Scope

The scope of the EI's to be developed in terms of the emissions sources, their applicable SCC, pollutants, geographic coverage, temporal details, control programs, and the basic emissions estimation methodology is described below.

The 2020 AERR EI and 2011 through 2050 trend EIs for airport sources include controlled and uncontrolled emissions estimates for CAPs, CAP precursors, HAPs, and other species of TOGs. Table 3 provides a list of CAPs and CAP precursors. Ammonia is not reported in this study as the airport emissions modeling software used in this study (FAA's AEDT) does not provide emissions estimates for ammonia.

Table 3. Criteria Air Pollutants.

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	Lead and lead compounds
NH_3	Ammonia
SO_2	Sulfur dioxide

HAP emissions and other species of TOGs were estimated by applying speciation profiles (or HAP fractions) to the TOG emission estimates obtained from AEDT. The speciation profiles are obtained from the AEDT database. Appendix A lists the HAPs and other TOG-speciated gases included in this study and their mass fraction.

This study used EPA's guidance to choose different airport-related sources for which emission estimates are reported separately. The emissions sources for this EI include nine aircraft and aircraft-related sources—six for the aviation and aircraft combination types, one for the APU, and two for the GSE (accounting for different fuel types). AEDT did not provide emissions for compressed natural gas (CNG) and Liquefied petroleum gas (LPG); thus, these SCC were not reported. The sources are represented by EPA's SCC listed in Table 4. Emissions for all nine SCC are reported under the point data category. Pollutants emitted by one source might not be by others, depending on the fuel used by different sources.

Table 4. Airport Emissions Sources by SCC per EPA.

SCC	SCC Description
2275020000	Commercial Aviation
2275060011	Air taxis: Piston Driven*
2275060012	Air taxis: Turbine Driven
2275050011	General Aviation: Piston Driven
2275050012	General Aviation: Turbine Driven
2275001000	Military
2275070000	APUs
2268008005	GSE: Compressed natural gas (CNG)-fueled**
2270008005	GSE: Diesel-fueled
2265008005	GSE: Gasoline-fueled
2267008005	GSE: Liquefied petroleum gas (LPG)-fueled**

*Fleet mix data only had jet or turbine engines for air taxis, thus no emissions are reported for Air taxis: Piston Driven category.

**AEDT did not provide emissions for GSE: CNG-fueled and GSE: LPG-fueled SCC.

The emissions are computed separately for each facility and reported at the individual facility level for the EPA's EIS XML reporting. The emissions are aggregated to the county level for TexAER reporting. Figure 1 shows the map of all Texas airport facilities. The geographical scope encompasses all 254 Texas counties and all airport facilities within those counties.

The temporal levels of coverage of the EIs are average daily (in units of tons per day) and annual calendar year (in units of tons per year). The average summer weekday is an average Monday through Friday for the June through August period.

According to the EPA's AERR guidance, aircraft source emissions are computed for LTOs and capped by a mixing height of 3,000 feet in altitude. An LTO cycle includes taxi-in, taxi-out, climb, and landing.

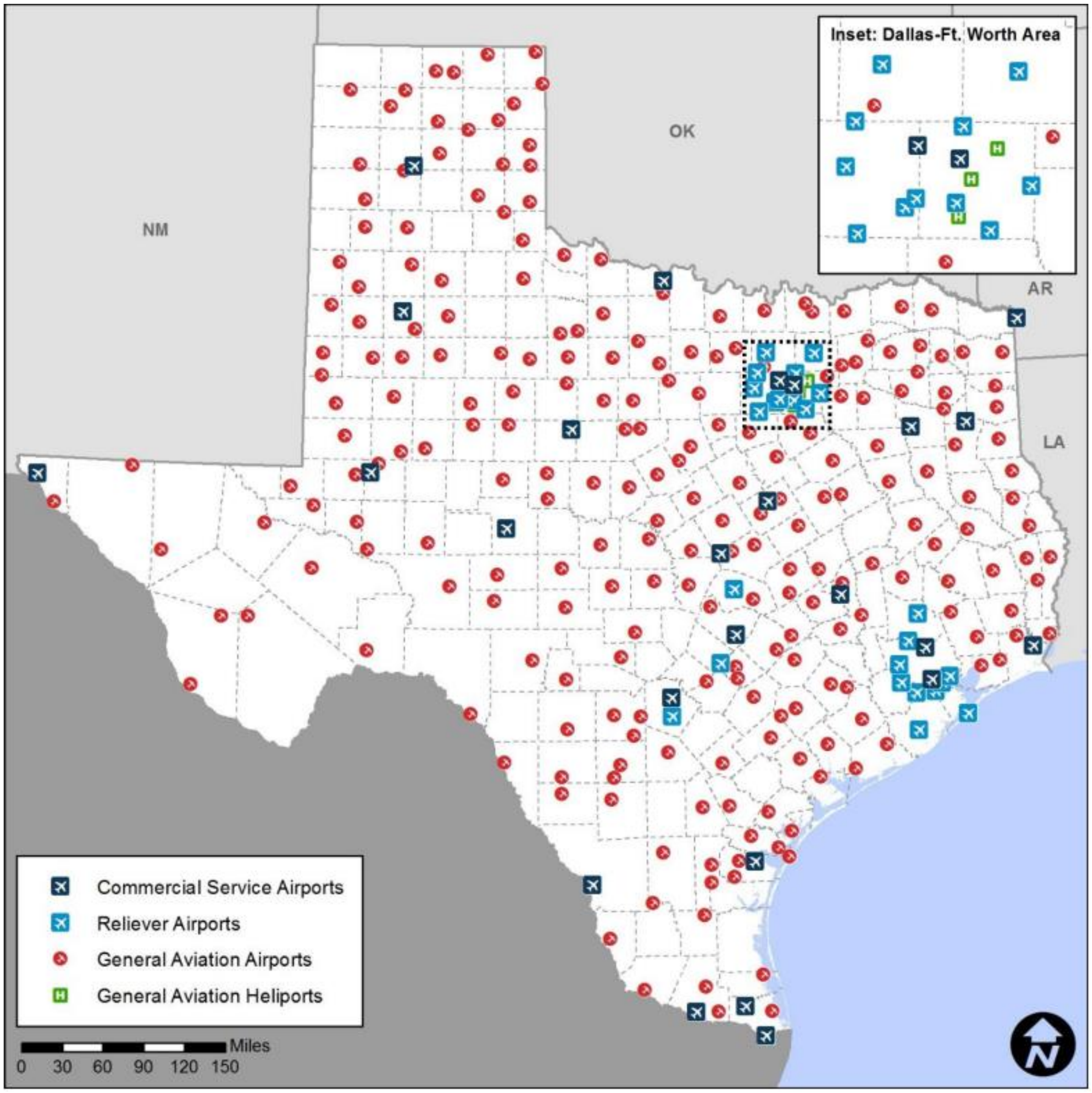

Figure 1. Texas Counties Airport Map.

1.3 ORGANIZATION

This report is organized as follows.

- **Section 2** provides the background on the relevant regulations that warranted these EIs, major aircraft emission processes for EIs, control strategies, and prior studies on aircraft emissions development.
- **Section 3** provides an overview of the methodology for developing the EIs.
- **Section 4** delineates the various datasets used in this study and provides details on the finalized data used.

- **Section 5** details the emission modeling procedure. It provides an overview of AEDT and expounds on the AEDT model parameters used for different facility groups.
- **Section 6** provides information on the development and preparation of reporting files per appropriate guidance and following the requests of the TCEQ project manager.
    - 2011 through 2050 electronic activity data reporting files for all source categories per guidance provided by EPA.
    - Statewide 2020 AERR EIs for all airport sources in the CERS XML format suitable for loading into TCEQ's TexAER as non-road sources and EPA's EIS as point sources.
    - Statewide trend EIs in the CERS XML format suitable for loading into TexAER as non-road sources.
- **Section 7** provides information on the quality assurance and quality control (QA/QC) procedures and project management processes employed to develop airport EIs.
- **Section 8** concludes this report and provides recommendations for future work.

2.0 BACKGROUND

This section provides background on the pertinent regulations warranting aircraft and airport equipment EI development, an overview of airport emissions, and a synthesis of the literature on previous airport EIs developed for Texas.

2.1 REGULATIONS

There are several regulations governing aircraft emissions at the federal and state level. Under the Clean Air Act (CAA), the EPA sets the national ambient air quality standards (NAAQS) for six CAPs: NO_2, SO_2, PM, CO, O_3, and Pb *(1)*. The FAA enforces EPA's aircraft engine emissions standards through its certification regulations. In addition to these regulatory standards at the federal level, several permitting programs are administered by state agencies. The National Environmental Policy Act (NEPA) *(2)* applies to airport construction projects to ensure that the projected project emissions in the nonattainment areas conform to the respective SIPs. TCEQ is required under the CAA to determine how best to meet the CAA goals through developing SIPs to achieve the NAAQS. The process of determining compliance with the SIPs requires accurate quantification of the emissions from existing airport operations and other related emission sources, including the use of APUs and GSE. Comparisons of airport emissions projected from the established inventory baseline are made, in combination with emissions from other major source categories, to evaluate impacts of projected emissions in relation to emissions thresholds quantified in the SIP.

2.2 AIRCRAFT EMISSIONS

The majority of airport emissions can be attributed to aircraft operations (shown in Figure 2) that can be broadly classified into two categories based on the altitude at which they occur. *(3)*

- LTO: this corresponds to all operations below an altitude of 3,000 feet (1,000 meters). These operations correspond to taxi-in, taxi-out, takeoff, and landing.
- Cruise: this corresponds to operations that occur above an altitude of 3,000 feet (1,000 meters) and include a climb to cruise altitude, cruise, and descent from the cruise.

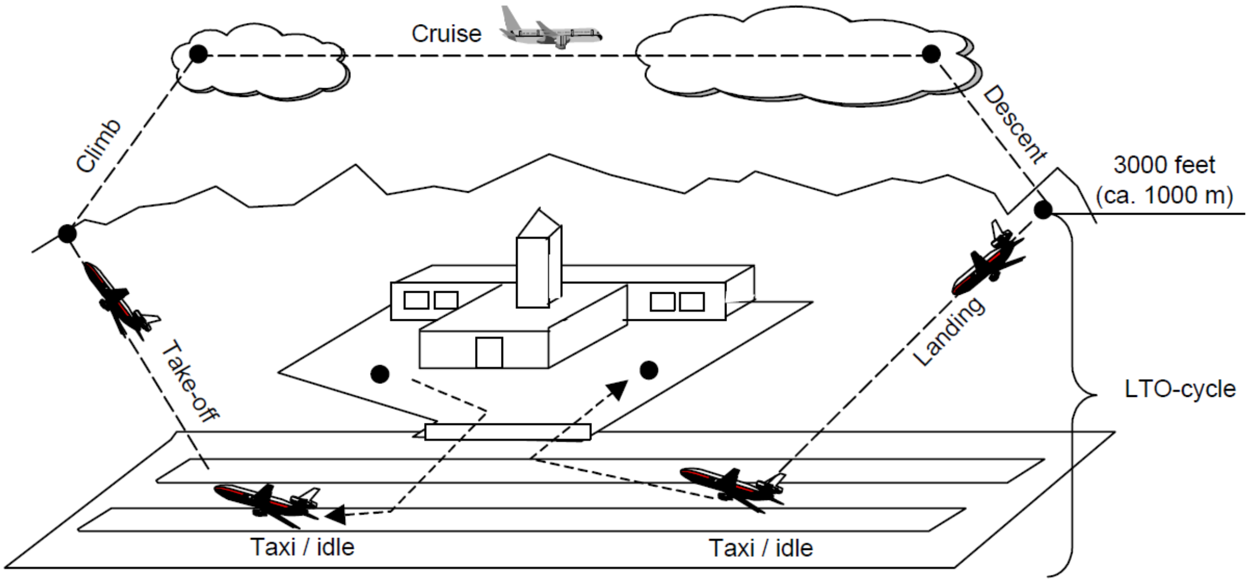

Figure 2. Aircraft Operations.

Per the EPA's AERR guidance, this study only computed the emissions from LTOs—capped by a mixing height of 3,000 feet.

Key pollutants released by aircraft are CO_2, H_2O, NO_X, SO_X, CO, PM, partially combusted or unburned hydrocarbons (HC), and other trace compounds. Except for CO and HCs, most aircraft emissions (approximately 70-90 percent) are released during aircraft operations that occur at 3,000 feet or higher altitudes. The remaining airport emissions are released during ground-level operations and operations that occur below 3,000 feet. Most CO and HC emissions (approximately 70 percent) are released during ground-level operations when engines operate at their lowest combustion efficiency. The remaining emissions of these pollutants occur during operations above 3,000 feet *(4)*. The different aircraft pollutant emissions and their sources are described in Table 5. The amount of emissions depends on three main factors, namely 1) fuel composition, especially the presence of sulfur and complex compounds that reduce the combustion efficiency, 2) aircraft operations related to the amount of time, efficiency, and fuel spent during different operations, and 3) aircraft construction material and technological sophistication.

Table 5. Aircraft and Related Emissions (Adapted from Aviation Emissions, Impacts and Mitigation: A Primer *(5)*).

Pollutant	Description	Emission Source
CO_2	Carbon dioxide is the product of the complete combustion of hydrocarbon fuels like gasoline, jet fuel, and diesel. Carbon in fuel combines with oxygen in the air to produce CO_2.	Aircraft, APUs, GSEs, vehicles, stationary power plants, construction equipment
H_2O	Water vapor is the other product of complete combustion as hydrogen in the fuel combines with oxygen in the air to produce H_2O. This is the source of water in condensation trails (contrails).	Aircraft, APUs, GSE, vehicles, stationary power plants, construction equipment
NO_X	Nitrogen oxides are produced when air passes through high temperature/high-pressure combustion, and nitrogen and oxygen present in the air combine to form NO_X. NO_X contributes to ozone and secondary particulate matter formation.	Aircraft, APUs, GSE, vehicles, stationary power plants, construction equipment
HC	Hydrocarbons are emitted due to incomplete fuel combustion. They are often referred to as unburned hydrocarbons (UHC) or volatile organic compounds (VOCs). Some of the compounds in the HC emissions are toxic and hazardous air pollutants (HAPs). HC contributes to ozone formation.	Aircraft, APUs, GSE, vehicles, stationary power plants, construction equipment
CH_4	Methane is the most basic hydrocarbon. Commercial aircraft are net consumers of methane during cruise and are not listed in the emissions source column. The net impact of methane from airport sources is highly dependent on local circumstances.	APUs, GSE, vehicles, stationary power plants, construction equipment
CO	Carbon monoxide is formed due to the incomplete combustion of the carbon in the fuel. CO contributes to ozone formation.	Aircraft, GSE, vehicles, construction equipment
SO_x	Sulfur oxides are produced when small quantities of sulfur, present in essentially all petroleum fuels, combine with oxygen from the air during combustion. SO_x contributes to secondary particulate matter formation.	Aircraft, APUs, GSE, construction equipment
PM	Particulate matter is small particles of soot (a.k.a. black carbon) formed due to incomplete combustion.	Aircraft, APUs, GSE, vehicles, stationary power plants, construction equipment

2.3 Control Strategies

To reduce emissions from aircraft operations and GSE, several emissions control measures have been implemented. These measures include using hybrid, electric, compressed natural gas, and alternative fuel vehicles. The FAA and EPA initiated the Voluntary Airport Low Emission (VALE) program which encourages airports to use low-emission vehicles, develop infrastructure for alternative fuels, supply gate electricity and air for parked aircraft, and other emission reduction options *(6)*. In addition to emissions from aircraft operations, emission reductions associated with these emission control measures can also be quantified. Information about the VALE program *(7)* implemented at various airports was also acquired to account for control strategies in the EIs developed for this project.

The use of gate electrification reduces the time APUs are operating during an LTO cycle by a percentage identified by the airport personnel. APU emission estimates for aircraft operations can be acquired directly from the AEDT model. The uncontrolled APU emission estimates from the AEDT were reduced by the APU percentage usage reduction reported by the airports to reflect the use of electricity and preconditioned air.

2.4 Prior Studies

The following sections provide details for previous airport EI studies conducted for Texas and the Dallas/Fort Worth metropolitan area. Three studies were reviewed for this project.

- Eastern Research Group (ERG) 2011 Statewide Airport Emissions Inventory Report
- North Central Texas Council of Governments (NCTCOG) Study, 2011
- ERG Study, 2017; EPA 2017 NEI

The ERG 2017 airport activity and emissions data set was used as the baseline for this study. The four studies are described below.

2.4.1 ERG 2011 Statewide Airport Emissions Inventory Report

The ERG prepared the 2011 EIs for CAPs and HAPs for Texas airports *(8)* in 2012, excluding the NCTCOG's (DFW Metropolitan Planning Organization) Metropolitan Statistical Area (MSA) counties[4], to support the SIP and other airport-related inquiries. ERG acquired the Texas airport activity data from several sources. These sources included US Department of Transportation data (i.e., the T-100 dataset from the Bureau of Transportation Statistics [BTS], and the FAA's Terminal Area Forecast [TAF] dataset, and the 5010 dataset), direct contacts with medium and large airports, and by internet searches of airport websites. Out of the total of 35 airports selected for direct contact, which accounted for 32 percent of activity in Texas according to the 2008 Texas airports inventory (excluding airports from the Dallas/Fort Worth area), the response rate consisted of 40 percent of airports reporting 2011 operations data, 26 percent reporting taxi time estimates, and 11 percent reporting control strategies information. For an

[4] Collin, Dallas, Denton, Ellis, Henderson, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, and Tarrant counties

additional 9 percent of the airports, ERG acquired data by conducting internet searches. Depending on the level of detail available, ERG used two emissions estimation methods. For activity data that included aircraft-specific data (i.e., only commercial aircraft and air taxi aircraft), ERG used the FAA's Emissions and Dispersion Modeling System (EDMS) to estimate emissions. Where aircraft-specific detail was not available, ERG applied a more general approach by aviation type (i.e., air taxis, general aviation, and military).

2.4.2 NCTCOG Study, 2011

NCTCOG in 2011 *(9)* developed an EI and activity data for airports in the DFW twelve county MSA that covers Collin, Dallas, Denton, Ellis, Henderson, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties. The inventory consisted of CAPs, CAP precursors, and HAPs and was used for SIP development. The data collection process consisted of gathering data from BTS and FAA data sets as described in sections 3.2 and 3.3 and through an online data request application to gather specific inputs and activity data required for emissions modeling. Out of the total of 344 facilities identified providing aviation-related services such as airports, heliports, or glideports, data was obtained for 62 facilities. Among the 62 facilities, Dallas Love Field International Airport (DAL) and Dallas/Fort Worth International Airport (DFW) were identified as major commercial facilities with significant activities. Additionally, 28 facilities were identified as significant airports due to annual operations of more than 18,000 LTOs or being included in the National Plan of Integrated Airport Systems (NPIAS). The remaining 32 airports were grouped as "other" and had less than 18,000 annual operations reported. The resulting activity data was used to model the EIs using the FAA's EDMS. Activity data were available for medium and large airports and was directly used to estimate emissions. Data gaps for smaller airports, air taxis, general aviation, and military aircraft were addressed following the EPA's NEI guidance. In addition to activity data, information obtained from emission control strategies was utilized to evaluate these strategies' impact on the EIs.

2.4.3 ERG Study, 2017

Similar to the study conducted in 2011, ERG prepared activity and EIs for aircraft operations to meet EPA's AERR for 2017 *(10, 11)*. ERG followed the same protocols for activity characterization and emissions estimation as done for the 2011 study. ERG used the FAA's AEDT model for this analysis, replacing the FAA's earlier EDMS for modeling airport emissions. ERG increased the number of airports from which they acquired information through direct contact compared to the previous study. Of the 2,016 airports in Texas, ERG contacted a total of 213 airports and obtained information on the LTO data, taxi times, emission control strategies, and seasonality of activities to help with summertime emissions estimation. Response rates consisted of 23 airports providing operation data, 15 reporting taxi time data, and 9 providing control strategy and seasonality information. The resulting 2017 activity and emissions data were projected using the FAA's TAF datasets.

3.0 METHODOLOGY

The EI estimation in this study consisted of grouping the facilities into different categories based on the hub sizes and the type of operations. Next, the modeling resolution for different facility groups was selected based on the facility group's data availability and the facility group's contribution to the EIs with respect to the emissions from other facility groups. After distributing the facilities into facility groups and determining the modeling resolution, FAA's AEDT tool was used to obtain emission quantities and emission rates. These quantities and rates were then post-processed to develop the EIs. The following sections describe the facility group categorization, emission modeling, and post-processing.

3.1 FACILITY GROUPS CATEGORIZATION

Airports have different hub sizes (small, medium, and large) and vary by operations. From a modeling and data collection perspective, it was necessary to group these airports such that priority could be given to the airports with the majority of the activity. The 5010 dataset *(12)* was considered the baseline. Information such as airport size, type, usage, contacts, operations, etc., for 2,032 operational facilities was acquired. Table 6 provides a breakdown of the airports by facility type and public or private use extracted from the 5010 data.

Table 6. The Number of Airport Facilities in Texas by Facility Type and Use.

Facility Type	Public-Use	Private-Use
Airport	385	1,087
Heliport	6	545
Gliderport	0	5
Seaplane Base	1	0
Ultralight	0	8
Total	**392**	**1,645**

The airports and heliports in the state that perform an essential role in Texas's economic and social development are identified in the TxDOT's TASP. Two hundred eighty-five airports and three heliports meet the TxDOT requirements of the TASP *(13)*. All commercial and reliever airports are included in TASP but are considered separately in this study due to their substantial influence on the EIs. Using this information and other attributes from the 5010 dataset, the 5010 airport list was divided into the following categories.

- Commercial Service Airports
- Reliever Airports
- Other TASP Facilities
- Military Airports
- Medical Facility Heliports
- Farm or Ranch Facilities
- Other Public and Private Facilities

For this study, commercial service airport and reliever airport categories received TTI's greatest focus for data collection and modeling since these have the most emission-generating activity. The following subsections describe each of these airport categories and details how they are selected.

3.1.1 Commercial Service Airports

The TASP report provided a list of commercial service airports. These facilities offer scheduled service by major airlines (American, Delta, Continental, Southwest, etc.), national airlines (US Air, etc.), and regional airlines (American Eagle, SkyWest, etc.). A total of 26 Texas facilities fall under this category. These airports support scheduled passenger service by large and medium transport aircraft, defined as those facilities that enplane at least 2,500 - 10,000 passengers annually *(13)*. All the Commercial Service airports provide access to business jets and commercial jet transport aircraft. TxDOT commercial service airports (in Texas) are listed in Table 7.

Table 7. Texas Commercial Service Airports.

Airport ID	Airport Name	Associated City	Associated County
ABI	Abilene Rgnl	Abilene	Taylor
ACT	Waco Rgnl	Waco	Mclennan
AMA	Rick Husband Amarillo Intl	Amarillo	Potter
AUS	Austin-Bergstrom Intl	Austin	Travis
BPT	Jack Brooks Rgnl	Beaumont/Port Arthur	Jefferson
BRO	Brownsville/South Padre Island Intl	Brownsville	Cameron
CLL	Easterwood Fld	College Station	Brazos
CRP	Corpus Christi Intl	Corpus Christi	Nueces
DAL	Dallas Love Fld	Dallas	Dallas
DFW	Dallas-Fort Worth Intl	Dallas-Fort Worth	Tarrant
DRT	Del Rio Intl	Del Rio	Val Verde
ELP	El Paso Intl	El Paso	El Paso
GGG	East Texas Rgnl	Longview	Gregg
HOU	William P Hobby	Houston	Harris
HRL	Valley Intl	Harlingen	Cameron
IAH	George Bush Intcntl/Houston	Houston	Harris

Airport ID	Airport Name	Associated City	Associated County
ILE	Skylark Fld	Killeen	Bell
LBB	Lubbock Preston Smith Intl	Lubbock	Lubbock
LRD	Laredo Intl	Laredo	Webb
MAF	Midland Intl Air And Space Port	Midland	Midland
MFE	Mc Allen Miller Intl	Mc Allen	Hidalgo
SAT	San Antonio Intl	San Antonio	Bexar
SJT	San Angelo Rgnl/Mathis Fld	San Angelo	Tom Green
SPS	Sheppard Afb/Wichita Falls Muni	Wichita Falls	Wichita
TYR	Tyler Pounds Rgnl	Tyler	Smith
VCT	Victoria Rgnl	Victoria	Victoria

Source: Texas Department of Transportation, Aviation Division, 2010.

3.1.2 Reliever Airports

Reliever airports are located within a major metropolitan area and provide alternative airport facilities for general aviation users to relieve congestion at the larger commercial service airports. These were also identified based on the TASP report. There are 25 existing reliever airports in the TASP, as shown in Table 8.

Table 8. Texas Reliever Airports.

Airport ID	Airport Name	Associated City	Associated County
ADS	Addison	Dallas	Dallas
AFW	Fort Worth Alliance	Fort Worth	Tarrant
AXH	Houston-Southwest	Houston	Fort Bend
CXO	Conroe-North Houston Rgnl	Houston	Montgomery
DTO	Denton Enterprise	Denton	Denton
DWH	David Wayne Hooks Meml	Houston	Harris
EFD	Ellington	Houston	Harris
FTW	Fort Worth Meacham Intl	Fort Worth	Tarrant
FWS	Fort Worth Spinks	Fort Worth	Tarrant
GKY	Arlington Muni	Arlington	Tarrant
GLS	Scholes Intl At Galveston	Galveston	Galveston
GPM	Grand Prairie Muni	Grand Prairie	Tarrant
GTU	Georgetown Muni	Georgetown	Williamson
HQZ	Mesquite Metro	Mesquite	Dallas
HYI	San Marcos Rgnl	Austin	Caldwell
IWS	West Houston	Houston	Harris
LBX	Texas Gulf Coast Rgnl	Angleton/Lake Jackson	Brazoria
LNC	Lancaster Rgnl	Lancaster	Dallas
LVJ	Pearland Rgnl	Houston	Brazoria
RBD	Dallas Exec	Dallas	Dallas
SGR	Sugar Land Rgnl	Houston	Fort Bend
SKF	Kelly Fld	San Antonio	Bexar

Airport ID	Airport Name	Associated City	Associated County
SSF	Stinson Muni	San Antonio	Bexar
T41	La Porte Muni	La Porte	Harris
TKI	Mckinney Ntl	Dallas	Collin

Source: Texas Department of Transportation, Aviation Division, 2010

3.1.3 Other TASP Facilities

Other TASP facilities (listed as a category in the TASP) include general aviation, business/corporate, community service, basic service, and general aviation heliports. General aviation airports (i.e., airports consisting of all aircraft operations that are not scheduled commercial service or reliever or military) represent most of the facilities included in the Other TASP facilities category. This category includes 234 operational airports, which include the following airport types *(13)*.

General aviation airports consist of all aircraft operations that are not scheduled for commercial service or military. The airports that serve this segment of aviation represent many of the facilities included in the TASP.

Business/corporate airports provide access to turboprop and turbojet business aircraft and are located where there is sufficient population or economic activity to support a moderate to a high level of business jet activity and/or to provide capacity in metropolitan areas.

Community service airports provide primary business access to smaller communities throughout the state, add capacity in many metropolitan areas, and provide access to agricultural and mineral production areas.

Basic service airports are located within the service area of commercial service, reliever, business/corporate, or community service airports or may be located in remote areas of the state. These airports typically have very low usage and provide additional convenience for clear weather flying and training operations.

General aviation heliports accommodate helicopters used by individuals, corporations, and helicopter taxi and medical services. Scheduled passenger service may be available if ample demand exists.

3.1.4 Military Airports

The military airports include a total of 20 operational[5] facilities that are owned by a branch of the United States military as identified in the 5010 dataset. Seventeen of these are listed as private-use airports, and three are listed as private-use heliports.

3.1.5 Medical Facility Heliports

Medical facilities were identified from the 5010 dataset. A total of 201 facilities were tagged as medical use in the database. All are classified as heliports.

3.1.6 Farm or Ranch Facilities

TTI extracted farm or ranch facilities from the 5010-dataset based on facility name (i.e., facility names that contained the word "farm" or "ranch"). A total of 486 facilities were placed in this group. Of these, 464 were classified as airports, 20 were as heliports, and two as ultralight facilities.

3.1.7 Other Public and Private Facilities

These are catch-all airports that were not included in any of the previous classifications. A total of 1,045 facilities are included in this category. Table 9 provides a breakdown of facilities under this group by facility type and public or private use.

Table 9. The Number of Other Public and Private Facilities in Texas by Type and Use.

Facility Type	Public-Use	Private-Use
Airport	89	620
Heliport	3	321
Gliderport	0	5
Seaplane Base	1	0
Ultralight	0	6
Total	**93**	**952**

3.2 Activity Data

The 2019 aircraft operations, associated projection factors, fleet mix, taxi times, and other critical data elements were collected for emissions modeling. Detailed activity data was available for commercial and reliever airports. Limited activity data were available

[5] Kelly Field airport in San Antonio and Wichita Falls Municipal in Wichita Falls are owned by the military, but fall under reliever and commercial categories respectively, they are not counted in the military category.

for other facility groups; appropriate data reconciliation methods were used to obtain activity data for the facilities within these facility groups.

The following are the various aircraft and airport-equipment activity components that were needed for modeling 2019 emissions and projecting the emissions for past and future years. The data chapter provides details on the finalized activity data.

3.2.1 Aircraft Activity- LTO

LTO refers to the number of aircraft that land and take off at any airport. LTOs are typically equal to the number of total aircraft operations (the sum of all arrivals and departures, as reported by the airports) divided by 2. Most aircraft go through a similar sequence during a complete operating cycle. Helicopters may combine specific modes such as takeoff and climb out. The aircraft engines operate at a standard power setting for a given aircraft category during each mode of operation.

3.2.2 Projection Factors

These factors are used to obtain operation estimates for historical and future years. This study collected the operations and other activity data for 2019. This data was used for emission modeling and obtaining the 2019 emissions. The projection factors were then used to backcast and forecast the 2019 emissions to other years. The projection factors are obtained from the TAF dataset and the United States (U.S.) Energy Information Administration’s (EIA) annual energy outlook (AEO) dataset.

3.2.3 Fleet-Mix and Engine Assignments

For a single LTO cycle, aircraft emissions vary considerably depending on the category of aircraft and the resulting typical flight profile. Aircraft activity for each facility is a critical modeling element needed for this study. The AEDT model treats each aircraft as a combination of a specific aircraft type (or airframe) and engine combination. There may be several different engine types available for use for each aircraft type, and emission factors may vary from engine to engine. Consequently, different aircraft may generate identical emissions because they are equipped with identical engines. Older aircraft may be outfitted with technologically newer engines and generate fewer emissions.

3.2.4 Taxi-In and Taxi-Out Times

Taxi/idle time, whether from the runway to the gate (taxi/idle-in) or from the gate to the runway (taxi/idle-out), depends on the size and layout of the airport, the amount of traffic, or congestion on the ground, and airport-specific operational procedures. Taxi/idle time can vary significantly for each airport throughout the day, as aircraft activity changes, and seasonally, as general travel activity increases and decreases. Airport-specific taxi times can be used to estimate emissions for all modeled airports, where available.

3.2.5 GSE Inventory

The GSE source category comprises vehicles or engines needed to support the aircraft while at the terminal or initiating takeoff. Prior to aircraft departure, GSEs are present to load baggage, food, and fuel. When an aircraft departs from a gate, a tug may be used to push or tow the aircraft away from the gate and to the taxiway. Aircraft require a mix of GSE that includes the following:

- External air conditioners
- Compressors to help with engine starts
- Aircraft tractors or tugs
- Baggage tractors
- Belt loaders
- Cabin service trucks
- Catering trucks
- Lavatory trucks
- Water supply trucks
- External generators
- Hydrant fueling trucks

3.2.6 APUs

When large aircraft are on the ground with their engines shut down, they need power and preconditioned air to maintain their operability. If a ground-based power and air source are unavailable, an APU, which is part of the aircraft, is operated. These units are essentially small jet engines, which generate electricity and compressed air. They burn jet fuel and generate exhaust emissions like larger engines. In use, APUs essentially run at full throttle. Some large airports may have converted their APU source of energy to electricity.

3.3 Emission Modeling

The emissions were estimated using AEDT. TTI modeled 2019 emissions and used projection factors to backcast and forecast the emissions.

Commercial and reliever airports had detailed activity data. They had a significant impact on emissions in the EI, thus were modeled individually. AEDT provided emission quantities by aircraft and modes for each facility.

All other facility groups with less detailed data and lower contribution to the EIs were modeled using a representative facility for that facility group. AEDT provided emission rates for different modes for the aircraft operating in the facility group. These rates were then converted to emission quantities based on the fleet mix and operations for individual facilities.

3.4 Post Processing

The emissions results were required to be reported by SCC, as listed in Table 4. To aggregate the emissions by aircraft to emissions by SCC, TTI used the traffic flow management system counts (TFMSC) dataset and AEDT airframe table (for airframes absent in the TFMSC data) to determine the engine types and aviation types for an aircraft *(14)*. After adding the respective SCC labels to the aircraft, TTI aggregated the emissions by SCC within each facility.

In addition to adding the SCC labels, TTI used speciation tables from the AEDT database (identical to those provided by EPA) to speciate the organic gases into various species. Appendix A provides the TOG speciation profiles used in this study. Note that some pollutants might be present for one category but can be absent for others. This is because these different categories use different fuel types.

Also, lead emissions for air taxis and general aviation activity associated with piston aircraft were prepared using the latest EPA-approved emission factors for aviation gasoline *(15)*. The following equation is used to estimate lead emissions based on the fuel consumption for each LTO cycle for piston-engine aircraft:

$$E_{pb} = \frac{FC}{D_{Avgas}} \times LC \times Rt = \frac{FC}{2707.946} \times 2.12 \times 0.95 = FC \times 0.000743737$$

Where,

E_{pb} = Lead estimate (tons of lead)

FC = Aviation gas fuel consumption (tons). (AEDT reports fuel consumption in tons.)

LC = Lead content of aviation gas (2.12 grams lead/gallon of fuel)

Rt = Lead retention rate 95 percent

D_{Avgas} = Aviation gas density (2707.946 gram/ gallon at 15°C) *(16)*

4.0 DATA

Compiled activity data, control strategy information, and airport facility data developed during the previous aircraft, APU, and GSE activity data collection project was used to develop the required modeling input files for use with AEDT and to further process and analyze the output file data as needed *(17)*. The following section lists the data sources used in this study. The subsequent sections describe the finalized activity data and control strategies used in this study.

4.1 Data Sources

This section describes the various activity data sources. The primary data sources include the FAA, EPA, AirNav, TxDOT, and EIA. The FAA provides various activity data, including data on operations, fleet-mix, and taxi-in and-out times. The EPA website has data from previous national inventories on non-road mobile source emissions. AirNav is a privately-owned website that publishes airport-related data. TxDOT resources provided a list of airports that play a significant role in Texas's economic and social development. EIA’s AEO data provides the projection factors for facilities where projection factor information was not available through FAA.

4.1.1 FAA

The FAA, formerly the Federal Aviation Agency, was established by the Federal Aviation Act of 1958 (72 Stat. 731). The agency became a component of the Department of Transportation in 1967 pursuant to the Department of Transportation Act (49 U.S.C. 106). It regulates civil aviation and U.S. commercial space transportation, maintains and operates air traffic control and navigation systems for civil and military aircraft, and develops and administers programs relating to aviation safety and the National Airspace System. It also hosts airport operations and performance data, including historical traffic counts, traffic forecasts of aviation activity, and delay statistics. The following subsections list the FAA datasets used in this study.

4.1.1.1 Airport Master Record (5010) Dataset

The FAA collects, maintains, and disseminates accurate, complete, and timely airport data for the safe and efficient running of the air transportation system. FAA Airport Master Record Form 5010 provides airport-specific data, contact information, and operation counts for public and private-use airports (*12*). Airport location, contact information, other operational information was used from this dataset.

4.1.1.2 TAF Dataset

The TAF dataset includes forecasts for active airports in the NPIAS and contains historic and forecast data for enplanements, airport operations, Terminal Radar Approach Control operations, and based aircraft. TAF data covers 264 FAA towered airports, 256 Federal contract tower airports, 30 terminal radar approach control facilities, and 2,790 non-FAA airports *(18)*. TTI extracted, summarized, and analyzed the TAF data for the years 1990 through 2045.

4.1.1.3 Traffic Flow Management System Counts (TMFSC)

The TFMSC provides information on traffic counts by the airport, grouped by aircraft type or by the hour of the day. The TFMSC is valuable from the seasonality and fleet mix standpoint. This data is available for each month for the year 2019 by arrival and departure. Data for 2020 is also available. An initial assessment showed that operations data for major commercial airports such as DFW, IAH, DAL, and others closely matched what was published in the TMFSC for 2019. In TFMSC, data are arranged by the following:

- flight type (domestic, foreign, US to foreign, foreign to the US)
- source-provided user class (commercial, air taxi, freight, general aviation, military, other)
- value-added equipment type (piston, turbine, jet, helicopter, other)
- value-added equipment weight class (heavy, 757, large jets, medium, small, other)
- business jets
- regional jets

4.1.1.4 Operations Network (OPSNET)

The OPSNET dataset contains the FAA air traffic operations and delays data reported daily. The 2019 extracted data provides departure and arrival operations sorted by TFMSC user class *(19)*.

4.1.1.5 Aviation System Performance Metrics (ASPM)

The ASPM provides data on airport weather, runway configuration, and airport arrival and departure rates. This combination of flight and airport information provides a complete picture of air traffic activity for these airports and air carriers. The data also contains actual and unimpeded taxi times by the airport *(20)*.

4.1.2 TxDOT Planning Airports

The TASP prepared by TxDOT helped identify the airports and heliports that play a significant role in Texas's economic and social development *(13)*. A total of 295 facilities are included in the TASP. Airports with international customs facilities are flagged in the data.

4.1.3 EPA's NEI

EPA's NEI database emissions source types include construction equipment, lawn and garden equipment, aircraft GSE, locomotives, commercial marine vessels, and other non-road sources *(21)*. The database only contains emissions summaries by county.

4.1.4 AirNav

AirNav is a privately-owned website that publishes aeronautical and airport information released by the FAA. It contains airport contact and operations information for each of the airports in Texas *(22)*.

4.1.5 EIA's AEO

EIA's AEO presents an assessment by the U.S. EIA of the outlook for the energy market through 2045 *(23)*. AEO provides fuel consumption projections for commercial jet fuel, commercial aviation gasoline, and military jet fuel.

4.2 Activity Data

The 2019 aircraft operations, taxi times, fleet mix, and projection factors with respect to 2019 operations for each facility group are presented in this section. Due to limited data on APU operating time and GSE activity, default values from AEDT were used for modeling.

4.2.1 Aircraft Activity— LTO

TTI employed the following procedure to estimate the operations for the different facility groups during the previous activity data collection study. This study was conducted before the current project to develop activity data needed for emissions modeling.

1. As a first step, all operations from various datasets were listed side by side for commercial and reliever airports. Average operations for each facility were created from 2019 data sources such as 5010, TAF, AirNav, and the 2017 ERG study. They were compared with airport values reported to TTI by airport facilities. Any anomalies were flagged and rectified using the information published in the airport-specific master plans.
2. Similarly, TASP and Military operations from various datasets were listed side by side. The average operations for each facility created from 2019 data sources

were compared with airport values reported to TTI by airport facilities. The TAF dataset was used as the preferred basis for the airports as a hierarchy. However, AirNav and the 5010 datasets were the preferred choices for airports where TAF had no values reported. Any anomalies with ratios (estimated/average) were flagged and rectified.

3. The military airport facilities were a challenge since a very limited dataset was available. Since most of the aircraft operations are used for training purposes, it is not tracked or reported. TMFSC data had reported values for ten military facilities. The average of these data sets was used for the facilities where data was unavailable, specifically for those military facilities.

4. A similar process was implemented for other airport groups where facility-specific information was not reported and not available from different data sources.

The above methodology was applied to FAA's 5010 dataset (downloaded August 2020) in the previous activity data collection study *(17)*. The 5010 dataset was re-downloaded in May 2021 to get the updated list of operational facilities in 2020. Twenty-nine facilities found in the May 2021 5010 dataset were not present in the August 2020 data. Also, these facilities did not have operations data in the 5010 dataset. Thus, the process for reconciling data gaps from the previous activity data collection study was applied to fill the operations for these facilities. The default values of 55 LTOs for other private airports and heliports, 78 LTOs for medical airports, one LTO for farm or ranch airports were used to fill the missing data. Table 10 shows the facilities with adjusted values for LTOs.

Table 10. Annual LTOs for 29 Facilities Found in May 2021 5010 Dataset.

Facility ID	Facility Name	Facility Type	Facility Group	Imputed Annual LTOs[1]
05XA	Moore County Hospital District	Heliport	Medical	78
15XA	Hauptrief Aero	Airport	Other Private Airports	55
16TT	16 L Ranch	Airport	Farm/Ranch	1
17TT	Allen Condo/Tower	Heliport	Other Private Heliports	55
20TT	Gone with the Wind	Airport	Other Private Airports	55
23XA	El Tejano	Airport	Other Private Airports	55
35TT	Hawkins Fld	Airport	Other Private Airports	55
38TA	Ascension Seton Highland Lakes Hospital	Heliport	Medical	78
44TT	Houston Methodist Baytown	Heliport	Medical	78
45TE	Northeast Methodist Hospital	Heliport	Medical	78
60TA	Ut Health Henderson	Heliport	Medical	78
63TA	Ascension Seton Williamson Hospital	Heliport	Medical	78
71TA	Bates Fld	Airport	Other Private Airports	55
89TE	Plaza Medical Center	Heliport	Medical	78
8XS5	San Luis Resort	Heliport	Other Private Heliports	55
T96	Southwest Lubbock	Airport	Other Public Airports	55
TA12	Flying B Ranch	Airport	Farm/Ranch	1
TA22	Mirasol Hills	Heliport	Other Private Heliports	55
TA54	Mccrea	Airport	Other Private Airports	55
TE44	R-Ranch Airstrip	Airport	Farm/Ranch	1
TS20	Joseph Of Cupertino Stolport	Airport	Other Private Airports	55
TS47	Peeler Airpark	Airport	Other Private Airports	55
TT21	Grant Ranch	Airport	Farm/Ranch	1
TT31	Y Bar Ranch	Airport	Farm/Ranch	1
TT83	HBR	Heliport	Other Private Heliports	55
TT99	Leinart Farms Airstrip	Airport	Farm/Ranch	1
TX98	Crespi Helistop	Heliport	Other Private Heliports	55
XA64	Texas Health Mansfield	Heliport	Medical	78
XA65	Medical City Alliance	Heliport	Medical	78

[1] Default Medical LTOs are obtained by considering three operations per week. This value is based on information obtained from interviews with local heliports. Farm and ranch defaults are based on the average operations reported from similar airports (previous activity data collection report). Other private airport defaults are based on ERG airport EI's default operations.

Figure 3 shows the 2019 LTOs for different facility groups and the cumulative distribution for the entire state. Commercial, reliever, and TASP airports account for 85 percent of the total LTOs; four million LTOs out of 4.6 million LTOs.

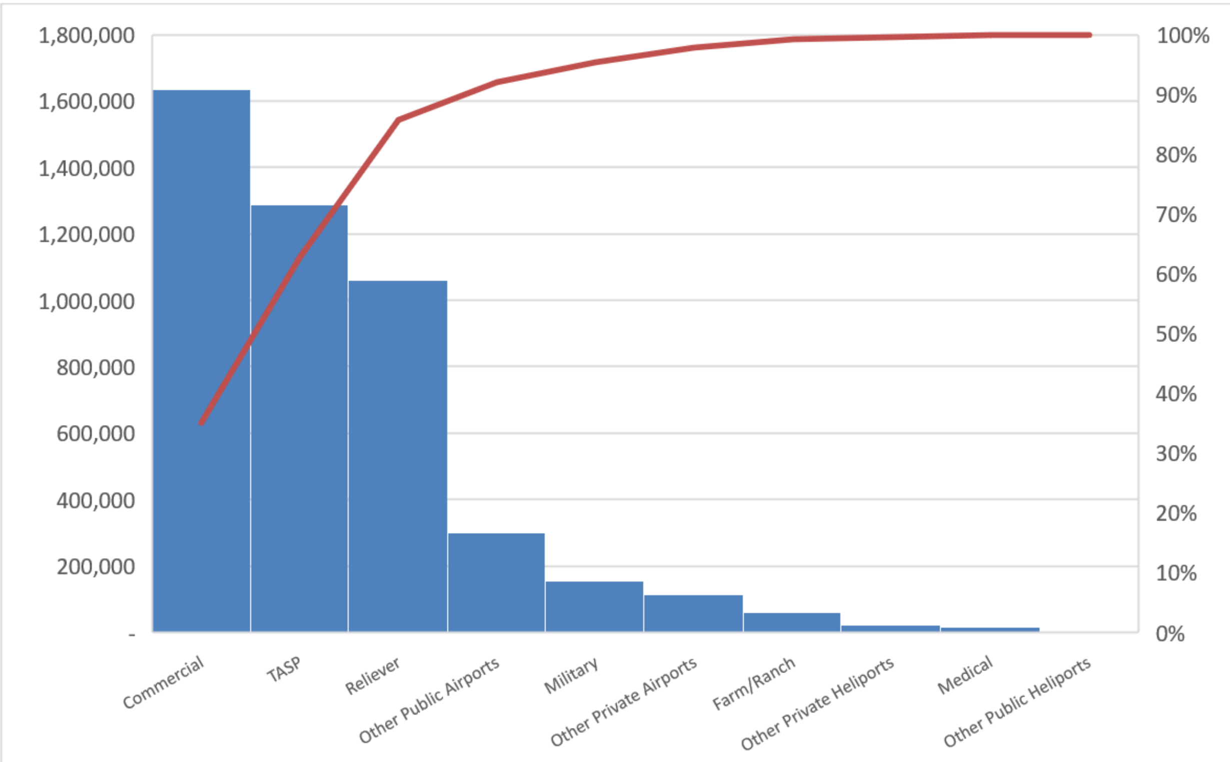

Figure 3. 2019 LTOs by Airport Facility Groups.

Moreover, this study corrected the county assigned for certain airports where the 5010 dataset had errors in county assignment. Table 11 shows the facilities with the assigned county from the 5010 dataset and corrected county. The correction is based on a spatial join between the airports shapefile available on the FAA website and the TxDOT county shapefile (*24*, *25*).

Table 11. Facility County Correction.

Facility ID	Facility Name	County (5010 Dataset)	County (Corrected)	City
68XA	Utley	Anderson	Bastrop	Bastrop
TE72	Taylor Fld	Anderson	Cass	Bivins
4TE1	Polyanna Ranch	Anderson	Navarro	Blooming Grove
1XS8	Pinon Ranch	Kinney	Edwards	Brackettville
TA27	Flying K	Burnet	Williamson	Briggs
15TA	J R Ranch	Burnet	Edwards	Briggs
2TA0	Shale Valley Ranch	Anderson	Burnet	Burnet
08TS	Flying G Ranch	Anderson	Hill	Bynum
TX45	Hawkeye Hunting Club	Shelby	Mclennan	Center
TE52	Chigger Fld	Anderson	Johnson	Cresson
1F7	Airpark East	Rockwall	Kaufman	Dallas
6TA9	Anderson Ranch	Anderson	La Salle	Dilley
TS53	Tecma	Anderson	El Paso	El Paso
6TA1	Sky Ranch	Henderson	Van Zandt	Eustace
22XS	Longhorn Aux Landing Strip	Bell	Coryell	Fort Hood (Killeen)
23XS	Shorthorn Aux Landing Strip	Bell	Coryell	Fort Hood (Killeen)
TA76	Flying 7H Ranch	Anderson	Mills	Goldthwaite
0TE6	Gorman	Eastland	Comanche	Gorman
TX14	Front Yard Landing Area	Young	Palo Pinto	Graham
22TA	Pharmnall	Hall	Hill	Grandview
6TA6	B & S Warehouse	Houston	Harris	Houston
7TX6	Kemah Waterfront	Harris	Galveston	Houston
TS62	Norris Fld	Kent	Stonewall	Jayton
5TE4	Perkins-Prothro Cimarron Ranch	Cimarron	Dallam	Kerrick
4TE0	Ro Ranch	Anderson	Travis	Lakeway
2TE8	Stand Fast	Anderson	Terrell	Langtry
6TA3	Culp	Kaufman	Dallas	Lawrence
XS12	Liberty Hill Air Ranch	Burnet	Williamson	Liberty Hill
TE70	BFS	Hale	Floyd	Lockney
9XS7	Reeder	Rains	Hunt	Lone Oak
0TA7	Alta Vista Ranch	Presidio	Jim Hogg	Marfa
8TE0	Tee Pee Creek	Anderson	Motley	Matador
4TE6	Francis Ranch	Anderson	Bosque	Meridian
XS17	Hensley Ranch	Cameron	Milam	Milano
88TS	Fort Wolters Helicopters	Palo Pinto	Parker	Mineral Wells
1TA1	Area 142	Anderson	Shackelford	Moran
06TS	M Sansom Ranch	Castro	Concho	Paint Rock
2TS6	AE139	Anderson	Lamar	Paris
TX59	Eds Administration NR 2	Collin	Hunt	Plano

Facility ID	Facility Name	County (5010 Dataset)	County (Corrected)	City
XA80	Martin Energy Svcs Harbor Island	San Patricio	Nueces	Port Aransas
4XA6	Medical Center Of Southeast Texas	Anderson	Jefferson	Port Arthur
XA40	Richardson Rgnl - Bush Hwy	Dallas	Collin	Richardson
XS69	Hackberry Ranch	Edwards	Real	Rocksprings
TE88	Bb Airpark	Houston	Brazoria	Rosharon
TE37	Canyon Ranch	Sutton	Edwards	Sonora
1TE2	Black Forest	Anderson	Montgomery	The Woodlands
16TA	Seven Springs	Pecos	Reeves	Toyahvale
54TS	J Bar WC Ranch	Parker	Jones	Weatherford

Appendix B shows the operations data used in this study.

4.2.2 Taxi-In and Taxi-Out Times

Taxi-in and taxi-out data sets are dependent on the airport traffic, runway alignments, and other airport-specific operational factors. During the previous activity data collection study, many of the airports TTI communicated with did not track this information. TTI employed a hierarchical process of using the airport-reported data as the primary source of information for taxi times and employed FAA's ASPM taxi time dataset for the airports that don't track taxi times *(26)*.

Table 12 shows the taxi-in and taxi-out times for commercial and reliever airports, combining both airport-reported values and ASPM-derived values where applicable. ASPM taxi times were used for all airports listed in

Table 12 except for IAH, EFD, and HOU, for which data from Houston Airport System (HAS) was used *(27)*. For the facilities where taxi-in and taxi-out times were not available, AEDT defaults were used.

Table 12. Taxi-In and Taxi-Out Times for Commercial/Reliever Airports.

Facility ID	Facility Name	County	Taxi-out (min)	Taxi-in (min)
ABI	ABILENE RGNL	TAYLOR	12.67	4.64
ACT	WACO RGNL	MC LENNAN	11.17	3.87
AMA	RICK HUSBAND AMARILLO INTL	POTTER	12.55	4.55
AUS[6]	AUSTIN-BERGSTROM INTL	TRAVIS	13.23	6.27

[6] The data reported by AUS was not used as it was significantly lower from the ASPM and previously reported studies. AUS provided the same value for 2019 and 2020.

Facility ID	Facility Name	County	Taxi-out (min)	Taxi-in (min)
BPT	JACK BROOKS RGNL	JEFFERSON	12.84	4.41
BRO	BROWNSVILLE/SOUTH PADRE ISLAND INTL	CAMERON	13.28	4.96
CLL	EASTERWOOD FIELD	BRAZOS	10.87	4.83
CRP	CORPUS CHRISTI INTL	NUECES	12.59	4.47
DAL	DALLAS LOVE FIELD	DALLAS	11.91	4.71
DFW	DALLAS-FORT WORTH INTL	TARRANT	18.93	11.69
DRT	DEL RIO INTL	VAL VERDE	12.53	4.51
ELP	EL PASO INTL	EL PASO	13.53	4.19
GGG	EAST TEXAS RGNL	GREGG	12.77	5.28
HOU	WILLIAM P HOBBY	HARRIS	10.91	5.48
HRL	VALLEY INTL	CAMERON	10.80	3.35
IAH	GEORGE BUSH INTERCONTINENTAL/HOUSTON	HARRIS	19.76	8.66
ILE	SKYLARK FIELD	BELL	13.75	5.00
LBB	LUBBOCK PRESTON SMITH INTL	LUBBOCK	11.81	4.39
LRD	LAREDO INTL	WEBB	12.54	4.88
MAF	MIDLAND INTL AIR AND SPACE PORT	MIDLAND	12.63	3.82
MFE	MC ALLEN MILLER INTL	HIDALGO	12.59	4.65
SAT	SAN ANTONIO INTL	BEXAR	11.27	4.50
SJT	SAN ANGELO RGNL/MATHIS FIELD	TOM GREEN	10.15	3.47
SPS	SHEPPARD AFB/WICHITA FALLS MUNI	WICHITA	12.64	6.33
TYR	TYLER POUNDS RGNL	SMITH	12.66	4.76
VCT	VICTORIA RGNL	VICTORIA	12.73	4.52
ADS	ADDISON	DALLAS	14.07	4.94
AFW	FORT WORTH ALLIANCE	TARRANT	11.72	5.58
AXH	HOUSTON-SOUTHWEST	FORT BEND	13.24	5.00
CXO	CONROE-NORTH HOUSTON RGNL	MONTGOMERY	13.80	4.94
DTO	DENTON ENTERPRISE	DENTON	13.96	4.95
DWH	DAVID WAYNE HOOKS MEMORIAL	HARRIS	14.18	4.95
EFD	ELLINGTON	HARRIS	13.86	4.87
FTW	FORT WORTH MEACHAM INTL	TARRANT	14.07	4.96
FWS	FORT WORTH SPINKS	TARRANT	13.01	4.91
GKY	ARLINGTON MUNI	TARRANT	13.93	4.97
GLS	SCHOLES INTL AT GALVESTON	GALVESTON	14.76	4.93
GPM	GRAND PRAIRIE MUNI	TARRANT	16.00	5.00
GTU	GEORGETOWN MUNI	WILLIAMSON	14.09	4.98
HQZ	MESQUITE METRO	DALLAS	13.45	4.93
HYI	SAN MARCOS RGNL	CALDWELL	13.57	4.95
IWS	WEST HOUSTON	HARRIS	13.82	4.92
LBX	TEXAS GULF COAST RGNL	BRAZORIA	15.36	5.00
LNC	LANCASTER RGNL	DALLAS	13.00	5.00

Facility ID	Facility Name	County	Taxi-out (min)	Taxi-in (min)
LVJ	PEARLAND RGNL	BRAZORIA	13.00	5.00
RBD	DALLAS EXECUTIVE	DALLAS	12.27	4.61
SGR	SUGAR LAND RGNL	FORT BEND	13.59	4.63
SKF	KELLY FLD	BEXAR	11.08	4.70
SSF	STINSON MUNI	BEXAR	15.67	4.50
T41	LA PORTE MUNI	HARRIS	13.84	4.99
TKI	MCKINNEY NATIONAL	COLLIN	12.59	4.70

4.2.3 Fleet Mix Development

As part of the previous activity data collection study, the research team found that many airports do not track the aircraft fleet mix as it depends on the technical capability of the airport. This information was not readily available from many of the airports TTI communicated with during the previous activity data collection study. This data was reconciled for airports found in the FAA's TFMSC dataset. TTI employed a hierarchical process of using the airport-reported data as the primary source of information for fleet mix and employed the TFMSC dataset for the airports that did not provide the fleet mix.

TTI used the airport-reported fleet mix data for DFW, IAH, EFD, and HOU. TFMSC data provided the fleet mix for all other commercial and reliever airports. TFMSC data (when available) was used for non-commercial and non-reliever airports as well. Data filling was conducted for the facilities where no fleet mix data was available. This fleet mix only consisted of the airframe information. There was a need to also incorporate the engine information before using the fleet information in AEDT. The engines were assigned based on the AEDT equipment table, which maps the airframes and the engines. Appendix C shows the fleet mix data used in this study.

Table 13 lists the data filling strategy for obtaining the fleet mix for various facility groups.

Table 13. Fleet Mix – Reconciling Data Gaps.

Facility Group	Missing Data Handling	Comments
TASP airports	Used TFMSC fleet mix from TASP airports in the same district.	Considered airports with the same facility group and district to have similar operating characteristics.
Military airports	Used TFMSC fleet mix from TASP airports in the same district.	Considered airports with the same facility group and district to have similar operating characteristics.
Military heliports	Distributed operations equally between Bell 212, Boeing CH47D, and Sikorsky-70.	Chose typical military helicopters to represent the military operations

Facility Group	Missing Data Handling	Comments
Other public and private airports	Used the TFMSC fleet mix from other public airports with the lowest operations.	Most of the airports in this category were absent from TFMSC data. Choose one representative airport to obtain the fleet mix.
TASP, medical, other private, and other public heliports	Distributed operations equally between Eurocopter 130, Agusta Westland 109, and Bell 429	Chose typical helicopters to represent the operations at heliports.
Farm or Ranch airports	Distributed operations equally between Raytheon Beech 55 Baron, Piper PA-32 Cherokee Six, Cessna 172 Skyhawk, Mooney M20-K, Grumman AA-5A/B (FAS)	Chose typical aircraft to represent the operations at farm or ranch airports.

4.2.4 Forecasting Factors

The calendar year 2019 EI was combined with projection factors to backcast and forecast emissions from 2011 through 2050. TTI used a combination of FAA's most recent TAF dataset (forecast issued May 2021) and EIA's AEO dataset to develop emissions projection factors. The TAF dataset had projection factors for 214 airports in Texas, including data for all commercial and reliever airports. EIA's AEO dataset was used in projection factor gap filling for airports not included in the TAF dataset. In addition to the TAF and AEO datasets, TTI used the 2019 and 2020 operations data for commercial airports from available airport websites (when available) and OPSNET to adjust for impacts on 2020 activity due to the COVID-19 pandemic. The following approach was used to develop the projection factors:

- The TAF dataset corresponding to 2011 through 2045 was downloaded for the State of Texas. The TAF data includes aircraft operations data by the airport and general aircraft type. It is not available after 2045. The downloaded operations data correspond to the airport and aircraft type (air taxi, general aviation, military, commercial). This study used the airport-level operations data to obtain the projection factors for 2011 through 2045. The calendar year 2045 projection factors were used for the remaining span of 2046 through 2050.
- Projection factors were developed by calculating ratios of base year (2019) operations (or LTOs) to each projection year's operations.
- TAF data provided operations for all commercial and reliever airports; however, it did not cover many other smaller facility groups. Generic growth-rate projection

factors were developed for these facilities. Table 14 presents the missing data handling methodology used for these facility groups.

- To better capture the impacts on activity due to the COVID-19 pandemic, 2020 projection factors for the commercial airports were estimated based on the 2019 and 2020 operations data from the airports' websites for airports that posted their operations online. TTI compared the operations from the airports' website with other data sources and found that OPSNET data closely aligns with the airport reported data. Thus, OPSNET data was used to develop the 2020 projection factors for commercial airports that did not report the operations data on their website. For airports that did not report the 2019 and 2020 operations and did not have data on OPSNET, an average projection factor of "smaller" commercial airports was used. Table 15 presents the 2019 and 2020 operations data and the projection factors that TTI developed.
- TTI used the activation year in the 5010 dataset to determine the start year of a facility. Projection factors for all years before the activation year were set to zero.

Appendix D provides the projection factors by different facility groups.

Table 14. Projection Factors – Reconciling Data Gaps.

Facility Group	Missing Data Handling	Comments
TASP airports	Used TAF projections from TASP airports in the same district.	Considered airports with the same facility group and district to have similar operating characteristics.
Military airports and heliport	Used AEO military jet fuel projection factors (shown in Figure 4).	Military jet fuel projection factors provide a good surrogate for capturing the military operation growth rate.
Other public and private, Farm or Ranch airports and heliport	Used AEO commercial aviation gasoline (Avgas)[7] projection factors (shown in Figure 4).	Aviation gas projection factors provide a good surrogate for capturing the general aviation growth rate as aviation gas is primarily used for general aviation.
Medical heliports	Considered no growth; 2019 operations used for all years between 2011 and 2050.	The TTI team considered the demand for helicopter medical services to stay constant over the years.

[7] Avgas is a specialized fuel used to power piston engine aircraft. Aircraft operating on leaded avgas are used for many critical purposes, including business and personal travel, instructional flying, aerial surveys, agriculture, firefighting, law enforcement, medical emergencies, and express freight. (Ref- https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=14754)

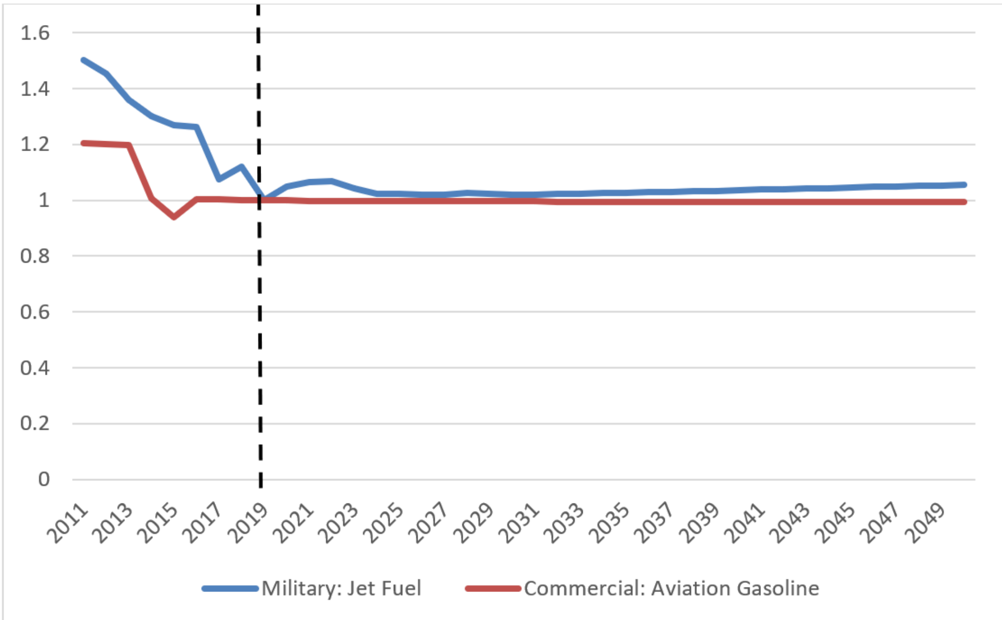

Figure 4. Annual Energy Outlook (AEO) Military Jet Fuel and Commercial Aviation Gasoline Projection Factors (*23*).

Table 15. 2019 and 2020 Operations and Projection Factors.

County	Facility ID	Facility Name	2019 Operations	2020 Operations	Projection Factor	Source
Taylor	ABI	Abilene Rgnl	52,426	44,220	0.84347	OPSNET
McLennan	ACT	Waco Rgnl	52,852	54,370	1.02872	OPSNET
Potter	AMA	Rick Husband Amarillo Intl	54,074	41,959	0.77596	OPSNET
Travis	AUS	Austin-Bergstrom Intl	209,726	131,342	0.62626	AUS Website
Jefferson	BPT	Jack Brooks Rgnl	18,949	16,950	0.89451	OPSNET
Cameron	BRO	Brownsville/South Padre Island Intl	27,439	24,943	0.90903	OPSNET
Brazos	CLL	Easterwood Fld	58,285	54,482	0.93475	OPSNET
Nueces	CRP	Corpus Christi Intl	100,129	88,889	0.88774	CRP Website
Dallas	DAL	Dallas Love Fld	231,879	170,162	0.73384	DAL Website
Tarrant	DFW	Dallas-Fort Worth Intl	720,007	514,702	0.71486	DFW Website
Val Verde	DRT	Del Rio Intl			0.89587	Based on the average growth of smaller commercial airports*.
El Paso	ELP	El Paso Intl	87,095	76,333	0.87643	ELP Website

County	Facility ID	Facility Name	2019 Operations	2020 Operations	Projection Factor	Source
Gregg	GGG	East Texas Rgnl	57,704	46,476	0.80542	OPSNET
Harris	HOU	William P Hobby	204,703	137,236	0.67042	HAS 2019 and 2020 EIs
Cameron	HRL	Valley Intl	41,338	57,120	1.38178	OPSNET
Harris	IAH	George Bush Intl/Houston	478,070	267,655	0.55987	HAS 2019 and 2020 EIs
Bell	ILE	Skylark Fld			0.89587	Based on the average growth of smaller commercial airports*.
Lubbock	LBB	Lubbock Preston Smith Intl	92,585	80,037	0.86447	OPSNET
Webb	LRD	Laredo Intl	73,359	64,604	0.88066	OPSNET
Midland	MAF	Midland Intl Air and Space Port	64,519	54,620	0.84657	OPSNET
Hidalgo	MFE	McAllen Miller Intl	65,222	63,120	0.96777	OPSNET
Bexar	SAT	San Antonio Intl	163,870	109,864	0.67043	OPSNET
Tom Green	SJT	San Angelo Rgnl/Mathis Fld	78,252	71,684	0.91607	OPSNET
Wichita	SPS	Sheppard AFB/Wichita Falls Muni			0.89587	Based on the average growth of smaller commercial airports*.
Smith	TYR	Tyler Pounds Rgnl	34,419	31,146	0.90491	OPSNET
Victoria	VCT	Victoria Rgnl	57,422	36,804	0.64094	OPSNET

*Smaller commercial airports: ABI, ACT, AMA, BPT, BRO, CLL, GGG, HRL, LBB, LRD, MAF, MFE, SJT, TYR, and VCT.

4.3 Control Strategies

This study primarily considered two control measures: gate electrification and GSE electrification.

Table 16 and Table 17 present the gate and GSE electrification details, respectively. The facilities included in these tables are not exhaustive thus do not capture all facilities in Texas that use these control measures. Only the facilities where control measure information was available are included. Moreover, a conservative approach was used and only considered controls after 2017, the source year for most of the control measure data collected.

Gate electrification allows the aircraft to use electricity hookups instead of the APUs while docking at the gates. GSE electrification consists of turning over the conventional fuel-powered GSE vehicle to use electric-powered vehicles. The APU and non-electric GSE emissions were reduced based on the gate and GSE electrification percentages.

Table 16. Gate Electrification.

Facility ID	Facility Name	County	Facility Group	2017 – 2050
ABI	ABILENE RGNL	TAYLOR	COMMERCIAL	50%
AMA	RICK HUSBAND AMARILLO INTL	POTTER	COMMERCIAL	100%
AUS	AUSTIN-BERGSTROM INTL	TRAVIS	COMMERCIAL	5%
CRP	CORPUS CHRISTI INTL	NUECES	COMMERCIAL	100%
DAL	DALLAS LOVE FIELD	DALLAS	COMMERCIAL	100%
DFW	DALLAS-FORT WORTH INTL	TARRANT	COMMERCIAL	55%
HOU	WILLIAM P HOBBY	HARRIS	COMMERCIAL	100%
ILE	SKYLARK FIELD	BELL	COMMERCIAL	100%

Table 17. GSE Electrification.

Facility ID	Facility Name	County	Facility Group	2017 – 2050
CRP	CORPUS CHRISTI INTL	NUECES	COMMERCIAL	4%
DFW	DALLAS-FORT WORTH INTL	TARRANT	COMMERCIAL	34%
HRL	VALLEY INTL	CAMERON	COMMERCIAL	15%
AFW	FORT WORTH ALLIANCE	TARRANT	RELIEVER	5%

5.0 EMISSIONS MODELING

The aircraft, GSE, and APU emissions were modeled using AEDT. The following section provides an overview of AEDT and presents the modeling approach used in this study.

5.1 AEDT Overview

AEDT is a software system that models aircraft performance in space and time to estimate fuel consumption, emissions, noise, and air quality consequences. AEDT is a comprehensive tool that provides information to FAA stakeholders on each of these specific environmental impacts. AEDT facilitates environmental review activities required under NEPA by consolidating the modeling of these environmental impacts in a single tool *(28)*. AEDT version 3d was the latest version of this software when this study was conducted.

AEDT is designed to model individual scenarios ranging in scope from a single flight at an airport to regional, national, and global scenarios. AEDT leverages geographic information system (GIS) and relational database technology to achieve this scalability and offers rich opportunities for exploring and presenting results. The U.S. government actively uses versions of AEDT for domestic aviation system planning as well as domestic and international aviation environmental policy analysis *(28)*.

AEDT accepts data from a variety of sources with varying spatial and temporal resolutions. The key input to estimating aircraft emissions is the aircraft activities which can be categorized into (a) planned flight data and (b) observed flight data. The planned flight data at the airport level consists of planned arrival and departure information of aircraft along specific routes. The observed flight data obtained from the sensor observations of aircraft activity contains information on the aircraft's three-dimensional position, speed, and direction. In addition to aircraft activity, AEDT can model emissions from APUs and GSE operating in the airports. Users have two options to incorporate input information, (i) user-defined inputs through the graphical user interface (GUI) and (ii) extensive databases maintained by AEDT on the aircraft, fleet, and operations information required to estimate emissions. Key components of the AEDT model are presented in Figure 5 *(28)*.

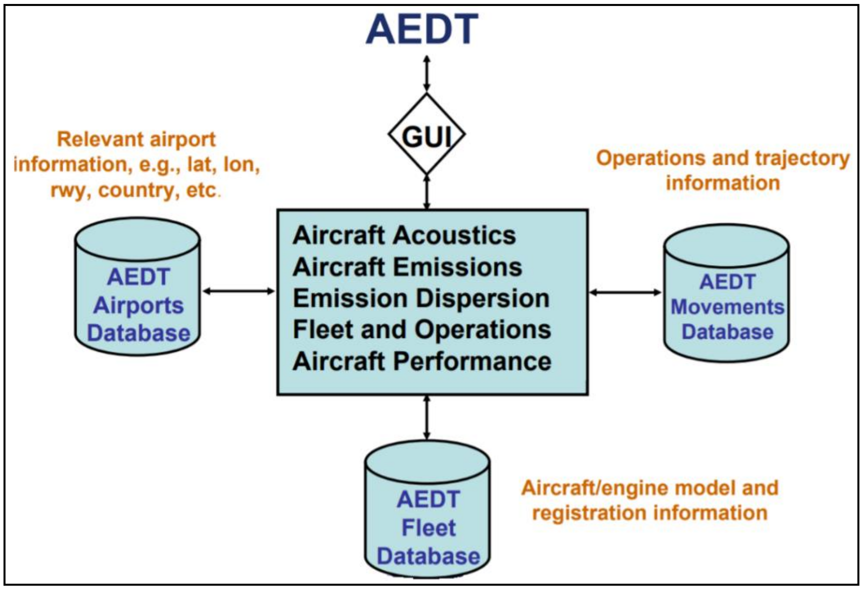

Figure 5. Key Components of the AEDT Model.

The critical databases within AEDT are described as follows:

- The study database provides the baseline template for creating a new study. This database references external data sources such as weather, terrain, as well as map layers, including input and run configuration, intermediate data, and output results for the AEDT application. The study database contains all input parameter types and units, control settings, table structure (grouping of parameters), and the relationship between tables.
- The airport database consists of data pertinent to the airports considered in the study. The database contains information corresponding to airport codes, historical averages of meteorological data extracted from the weather sensors stationed at the airports, details of airport surface structures (e.g., runways, taxiways, gates, buildings, etc.), and airspace geographical content on procedures (e.g., ground-tracks, altitude controls, etc.). Additional information about airports can be imported using the GUI.
- AEDT fleet database contains information pertaining to aircraft and non-aircraft equipment for AEDT modeling. The fleet database contains over 4,000 aircraft (airframe/engine combinations) and approximately 400 non-aircraft emissions sources (GSE, stationary power and fuel equipment, and APUs) *(29)*. AEDT provides the option to assign the non-aircraft data either as a stand-alone operation or defined in association with aircraft operations.
- AEDT movement database provides two options to incorporate operations information. The first option, where the minimum information required from the

user to be incorporated, is the equipment to be used, the time at which the operation is to take place, and the location of the operation. AEDT models this as an explicitly scheduled operation. In the second option, in addition to the user's required information on the equipment and location of operation, incorporation of activity profiles is required by AEDT to form a detailed schedule. The different inputs required by the AEDT[8] model to estimate emissions from different sources are presented in Table 18.

[8] Since the AEDT model is resource intensive, an emission rates look-up table was developed for all aircraft types in a single run or a group of runs based on the region or airport category. In addition, due to lack of fuel formulation data availability from the airports, AEDT defaults on fuels were used for the analysis.

Table 18. Input data parameters for emissions sources as required by AEDT.

Emission Sources	Input Parameters

Aircraft operation	• Airport layout (for departures and arrivals, required for delay and sequencing modeling)
	  ○ Runway locations
	  ○ Gate locations
	  ○ Taxiway locations
	  ○ Taxi path definitions
	• Aircraft operation schedule
	  ○ Date and time
	  ○ Operation type (e.g., departure, arrival, touch and go, etc.)
	  ○ Airframe model and Engine model
	  ○ Flight profile
	  ○ Runway
	  ○ Flight track
	  ○ Gate (for departures and arrivals)
	• Meteorological conditions
	  ○ Mean sea level pressure and Temperature
	  ○ Relative humidity and Wind (speed and direction)

APU	• Duration of operation • Emission rates (ERs) for pollutants (default ERs are available for system APUs) • As APU operation occurs only when an APU is installed on an aircraft, hence its operation is considered in conjunction with aircraft operation
GSE	• GSE emissions can be characterized in two ways, (a) "aircraft-assigned GSE" in which case emissions are estimated in conjunction with aircraft operations, (b) "GSE population," in which case GSE emissions are estimated based on total annual GSE operation time independent of aircraft operation • Emissions are defined by the GSE type (e.g., air conditioner), and fuel type • Duration (minutes) (default values are available) • Horsepower (power rating) (default values are available) • Load factor (percent) • Emission rates (ERs) for pollutants (default ERs are available for system GSEs)

5.2 Modeling Parameters

Landing and takeoff emissions in AEDT are affected by a multitude of parameters. The following is a discussion on the key parameters that influence emissions and their values in this study.

- **Spatial scope:** In AEDT, the three-dimensional spatial scope is defined by selecting the airport for which the EI is being developed and the mixing height.

TTI has used the default AEDT mixing height of 3,000 feet. Only landing and takeoff emissions below the mixing height are considered for the EI.

- **Temporal scope:** Temporal scope consists of the arrival and departure times. For this inventory, all operations are assigned to January 1st, 2019, at 8 am. This approach is similar to the HAS's approach used for developing EIs for IAH, EFD, and HOU *(27)*.
- **Airport layout:** Airport layout consists of runway locations, gate locations, taxiway locations, and taxipath definitions. For this study, we have used the default airport layout.
- **Ground tracks:** Each runway end can have an arrival and departure track associated with it. They are a trace of the flight path on the horizontal plane. They are represented by an ordered series of 2-D surface locations. This study generally uses four tracks for assigning aircraft and helicopter arrivals and departures; one track for assigning aircraft arrivals, one for assigning aircraft departures, one for assigning helicopter arrivals, and one for assigning helicopter departures.
- **Landing and takeoff profiles:** These are a set of points that model the geometrical and physical characteristics of an aircraft flight operation in the vertical profile. This study uses the default profiles provided by AEDT for different aircraft and helicopters.
- **Number of arrivals and departures:** The 2019 operations and the fleet mix are used to obtain the number of operations for different aircraft. Operations for each aircraft are split equally between arrivals and departures.
- **APUs:** All commercial and reliever airport aircraft are assigned an APU based on the default APU and airframe mapping provided in the AEDT Fleet database. For the aircraft with APU, a default APU operating duration of 13 minutes is used.
- **GSE:** GSE and GSE operating durations are assigned based on the AEDT default values.
- **Weather information**: This study uses the 2020 average airport weather for each facility modeled in AEDT.
- **Startup Emissions:** Startup emissions are included in the total emissions.

5.2.1 Commercial and Reliever

Each commercial and reliever facility is modeled separately based on their respective fleet mix. IAH, HOU, and EFD AEDT files were obtained from HAS. The emissions output is obtained for each aircraft arrival and departure, GSE, and APU. For aircraft arrivals and departures, this study only considers the emissions for "Descend Below Mixing Height" and "Climb Below Mixing Height," respectively.

5.2.2 Non-Commercial and -Reliever

A representative airport is used to model the emissions for different non-commercial and non-reliever facility groups. TTI obtained the emission rates for landing and takeoff for different aircraft using this approach. These emission rates were converted into emission quantities based on the operations and fleet mix data.

Table 19 lists the facility groups and the representative facility used to model these facility groups.

Table 19. Representative Facility for Different Facility Groups.

Facility Group	Representative Facility
TASP airports	T23: Albany Municipal Airport
Military airports	KBIF: Biggs Army Airfield
Military heliports	K9R7: Camp Bullis
Other public airports	KHPY: Baytown Airport
Other private airports	KEDC: Austin Executive
TASP, medical, other private, and other public heliports	78TX: Baylor Scott & White Medical Center - Grapevine Heliport
Farm or Ranch airports	KEDC: Austin Executive

6.0 EMISSION INVENTORIES

This study included the development of the AERR 2020 and 2011 through 2050 trend EIs for aircraft, APU, and GSE non-road mobile sources. Based on the methodology described in Section 3, the 2020 AERR emissions summary, 2011 through 2050 trend emissions summary, TexAER XML format output, and EPA EIS XML files were prepared for the required SCC listed in Table 4.

Appendix E and F show the county-level uncontrolled and controlled emissions respectively. The detailed EI results are included electronically as a zipped folder with tab-delimited file format in Appendix G. Statewide controlled annual and average summer weekday emissions are included in the executive summary.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

Analyses and results were subjected to appropriate internal review and QA/QC procedures, including independent verification and reasonableness checks. All work was completed consistent with applicable elements of American Society for Quality, American National Standard ASQ/ANSI: E4:2014: *Quality Management Systems for Environmental Information and Technology Programs – Requirements with Guidance for Use,* February 2014, and the TCEQ Quality Management Plan.

The Quality Assurance Project Plans (QAPP) category and project type most closely matching the intended use of this analysis are QAPP Category II (for important, highly visible Agency projects involving areas such as supporting the development of environmental regulations or standards) and modeling for NAAQS compliance. Internal review and quality control measures consistent with the QA category and project type-specific requirements provided in Guidance for Quality Assurance Project Plans for Modeling, EPA QA/G-5M *(30)*, along with appropriate audits or assessments of data and reporting of findings, were employed. These include but were not limited to the elements outlined, per EPA Requirements for Quality Assurance Project Plans (EPA QA/R-5) *(31)*, in the following description.

7.1 PROJECT MANAGEMENT

The definition and background of the work addressed by this project, the project/task description, and project documents and records are as described in the Purpose and Background sections of the Grant Activity Description (GAD). No special training or certification was required. The TTI project manager ensured project personnel used the most current, approved version of the QAPP.

According to guidance and methods documents as referenced, the objective was to produce EIs of the quality level required for air quality modeling and in consultation with the TCEQ project manager.

Basic criteria were used to assure the acceptable quality of the product, including:

- The product met the purpose of the emissions analysis;
- The full extent of the modeling domain was included;
- Agreed methods, models, tools, and data were used;
- The output data sets were produced in required formats;
- Any deficiencies found were corrected; and

- Aggregate results were comparable with available, similarly produced emissions estimates.

7.2 Assessment and Oversight

The following assessments were performed.

- Verified that the overall scope was met (i.e., consistent with the intended purpose, for specified temporal resolution and geographic coverage, for specified sources, pollutants, and emissions processes).
- Checked that input data was prepared according to the plan; and
- Checked that correct output data was produced. Records were kept of the checks performed.

If any inconsistency or deficiency was found, the issue was directly communicated to responsible staff for correction (or outside agency staff involved, if any). After any correction, QA checks were repeated to ensure that the additional work resulted in the intended result and was noted in the QA record. The project manager ensured that all QA checks performed were compiled and maintained in the project archives.

7.3 Data Validation

Erroneous or improper inputs at any point during the EI development process may produce inaccurate emissions estimates. The TTI project team performed QA checks at each step of the analysis to ensure data quality.

Any data products required for the emissions analysis were subjected to the appropriate QA checks. Any issues found needing resolution were corrected, and appropriate QA checks were performed until satisfied, ensuring the project results met the TCEQ requirements, i.e., as outlined in the GAD and QAPP. The QA/QC results are provided in Appendix H (electronic only).

Some of the protocols that TTI followed are outlined below:

- The TTI team compared the LTOs between those developed by TTI for this project and those developed by ERG from a previous study.
- Table 20 shows the differences between the ERG and TTI EI's LTOs *(8)*. The total percent difference in LTOs between the studies is within one percent.

Table 20. TTI and ERG – 2017 LTOs Comparison.

Facility Group	ERG 2017 LTOs	TTI 2017 LTOs	Percent Difference (%)
Commercial	1,596,760	1,560,809	-2.25%
Reliever	1,021,636	1,056,668	3.43%
TASP	1,281,547	1,282,092	0.04%
Other	657,227	625,522	-4.82%
All	4,557,171	4,525,110	-0.70%

- Aggregate emissions from TTI estimates were compared with ERG 2017 data for reasonableness *(8)*. Appendix I shows the pollutant emissions comparisons between TTI and ERG 2017 results. The emissions differences between the two studies can be attributed to differences in the AEDT version used, LTO, fleet mixes, engine-airframe combinations, and the modeling methodologies used by TTI and ERG.
- IAH, HOU, and EFD's emissions provided by HAS were projected to 2017 and compared with the ERG 2017 results to assess the variance in emissions between ERG and other EI sources. This check provides a reference for the variance that can be expected between different inventories. Appendix I provides the 2019 and 2017 HAS airport emissions. HAS airport provided the 2019 emissions *(27)*; the TTI team projected these emissions to 2017. Appendix I also presents the percent change in HAS emissions with respect to ERG emissions. There is a considerable variation in emissions between the two studies. The variance can be attributed to different input data and modeling approaches. Based on this comparison, it is reasonable to expect the emissions from this EI to differ from the emissions provided by the previous 2017 ERG study.
- TTI verified that the final EI data converted into TCEQ's TexAER format meets the TCEQ reporting purposes.

8.0 CONCLUSION AND RECOMMENDATION

The results from this study showed that commercial and reliever airports accounted for about 55 percent of the total statewide LTOs. In terms of emissions, commercial and reliever airports contribute around 80 percent of the NOx, PM_{10}, $PM_{2.5}$, SO_2, and VOC emissions. The percent of commercial, reliever, and TASP airport LTOs compared to statewide LTOs is around 85, and the emissions contribution to total statewide emissions is significant from these facility groups. Figure 6 shows the percentage contribution of commercial and reliever airports to the total statewide emissions. It also shows the percentage contribution of the commercial, reliever, and TASP facility group.

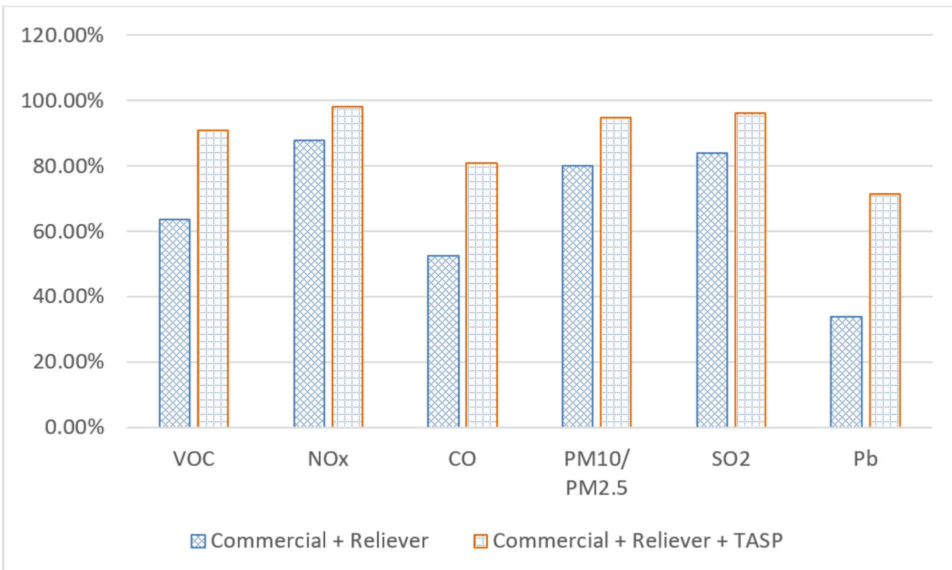

Figure 6. Percentage Contribution of Facility Groups to Statewide Emissions.

The TTI team reviewed the previous NEI's inventory development methodologies to follow previously used best practices and improve upon the methodology where warranted. The following were the focus areas for improving emission estimates:

- **Activity data development:** The TTI team reviewed various airport activity datasets and contacted multiple airports to develop a robust database of activity data. As a part of this effort, the TTI team collected detailed operation, fleet mix, taxi times, and projection factor information from the FAA datasets and individual airports. This data was used for emission modeling, thus improving the data resolution, which translated to improved emissions estimates.
- **Emissions modeling resolution:** The TTI team also aimed to improve the emissions models and develop finer resolution activity data. To accomplish this, commercial and reliever airports, which account for around 85 percent of the

total aircraft operations in Texas, were modeled individually using FAA's emission modeling software AEDT.

TTI believes that the following additional data collection efforts and prediction model development can help further improve the estimates:

1. **CSA, GSE, and APU usage data improvements:** Current EI's do not accurately estimate the GSE fleets (equipment type, fuel type, etc.) and APU usage at CSAs. It would be beneficial to develop a focused survey and collect data on equipment types and their usage statistics at these airports to improve the EIs. The focus is on commercial service airports since the GSE and APUs are predominantly used in commercial airport operations. In addition, the survey could collect data on local emissions reduction programs implemented at CSAs to improve the controlled and uncontrolled EIs.
2. **Aircraft and engine type data improvements:** The same aircraft can have multiple engine types. FAA's dataset used in this study primarily provided information on operations by aircraft; it did not provide details on the engine models used by the aircraft. Future studies can explore other data sources that provide information on common engine types used in different aircraft. One such data source is the 2018 edition of the Turbine-Engined Fleets of the World's Airlines listing by Eastman Chemical Company *(32)*. It provides information on airline, airframe, and engine types operating at airports.
3. **Aircraft operations and Fleet-mix predictions:** The COVID-19 pandemic has challenged the aviation industry and has affected response rates for data requests for EI development. To overcome this challenge, prediction models can be developed for operations and activity distributions by modes (general aviation, military, air carrier, etc.). It would be beneficial to explore alternate data sources such as BTS, FAA, and other open-source datasets to develop models that can predict activity based on the airport characteristics. This would also assist in streamlining and improving the EI development process.

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APPENDIX A:
TOG SPECIATED POLLUTANTS

Table 21. TOG Speciation Profile (Source: AEDT).

Profile Name	Pollutant Code	Pollutant Name	Mass Fraction
Aircraft: Piston	50000	Formaldehyde	0.1414
Aircraft: Piston	66251	Hexaldehyde	0.002
Aircraft: Piston	67641	Acetone	0.0293
Aircraft: Piston	71432	Benzene	0.0179
Aircraft: Piston	74828	Methane	0.1095
Aircraft: Piston	74840	Ethane	0.0092
Aircraft: Piston	74851	Ethylene	0.155
Aircraft: Piston	74862	Acetylene	0.0369
Aircraft: Piston	74986	Propane	0.002
Aircraft: Piston	75070	Acetaldehyde	0.0432
Aircraft: Piston	91203	Naphthalene	0.0051
Aircraft: Piston	95476	O-xylene	0.0018
Aircraft: Piston	98000	Furfuryl alcohol	0.0181
Aircraft: Piston	100414	Ethylbenzene	0.0015
Aircraft: Piston	100425	Styrene	0.0037
Aircraft: Piston	100527	Benzaldehyde	0.0053
Aircraft: Piston	104518	N-butylbenzene	0.0022
Aircraft: Piston	106989	1-butene	0.0179
Aircraft: Piston	106990	1,3-butadiene	0.0157
Aircraft: Piston	107028	Acrolein	0.0206
Aircraft: Piston	107222	Glyoxal	0.0253
Aircraft: Piston	107835	2-methylpentane	0.0035
Aircraft: Piston	108883	Toluene	0.0049
Aircraft: Piston	108952	Phenol (carbolic acid)	0.0022
Aircraft: Piston	109660	N-pentane	0.0019
Aircraft: Piston	109671	1-pentene	0.0075
Aircraft: Piston	111659	N-octane	0.0004
Aircraft: Piston	111660	1-octene	0.0025
Aircraft: Piston	111842	N-nonane	0.0015
Aircraft: Piston	112403	N-dodecane	0.0121
Aircraft: Piston	115071	Propylene	0.0459
Aircraft: Piston	123386	Propionaldehyde	0.009
Aircraft: Piston	123728	Butyraldehyde	0.0119
Aircraft: Piston	124118	1-nonene	0.0022
Aircraft: Piston	124185	N-decane	0.0042
Aircraft: Piston	142825	N-heptane	0.0006
Aircraft: Piston	513359	2-methyl-2-butene	0.0018
Aircraft: Piston	538681	N-pentylbenzene	0.0017
Aircraft: Piston	544763	N-Hexadecane	0.0014
Aircraft: Piston	590181	Cis-2-butene	0.0045
Aircraft: Piston	592416	1-hexene	0.0076
Aircraft: Piston	629505	N-tridecane	0.0066

Profile Name	Pollutant Code	Pollutant Name	Mass Fraction
Aircraft: Piston	629594	N-Tetradecane	0.0059
Aircraft: Piston	629629	N-Pentadecane	0.0027
Aircraft: Piston	629787	N-heptadecane	0.0001
Aircraft: Piston	872059	1-decene	0.0015
Aircraft: Piston	1120214	N-undecane	0.0052
Aircraft: Piston	25339564	Heptene	0.0052
Aircraft: Piston	108383 & 106423	M & P-xylene	0.0026
Aircraft: Piston	-	C-16 Alkane	0.0013
Aircraft: Piston	-	C6H18O3SI3	0.1177
Aircraft: Piston	-	C7-C16 Paraffins	0.0027
Aircraft: Piston	-	C8H24O4SI4	0.042
Aircraft: Piston	-	Isomers of dodecane	0.0016
Aircraft: Piston	-	Isomers of pentadecane	0.0015
Aircraft: Piston	-	Isomers of pentene	0.0064
Aircraft: Piston	-	Isomers of tetradecane	0.0017
Aircraft: Piston	-	Methyl naphthalenes	0.0044
Aircraft: Turbine and APU	50000	Formaldehyde	0.1231
Aircraft: Turbine and APU	67561	Methyl alcohol	0.01805
Aircraft: Turbine and APU	67641	Acetone	0.00369
Aircraft: Turbine and APU	71432	Benzene	0.01681
Aircraft: Turbine and APU	74840	Ethane	0.00521
Aircraft: Turbine and APU	74851	Ethylene	0.15461
Aircraft: Turbine and APU	74862	Acetylene	0.03939
Aircraft: Turbine and APU	74986	Propane	0.00078
Aircraft: Turbine and APU	75070	Acetaldehyde	0.04272
Aircraft: Turbine and APU	78853	2-methyl-2-propenal (methacrolein)	0.00429
Aircraft: Turbine and APU	78988	Methylglyoxal	0.01503
Aircraft: Turbine and APU	90120	1-Methylnaphthalene	0.00247
Aircraft: Turbine and APU	91203	Naphthalene	0.00541
Aircraft: Turbine and APU	91576	2-methylnaphthalene	0.00206
Aircraft: Turbine and APU	95476	O-xylene	0.00166
Aircraft: Turbine and APU	95636	1,2,4-trimethylbenzene (1,3,4-trimethylbenzene)	0.0035
Aircraft: Turbine and APU	98828	Isopropylbenzene (cumene)	0.00003
Aircraft: Turbine and APU	100414	Ethylbenzene	0.00174
Aircraft: Turbine and APU	100425	Styrene	0.00309
Aircraft: Turbine and APU	100527	Benzaldehyde	0.0047
Aircraft: Turbine and APU	103651	N-propylbenzene	0.00053
Aircraft: Turbine and APU	104870	p-Tolualdehyde	0.00048
Aircraft: Turbine and APU	106989	1-butene	0.01754
Aircraft: Turbine and APU	106990	1,3-butadiene	0.01687

Profile Name	Pollutant Code	Pollutant Name	Mass Fraction
Aircraft: Turbine and APU	107028	Acrolein	0.02449
Aircraft: Turbine and APU	107222	Glyoxal	0.01816
Aircraft: Turbine and APU	107835	2-methylpentane	0.00408
Aircraft: Turbine and APU	108678	1,3,5-trimethylbenzene	0.00054
Aircraft: Turbine and APU	108883	Toluene	0.00642
Aircraft: Turbine and APU	108952	Phenol (carbolic acid)	0.00726
Aircraft: Turbine and APU	109660	N-pentane	0.00198
Aircraft: Turbine and APU	109671	1-pentene	0.00776
Aircraft: Turbine and APU	110623	Valeraldehyde	0.00245
Aircraft: Turbine and APU	111659	N-octane	0.00062
Aircraft: Turbine and APU	111660	1-octene	0.00276
Aircraft: Turbine and APU	111842	N-nonane	0.00062
Aircraft: Turbine and APU	112312	Decanol	0.05843
Aircraft: Turbine and APU	112403	N-dodecane	0.00462
Aircraft: Turbine and APU	112538	Dodecanol	0.02921
Aircraft: Turbine and APU	115071	Propylene	0.04534
Aircraft: Turbine and APU	123386	Propionaldehyde	0.00727
Aircraft: Turbine and APU	123728	Butyraldehyde	0.00119
Aircraft: Turbine and APU	124118	1-nonene	0.00246
Aircraft: Turbine and APU	124185	N-decane	0.0032
Aircraft: Turbine and APU	142825	N-heptane	0.00064
Aircraft: Turbine and APU	513359	2-methyl-2-butene	0.00185
Aircraft: Turbine and APU	526738	1,2,3-trimethylbenzene	0.00106
Aircraft: Turbine and APU	529204	o-Tolualdehyde	0.0023
Aircraft: Turbine and APU	544763	N-Hexadecane	0.00049
Aircraft: Turbine and APU	563451	3-methyl-1-butene	0.00112
Aircraft: Turbine and APU	563462	2-methyl-1-butene	0.0014
Aircraft: Turbine and APU	590181	Cis-2-butene	0.0021
Aircraft: Turbine and APU	590863	Isovaleraldehyde	0.00032
Aircraft: Turbine and APU	592416	1-hexene	0.00736
Aircraft: Turbine and APU	611143	1-Methyl-2-ethylbenzene (o-ethyltoluene)	0.00065
Aircraft: Turbine and APU	620144	1-Methyl-3-ethylbenzene (m-ethyltoluene)	0.00154
Aircraft: Turbine and APU	620235	Tolualdehyde	0.00278
Aircraft: Turbine and APU	622968	1-Methyl-4-ethylbenzene (p-ethyltoluene)	0.00064
Aircraft: Turbine and APU	627203	Cis-2-pentene	0.00276
Aircraft: Turbine and APU	629505	N-tridecane	0.00535
Aircraft: Turbine and APU	629594	N-Tetradecane	0.00416
Aircraft: Turbine and APU	629629	N-Pentadecane	0.00173
Aircraft: Turbine and APU	629787	N-heptadecane	0.00009
Aircraft: Turbine and APU	646048	Trans-2-pentene	0.00359
Aircraft: Turbine and APU	691372	4-methyl-1-pentene	0.00069

Profile Name	Pollutant Code	Pollutant Name	Mass Fraction
Aircraft: Turbine and APU	763291	2-methyl-1-pentene	0.00034
Aircraft: Turbine and APU	872059	1-decene	0.00185
Aircraft: Turbine and APU	1120214	N-undecane	0.00444
Aircraft: Turbine and APU	4050457	Trans-2-hexene	0.0003
Aircraft: Turbine and APU	4170303	Crotonaldehyde	0.01033
Aircraft: Turbine and APU	25339564	Heptene	0.00438
Aircraft: Turbine and APU	28804888	Dimethyl naphthalene	0.0009
Aircraft: Turbine and APU	108383 & 106423	M & P-xylene	0.00282
Aircraft: Turbine and APU	-	C-10 Olefins	0.05843
Aircraft: Turbine and APU	-	C-10 Paraffins	0.14606
Aircraft: Turbine and APU	-	C-14 Alkane	0.00186
Aircraft: Turbine and APU	-	C-15 Alkane	0.00177
Aircraft: Turbine and APU	-	C-16 Alkane	0.00146
Aircraft: Turbine and APU	-	C-18 Alkane	0.00002
Aircraft: Turbine and APU	-	C-4 Benzene + C-3 Aroald	0.00656
Aircraft: Turbine and APU	-	C-5 Benzene + C-4 Aroald	0.00324
GSE: Diesel	50000	Formaldehyde	0.0861
GSE: Diesel	66251	Hexaldehyde	0.0008
GSE: Diesel	75070	Acetaldehyde	0.0291
GSE: Diesel	100527	Benzaldehyde	0.0055
GSE: Diesel	123386	Propionaldehyde	0.0177
GSE: Diesel	4170303	Crotonaldehyde	0.0101
GSE: Diesel	-	C-1 Compounds	0.058
GSE: Diesel	-	C-10 Compounds	0.0352
GSE: Diesel	-	C-11 Compounds	0.0358
GSE: Diesel	-	C-12 Compounds	0.022
GSE: Diesel	-	C-13 Compounds	0.0343
GSE: Diesel	-	C-14 Compounds	0.0445
GSE: Diesel	-	C-15 Compounds	0.0435
GSE: Diesel	-	C-16 Compounds	0.0349
GSE: Diesel	-	C-17 Compounds	0.0306
GSE: Diesel	-	C-18 Compounds	0.0204
GSE: Diesel	-	C-19 Compounds	0.0156
GSE: Diesel	-	C-2 Compounds	0.1996
GSE: Diesel	-	C-20 Compounds	0.0091
GSE: Diesel	-	C-21 Compounds	0.0075
GSE: Diesel	-	C-22 Compounds	0.0059
GSE: Diesel	-	C-23 Compounds	0.0048
GSE: Diesel	-	C-24 Compounds	0.0048
GSE: Diesel	-	C-25 Compounds	0.0054
GSE: Diesel	-	C-26 Compounds	0.0044

Profile Name	Pollutant Code	Pollutant Name	Mass Fraction
GSE: Diesel	-	C-27 Compounds	0.0022
GSE: Diesel	-	C-28 Compounds	0.0032
GSE: Diesel	-	C-29 Compounds	0.0014
GSE: Diesel	-	C-3 Compounds	0.0521
GSE: Diesel	-	C-30 Compounds	0.0032
GSE: Diesel	-	C-31 Compounds	0.0029
GSE: Diesel	-	C-32 Compounds	0.0027
GSE: Diesel	-	C-33 Compounds	0.0022
GSE: Diesel	-	C-34 Compounds	0.0024
GSE: Diesel	-	C-35 Compounds	0.0016
GSE: Diesel	-	C-36 Compounds	0.002
GSE: Diesel	-	C-37 Compounds	0.0008
GSE: Diesel	-	C-38 Compounds	0.0005
GSE: Diesel	-	C-39 Compounds	0.0011
GSE: Diesel	-	C-4 Compounds	0.0408
GSE: Diesel	-	C-40 Compounds	0.0002
GSE: Diesel	-	C-41 Compounds	0.0005
GSE: Diesel	-	C-42 Compounds	0.0002
GSE: Diesel	-	C-43 compounds	0.0001
GSE: Diesel	-	C-5 Compounds	0.0236
GSE: Diesel	-	C-6 Compounds	0.043
GSE: Diesel	-	C-7 Compounds	0.0289
GSE: Diesel	-	C-8 Compounds	0.0113
GSE: Diesel	-	C-9 Compounds	0.0075
GSE: Gasoline, LPG and CNG	71432	Benzene	0.0175
GSE: Gasoline, LPG and CNG	74828	Methane	0.0245
GSE: Gasoline, LPG and CNG	74840	Ethane	0.0069
GSE: Gasoline, LPG and CNG	74851	Ethylene	0.0435
GSE: Gasoline, LPG and CNG	74862	Acetylene	0.0266
GSE: Gasoline, LPG and CNG	74997	1-propyne	0.0024
GSE: Gasoline, LPG and CNG	75285	Isobutane	0.0343
GSE: Gasoline, LPG and CNG	75832	2,2-dimethylbutane	0.0022
GSE: Gasoline, LPG and CNG	78784	Isopentane	0.1104
GSE: Gasoline, LPG and CNG	78795	Isoprene	0.001
GSE: Gasoline, LPG and CNG	79298	2,3-dimethylbutane	0.0098
GSE: Gasoline, LPG and CNG	95476	O-xylene	0.0091
GSE: Gasoline, LPG and CNG	95636	1,2,4-trimethylbenzene (1,3,4-trimethylbenzene)	0.0144
GSE: Gasoline, LPG and CNG	96140	3-methylpentane	0.0154
GSE: Gasoline, LPG and CNG	96377	Methylcyclopentane	0.0111
GSE: Gasoline, LPG and CNG	100414	Ethylbenzene	0.0067
GSE: Gasoline, LPG and CNG	103651	N-propylbenzene	0.0031
GSE: Gasoline, LPG and CNG	104518	N-butylbenzene	0.0021
GSE: Gasoline, LPG and CNG	106978	N-butane	0.2242

Profile Name	Pollutant Code	Pollutant Name	Mass Fraction
GSE: Gasoline, LPG and CNG	106989	1-butene	0.0111
GSE: Gasoline, LPG and CNG	107391	2,4,4-trimethyl-1-pentene	0.0173
GSE: Gasoline, LPG and CNG	107835	2-methylpentane	0.0281
GSE: Gasoline, LPG and CNG	108087	2,4-dimethylpentane	0.0064
GSE: Gasoline, LPG and CNG	108383	M-xylene	0.0186
GSE: Gasoline, LPG and CNG	108678	1,3,5-trimethylbenzene	0.0121
GSE: Gasoline, LPG and CNG	108872	Methylcyclohexane	0.0026
GSE: Gasoline, LPG and CNG	108883	Toluene	0.0298
GSE: Gasoline, LPG and CNG	109660	N-pentane	0.0486
GSE: Gasoline, LPG and CNG	109671	1-pentene	0.0041
GSE: Gasoline, LPG and CNG	110543	N-hexane	0.0153
GSE: Gasoline, LPG and CNG	110838	Cyclohexene	0.0158
GSE: Gasoline, LPG and CNG	111659	N-octane	0.0024
GSE: Gasoline, LPG and CNG	111842	N-nonane	0.0011
GSE: Gasoline, LPG and CNG	115071	Propylene	0.0157
GSE: Gasoline, LPG and CNG	124185	N-decane	0.0011
GSE: Gasoline, LPG and CNG	135013	1,2-diethylbenzene (ortho)	0.003
GSE: Gasoline, LPG and CNG	135988	(1-Methylpropyl)benzene	0.0005
GSE: Gasoline, LPG and CNG	141935	1,3-diethylbenzene (meta)	0.0023
GSE: Gasoline, LPG and CNG	142290	Cyclopentene	0.0029
GSE: Gasoline, LPG and CNG	142825	N-heptane	0.0073
GSE: Gasoline, LPG and CNG	287923	Cyclopentane	0.0048
GSE: Gasoline, LPG and CNG	463490	1,2-propadiene	0.0011
GSE: Gasoline, LPG and CNG	496117	Indan	0.0032
GSE: Gasoline, LPG and CNG	513359	2-methyl-2-butene	0.0011
GSE: Gasoline, LPG and CNG	526738	1,2,3-trimethylbenzene	0.0026
GSE: Gasoline, LPG and CNG	540841	2,2,4-trimethylpentane	0.015
GSE: Gasoline, LPG and CNG	560214	2,3,3-trimethylpentane	0.0042
GSE: Gasoline, LPG and CNG	563451	3-methyl-1-butene	0.0014
GSE: Gasoline, LPG and CNG	565753	2,3,4-trimethylpentane	0.0026
GSE: Gasoline, LPG and CNG	589435	2,4-dimethylhexane	0.0042
GSE: Gasoline, LPG and CNG	589537	4-methylheptane	0.0025
GSE: Gasoline, LPG and CNG	589811	3-methylheptane	0.0035
GSE: Gasoline, LPG and CNG	590181	Cis-2-butene	0.0067
GSE: Gasoline, LPG and CNG	592278	2-methylheptane	0.0026
GSE: Gasoline, LPG and CNG	592416	1-hexene	0.0028
GSE: Gasoline, LPG and CNG	620144	1-Methyl-3-ethylbenzene (m-ethyltoluene)	0.0016
GSE: Gasoline, LPG and CNG	624293	Cis-1,4-dimethylcyclohexane	0.0008
GSE: Gasoline, LPG and CNG	624646	Trans-2-butene	0.0089
GSE: Gasoline, LPG and CNG	625274	2-methyl-2-pentene	0.0034

Profile Name	Pollutant Code	Pollutant Name	Mass Fraction
GSE: Gasoline, LPG and CNG	627203	Cis-2-pentene	0.0097
GSE: Gasoline, LPG and CNG	646048	Trans-2-pentene	0.0082
GSE: Gasoline, LPG and CNG	693890	1-Methylcyclopentene	0.0003
GSE: Gasoline, LPG and CNG	768569	4-Phenyl-1-butene	0.0026
GSE: Gasoline, LPG and CNG	821954	1-undecene	0.0014
GSE: Gasoline, LPG and CNG	1069530	2,3,5-trimethylhexane	0.0008
GSE: Gasoline, LPG and CNG	1074437	1-Methyl-3-propylbenzene	0.0016
GSE: Gasoline, LPG and CNG	1120214	N-undecane	0.0014
GSE: Gasoline, LPG and CNG	2051301	2,6-dimethyloctane	0.0007
GSE: Gasoline, LPG and CNG	2213232	2,4-dimethylheptane	0.0008
GSE: Gasoline, LPG and CNG	2216300	2,5-dimethylheptane	0.0013
GSE: Gasoline, LPG and CNG	2216333	3-methyloctane	0.0031
GSE: Gasoline, LPG and CNG	2216344	4-methyloctane	0.0039
GSE: Gasoline, LPG and CNG	3221612	2-methyloctane	0.0004
GSE: Gasoline, LPG and CNG	3522949	2,2,5-trimethylhexane	0.0024
GSE: Gasoline, LPG and CNG	6434782	T-2-Nonene	0.0017
GSE: Gasoline, LPG and CNG	6975980	2-methyldecane	0.0063
GSE: Gasoline, LPG and CNG	7146603	2,3-dimethyloctane	0.0052
GSE: Gasoline, LPG and CNG	7688213	Cis-2-hexene	0.0011
GSE: Gasoline, LPG and CNG	-	Cyclopentylcyclopentane	0.0046
GSE: Gasoline, LPG and CNG	-	Hexyne	0.0002
GSE: Gasoline, LPG and CNG	-	Methylcyclooctane	0.0033
GSE: Gasoline, LPG and CNG	-	Pentyne	0.0019
GSE: Gasoline, LPG and CNG	-	T-1-Phenylbutene	0.0023

Note: "-" indicates that the pollutant did not have a pollutant code (alias Chemical Abstracts Service (CAS) Number). These pollutants are not included in the final reporting.

APPENDIX B: 2019 OPERATIONS (ELECTRONIC ONLY)

Available from the TCEQ upon request.

APPENDIX C: FLEET MIX (ELECTRONIC ONLY)

Available from the TCEQ upon request.

APPENDIX D: FORECASTING FACTORS (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).

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Anderson	2275020000	0.7393	0.3088	3.6269	0.0087	0.0604	0.0006
Anderson	2275060012	0.1950	5.2203	1.1073	0.0594	0.2969	0.0000
Anderson	2275050011	0.8265	0.0684	38.6055	0.0223	0.0454	0.0217
Anderson	2275050012	5.8766	3.7511	19.4369	0.0852	0.5762	0.0000
Anderson	2275001000	0.0347	0.0678	0.3713	0.0003	0.0098	0.0000
Andrews	2275020000	0.1301	0.0641	0.5580	0.0011	0.0154	0.0000
Andrews	2275060012	0.0228	0.0017	0.0527	0.0002	0.0005	0.0000
Andrews	2275050011	0.2273	0.0082	11.4596	0.0058	0.0118	0.0065
Andrews	2275050012	1.7871	1.5150	8.3769	0.0227	0.2621	0.0000
Andrews	2275001000	0.0006	0.0067	0.0091	0.0000	0.0014	0.0000
Angelina	2275020000	0.2805	0.2457	4.1954	0.0035	0.0443	0.0019
Angelina	2275060012	0.1558	0.0807	0.3275	0.0015	0.0134	0.0000
Angelina	2275050011	1.9746	0.0588	98.1467	0.0508	0.0898	0.0536
Angelina	2275050012	6.5182	14.0335	24.7977	0.1925	1.2117	0.0000
Angelina	2275001000	0.7756	0.1701	3.9081	0.0068	0.0536	0.0003
Aransas	2275020000	4.8661	0.9241	9.6751	0.0397	0.1891	0.0004
Aransas	2275060012	1.3625	10.9177	4.8975	0.1265	0.6913	0.0000
Aransas	2275050011	3.0095	0.1303	160.7636	0.0827	0.1721	0.0908
Aransas	2275050012	19.7527	27.2409	59.3845	0.4608	2.4709	0.0000
Aransas	2275001000	1.5145	0.6574	5.4010	0.0145	0.1528	0.0001
Archer	2275050011	0.2126	0.0075	9.2401	0.0059	0.0088	0.0054
Archer	2275050012	0.0064	0.0005	0.0147	0.0001	0.0002	0.0000
Armstrong	2275050011	0.0784	0.0028	3.6671	0.0023	0.0034	0.0021
Armstrong	2275050012	0.0087	0.0005	0.0196	0.0001	0.0002	0.0000
Atascosa	2275020000	0.2270	0.0508	1.3480	0.0020	0.0167	0.0002
Atascosa	2275050011	1.1684	0.0104	58.1761	0.0356	0.0482	0.0309
Atascosa	2275050012	2.9642	1.7901	8.4677	0.0354	0.2566	0.0000
Atascosa	2275001000	0.3388	0.1309	1.5991	0.0030	0.0347	0.0000
Austin	2275050011	0.3839	0.0141	18.7612	0.0121	0.0177	0.0109
Austin	2275050012	0.0538	0.0306	0.1298	0.0004	0.0047	0.0000
Bailey	2275020000	0.1938	0.0380	0.8421	0.0019	0.0125	0.0000
Bailey	2275050011	1.3875	0.0524	74.8584	0.0464	0.0714	0.0441
Bailey	2275050012	1.1414	0.3192	2.7052	0.0107	0.0641	0.0000
Bailey	2275001000	0.0186	0.3220	0.1104	0.0036	0.0201	0.0000
Bandera	2275050011	0.3500	0.0124	15.8671	0.0101	0.0149	0.0093
Bandera	2275050012	0.0298	0.0292	0.0754	0.0002	0.0041	0.0000
Bastrop	2275050011	2.2743	0.1148	114.5822	0.0665	0.1400	0.0721
Bastrop	2275050012	0.7664	0.2639	2.0978	0.0073	0.0675	0.0000
Bastrop	2275001000	0.9735	0.0942	2.2923	0.0079	0.0298	0.0000
Baylor	2275020000	0.2661	0.0836	0.9921	0.0053	0.0211	0.0000
Baylor	2275050011	0.1585	0.0053	8.9848	0.0039	0.0096	0.0050
Baylor	2275050012	2.1121	0.9013	4.8324	0.0211	0.1460	0.0000
Baylor	2275001000	0.0334	2.0073	0.3345	0.0225	0.1137	0.0000
Bee	2275020000	0.3540	0.0549	0.9094	0.0032	0.0148	0.0001
Bee	2275060012	0.0818	0.0372	0.1706	0.0008	0.0055	0.0000
Bee	2275050011	0.1461	0.0041	7.8937	0.0039	0.0081	0.0043
Bee	2275050012	0.9699	2.1827	4.0001	0.0277	0.2030	0.0000
Bee	2275001000	0.1794	0.1877	0.6261	0.0015	0.0402	0.0000
Bell	2275020000	17.0802	54.5844	74.0493	0.4598	5.4472	0.0019
Bell	2275060012	1.7980	17.4147	7.9483	0.2167	1.1376	0.0000
Bell	2275050011	5.0763	0.4059	266.1086	0.1375	0.2613	0.1551
Bell	2275050012	23.5234	18.1290	66.0035	0.3505	2.2265	0.0000
Bell	2275001000	14.1853	4.3968	43.8767	0.1190	0.7673	0.0002

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Bell	2275070000	0.0355	0.5262	1.2998	0.0733	0.1024	0.0000
Bell	2265008005	0.1042	0.2623	4.0848	0.0000	0.0000	0.0000
Bell	2270008005	0.0212	0.1168	0.0240	0.0023	0.0000	0.0000
Bexar	2275020000	51.6970	356.0245	322.3607	2.6818	31.3885	0.0368
Bexar	2275060012	2.4110	12.1154	9.9341	0.1411	1.1144	0.0000
Bexar	2275050011	13.3312	0.6986	724.3511	0.4317	0.7960	0.4178
Bexar	2275050012	48.1312	46.0626	150.5707	0.8096	5.7210	0.0000
Bexar	2275001000	64.0372	32.1396	379.4614	0.7498	7.1150	0.0039
Bexar	2275070000	1.4767	14.8747	18.6923	1.7519	2.3982	0.0000
Bexar	2265008005	3.3255	6.6439	115.0182	0.0000	0.0000	0.0000
Bexar	2270008005	0.8907	5.9717	1.7628	0.0754	0.0000	0.0000
Blanco	2275050011	3.1170	0.1072	128.7738	0.0808	0.1211	0.0752
Blanco	2275050012	0.0149	0.0008	0.0335	0.0001	0.0003	0.0000
Bosque	2275020000	0.7581	0.1690	3.8244	0.0071	0.0546	0.0000
Bosque	2275050011	0.6052	0.0761	32.4725	0.0187	0.0448	0.0278
Bosque	2275050012	1.0573	0.4256	2.5823	0.0092	0.0961	0.0000
Bosque	2275001000	0.0642	4.2718	0.6989	0.0478	0.2418	0.0000
Bowie	2275050011	0.0784	0.0030	4.2860	0.0028	0.0040	0.0025
Bowie	2275050012	0.0228	0.0766	0.0738	0.0001	0.0100	0.0000
Brazoria	2275020000	4.7277	1.0941	54.9028	0.0505	0.2860	0.0287
Brazoria	2275060012	0.7491	4.1484	2.3063	0.0530	0.2921	0.0000
Brazoria	2275050011	14.8347	0.7384	777.2265	0.3874	0.7608	0.4470
Brazoria	2275050012	66.1779	19.7081	147.8361	0.7758	4.3229	0.0000
Brazoria	2275001000	0.3108	0.6010	3.0019	0.0095	0.1271	0.0000
Brazoria	2275070000	0.0880	0.8589	4.6749	0.1169	0.2128	0.0000
Brazoria	2265008005	0.4649	1.1133	17.7066	0.0000	0.0000	0.0000
Brazoria	2270008005	0.1054	0.6396	0.1353	0.0256	0.0000	0.0000
Brazos	2275020000	12.4746	33.2084	44.9869	0.3426	3.2303	0.0047
Brazos	2275060012	1.2819	8.3613	4.3720	0.0989	0.5972	0.0000
Brazos	2275050011	3.4480	0.1889	180.0998	0.0962	0.1768	0.1024
Brazos	2275050012	15.0345	14.8825	50.8095	0.2557	1.8687	0.0000
Brazos	2275001000	8.4871	1.4159	25.1139	0.0850	0.4086	0.0006
Brazos	2275070000	0.1087	1.1599	3.2922	0.1736	0.2656	0.0000
Brazos	2265008005	0.5405	1.3043	20.6055	0.0000	0.0000	0.0000
Brazos	2270008005	0.0673	0.4877	0.0857	0.0064	0.0000	0.0000
Brewster	2275020000	0.6961	0.4042	2.2643	0.0060	0.0808	0.0002
Brewster	2275060012	0.4363	2.3311	1.2603	0.0268	0.1597	0.0000
Brewster	2275050011	2.5184	0.1136	148.9440	0.1024	0.1474	0.0859
Brewster	2275050012	4.9102	3.6495	16.1488	0.0542	0.6067	0.0000
Brewster	2275001000	0.0184	0.0124	0.1066	0.0003	0.0027	0.0000
Briscoe	2275050011	0.0008	0.0000	0.0388	0.0000	0.0000	0.0000
Briscoe	2275050012	0.0001	0.0000	0.0002	0.0000	0.0000	0.0000
Brooks	2275020000	0.4581	0.5253	1.8228	0.0135	0.0813	0.0000
Brooks	2275060012	0.8506	5.1432	3.8559	0.0647	0.3914	0.0000
Brooks	2275050011	0.1812	0.0040	8.6333	0.0053	0.0080	0.0048
Brooks	2275050012	4.0270	6.1662	12.0765	0.1247	0.6405	0.0000
Brooks	2275001000	0.1657	0.2923	1.0353	0.0013	0.0639	0.0000
Brown	2275020000	0.5332	0.1579	2.7464	0.0052	0.0386	0.0005
Brown	2275060012	0.1424	1.3867	0.7074	0.0154	0.0949	0.0000
Brown	2275050011	0.8176	0.0233	39.8016	0.0207	0.0393	0.0222
Brown	2275050012	5.1072	1.8129	15.4577	0.0570	0.3509	0.0000
Brown	2275001000	0.3170	0.1083	1.5895	0.0035	0.0302	0.0000
Burleson	2275020000	0.0151	0.1302	0.2180	0.0000	0.0303	0.0000
Burleson	2275050011	0.7013	0.0440	45.0401	0.0230	0.0547	0.0266
Burleson	2275050012	0.0473	0.2648	0.3854	0.0002	0.0523	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Burnet	2275020000	0.8876	1.3673	6.4991	0.0178	0.1475	0.0017
Burnet	2275060012	0.5856	4.9096	2.0554	0.0567	0.3081	0.0000
Burnet	2275050011	3.7697	0.1054	220.6154	0.1272	0.2104	0.1184
Burnet	2275050012	12.4274	11.3424	39.3657	0.2036	1.2325	0.0000
Burnet	2275001000	0.1562	0.0594	1.5679	0.0014	0.0155	0.0004
Caldwell	2275020000	3.4745	4.5667	73.3858	0.0450	0.8612	0.0347
Caldwell	2275060012	1.0352	1.0073	2.1061	0.0168	0.1020	0.0000
Caldwell	2275050011	4.8928	0.3666	258.5828	0.1316	0.2922	0.1546
Caldwell	2275050012	30.7121	9.5421	71.0087	0.3225	1.8114	0.0000
Caldwell	2275001000	2.6850	0.3927	9.0980	0.0251	0.1271	0.0008
Caldwell	2275070000	0.0884	1.0730	4.9718	0.1664	0.2879	0.0000
Caldwell	2265008005	0.5008	1.1791	18.7196	0.0000	0.0000	0.0000
Caldwell	2270008005	0.0866	0.4865	0.0899	0.0024	0.0000	0.0000
Calhoun	2275020000	0.3404	0.0335	0.6800	0.0025	0.0097	0.0001
Calhoun	2275060012	0.1421	0.5372	0.3388	0.0067	0.0351	0.0000
Calhoun	2275050011	1.0124	0.0287	61.1233	0.0419	0.0582	0.0346
Calhoun	2275050012	5.0891	1.1987	12.5232	0.0455	0.2711	0.0000
Calhoun	2275001000	0.5741	0.4123	1.8902	0.0063	0.0856	0.0000
Callahan	2275050011	0.1450	0.0055	7.9316	0.0052	0.0074	0.0046
Callahan	2275050012	0.0385	0.0020	0.0866	0.0003	0.0009	0.0000
Cameron	2275020000	37.8067	177.2799	155.5344	1.6852	17.9126	0.0026
Cameron	2275060012	1.0092	10.6417	7.7822	0.1052	1.1272	0.0000
Cameron	2275050011	5.3685	0.3998	151.9895	0.0959	0.2209	0.0868
Cameron	2275050012	21.7994	16.2342	61.7470	0.3177	2.3356	0.0000
Cameron	2275001000	3.3201	4.0981	15.3300	0.0651	0.7695	0.0001
Cameron	2275070000	1.1506	6.2143	10.3534	0.9353	1.1032	0.0000
Cameron	2265008005	1.7003	3.5542	60.0820	0.0000	0.0000	0.0000
Cameron	2270008005	0.4378	2.9823	0.8665	0.0920	0.0000	0.0000
Camp	2275050011	0.0380	0.0014	2.0790	0.0014	0.0019	0.0012
Camp	2275050012	0.0111	0.0398	0.0367	0.0001	0.0052	0.0000
Carson	2275020000	0.3089	0.0840	1.7802	0.0030	0.0269	0.0000
Carson	2275050011	0.5511	0.0175	28.9953	0.0179	0.0269	0.0166
Carson	2275050012	0.6067	0.2059	1.6244	0.0049	0.0436	0.0000
Cass	2275020000	1.1075	0.5921	5.9387	0.0130	0.1171	0.0000
Cass	2275050011	2.2382	0.0608	133.5541	0.0640	0.1224	0.0752
Cass	2275050012	3.6761	1.9021	5.0526	0.0317	0.2749	0.0000
Castro	2275020000	0.1809	0.0355	0.7860	0.0018	0.0116	0.0000
Castro	2275050011	0.3759	0.0137	18.9759	0.0102	0.0191	0.0116
Castro	2275050012	0.8094	0.2845	1.9487	0.0083	0.0540	0.0000
Castro	2275001000	0.0174	0.3005	0.1030	0.0034	0.0188	0.0000
Chambers	2275020000	1.8694	0.4949	10.6819	0.0179	0.1598	0.0000
Chambers	2275050011	1.8214	0.0724	117.2891	0.0789	0.1177	0.0689
Chambers	2275050012	1.4881	0.3008	2.9548	0.0125	0.0645	0.0000
Cherokee	2275020000	3.2050	0.3869	6.9528	0.0244	0.0999	0.0009
Cherokee	2275060012	0.0232	0.0801	0.1524	0.0006	0.0090	0.0000
Cherokee	2275050011	1.8175	0.0682	92.1848	0.0465	0.0947	0.0525
Cherokee	2275050012	7.7450	1.9601	20.9505	0.0637	0.4957	0.0000
Cherokee	2275001000	0.2965	0.0413	0.8056	0.0022	0.0128	0.0000
Childress	2275020000	0.4181	0.0783	0.7529	0.0030	0.0176	0.0000
Childress	2275060012	0.0272	1.3843	0.2547	0.0155	0.0790	0.0000
Childress	2275050011	0.2089	0.0083	11.0135	0.0066	0.0110	0.0059
Childress	2275050012	1.3507	0.8279	4.6724	0.0128	0.1623	0.0000
Childress	2275001000	0.0655	0.0075	0.2486	0.0006	0.0028	0.0000
Clay	2275050011	1.1229	0.0428	61.4131	0.0399	0.0574	0.0357
Clay	2275050012	0.2978	0.0156	0.6704	0.0019	0.0068	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Cochran	2275020000	0.0711	0.0139	0.3088	0.0007	0.0046	0.0000
Cochran	2275050011	0.1147	0.0042	5.8981	0.0030	0.0060	0.0036
Cochran	2275050012	0.3140	0.1116	0.7566	0.0032	0.0211	0.0000
Cochran	2275001000	0.0068	0.1181	0.0405	0.0013	0.0074	0.0000
Coleman	2275020000	0.2656	0.0436	1.1468	0.0026	0.0131	0.0003
Coleman	2275050011	0.4437	0.0146	22.6596	0.0119	0.0236	0.0139
Coleman	2275050012	4.8966	0.9438	14.5831	0.0499	0.2805	0.0000
Collin	2275020000	14.0152	20.8988	81.6670	0.3194	2.0710	0.0290
Collin	2275060012	6.0454	78.2036	21.2275	0.9428	4.6300	0.0000
Collin	2275050011	8.7691	0.7923	503.0025	0.2744	0.4451	0.3074
Collin	2275050012	44.8768	117.5983	140.5640	1.6899	10.1679	0.0000
Collin	2275001000	0.3455	0.1256	6.0314	0.0037	0.0247	0.0024
Collin	2275070000	0.5271	7.1760	23.2261	1.0648	1.5045	0.0000
Collin	2265008005	0.8919	2.2115	34.6148	0.0000	0.0000	0.0000
Collin	2270008005	0.1810	1.0531	0.2011	0.0195	0.0000	0.0000
Collingsworth	2275020000	0.2820	0.0933	1.5040	0.0025	0.0253	0.0000
Collingsworth	2275050011	0.2267	0.0090	11.1473	0.0067	0.0109	0.0067
Collingsworth	2275050012	1.0316	0.5558	2.3968	0.0094	0.1040	0.0000
Collingsworth	2275001000	0.0282	0.9806	0.2475	0.0111	0.0559	0.0000
Colorado	2275020000	0.5251	0.2514	5.2070	0.0088	0.0658	0.0013
Colorado	2275050011	1.2410	0.0525	70.4592	0.0328	0.0765	0.0403
Colorado	2275050012	3.4293	1.5385	7.6468	0.0337	0.2566	0.0000
Colorado	2275001000	0.3510	1.6885	1.6779	0.0188	0.1605	0.0000
Comal	2275020000	0.0017	0.0003	0.1361	0.0000	0.0001	0.0001
Comal	2275050011	1.9197	0.1067	112.9337	0.0669	0.0991	0.0678
Comal	2275050012	0.2952	0.1474	0.7304	0.0026	0.0235	0.0000
Comanche	2275020000	1.5701	0.5846	9.0222	0.0217	0.1652	0.0000
Comanche	2275050011	0.5742	0.0101	30.5938	0.0153	0.0293	0.0168
Comanche	2275050012	3.8768	1.1445	8.1576	0.0346	0.2157	0.0000
Comanche	2275001000	0.1165	1.4732	0.6827	0.0172	0.0936	0.0000
Concho	2275050011	0.0005	0.0000	0.0191	0.0000	0.0000	0.0000
Cooke	2275020000	0.3661	0.4485	1.6072	0.0062	0.0445	0.0005
Cooke	2275060012	0.1413	2.1690	0.6302	0.0251	0.1298	0.0000
Cooke	2275050011	0.9889	0.0360	54.0882	0.0346	0.0525	0.0311
Cooke	2275050012	3.2215	1.9226	8.2539	0.0435	0.2532	0.0000
Cooke	2275001000	0.1226	0.0338	1.7507	0.0009	0.0083	0.0009
Coryell	2275020000	11.3728	3.8686	79.1661	0.1434	1.1472	0.0000
Coryell	2275050011	0.1476	0.0164	8.0479	0.0048	0.0105	0.0065
Coryell	2275050012	0.2231	0.0812	0.5417	0.0019	0.0190	0.0000
Coryell	2275001000	0.0130	0.8677	0.1420	0.0097	0.0491	0.0000
Cottle	2275020000	0.1106	0.0366	0.5898	0.0010	0.0099	0.0000
Cottle	2275050011	0.1239	0.0048	5.9006	0.0036	0.0057	0.0035
Cottle	2275050012	0.4063	0.2180	0.9439	0.0037	0.0408	0.0000
Cottle	2275001000	0.0111	0.3846	0.0971	0.0044	0.0219	0.0000
Crane	2275020000	0.0866	0.0348	0.5082	0.0013	0.0096	0.0000
Crane	2275050011	0.0517	0.0011	2.6736	0.0013	0.0025	0.0015
Crane	2275050012	0.6478	0.2449	1.6274	0.0058	0.0476	0.0000
Crane	2275001000	0.0051	0.2000	0.0349	0.0023	0.0113	0.0000
Crockett	2275020000	0.1043	0.0437	0.5564	0.0014	0.0111	0.0000
Crockett	2275050011	0.1327	0.0061	7.7972	0.0049	0.0083	0.0047
Crockett	2275050012	3.1638	0.5113	7.2236	0.0301	0.1114	0.0000
Crockett	2275001000	0.0179	0.6070	0.1179	0.0068	0.0348	0.0000
Crosby	2275020000	0.0808	0.0158	0.3509	0.0008	0.0052	0.0000
Crosby	2275050011	1.4340	0.0495	60.2426	0.0370	0.0572	0.0354
Crosby	2275050012	0.3568	0.1268	0.8598	0.0037	0.0240	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Crosby	2275001000	0.0078	0.1342	0.0460	0.0015	0.0084	0.0000
Culberson	2275020000	0.4001	0.3249	2.1053	0.0137	0.0666	0.0000
Culberson	2275050011	0.1878	0.0048	9.4387	0.0054	0.0089	0.0053
Culberson	2275050012	1.8172	1.3027	4.4949	0.0219	0.1770	0.0000
Culberson	2275001000	0.0604	1.4284	0.4354	0.0159	0.0868	0.0000
Dallam	2275050011	0.5377	0.0205	29.4005	0.0191	0.0275	0.0171
Dallam	2275050012	0.1425	0.0074	0.3208	0.0009	0.0033	0.0000
Dallas	2275020000	92.0462	367.9688	501.0962	2.8975	35.9772	0.0691
Dallas	2275060012	14.5556	68.7164	50.6894	0.9288	5.3586	0.0000
Dallas	2275050011	22.0092	1.2781	1067.1720	0.5300	1.0836	0.6205
Dallas	2275050012	174.1110	230.2115	520.8540	3.3525	26.4655	0.0000
Dallas	2275001000	5.1075	15.3948	28.5137	0.1288	1.5863	0.0048
Dallas	2275070000	2.2085	26.5854	56.4057	3.4389	4.9530	0.0000
Dallas	2265008005	6.7448	14.1935	239.2275	0.0000	0.0000	0.0000
Dallas	2270008005	1.4035	9.3255	2.5108	0.0727	0.0000	0.0000
Dawson	2275020000	0.4673	0.1380	2.6962	0.0051	0.0428	0.0000
Dawson	2275050011	0.2754	0.0080	16.5933	0.0109	0.0163	0.0092
Dawson	2275050012	4.8917	2.4026	13.6349	0.0550	0.5423	0.0000
Dawson	2275001000	0.0023	0.0062	0.0296	0.0000	0.0016	0.0000
De Witt	2275020000	0.0140	0.0054	0.0787	0.0002	0.0014	0.0000
De Witt	2275050011	0.0066	0.0003	0.3522	0.0001	0.0003	0.0002
De Witt	2275050012	0.1145	0.0860	0.2486	0.0011	0.0124	0.0000
De Witt	2275001000	0.0006	0.0469	0.0069	0.0005	0.0026	0.0000
Deaf Smith	2275020000	0.2572	0.2752	1.2435	0.0029	0.0512	0.0000
Deaf Smith	2275060012	0.0083	0.6051	0.0886	0.0068	0.0338	0.0000
Deaf Smith	2275050011	0.4979	0.0076	25.4141	0.0135	0.0240	0.0141
Deaf Smith	2275050012	2.1923	2.7829	7.7724	0.0382	0.3492	0.0000
Delta	2275050011	0.0005	0.0000	0.0191	0.0000	0.0000	0.0000
Denton	2275020000	18.6038	10.9174	123.2453	0.2086	1.9820	0.0434
Denton	2275060012	4.7186	9.2486	9.3593	0.1356	0.6690	0.0000
Denton	2275050011	36.7266	1.1893	1959.4648	1.0589	1.9984	1.1117
Denton	2275050012	49.2422	37.5739	137.0602	0.6245	5.2541	0.0000
Denton	2275001000	0.8804	0.3787	11.7586	0.0070	0.1049	0.0053
Denton	2275070000	0.1530	3.4687	13.9924	0.4293	0.7075	0.0000
Denton	2265008005	1.0427	2.6004	40.8441	0.0000	0.0000	0.0000
Denton	2270008005	0.2810	1.4443	0.3174	0.0337	0.0000	0.0000
Dickens	2275050011	0.0756	0.0027	3.5524	0.0023	0.0033	0.0021
Dickens	2275050012	0.0087	0.0005	0.0196	0.0001	0.0002	0.0000
Dimmit	2275020000	0.3320	0.1816	1.2285	0.0040	0.0316	0.0000
Dimmit	2275060012	0.0155	0.1561	0.1086	0.0017	0.0115	0.0000
Dimmit	2275050011	0.1607	0.0053	7.2794	0.0043	0.0072	0.0043
Dimmit	2275050012	1.0336	0.5636	4.2288	0.0116	0.1096	0.0000
Dimmit	2275001000	0.1231	0.0104	0.3746	0.0012	0.0032	0.0000
Donley	2275020000	0.1659	0.0549	0.8847	0.0015	0.0149	0.0000
Donley	2275050011	0.0893	0.0038	4.7463	0.0028	0.0047	0.0029
Donley	2275050012	0.6068	0.3269	1.4099	0.0055	0.0612	0.0000
Donley	2275001000	0.0166	0.5769	0.1456	0.0066	0.0329	0.0000
Duval	2275020000	0.0072	0.0032	0.0349	0.0001	0.0007	0.0000
Duval	2275050011	0.2044	0.0070	8.9654	0.0056	0.0084	0.0052
Duval	2275050012	0.0722	0.0246	0.1654	0.0006	0.0048	0.0000
Duval	2275001000	0.0020	0.0003	0.0069	0.0000	0.0001	0.0000
Eastland	2275020000	3.5904	0.5399	10.6095	0.0360	0.1587	0.0008
Eastland	2275050011	1.2045	0.0330	58.5326	0.0276	0.0561	0.0326
Eastland	2275050012	7.3576	1.2646	17.4038	0.0642	0.3237	0.0000
Eastland	2275001000	0.0011	0.0098	0.0164	0.0000	0.0023	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Ector	2275020000	10.7128	2.9577	26.5386	0.0872	0.7048	0.0007
Ector	2275060012	0.4687	5.9857	1.7068	0.0690	0.3528	0.0000
Ector	2275050011	2.5750	0.1413	137.1937	0.0758	0.1529	0.0755
Ector	2275050012	55.5014	38.8002	130.7449	0.7225	4.8303	0.0000
Ector	2275001000	0.0781	0.0120	1.0242	0.0009	0.0043	0.0004
Edwards	2275020000	0.0233	0.0098	0.1242	0.0003	0.0025	0.0000
Edwards	2275050011	0.2024	0.0073	8.8364	0.0055	0.0085	0.0052
Edwards	2275050012	0.7059	0.1141	1.6118	0.0067	0.0249	0.0000
Edwards	2275001000	0.0040	0.1354	0.0263	0.0015	0.0078	0.0000
El Paso	2275020000	41.6733	270.4860	206.0649	2.0986	22.5620	0.0061
El Paso	2275060012	1.6561	13.8702	11.4915	0.0996	1.5223	0.0000
El Paso	2275050011	0.6646	0.0256	35.4894	0.0162	0.0328	0.0177
El Paso	2275050012	8.2819	17.3567	29.5063	0.2103	1.8116	0.0000
El Paso	2275001000	4.1512	4.4366	23.8818	0.0693	0.6002	0.0003
El Paso	2275070000	1.4836	8.8705	12.7953	1.2061	1.5031	0.0000
El Paso	2265008005	1.9707	3.8866	67.5999	0.0000	0.0000	0.0000
El Paso	2270008005	0.5519	3.8229	1.1418	0.0857	0.0000	0.0000
Ellis	2275020000	5.4897	2.4936	16.2816	0.0587	0.4284	0.0006
Ellis	2275060012	2.3107	11.9593	6.4795	0.1443	0.7833	0.0000
Ellis	2275050011	5.7448	0.6823	312.4270	0.1876	0.4241	0.1818
Ellis	2275050012	21.4740	12.4602	59.2155	0.2473	1.9306	0.0000
Ellis	2275001000	0.3580	0.4998	2.6639	0.0082	0.0590	0.0000
Erath	2275020000	1.5804	0.2346	6.4084	0.0141	0.0643	0.0021
Erath	2275060012	0.1358	0.3850	0.3423	0.0050	0.0270	0.0000
Erath	2275050011	1.6798	0.2226	56.4650	0.0276	0.0867	0.0330
Erath	2275050012	3.5840	0.8938	11.5165	0.0309	0.2129	0.0000
Erath	2275001000	0.0466	0.0108	0.4582	0.0004	0.0030	0.0001
Falls	2275020000	0.0415	0.0092	0.2091	0.0004	0.0030	0.0000
Falls	2275050011	0.0733	0.0057	3.9958	0.0025	0.0045	0.0028
Falls	2275050012	0.0689	0.0223	0.1656	0.0006	0.0053	0.0000
Falls	2275001000	0.0035	0.2336	0.0382	0.0026	0.0132	0.0000
Fannin	2275020000	0.6088	0.1874	3.7167	0.0104	0.0601	0.0000
Fannin	2275050011	1.1688	0.0501	66.1475	0.0286	0.0744	0.0384
Fannin	2275050012	8.7701	2.0729	18.6708	0.0808	0.4401	0.0000
Fannin	2275001000	0.0046	0.3325	0.0487	0.0037	0.0186	0.0000
Fayette	2275020000	0.3444	0.1927	1.2720	0.0034	0.0379	0.0001
Fayette	2275060012	0.6744	2.3751	1.7595	0.0295	0.1634	0.0000
Fayette	2275050011	0.7060	0.0393	30.0790	0.0135	0.0310	0.0169
Fayette	2275050012	8.0418	3.7029	18.5518	0.0963	0.4888	0.0000
Fayette	2275001000	0.0397	0.0141	0.1046	0.0004	0.0032	0.0000
Fisher	2275020000	0.3831	0.1089	1.9112	0.0055	0.0323	0.0000
Fisher	2275050011	0.2331	0.0042	11.3392	0.0056	0.0099	0.0062
Fisher	2275050012	1.6874	0.6299	3.6972	0.0169	0.1240	0.0000
Fisher	2275001000	0.0150	1.0912	0.1598	0.0123	0.0610	0.0000
Floyd	2275020000	0.4070	0.0798	1.7684	0.0040	0.0262	0.0000
Floyd	2275050011	0.7539	0.0276	39.0811	0.0208	0.0395	0.0239
Floyd	2275050012	1.8242	0.6403	4.3913	0.0188	0.1216	0.0000
Floyd	2275001000	0.0391	0.6762	0.2318	0.0075	0.0422	0.0000
Foard	2275050011	0.0901	0.0034	4.9264	0.0032	0.0046	0.0029
Foard	2275050012	0.0239	0.0012	0.0538	0.0002	0.0005	0.0000
Fort Bend	2275020000	13.8730	18.4837	82.0453	0.3411	1.8985	0.0243
Fort Bend	2275060012	6.1001	28.3232	20.1452	0.4010	2.1722	0.0000
Fort Bend	2275050011	5.8483	0.1959	292.1332	0.1467	0.2879	0.1661
Fort Bend	2275050012	49.0821	51.4412	134.8891	0.9626	6.0257	0.0000
Fort Bend	2275001000	0.6354	0.2017	2.1567	0.0065	0.0550	0.0001

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Fort Bend	2275070000	0.2027	3.2511	13.4725	0.4995	0.7022	0.0000
Fort Bend	2265008005	0.9011	2.2521	35.0539	0.0000	0.0000	0.0000
Fort Bend	2270008005	0.1279	0.8346	0.1480	0.0191	0.0000	0.0000
Franklin	2275050011	1.0830	0.0444	57.1760	0.0280	0.0625	0.0353
Franklin	2275050012	0.2418	0.1727	0.5836	0.0023	0.0303	0.0000
Freestone	2275020000	0.0051	0.0440	0.0737	0.0000	0.0102	0.0000
Freestone	2275050011	0.2389	0.0148	14.8905	0.0075	0.0182	0.0088
Freestone	2275050012	0.0084	0.1035	0.1174	0.0000	0.0193	0.0000
Frio	2275020000	0.1147	0.0816	0.9253	0.0052	0.0194	0.0002
Frio	2275060012	0.8828	4.2057	1.9018	0.0528	0.2547	0.0000
Frio	2275050011	0.2859	0.0049	19.2582	0.0136	0.0198	0.0112
Frio	2275050012	1.7567	2.3229	5.6999	0.0478	0.2388	0.0000
Frio	2275001000	0.0049	0.1043	0.0464	0.0010	0.0081	0.0000
Gaines	2275020000	0.0894	0.1278	0.6019	0.0008	0.0289	0.0000
Gaines	2275050011	1.2041	0.0411	61.0155	0.0393	0.0581	0.0350
Gaines	2275050012	6.3866	2.9050	19.0781	0.0714	0.6708	0.0000
Galveston	2275020000	2.8341	2.8351	13.3067	0.0535	0.3298	0.0029
Galveston	2275060012	0.5299	3.7603	2.0744	0.0482	0.2794	0.0000
Galveston	2275050011	3.5291	0.1690	179.7286	0.0952	0.1746	0.1015
Galveston	2275050012	12.1560	6.5780	31.9843	0.1803	1.0196	0.0000
Galveston	2275001000	0.5643	0.2895	2.7995	0.0065	0.0766	0.0000
Galveston	2275070000	0.0256	0.4250	1.8464	0.0625	0.0931	0.0000
Galveston	2265008005	0.1727	0.4402	6.8297	0.0000	0.0000	0.0000
Galveston	2270008005	0.0317	0.1882	0.0398	0.0041	0.0000	0.0000
Garza	2275020000	0.1938	0.0380	0.8421	0.0019	0.0125	0.0000
Garza	2275050011	0.4597	0.0164	22.1158	0.0120	0.0221	0.0134
Garza	2275050012	0.8564	0.3043	2.0635	0.0089	0.0576	0.0000
Garza	2275001000	0.0186	0.3220	0.1104	0.0036	0.0201	0.0000
Gillespie	2275020000	1.3083	0.6206	7.8929	0.0142	0.1013	0.0024
Gillespie	2275060012	1.0246	7.8969	3.4445	0.0919	0.4987	0.0000
Gillespie	2275050011	1.6462	0.1935	66.0886	0.0420	0.0883	0.0384
Gillespie	2275050012	5.1402	13.4241	16.3932	0.1887	1.0026	0.0000
Gillespie	2275001000	0.1128	0.0361	0.7284	0.0011	0.0108	0.0000
Glasscock	2275050011	0.1246	0.0044	5.5706	0.0035	0.0052	0.0032
Glasscock	2275050012	0.0088	0.0005	0.0199	0.0001	0.0002	0.0000
Goliad	2275020000	1.2316	3.7846	8.2798	0.0350	0.4218	0.0000
Goliad	2275050011	0.0237	0.0010	1.4393	0.0005	0.0014	0.0007
Goliad	2275050012	10.5851	10.6329	35.5207	0.1135	2.2901	0.0000
Goliad	2275001000	3.4162	1.7511	19.6207	0.0443	0.3678	0.0000
Gonzales	2275020000	0.2809	0.1070	1.5738	0.0032	0.0279	0.0000
Gonzales	2275050011	0.1334	0.0055	7.1016	0.0025	0.0067	0.0041
Gonzales	2275050012	2.2697	0.9347	4.6916	0.0224	0.1493	0.0000
Gonzales	2275001000	0.0129	0.9375	0.1373	0.0105	0.0524	0.0000
Gray	2275020000	1.1838	1.6387	10.4999	0.0129	0.3606	0.0009
Gray	2275060012	0.2857	1.1920	0.6594	0.0150	0.0757	0.0000
Gray	2275050011	0.3294	0.0047	17.9792	0.0080	0.0189	0.0102
Gray	2275050012	7.2250	3.3422	18.4160	0.0756	0.4888	0.0000
Gray	2275001000	0.0016	0.0003	0.1221	0.0000	0.0000	0.0000
Grayson	2275020000	3.6107	1.9498	28.4525	0.0429	0.3174	0.0132
Grayson	2275060012	0.3265	1.1954	1.2982	0.0172	0.1046	0.0000
Grayson	2275050011	3.2851	0.1815	188.3646	0.0927	0.2201	0.1136
Grayson	2275050012	13.6249	12.1712	38.5370	0.2188	1.6341	0.0000
Grayson	2275001000	0.2272	1.0554	1.9557	0.0015	0.2208	0.0000
Gregg	2275020000	8.4176	16.3278	40.5591	0.1363	1.6547	0.0116
Gregg	2275060012	0.4922	3.8518	1.5469	0.0469	0.2451	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Gregg	2275050011	5.7800	3.2321	187.1887	0.1200	0.5485	0.1022
Gregg	2275050012	21.2221	13.7068	49.8339	0.3103	1.8205	0.0000
Gregg	2275001000	6.7501	1.4059	36.4390	0.0651	0.4834	0.0013
Gregg	2275070000	0.0479	0.5624	1.7320	0.0795	0.1275	0.0000
Gregg	2265008005	0.3460	0.8680	13.5674	0.0000	0.0000	0.0000
Gregg	2270008005	0.0956	0.8161	0.1933	0.0296	0.0000	0.0000
Grimes	2275020000	0.1865	0.0289	0.6670	0.0017	0.0080	0.0001
Grimes	2275050011	1.0166	0.0596	62.3911	0.0217	0.0770	0.0380
Grimes	2275050012	4.2696	1.1848	9.5251	0.0383	0.2275	0.0000
Guadalupe	2275020000	3.5666	2.1253	33.1394	0.0470	0.3416	0.0147
Guadalupe	2275060012	1.5759	6.2863	4.5837	0.0783	0.4323	0.0000
Guadalupe	2275050011	6.3513	0.3593	339.7051	0.1631	0.3878	0.1972
Guadalupe	2275050012	36.3356	13.6317	94.0427	0.4184	2.3183	0.0000
Guadalupe	2275001000	12.3763	2.7306	90.3383	0.1381	1.0644	0.0002
Hale	2275020000	0.4119	0.0855	1.1314	0.0037	0.0223	0.0001
Hale	2275060012	0.0010	0.0027	0.0128	0.0000	0.0007	0.0000
Hale	2275050011	0.8745	0.0411	43.2369	0.0236	0.0456	0.0263
Hale	2275050012	1.8115	1.2760	5.4352	0.0262	0.1622	0.0000
Hale	2275001000	0.0010	0.0002	0.0874	0.0000	0.0001	0.0000
Hall	2275020000	0.0553	0.0183	0.2949	0.0005	0.0050	0.0000
Hall	2275050011	0.0298	0.0013	1.5821	0.0009	0.0016	0.0010
Hall	2275050012	0.2023	0.1090	0.4700	0.0018	0.0204	0.0000
Hall	2275001000	0.0055	0.1923	0.0485	0.0022	0.0110	0.0000
Hamilton	2275020000	0.6045	0.1347	3.0494	0.0057	0.0435	0.0000
Hamilton	2275050011	0.4135	0.0580	21.9339	0.0124	0.0321	0.0198
Hamilton	2275050012	0.8206	0.3157	2.0018	0.0072	0.0733	0.0000
Hamilton	2275001000	0.0512	3.4061	0.5573	0.0381	0.1928	0.0000
Hansford	2275020000	2.5800	0.5996	12.0601	0.0273	0.1829	0.0000
Hansford	2275050011	1.2582	0.0147	73.4286	0.0438	0.0680	0.0404
Hansford	2275050012	13.2058	4.2129	32.6493	0.1322	0.9459	0.0000
Hansford	2275001000	0.0035	0.2009	0.0397	0.0022	0.0117	0.0000
Hardeman	2275020000	0.4055	0.1341	2.1626	0.0036	0.0364	0.0000
Hardeman	2275050011	0.2182	0.0092	11.6021	0.0068	0.0116	0.0071
Hardeman	2275050012	1.4833	0.7991	3.4464	0.0135	0.1496	0.0000
Hardeman	2275001000	0.0405	1.4101	0.3559	0.0160	0.0804	0.0000
Hardin	2275020000	0.5252	0.1390	3.0011	0.0050	0.0449	0.0000
Hardin	2275050011	0.1554	0.0057	11.3894	0.0071	0.0120	0.0068
Hardin	2275050012	0.3297	0.0901	0.6303	0.0026	0.0175	0.0000
Harris	2275020000	226.9108	1456.4958	1657.1146	12.9591	147.0027	0.1204
Harris	2275060012	17.4510	35.6386	43.2621	0.5437	3.2751	0.0000
Harris	2275050011	26.3938	1.3064	1359.0627	0.6848	1.3309	0.7977
Harris	2275050012	207.0405	155.0165	528.8429	4.3262	19.5453	0.0000
Harris	2275001000	21.5291	36.2627	85.5074	0.3760	4.1131	0.0102
Harris	2275070000	3.5086	51.3869	69.1342	6.4509	8.4571	0.0000
Harris	2265008005	10.0423	21.4376	373.2532	0.0000	0.0000	0.0000
Harris	2270008005	2.7364	15.0529	4.1927	0.0857	0.0000	0.0000
Harrison	2275020000	0.4194	0.1062	3.3899	0.0033	0.0227	0.0016
Harrison	2275060012	1.9227	0.3084	3.1887	0.0157	0.0690	0.0000
Harrison	2275050011	0.7070	0.0268	37.9118	0.0202	0.0389	0.0214
Harrison	2275050012	21.7468	4.8394	43.1476	0.1957	0.9900	0.0000
Harrison	2275001000	0.0256	0.0109	0.1565	0.0002	0.0030	0.0000
Hartley	2275020000	0.6900	0.2269	2.4054	0.0061	0.0474	0.0004
Hartley	2275060012	0.0017	0.1266	0.0185	0.0014	0.0071	0.0000
Hartley	2275050011	1.0446	0.1820	25.9060	0.0187	0.0526	0.0140
Hartley	2275050012	2.0820	0.8561	7.7070	0.0208	0.1856	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Hartley	2275001000	0.0014	0.0016	0.0579	0.0000	0.0003	0.0000
Haskell	2275020000	0.1596	0.0454	0.7963	0.0023	0.0135	0.0000
Haskell	2275050011	0.0969	0.0018	4.7167	0.0023	0.0041	0.0026
Haskell	2275050012	0.7031	0.2625	1.5405	0.0071	0.0517	0.0000
Haskell	2275001000	0.0062	0.4547	0.0666	0.0051	0.0254	0.0000
Hays	2275050011	0.1889	0.0065	7.7639	0.0049	0.0073	0.0045
Hays	2275050012	0.0031	0.1149	0.0413	0.0000	0.0145	0.0000
Hemphill	2275020000	0.1157	0.0594	0.6903	0.0011	0.0158	0.0000
Hemphill	2275050011	0.3775	0.0110	22.3676	0.0133	0.0234	0.0131
Hemphill	2275050012	4.6841	4.3743	14.1375	0.0700	0.5602	0.0000
Henderson	2275020000	0.1263	0.0264	5.8868	0.0006	0.0158	0.0037
Henderson	2275060012	0.0508	3.1892	0.5592	0.0356	0.1821	0.0000
Henderson	2275050011	4.3453	0.2586	255.3792	0.1724	0.2662	0.1513
Henderson	2275050012	6.0869	2.7847	17.0167	0.0721	0.3757	0.0000
Hidalgo	2275020000	14.0814	88.0364	68.0689	0.9403	8.7359	0.0015
Hidalgo	2275060012	1.1277	6.3970	7.4993	0.0700	0.8650	0.0000
Hidalgo	2275050011	3.1092	0.1171	159.2734	0.0883	0.1601	0.0915
Hidalgo	2275050012	18.2250	13.5938	51.3162	0.2605	1.9888	0.0000
Hidalgo	2275001000	2.4884	3.6858	8.5708	0.0480	0.3800	0.0003
Hidalgo	2275070000	0.7241	3.6658	7.0547	0.4974	0.6082	0.0000
Hidalgo	2265008005	1.0237	2.1677	36.3914	0.0000	0.0000	0.0000
Hidalgo	2270008005	0.2021	1.3989	0.3617	0.0065	0.0000	0.0000
Hill	2275020000	0.3178	0.2001	2.8618	0.0047	0.0325	0.0011
Hill	2275050011	0.9701	0.0746	54.1852	0.0294	0.0651	0.0306
Hill	2275050012	1.8778	0.8433	10.9799	0.0170	0.2032	0.0000
Hill	2275001000	0.0447	0.0011	1.9027	0.0000	0.0023	0.0011
Hockley	2275020000	1.7568	0.4618	8.8923	0.0161	0.1413	0.0000
Hockley	2275060012	0.0164	0.0455	0.2163	0.0000	0.0114	0.0000
Hockley	2275050011	0.2587	0.0036	12.5764	0.0053	0.0117	0.0067
Hockley	2275050012	4.0036	1.3300	12.0929	0.0315	0.3257	0.0000
Hockley	2275001000	0.0056	0.0172	0.0688	0.0000	0.0040	0.0000
Hood	2275020000	0.4680	0.2010	5.8767	0.0049	0.0425	0.0026
Hood	2275060012	0.0405	2.9498	0.4319	0.0332	0.1648	0.0000
Hood	2275050011	3.7760	0.2971	189.1651	0.1058	0.2011	0.1043
Hood	2275050012	5.7157	1.6476	32.9598	0.0504	0.3963	0.0000
Hood	2275001000	0.0124	0.0216	0.9587	0.0000	0.0064	0.0006
Hopkins	2275020000	1.3703	0.8599	19.2733	0.0132	0.1408	0.0103
Hopkins	2275060012	0.8669	18.3645	4.2012	0.2081	1.0657	0.0000
Hopkins	2275050011	1.7046	0.1041	100.4756	0.0435	0.1166	0.0590
Hopkins	2275050012	14.7362	15.4986	43.0444	0.2858	1.6022	0.0000
Hopkins	2275001000	0.0971	0.0811	0.6396	0.0008	0.0187	0.0000
Houston	2275020000	1.0125	0.3080	5.7672	0.0113	0.0928	0.0000
Houston	2275050011	0.9098	0.0213	46.2330	0.0240	0.0421	0.0257
Houston	2275050012	1.8940	0.9445	4.8388	0.0190	0.1672	0.0000
Houston	2275001000	0.0669	4.2889	0.6971	0.0481	0.2424	0.0000
Howard	2275020000	2.5153	1.2146	11.4337	0.0291	0.2432	0.0014
Howard	2275060012	0.0620	0.8628	0.2457	0.0100	0.0509	0.0000
Howard	2275050011	1.2548	0.0373	58.3577	0.0542	0.0609	0.0305
Howard	2275050012	9.3054	6.9945	31.1163	0.1185	1.0034	0.0000
Howard	2275001000	2.8034	0.3330	7.0948	0.0209	0.1047	0.0000
Hudspeth	2275020000	0.0690	0.0560	0.3630	0.0024	0.0115	0.0000
Hudspeth	2275050011	0.0694	0.0021	3.1466	0.0019	0.0030	0.0018
Hudspeth	2275050012	0.3148	0.2799	0.7948	0.0038	0.0375	0.0000
Hudspeth	2275001000	0.0104	0.2463	0.0751	0.0027	0.0150	0.0000
Hunt	2275020000	1.3937	5.7426	15.3281	0.0474	0.4927	0.0047

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Hunt	2275060012	0.8766	0.7354	2.2966	0.0147	0.0988	0.0000
Hunt	2275050011	3.4232	0.1625	189.3943	0.0882	0.2098	0.1125
Hunt	2275050012	12.7409	6.2937	31.9088	0.1566	0.9917	0.0000
Hunt	2275001000	2.3810	18.1451	13.2139	0.1107	1.3333	0.0000
Hutchinson	2275020000	0.8219	0.3904	2.1944	0.0098	0.0502	0.0002
Hutchinson	2275060012	0.0015	0.0040	0.0192	0.0000	0.0010	0.0000
Hutchinson	2275050011	0.2211	0.0109	10.8171	0.0053	0.0120	0.0059
Hutchinson	2275050012	4.6841	1.3425	11.5707	0.0469	0.2677	0.0000
Hutchinson	2275001000	0.0076	0.0104	0.0365	0.0008	0.0023	0.0000
Irion	2275050011	0.0328	0.0013	1.7932	0.0012	0.0017	0.0010
Irion	2275050012	0.0087	0.0005	0.0196	0.0001	0.0002	0.0000
Jack	2275020000	0.1226	0.0320	0.5315	0.0013	0.0091	0.0000
Jack	2275050011	0.2058	0.0103	11.9485	0.0060	0.0125	0.0071
Jack	2275050012	0.5741	0.1211	1.0308	0.0045	0.0257	0.0000
Jack	2275001000	0.0009	0.0375	0.0102	0.0004	0.0023	0.0000
Jackson	2275020000	0.1205	0.0551	0.6964	0.0015	0.0139	0.0000
Jackson	2275050011	3.6470	0.1333	168.1503	0.1053	0.1592	0.0982
Jackson	2275050012	1.7045	1.5054	5.4380	0.0137	0.3282	0.0000
Jackson	2275001000	0.0601	0.7239	0.3575	0.0084	0.0477	0.0000
Jasper	2275020000	0.4730	0.2142	5.5951	0.0041	0.0416	0.0020
Jasper	2275060012	0.6820	0.1973	1.2763	0.0059	0.0371	0.0000
Jasper	2275050011	0.9622	0.0241	48.9135	0.0200	0.0485	0.0272
Jasper	2275050012	9.3674	6.6717	26.1164	0.1466	0.8087	0.0000
Jasper	2275001000	0.3758	0.0899	1.6766	0.0037	0.0280	0.0000
Jeff Davis	2275050011	1.8442	0.0633	75.7402	0.0475	0.0712	0.0442
Jefferson	2275020000	2.9314	6.6340	11.1334	0.0567	0.6905	0.0009
Jefferson	2275060012	1.5968	1.9764	2.8299	0.0350	0.1629	0.0000
Jefferson	2275050011	1.9371	0.0611	106.6962	0.0649	0.1017	0.0590
Jefferson	2275050012	13.0799	12.7700	39.5542	0.2284	1.6657	0.0000
Jefferson	2275001000	0.5051	0.1634	2.4130	0.0045	0.0467	0.0001
Jefferson	2275070000	0.0216	0.3883	2.5247	0.0604	0.0974	0.0000
Jefferson	2265008005	0.2289	0.5618	8.7517	0.0000	0.0000	0.0000
Jefferson	2270008005	0.0149	0.1730	0.0188	0.0028	0.0000	0.0000
Jim Hogg	2275020000	0.0504	0.0645	0.2107	0.0013	0.0075	0.0000
Jim Hogg	2275060012	0.0317	0.3031	0.1474	0.0035	0.0196	0.0000
Jim Hogg	2275050011	0.0387	0.0013	2.1825	0.0014	0.0020	0.0013
Jim Hogg	2275050012	0.2763	0.2802	0.9205	0.0052	0.0316	0.0000
Jim Hogg	2275001000	0.0005	0.0014	0.0212	0.0000	0.0003	0.0000
Jim Wells	2275020000	0.4106	0.5055	1.1938	0.0081	0.0447	0.0001
Jim Wells	2275060012	0.3722	2.4954	0.9580	0.0300	0.1512	0.0000
Jim Wells	2275050011	0.2694	0.0182	14.9158	0.0090	0.0159	0.0081
Jim Wells	2275050012	4.9354	4.0546	13.8355	0.0531	0.8518	0.0000
Jim Wells	2275001000	5.2866	7.3024	19.5564	0.0673	0.8847	0.0001
Johnson	2275020000	4.7698	1.8810	16.3799	0.0488	0.3541	0.0020
Johnson	2275060012	0.8034	2.7242	2.3582	0.0343	0.2017	0.0000
Johnson	2275050011	2.6290	0.1420	140.5645	0.0710	0.1404	0.0802
Johnson	2275050012	10.4313	5.8604	31.1704	0.1174	0.9029	0.0000
Johnson	2275001000	0.4530	0.0239	16.9717	0.0003	0.0228	0.0093
Jones	2275020000	0.4658	0.1328	2.3230	0.0044	0.0376	0.0000
Jones	2275050011	0.8876	0.0316	42.0312	0.0254	0.0414	0.0248
Jones	2275050012	2.9766	1.5694	7.0292	0.0313	0.2331	0.0000
Jones	2275001000	0.0080	0.4522	0.0893	0.0050	0.0262	0.0000
Karnes	2275020000	0.0768	0.0433	0.4557	0.0016	0.0112	0.0000
Karnes	2275050011	0.2754	0.0031	12.5605	0.0046	0.0115	0.0068
Karnes	2275050012	0.3893	0.8661	4.6484	0.0070	0.1045	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Karnes	2275001000	0.1405	0.0277	0.3443	0.0013	0.0068	0.0000
Kaufman	2275020000	1.1773	0.4189	12.5727	0.0149	0.0983	0.0055
Kaufman	2275060012	0.4839	3.6069	1.5149	0.0422	0.2283	0.0000
Kaufman	2275050011	5.5851	0.2622	300.1658	0.1786	0.3350	0.1724
Kaufman	2275050012	12.6925	6.5232	34.2614	0.1500	0.8748	0.0000
Kaufman	2275001000	2.3664	0.1993	2.8753	0.0154	0.0485	0.0000
Kendall	2275050011	0.1401	0.0052	7.0473	0.0045	0.0066	0.0041
Kendall	2275050012	0.0252	0.0013	0.0567	0.0002	0.0006	0.0000
Kenedy	2275050011	0.2181	0.0075	8.9584	0.0056	0.0084	0.0052
Kent	2275020000	0.0639	0.0182	0.3185	0.0009	0.0054	0.0000
Kent	2275050011	0.0392	0.0007	1.9058	0.0009	0.0017	0.0010
Kent	2275050012	0.2812	0.1050	0.6162	0.0028	0.0207	0.0000
Kent	2275001000	0.0025	0.1819	0.0266	0.0020	0.0102	0.0000
Kerr	2275020000	6.6458	6.9840	30.0094	0.1204	0.7638	0.0077
Kerr	2275060012	2.7839	13.4073	7.9033	0.1656	0.8894	0.0000
Kerr	2275050011	2.9978	0.4805	148.1050	0.0859	0.1996	0.0848
Kerr	2275050012	30.2551	16.3228	73.9599	0.3959	2.3096	0.0000
Kerr	2275001000	0.3759	0.1363	5.4981	0.0045	0.0408	0.0025
Kimble	2275020000	0.1307	0.0237	0.3280	0.0011	0.0064	0.0000
Kimble	2275060012	0.0874	0.0826	0.2504	0.0011	0.0106	0.0000
Kimble	2275050011	0.1699	0.0108	10.7588	0.0068	0.0124	0.0065
Kimble	2275050012	1.2497	1.5428	3.4213	0.0247	0.1496	0.0000
Kimble	2275001000	3.9881	0.3165	9.2678	0.0367	0.0988	0.0000
King	2275050011	0.0852	0.0029	3.4992	0.0022	0.0033	0.0020
Kinney	2275020000	0.0362	0.1690	0.1028	0.0029	0.0152	0.0000
Kinney	2275050011	0.2667	0.0095	12.4534	0.0079	0.0117	0.0072
Kinney	2275050012	9.4710	1.1742	25.1780	0.0938	0.3541	0.0000
Kinney	2275001000	11.6297	2.5014	89.7447	0.1326	1.0284	0.0000
Kleberg	2275020000	0.5643	1.5328	2.2135	0.0151	0.1573	0.0000
Kleberg	2275060012	0.0523	0.4260	0.2085	0.0050	0.0282	0.0000
Kleberg	2275050011	0.0496	0.0016	3.7459	0.0024	0.0041	0.0022
Kleberg	2275050012	0.5154	0.4683	1.5424	0.0086	0.0512	0.0000
Kleberg	2275001000	5.8703	5.2521	24.6187	0.0663	1.1338	0.0001
Knox	2275020000	0.0829	0.0274	0.4424	0.0007	0.0074	0.0000
Knox	2275050011	0.2951	0.0106	13.2138	0.0082	0.0126	0.0078
Knox	2275050012	0.3142	0.1640	0.7292	0.0028	0.0308	0.0000
Knox	2275001000	0.0083	0.2884	0.0728	0.0033	0.0164	0.0000
La Salle	2275020000	0.7578	0.2275	2.1800	0.0075	0.0480	0.0000
La Salle	2275060012	0.5037	3.4376	1.8318	0.0404	0.2295	0.0000
La Salle	2275050011	0.2848	0.0105	15.9169	0.0102	0.0163	0.0090
La Salle	2275050012	6.4463	3.8110	15.6612	0.0853	0.4782	0.0000
La Salle	2275001000	3.8753	0.4272	9.2411	0.0293	0.1323	0.0000
Lamar	2275020000	0.4162	0.1194	5.4935	0.0035	0.0333	0.0025
Lamar	2275060012	0.3470	0.3631	0.6684	0.0060	0.0315	0.0000
Lamar	2275050011	2.5759	0.1169	141.2256	0.0833	0.1429	0.0819
Lamar	2275050012	7.2256	1.8977	17.1844	0.0693	0.3990	0.0000
Lamar	2275001000	0.0071	0.0099	0.5862	0.0000	0.0030	0.0004
Lamb	2275020000	0.0468	0.0092	0.2035	0.0005	0.0030	0.0000
Lamb	2275050011	0.6825	0.0236	28.8123	0.0176	0.0274	0.0170
Lamb	2275050012	0.2070	0.0735	0.4987	0.0021	0.0139	0.0000
Lamb	2275001000	0.0045	0.0778	0.0267	0.0009	0.0049	0.0000
Lampasas	2275020000	0.1262	0.0167	3.1032	0.0014	0.0076	0.0014
Lampasas	2275050011	1.2242	0.2376	67.9870	0.0401	0.0916	0.0389
Lampasas	2275050012	0.8813	1.4413	3.1093	0.0179	0.1398	0.0000
Lampasas	2275001000	0.6551	0.0939	2.1802	0.0056	0.0299	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Lavaca	2275020000	0.2633	0.1003	1.4755	0.0030	0.0261	0.0000
Lavaca	2275050011	0.2070	0.0081	10.5046	0.0048	0.0099	0.0060
Lavaca	2275050012	2.1382	0.9160	4.4335	0.0210	0.1451	0.0000
Lavaca	2275001000	0.0121	0.8789	0.1287	0.0099	0.0491	0.0000
Lee	2275020000	0.0110	0.0081	0.7561	0.0000	0.0027	0.0005
Lee	2275050011	0.8437	0.0235	53.5865	0.0340	0.0540	0.0306
Lee	2275050012	0.4376	0.0736	2.2373	0.0035	0.0207	0.0000
Lee	2275001000	0.3297	0.0380	1.0776	0.0029	0.0106	0.0002
Leon	2275050011	0.2869	0.0104	13.8894	0.0089	0.0130	0.0081
Leon	2275050012	0.0418	0.0298	0.1023	0.0003	0.0044	0.0000
Liberty	2275020000	0.9638	0.1251	14.7397	0.0073	0.0466	0.0068
Liberty	2275060012	0.0987	4.1663	0.8087	0.0461	0.2432	0.0000
Liberty	2275050011	1.7858	0.0800	104.3315	0.0463	0.1052	0.0613
Liberty	2275050012	3.9175	0.8333	15.5087	0.0349	0.2465	0.0000
Limestone	2275060012	0.0241	1.4739	0.2663	0.0164	0.0845	0.0000
Limestone	2275050011	0.3371	0.0559	15.3064	0.0085	0.0255	0.0150
Limestone	2275050012	1.1658	1.8351	4.6816	0.0271	0.1789	0.0000
Limestone	2275001000	0.0266	0.0071	0.1535	0.0003	0.0023	0.0000
Lipscomb	2275020000	0.0858	0.0233	0.4945	0.0008	0.0075	0.0000
Lipscomb	2275050011	0.1483	0.0043	6.3168	0.0037	0.0059	0.0036
Lipscomb	2275050012	0.1387	0.0556	0.3841	0.0012	0.0114	0.0000
Live Oak	2275020000	0.1251	0.0339	0.7483	0.0012	0.0109	0.0000
Live Oak	2275050011	0.3032	0.0080	17.9095	0.0122	0.0172	0.0104
Live Oak	2275050012	0.5188	0.1166	2.0683	0.0049	0.0335	0.0000
Live Oak	2275001000	0.0081	0.0212	0.0425	0.0001	0.0045	0.0000
Llano	2275020000	1.8772	1.0505	6.6527	0.0250	0.1328	0.0011
Llano	2275060012	0.9732	3.4413	3.2704	0.0433	0.2706	0.0000
Llano	2275050011	1.7190	0.0714	88.3280	0.0428	0.0843	0.0488
Llano	2275050012	7.3293	3.3936	19.2191	0.0895	0.5578	0.0000
Llano	2275001000	0.0490	0.0162	0.2646	0.0004	0.0041	0.0000
Lubbock	2275020000	36.6101	148.4975	181.0559	1.1785	12.1583	0.0189
Lubbock	2275060012	2.0077	10.9792	6.5964	0.0964	0.9235	0.0000
Lubbock	2275050011	4.7406	0.2324	267.4988	0.1748	0.2602	0.1542
Lubbock	2275050012	25.1277	15.5906	67.8774	0.3318	2.1528	0.0000
Lubbock	2275001000	7.2338	11.6969	32.5518	0.1414	1.3283	0.0001
Lubbock	2275070000	0.3736	5.4647	6.7362	0.6679	0.9013	0.0000
Lubbock	2265008005	1.4573	3.1239	52.4440	0.0000	0.0000	0.0000
Lubbock	2270008005	0.5038	3.5924	1.0321	0.1236	0.0000	0.0000
Lynn	2275020000	0.1034	0.0203	0.4491	0.0010	0.0067	0.0000
Lynn	2275050011	0.1668	0.0061	8.5791	0.0044	0.0088	0.0053
Lynn	2275050012	0.4568	0.1623	1.1006	0.0047	0.0307	0.0000
Lynn	2275001000	0.0099	0.1717	0.0589	0.0019	0.0107	0.0000
Madison	2275020000	0.0053	0.0458	0.0767	0.0000	0.0107	0.0000
Madison	2275050011	0.2367	0.0151	15.4989	0.0079	0.0189	0.0091
Madison	2275050012	0.0175	0.0795	0.1334	0.0001	0.0167	0.0000
Marion	2275020000	0.1910	0.0581	1.1027	0.0022	0.0178	0.0000
Marion	2275050011	0.4576	0.0105	26.9336	0.0189	0.0269	0.0146
Marion	2275050012	0.2614	0.0421	0.5056	0.0021	0.0105	0.0000
Martin	2275020000	0.1181	0.0474	0.6931	0.0018	0.0131	0.0000
Martin	2275050011	0.1103	0.0029	5.2789	0.0028	0.0050	0.0030
Martin	2275050012	0.8834	0.3340	2.2192	0.0080	0.0649	0.0000
Martin	2275001000	0.0070	0.2727	0.0476	0.0031	0.0154	0.0000
Mason	2275020000	0.0302	0.0081	0.1740	0.0003	0.0026	0.0000
Mason	2275050011	0.3633	0.0165	20.3256	0.0113	0.0206	0.0119
Mason	2275050012	0.0707	0.0150	0.1848	0.0006	0.0039	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Matagorda	2275020000	2.0152	0.3780	5.4791	0.0165	0.0960	0.0000
Matagorda	2275060012	0.0622	2.7272	0.5869	0.0306	0.1571	0.0000
Matagorda	2275050011	1.0090	0.0392	58.6535	0.0321	0.0595	0.0327
Matagorda	2275050012	4.8868	5.8238	14.2216	0.0930	0.5769	0.0000
Matagorda	2275001000	1.0626	1.7831	5.2190	0.0087	0.3787	0.0003
Maverick	2275020000	0.0686	0.0470	0.3378	0.0007	0.0085	0.0000
Maverick	2275060012	0.0007	0.0017	0.0081	0.0000	0.0004	0.0000
Maverick	2275050011	0.0443	0.0006	2.2661	0.0010	0.0022	0.0012
Maverick	2275050012	0.7119	0.3626	1.7790	0.0065	0.0641	0.0000
Maverick	2275001000	0.0124	0.0009	0.0287	0.0001	0.0003	0.0000
Mcculloch	2275020000	1.2950	0.9238	6.4923	0.0262	0.1572	0.0009
Mcculloch	2275060012	0.8736	7.6910	4.5256	0.0909	0.4840	0.0000
Mcculloch	2275050011	0.4497	0.0108	26.0325	0.0140	0.0249	0.0145
Mcculloch	2275050012	7.3974	2.1459	20.7804	0.0688	0.4527	0.0000
Mcculloch	2275001000	0.2135	0.0233	0.7334	0.0016	0.0072	0.0002
Mclennan	2275020000	25.7866	27.4353	80.7434	0.3314	3.1149	0.0085
Mclennan	2275060012	7.2683	4.4036	17.6340	0.0933	0.4987	0.0000
Mclennan	2275050011	4.4289	0.4188	283.1027	0.1293	0.3008	0.1833
Mclennan	2275050012	54.7037	41.1746	146.3168	0.6911	4.5373	0.0000
Mclennan	2275001000	44.7791	12.9699	117.0100	0.3780	2.1975	0.0005
Mclennan	2275070000	0.0608	0.6461	2.0757	0.0949	0.1522	0.0000
Mclennan	2265008005	0.5056	1.2583	19.6155	0.0000	0.0000	0.0000
Mclennan	2270008005	0.0538	0.3974	0.0617	0.0021	0.0000	0.0000
Mcmullen	2275050011	0.0433	0.0015	1.7821	0.0011	0.0017	0.0010
Mcmullen	2275050012	0.0001	0.0000	0.0002	0.0000	0.0000	0.0000
Medina	2275020000	1.5198	0.7559	6.8271	0.0413	0.1736	0.0006
Medina	2275060012	0.0811	0.9214	0.3838	0.0107	0.0581	0.0000
Medina	2275050011	2.0407	0.1358	118.8438	0.0644	0.1356	0.0703
Medina	2275050012	8.8244	3.3059	20.4359	0.0906	0.5296	0.0000
Medina	2275001000	0.6898	9.1342	3.4620	0.1061	0.5412	0.0000
Menard	2275020000	0.0133	0.0056	0.0709	0.0002	0.0014	0.0000
Menard	2275050011	0.0872	0.0033	4.3258	0.0028	0.0042	0.0025
Menard	2275050012	0.4116	0.0656	0.9395	0.0039	0.0144	0.0000
Menard	2275001000	0.0023	0.0773	0.0150	0.0009	0.0044	0.0000
Midland	2275020000	24.0625	86.3017	102.5707	0.7835	8.4546	0.0011
Midland	2275060012	4.6563	30.3189	19.6188	0.3284	2.3285	0.0000
Midland	2275050011	2.2600	0.1141	132.6011	0.0835	0.1344	0.0759
Midland	2275050012	33.7643	35.9055	106.2343	0.6215	3.8663	0.0000
Midland	2275001000	5.0709	2.0921	21.4231	0.0599	0.4030	0.0001
Midland	2275070000	0.7196	3.8717	7.0572	0.4973	0.6657	0.0000
Midland	2265008005	0.9700	2.0022	34.2108	0.0000	0.0000	0.0000
Midland	2270008005	0.2757	2.0360	0.5515	0.0401	0.0000	0.0000
Milam	2275020000	0.0205	0.1760	0.2947	0.0000	0.0409	0.0000
Milam	2275050011	0.8897	0.0573	57.8988	0.0292	0.0711	0.0342
Milam	2275050012	0.0509	0.3043	0.4761	0.0001	0.0637	0.0000
Mills	2275020000	0.3401	0.1086	1.9646	0.0041	0.0328	0.0000
Mills	2275050011	0.3163	0.0107	15.4507	0.0088	0.0153	0.0092
Mills	2275050012	1.5304	0.2477	3.5542	0.0149	0.0731	0.0000
Mitchell	2275020000	0.1383	0.0393	0.6902	0.0020	0.0117	0.0000
Mitchell	2275050011	0.0845	0.0015	4.1069	0.0020	0.0036	0.0023
Mitchell	2275050012	0.6093	0.2275	1.3351	0.0061	0.0448	0.0000
Mitchell	2275001000	0.0054	0.3941	0.0577	0.0044	0.0220	0.0000
Montague	2275020000	0.2298	0.0722	0.8569	0.0046	0.0182	0.0000
Montague	2275050011	0.1702	0.0059	9.5824	0.0046	0.0100	0.0054
Montague	2275050012	1.8339	0.8181	4.2073	0.0182	0.1312	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Montague	2275001000	0.0289	1.7336	0.2889	0.0194	0.0982	0.0000
Montgomery	2275020000	9.1736	12.9851	42.9586	0.1598	1.6019	0.0077
Montgomery	2275060012	2.6923	13.4668	9.0528	0.1831	1.0121	0.0000
Montgomery	2275050011	8.8913	0.7930	348.9140	0.1804	0.3480	0.2091
Montgomery	2275050012	29.7832	53.2694	93.1121	0.8877	5.2152	0.0000
Montgomery	2275001000	3.5992	0.6727	23.8008	0.0284	0.1842	0.0092
Montgomery	2275070000	0.1751	2.4936	9.5330	0.3624	0.5475	0.0000
Montgomery	2265008005	0.6145	1.4998	23.5885	0.0000	0.0000	0.0000
Montgomery	2270008005	0.1090	0.7414	0.1394	0.0218	0.0000	0.0000
Moore	2275020000	1.7464	1.1410	6.2477	0.0226	0.1466	0.0003
Moore	2275060012	0.0206	1.2312	0.2285	0.0137	0.0708	0.0000
Moore	2275050011	0.7319	0.0448	37.3868	0.0230	0.0423	0.0212
Moore	2275050012	6.4295	3.7435	16.4709	0.0787	0.5109	0.0000
Moore	2275001000	0.0514	0.0082	0.1139	0.0006	0.0021	0.0000
Morris	2275020000	0.0030	0.0009	0.0172	0.0000	0.0003	0.0000
Morris	2275050011	0.0068	0.0001	0.3994	0.0003	0.0004	0.0002
Morris	2275050012	0.0050	0.0399	0.0217	0.0000	0.0051	0.0000
Motley	2275050011	0.0004	0.0000	0.0197	0.0000	0.0000	0.0000
Motley	2275050012	0.0001	0.0000	0.0002	0.0000	0.0000	0.0000
Nacogdoches	2275020000	0.9058	0.4415	10.1917	0.0130	0.0865	0.0046
Nacogdoches	2275060012	0.6315	5.6095	2.1476	0.0651	0.3455	0.0000
Nacogdoches	2275050011	2.2263	0.1126	111.4053	0.0533	0.1119	0.0643
Nacogdoches	2275050012	10.3431	22.4864	31.5825	0.3191	1.8022	0.0000
Nacogdoches	2275001000	0.1515	0.0608	0.8898	0.0014	0.0172	0.0000
Navarro	2275020000	2.3153	0.2510	5.6822	0.0208	0.0931	0.0005
Navarro	2275050011	1.7725	0.1536	108.2082	0.0573	0.1070	0.0633
Navarro	2275050012	9.3926	4.9024	32.5283	0.1120	0.7614	0.0000
Navarro	2275001000	0.0127	0.0000	0.4436	0.0000	0.0004	0.0002
Newton	2275020000	0.1780	0.0471	1.0173	0.0017	0.0152	0.0000
Newton	2275050011	0.0530	0.0019	3.8805	0.0024	0.0041	0.0023
Newton	2275050012	0.1116	0.0212	0.2105	0.0009	0.0047	0.0000
Nolan	2275020000	0.3050	0.1951	0.8028	0.0030	0.0315	0.0000
Nolan	2275060012	0.0336	1.2519	0.2618	0.0138	0.0741	0.0000
Nolan	2275050011	0.3085	0.0142	15.1158	0.0081	0.0152	0.0084
Nolan	2275050012	1.8303	0.5385	4.6961	0.0199	0.1241	0.0000
Nolan	2275001000	0.1059	0.0296	0.7467	0.0010	0.0095	0.0001
Nueces	2275020000	25.5756	85.9350	114.1854	0.7906	9.8717	0.0026
Nueces	2275060012	0.8526	6.4123	6.4823	0.0584	0.7556	0.0000
Nueces	2275050011	2.0407	0.0760	120.9223	0.0692	0.1161	0.0686
Nueces	2275050012	31.3289	18.3462	93.2850	0.3769	3.3910	0.0000
Nueces	2275001000	14.3648	10.2044	43.7809	0.2104	1.4933	0.0006
Nueces	2275070000	0.7370	3.7627	7.7831	0.5437	0.8040	0.0000
Nueces	2265008005	1.2710	2.7831	46.1837	0.0000	0.0000	0.0000
Nueces	2270008005	0.3274	2.4392	0.6161	0.0542	0.0000	0.0000
Ochiltree	2275020000	0.1611	0.0624	0.5528	0.0015	0.0142	0.0000
Ochiltree	2275050011	0.2375	0.0010	11.6262	0.0055	0.0102	0.0062
Ochiltree	2275050012	1.7520	0.6099	7.0032	0.0156	0.1467	0.0000
Oldham	2275020000	0.7550	0.2052	4.3515	0.0074	0.0657	0.0000
Oldham	2275050011	0.3005	0.0031	14.3177	0.0071	0.0127	0.0077
Oldham	2275050012	1.2210	0.4894	3.3804	0.0103	0.1005	0.0000
Orange	2275020000	1.6200	0.1864	3.6463	0.0157	0.0591	0.0000
Orange	2275060012	0.4544	1.5197	1.0395	0.0194	0.1006	0.0000
Orange	2275050011	0.6125	0.0160	32.5459	0.0156	0.0326	0.0183
Orange	2275050012	6.8963	1.4137	20.5421	0.0635	0.3665	0.0000
Orange	2275001000	0.0617	0.0164	0.3553	0.0006	0.0053	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Palo Pinto	2275020000	0.1144	0.0298	0.4961	0.0012	0.0085	0.0000
Palo Pinto	2275050011	0.2493	0.0116	13.6083	0.0072	0.0139	0.0080
Palo Pinto	2275050012	0.5396	0.1801	0.9906	0.0042	0.0325	0.0000
Palo Pinto	2275001000	0.0008	0.0350	0.0095	0.0004	0.0021	0.0000
Panola	2275020000	0.0034	0.0002	0.1851	0.0000	0.0003	0.0001
Panola	2275050011	0.1868	0.0040	10.9993	0.0078	0.0109	0.0059
Panola	2275050012	0.1965	0.0829	0.7119	0.0018	0.0173	0.0000
Parker	2275020000	1.5789	1.1705	17.8023	0.0233	0.1849	0.0082
Parker	2275060012	1.3171	2.9965	3.3838	0.0380	0.2454	0.0000
Parker	2275050011	13.7781	0.5369	721.7751	0.2931	0.5270	0.4229
Parker	2275050012	10.8085	7.2908	37.4488	0.1310	1.1807	0.0000
Parker	2275001000	1.8989	0.3145	15.7060	0.0151	0.1021	0.0070
Parmer	2275050011	1.6650	0.0572	68.3784	0.0429	0.0643	0.0399
Pecos	2275020000	0.4778	0.2305	1.5378	0.0043	0.0445	0.0000
Pecos	2275060012	0.0372	0.9104	0.2821	0.0099	0.0562	0.0000
Pecos	2275050011	0.3572	0.0103	19.8489	0.0118	0.0194	0.0112
Pecos	2275050012	1.3366	0.6818	4.4920	0.0156	0.1354	0.0000
Pecos	2275001000	1.2303	0.1517	3.0328	0.0092	0.0463	0.0000
Polk	2275020000	1.0585	0.3220	6.0294	0.0118	0.0970	0.0000
Polk	2275050011	0.8010	0.0168	41.1107	0.0205	0.0373	0.0226
Polk	2275050012	1.9595	0.9863	5.0124	0.0197	0.1743	0.0000
Polk	2275001000	0.0699	4.4839	0.7287	0.0503	0.2535	0.0000
Potter	2275020000	11.1743	41.3396	47.9560	0.3761	4.0886	0.0016
Potter	2275060012	2.0020	9.1107	6.0366	0.0762	0.8085	0.0000
Potter	2275050011	0.4617	0.0432	22.7381	0.0110	0.0268	0.0131
Potter	2275050012	10.7040	10.7588	29.9005	0.1624	1.2515	0.0000
Potter	2275001000	10.9302	14.3450	54.2058	0.1851	1.8017	0.0004
Potter	2275070000	0.2099	2.6635	4.0713	0.3420	0.5297	0.0000
Potter	2265008005	0.7674	1.6112	27.2516	0.0000	0.0000	0.0000
Potter	2270008005	0.2438	1.9749	0.5271	0.0579	0.0000	0.0000
Presidio	2275020000	0.9654	0.9198	3.2318	0.0186	0.1145	0.0000
Presidio	2275060012	0.7274	2.3764	2.3615	0.0336	0.1909	0.0000
Presidio	2275050011	0.4060	0.0152	20.4697	0.0119	0.0209	0.0111
Presidio	2275050012	3.3227	2.8440	10.1112	0.0546	0.3882	0.0000
Presidio	2275001000	0.2255	0.8804	0.8737	0.0118	0.0650	0.0000
Rains	2275050011	0.0409	0.0016	2.2366	0.0015	0.0021	0.0013
Rains	2275050012	0.0108	0.0006	0.0244	0.0001	0.0002	0.0000
Randall	2275020000	0.3939	0.2560	7.4552	0.0071	0.0587	0.0033
Randall	2275060012	0.0669	0.0075	0.1053	0.0005	0.0020	0.0000
Randall	2275050011	4.1362	0.2247	248.4565	0.1682	0.2633	0.1429
Randall	2275050012	16.7306	4.8104	49.0374	0.1752	1.0977	0.0000
Randall	2275001000	0.0184	0.0136	0.3288	0.0001	0.0037	0.0001
Reagan	2275020000	0.0255	0.0107	0.1363	0.0003	0.0027	0.0000
Reagan	2275050011	0.0213	0.0011	1.4506	0.0009	0.0016	0.0009
Reagan	2275050012	0.7748	0.1252	1.7691	0.0074	0.0273	0.0000
Reagan	2275001000	0.0044	0.1487	0.0289	0.0017	0.0085	0.0000
Real	2275020000	0.0340	0.0143	0.1817	0.0005	0.0036	0.0000
Real	2275050011	0.0776	0.0032	3.9515	0.0025	0.0040	0.0024
Real	2275050012	1.0331	0.1675	2.3589	0.0098	0.0364	0.0000
Real	2275001000	0.0058	0.1982	0.0385	0.0022	0.0114	0.0000
Red River	2275050011	0.2289	0.0091	11.5622	0.0058	0.0125	0.0071
Red River	2275050012	0.0408	0.0190	0.0953	0.0004	0.0039	0.0000
Reeves	2275020000	1.3586	0.3976	4.6484	0.0133	0.0835	0.0006
Reeves	2275060012	0.7205	2.5662	1.7580	0.0321	0.1748	0.0000
Reeves	2275050011	0.8484	0.0219	47.2072	0.0257	0.0471	0.0267

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Reeves	2275050012	7.7012	7.9589	26.1806	0.1423	1.2043	0.0000
Reeves	2275001000	2.4239	0.2741	3.9543	0.0170	0.0730	0.0000
Refugio	2275020000	0.2913	0.0946	1.6958	0.0029	0.0276	0.0000
Refugio	2275050011	0.1928	0.0059	9.5572	0.0047	0.0097	0.0053
Refugio	2275050012	1.3725	0.9580	3.9617	0.0146	0.1665	0.0000
Refugio	2275001000	0.0219	1.5913	0.2330	0.0179	0.0889	0.0000
Roberts	2275020000	0.0172	0.0047	0.0989	0.0002	0.0015	0.0000
Roberts	2275050011	0.0389	0.0013	2.0871	0.0013	0.0019	0.0012
Roberts	2275050012	0.0364	0.0116	0.0964	0.0003	0.0025	0.0000
Robertson	2275050011	0.4057	0.0225	23.9262	0.0128	0.0282	0.0141
Robertson	2275050012	0.0303	0.1550	0.4558	0.0001	0.0336	0.0000
Robertson	2275001000	0.0007	0.0059	0.0098	0.0000	0.0014	0.0000
Rockwall	2275020000	0.0445	0.0066	3.9463	0.0007	0.0044	0.0016
Rockwall	2275050011	4.5175	0.1530	264.9352	0.1517	0.2679	0.1516
Rockwall	2275050012	1.8338	3.2107	9.5824	0.0302	0.4349	0.0000
Rockwall	2275001000	0.0168	0.0031	1.5380	0.0000	0.0031	0.0010
Runnels	2275020000	0.1957	0.0821	1.0447	0.0026	0.0208	0.0000
Runnels	2275050011	0.2015	0.0099	13.2003	0.0083	0.0142	0.0080
Runnels	2275050012	5.9503	0.9605	13.5854	0.0565	0.2094	0.0000
Runnels	2275001000	0.0336	1.1397	0.2213	0.0128	0.0653	0.0000
Rusk	2275020000	0.0470	0.0151	1.0143	0.0006	0.0051	0.0005
Rusk	2275060012	0.0157	1.1417	0.1672	0.0128	0.0638	0.0000
Rusk	2275050011	1.4716	0.0386	72.1966	0.0390	0.0721	0.0391
Rusk	2275050012	0.6231	0.1017	1.5430	0.0055	0.0274	0.0000
Rusk	2275001000	0.0214	0.0406	0.2000	0.0000	0.0086	0.0000
Sabine	2275020000	0.0690	0.0210	0.3932	0.0008	0.0063	0.0000
Sabine	2275050011	0.0504	0.0010	2.5807	0.0013	0.0023	0.0014
Sabine	2275050012	0.1280	0.0920	0.3357	0.0013	0.0148	0.0000
Sabine	2275001000	0.0046	0.2924	0.0475	0.0033	0.0165	0.0000
San Augustine	2275020000	0.0115	0.0035	0.0655	0.0001	0.0011	0.0000
San Augustine	2275050011	0.0088	0.0002	0.4459	0.0002	0.0004	0.0002
San Augustine	2275050012	0.0212	0.0107	0.0543	0.0002	0.0019	0.0000
San Augustine	2275001000	0.0008	0.0487	0.0079	0.0005	0.0028	0.0000
San Jacinto	2275050011	0.0386	0.0015	2.1085	0.0014	0.0020	0.0012
San Jacinto	2275050012	0.0102	0.0005	0.0230	0.0001	0.0002	0.0000
San Patricio	2275020000	2.8330	1.1957	10.2025	0.0273	0.2254	0.0005
San Patricio	2275060012	1.0403	0.1923	1.7492	0.0087	0.0394	0.0000
San Patricio	2275050011	2.7275	0.1163	149.2094	0.0811	0.1499	0.0816
San Patricio	2275050012	7.7130	3.2225	33.0055	0.0839	0.7349	0.0000
San Patricio	2275001000	0.9832	0.3453	3.5235	0.0091	0.0858	0.0000
San Saba	2275020000	0.3527	0.1127	2.0373	0.0043	0.0340	0.0000
San Saba	2275050011	0.2676	0.0090	13.3288	0.0075	0.0134	0.0080
San Saba	2275050012	1.5830	0.2567	3.6767	0.0154	0.0758	0.0000
Schleicher	2275020000	0.0426	0.0179	0.2271	0.0006	0.0045	0.0000
Schleicher	2275050011	0.0360	0.0018	2.4368	0.0015	0.0027	0.0015
Schleicher	2275050012	1.2913	0.2087	2.9484	0.0123	0.0455	0.0000
Schleicher	2275001000	0.0073	0.2478	0.0481	0.0028	0.0142	0.0000
Scurry	2275020000	0.1462	0.1390	0.4970	0.0019	0.0196	0.0000
Scurry	2275060012	1.2007	1.4354	3.1642	0.0195	0.1523	0.0000
Scurry	2275050011	0.2874	0.0101	16.3802	0.0093	0.0176	0.0097
Scurry	2275050012	2.1380	0.5633	5.9433	0.0197	0.1208	0.0000
Scurry	2275001000	0.0160	0.0202	0.1174	0.0003	0.0048	0.0000
Shackelford	2275020000	0.2235	0.0635	1.1149	0.0032	0.0188	0.0000
Shackelford	2275050011	0.1555	0.0032	7.6872	0.0040	0.0068	0.0043
Shackelford	2275050012	0.9896	0.3677	2.1685	0.0099	0.0725	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Shackelford	2275001000	0.0087	0.6366	0.0932	0.0072	0.0356	0.0000
Shelby	2275020000	0.4935	0.0942	6.0386	0.0038	0.0305	0.0030
Shelby	2275050011	0.9193	0.0147	46.3556	0.0224	0.0429	0.0253
Shelby	2275050012	14.3817	103.3570	41.3143	1.2212	6.3381	0.0000
Shelby	2275001000	0.0378	0.0101	0.2177	0.0004	0.0032	0.0000
Sherman	2275050011	0.0605	0.0021	2.4858	0.0016	0.0023	0.0015
Smith	2275020000	7.5808	22.4972	29.8288	0.1476	2.1093	0.0043
Smith	2275060012	1.5797	5.5691	4.0331	0.0712	0.3963	0.0000
Smith	2275050011	0.9385	0.0643	52.6040	0.0268	0.0479	0.0306
Smith	2275050012	12.0170	8.5413	30.1443	0.1982	1.1099	0.0000
Smith	2275001000	0.2508	0.1200	2.0027	0.0022	0.0341	0.0005
Smith	2275070000	0.0421	0.6662	2.5914	0.0952	0.1464	0.0000
Smith	2265008005	0.3317	0.8223	12.8161	0.0000	0.0000	0.0000
Smith	2270008005	0.0334	0.2794	0.0432	0.0022	0.0000	0.0000
Somervell	2275050011	0.1133	0.0039	4.6567	0.0029	0.0044	0.0027
Somervell	2275050012	0.0011	0.0393	0.0143	0.0000	0.0049	0.0000
Starr	2275020000	0.4248	0.2037	2.4504	0.0077	0.0496	0.0000
Starr	2275050011	0.0720	0.0019	3.5852	0.0023	0.0033	0.0021
Starr	2275050012	0.9493	0.5514	2.2763	0.0117	0.0825	0.0000
Starr	2275001000	0.0256	1.8421	0.2730	0.0207	0.1031	0.0000
Stephens	2275020000	0.2791	0.0885	2.0201	0.0030	0.0267	0.0002
Stephens	2275060012	0.0283	0.0709	0.3380	0.0008	0.0164	0.0000
Stephens	2275050011	0.7796	0.0325	51.1916	0.0326	0.0530	0.0297
Stephens	2275050012	8.9648	2.4074	24.0151	0.0782	0.5591	0.0000
Stephens	2275001000	0.0255	0.0163	0.8921	0.0000	0.0044	0.0005
Sterling	2275050011	0.0604	0.0021	2.5571	0.0016	0.0024	0.0015
Sterling	2275050012	0.0015	0.0001	0.0034	0.0000	0.0000	0.0000
Stonewall	2275020000	0.0319	0.0091	0.1593	0.0005	0.0027	0.0000
Stonewall	2275050011	0.2525	0.0084	10.5238	0.0065	0.0098	0.0061
Stonewall	2275050012	0.1407	0.0525	0.3083	0.0014	0.0103	0.0000
Stonewall	2275001000	0.0012	0.0909	0.0133	0.0010	0.0051	0.0000
Sutton	2275020000	0.0426	0.0179	0.2271	0.0006	0.0045	0.0000
Sutton	2275050011	0.0784	0.0033	4.1769	0.0026	0.0043	0.0025
Sutton	2275050012	1.2921	0.2364	2.9583	0.0123	0.0489	0.0000
Sutton	2275001000	0.0073	0.2478	0.0481	0.0028	0.0142	0.0000
Swisher	2275020000	0.1744	0.0342	0.7579	0.0017	0.0112	0.0000
Swisher	2275050011	0.8236	0.0292	37.7758	0.0221	0.0367	0.0225
Swisher	2275050012	0.7909	0.2749	1.9026	0.0081	0.0523	0.0000
Swisher	2275001000	0.0168	0.2898	0.0993	0.0032	0.0181	0.0000
Tarrant	2275020000	414.4202	3136.1441	2889.0389	28.4551	282.0852	0.0790
Tarrant	2275060012	16.7153	88.0154	66.0107	1.0869	7.0606	0.0000
Tarrant	2275050011	39.1437	2.3394	2083.3415	1.0007	1.9122	1.2302
Tarrant	2275050012	198.4897	233.4482	556.1221	3.6096	25.4783	0.0000
Tarrant	2275001000	63.4495	124.4496	364.9921	1.2577	14.0479	0.0188
Tarrant	2275070000	9.3550	106.3784	149.6624	15.2267	16.7874	0.0000
Tarrant	2265008005	20.0632	40.7055	699.8873	0.0000	0.0000	0.0000
Tarrant	2270008005	5.4796	37.2530	10.8807	0.9892	0.0000	0.0000
Taylor	2275020000	9.2592	35.8642	32.7221	0.1988	3.1818	0.0019
Taylor	2275060012	0.7492	3.4204	2.1095	0.0358	0.2505	0.0000
Taylor	2275050011	2.7380	0.1663	141.4826	0.0898	0.1374	0.0833
Taylor	2275050012	9.1471	5.3542	23.5962	0.1223	0.7677	0.0000
Taylor	2275001000	11.9467	17.8601	63.2627	0.2274	2.6034	0.0006
Taylor	2275070000	0.0640	0.6464	1.8655	0.0959	0.1615	0.0000
Taylor	2265008005	0.5425	1.3276	20.7876	0.0000	0.0000	0.0000
Taylor	2270008005	0.0475	0.4064	0.0568	0.0028	0.0000	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Terrell	2275050011	0.0514	0.0021	3.1176	0.0022	0.0031	0.0018
Terrell	2275050012	0.0126	0.0009	0.0291	0.0001	0.0003	0.0000
Terry	2275020000	0.4070	0.0798	1.7684	0.0040	0.0262	0.0000
Terry	2275050011	0.6569	0.0239	33.7803	0.0174	0.0346	0.0209
Terry	2275050012	1.7996	0.6782	4.3475	0.0186	0.1260	0.0000
Terry	2275001000	0.0391	0.6762	0.2318	0.0075	0.0422	0.0000
Throckmorton	2275020000	0.0052	0.0016	0.0195	0.0001	0.0004	0.0000
Throckmorton	2275050011	0.0031	0.0001	0.1770	0.0001	0.0002	0.0001
Throckmorton	2275050012	0.0416	0.0178	0.0952	0.0004	0.0029	0.0000
Throckmorton	2275001000	0.0007	0.0395	0.0066	0.0004	0.0022	0.0000
Titus	2275020000	0.3965	0.2491	11.5975	0.0073	0.0456	0.0060
Titus	2275060012	0.0154	0.8750	0.1729	0.0097	0.0508	0.0000
Titus	2275050011	1.8619	0.1112	102.0990	0.0569	0.1059	0.0581
Titus	2275050012	26.1234	4.1651	65.9086	0.2428	1.1302	0.0000
Titus	2275001000	0.0078	0.0105	0.4375	0.0000	0.0032	0.0003
Tom Green	2275020000	12.6825	42.3894	49.5656	0.2847	3.9079	0.0040
Tom Green	2275060012	0.3589	4.7014	1.5625	0.0523	0.2861	0.0000
Tom Green	2275050011	1.5147	0.1117	71.7681	0.0378	0.0710	0.0405
Tom Green	2275050012	16.2077	9.6118	42.8438	0.2050	1.2534	0.0000
Tom Green	2275001000	20.3139	3.8532	89.2211	0.2385	1.2731	0.0005
Tom Green	2275070000	0.0801	0.8320	1.9119	0.1199	0.1928	0.0000
Tom Green	2265008005	0.7518	1.8388	28.9901	0.0000	0.0000	0.0000
Tom Green	2270008005	0.2270	2.0646	0.4926	0.0798	0.0000	0.0000
Travis	2275020000	77.8174	495.0554	511.6040	3.5512	45.3300	0.0385
Travis	2275060012	3.5353	17.1033	14.8650	0.2245	1.5382	0.0000
Travis	2275050011	7.4725	0.3958	376.8005	0.1762	0.4015	0.2087
Travis	2275050012	41.9743	38.5956	117.4135	0.7462	4.6992	0.0000
Travis	2275001000	6.8355	17.4317	36.0937	0.1378	2.3946	0.0025
Travis	2275070000	1.6474	19.8653	21.1030	2.2579	3.1563	0.0000
Travis	2265008005	4.1596	7.9895	141.0041	0.0000	0.0000	0.0000
Travis	2270008005	1.0392	6.8781	2.0624	0.0426	0.0000	0.0000
Trinity	2275020000	0.2761	0.0840	1.5729	0.0031	0.0253	0.0000
Trinity	2275050011	0.3018	0.0079	15.8009	0.0086	0.0145	0.0089
Trinity	2275050012	0.5368	0.2978	1.3771	0.0053	0.0510	0.0000
Trinity	2275001000	0.0182	1.1697	0.1901	0.0131	0.0661	0.0000
Tyler	2275020000	0.2671	0.0707	1.5260	0.0026	0.0228	0.0000
Tyler	2275050011	0.1172	0.0043	7.8801	0.0050	0.0081	0.0047
Tyler	2275050012	0.1784	0.0715	0.3523	0.0014	0.0123	0.0000
Upshur	2275020000	0.0626	0.0138	5.0200	0.0009	0.0102	0.0032
Upshur	2275050011	4.7036	0.8042	131.3888	0.0865	0.2166	0.0728
Upshur	2275050012	1.8053	1.5661	7.8365	0.0197	0.2586	0.0000
Upton	2275020000	0.0242	0.0097	0.1423	0.0004	0.0027	0.0000
Upton	2275050011	0.0143	0.0003	0.8023	0.0004	0.0008	0.0004
Upton	2275050012	0.1822	0.0686	0.4574	0.0016	0.0133	0.0000
Upton	2275001000	0.0014	0.0560	0.0098	0.0006	0.0032	0.0000
Uvalde	2275020000	1.0777	0.2463	2.8075	0.0097	0.0494	0.0004
Uvalde	2275060012	0.4581	2.0257	1.4322	0.0278	0.1417	0.0000
Uvalde	2275050011	0.8000	0.0362	42.2344	0.0271	0.0451	0.0232
Uvalde	2275050012	9.0633	3.3195	22.4512	0.1094	0.5856	0.0000
Uvalde	2275001000	0.5106	0.0635	1.2654	0.0048	0.0172	0.0000
Val Verde	2275020000	11.6487	18.5773	36.7927	0.1925	2.0080	0.0008
Val Verde	2275060012	0.0363	0.4484	0.2171	0.0052	0.0327	0.0000
Val Verde	2275050011	0.4551	0.0154	23.4673	0.0133	0.0228	0.0131
Val Verde	2275050012	4.2641	2.6794	13.7608	0.0628	0.4121	0.0000
Val Verde	2275001000	53.6148	9.5580	303.4552	0.5813	3.6221	0.0001

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Val Verde	2275070000	0.0210	0.1875	0.5965	0.0300	0.0460	0.0000
Val Verde	2265008005	0.2240	0.5452	8.6346	0.0000	0.0000	0.0000
Val Verde	2270008005	0.0941	0.8634	0.2147	0.0361	0.0000	0.0000
Van Zandt	2275020000	0.0274	0.0103	0.1586	0.0004	0.0030	0.0000
Van Zandt	2275050011	0.6420	0.0193	32.3230	0.0197	0.0308	0.0184
Van Zandt	2275050012	0.1538	0.1232	0.3529	0.0011	0.0184	0.0000
Van Zandt	2275001000	0.0026	0.1877	0.0275	0.0021	0.0105	0.0000
Victoria	2275020000	5.0213	1.6665	20.2659	0.0649	0.3630	0.0017
Victoria	2275060012	0.3297	3.9833	1.4336	0.0508	0.2634	0.0000
Victoria	2275050011	0.4078	0.0157	22.1791	0.0126	0.0210	0.0121
Victoria	2275050012	7.9289	10.4449	25.7820	0.1689	1.1338	0.0000
Victoria	2275001000	15.7179	2.7208	56.5645	0.1442	0.8897	0.0003
Victoria	2275070000	0.0259	0.4562	1.4362	0.0657	0.0914	0.0000
Victoria	2265008005	0.2829	0.7792	11.9956	0.0000	0.0000	0.0000
Victoria	2270008005	0.1379	0.8568	0.2319	0.0291	0.0000	0.0000
Walker	2275020000	1.0769	0.2200	3.8087	0.0096	0.0629	0.0000
Walker	2275060012	2.4670	13.3692	7.5578	0.1651	0.9155	0.0000
Walker	2275050011	1.3595	0.0576	81.7141	0.0430	0.0845	0.0467
Walker	2275050012	16.5464	5.4978	47.6511	0.1720	1.0926	0.0000
Walker	2275001000	0.2785	0.0950	2.1168	0.0024	0.0254	0.0002
Waller	2275020000	1.7124	1.3470	8.8733	0.0254	0.1868	0.0019
Waller	2275060012	0.8767	4.1353	2.8976	0.0556	0.3093	0.0000
Waller	2275050011	2.4881	0.0923	136.5985	0.0840	0.1207	0.0790
Waller	2275050012	7.8071	6.0891	24.6729	0.1246	0.7970	0.0000
Waller	2275001000	0.2058	0.0334	1.9661	0.0028	0.0118	0.0007
Ward	2275020000	0.8735	0.6555	5.3699	0.0120	0.1388	0.0000
Ward	2275050011	0.2784	0.0070	14.4820	0.0070	0.0129	0.0083
Ward	2275050012	1.3566	0.5784	3.4526	0.0122	0.1090	0.0000
Ward	2275001000	0.1022	0.6807	1.3298	0.0046	0.0899	0.0000
Washington	2275020000	4.5103	0.9347	12.9066	0.0382	0.2148	0.0012
Washington	2275060012	1.3825	7.4730	4.9464	0.0846	0.5411	0.0000
Washington	2275050011	1.7060	0.0818	93.0616	0.0443	0.0989	0.0514
Washington	2275050012	10.9051	6.3857	29.8368	0.1180	0.9721	0.0000
Washington	2275001000	0.0210	0.0746	0.2357	0.0000	0.0164	0.0000
Webb	2275020000	31.7920	126.6753	112.2233	1.5886	12.0397	0.0010
Webb	2275060012	0.5114	2.2897	1.5931	0.0316	0.1696	0.0000
Webb	2275050011	0.8200	0.0221	44.0960	0.0289	0.0397	0.0252
Webb	2275050012	25.2808	23.2387	72.2328	0.4465	3.0173	0.0000
Webb	2275001000	2.4591	1.4847	7.8609	0.0304	0.2248	0.0001
Webb	2275070000	0.3663	3.6989	6.5095	0.5868	0.6772	0.0000
Webb	2265008005	1.1424	2.4683	40.8201	0.0000	0.0000	0.0000
Webb	2270008005	0.2663	1.9270	0.5116	0.0526	0.0000	0.0000
Wharton	2275020000	0.4563	0.2051	0.9760	0.0057	0.0339	0.0000
Wharton	2275060012	0.0752	1.0533	0.3340	0.0119	0.0635	0.0000
Wharton	2275050011	1.9168	0.0712	99.1442	0.0618	0.0939	0.0575
Wharton	2275050012	3.4133	1.5174	9.2823	0.0351	0.2257	0.0000
Wharton	2275001000	0.0171	0.0549	0.2739	0.0002	0.0114	0.0001
Wheeler	2275020000	0.1106	0.0366	0.5898	0.0010	0.0099	0.0000
Wheeler	2275050011	0.0595	0.0025	3.1642	0.0019	0.0032	0.0019
Wheeler	2275050012	0.4045	0.2179	0.9399	0.0037	0.0408	0.0000
Wheeler	2275001000	0.0111	0.3846	0.0971	0.0044	0.0219	0.0000
Wichita	2275020000	22.3606	32.8874	88.4361	0.3104	3.4141	0.0146
Wichita	2275060012	5.9848	3.8095	13.8612	0.0906	0.3561	0.0000
Wichita	2275050011	2.8980	0.0909	148.2391	0.0741	0.1481	0.0843
Wichita	2275050012	18.2717	6.9403	47.8626	0.1979	1.2452	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Wichita	2275001000	315.7348	64.5462	2115.1125	3.1617	26.0016	0.0063
Wichita	2275070000	0.0318	0.2828	0.6501	0.0426	0.0667	0.0000
Wichita	2265008005	0.3196	0.7801	18.1778	0.0000	0.0000	0.0000
Wichita	2270008005	4.5162	43.7350	12.0264	2.2525	0.0000	0.0000
Wilbarger	2275020000	0.1597	0.0281	1.4875	0.0011	0.0100	0.0006
Wilbarger	2275060012	0.0689	0.8626	0.2575	0.0102	0.0493	0.0000
Wilbarger	2275050011	0.6075	0.0567	31.0058	0.0182	0.0347	0.0172
Wilbarger	2275050012	3.6073	1.8690	11.3615	0.0352	0.3234	0.0000
Wilbarger	2275001000	0.0076	0.0106	0.2521	0.0000	0.0025	0.0001
Willacy	2275020000	0.0452	0.0217	0.2605	0.0008	0.0053	0.0000
Willacy	2275050011	0.0712	0.0026	3.9264	0.0026	0.0037	0.0023
Willacy	2275050012	0.1192	0.0596	0.2831	0.0014	0.0092	0.0000
Willacy	2275001000	0.0027	0.1958	0.0290	0.0022	0.0110	0.0000
Williamson	2275020000	10.4466	1.6828	66.3540	0.0897	0.4921	0.0251
Williamson	2275060012	0.7376	3.8090	2.3562	0.0543	0.2761	0.0000
Williamson	2275050011	10.5439	0.8631	598.6065	0.2471	0.4763	0.3612
Williamson	2275050012	36.5341	9.8266	90.8811	0.3196	2.0072	0.0000
Williamson	2275001000	0.5985	0.1156	8.8243	0.0050	0.0367	0.0035
Williamson	2275070000	0.0201	0.3180	1.3684	0.0481	0.0720	0.0000
Williamson	2265008005	0.3493	0.9216	14.1915	0.0000	0.0000	0.0000
Williamson	2270008005	0.0782	0.3395	0.0796	0.0014	0.0000	0.0000
Wilson	2275050011	0.2275	0.0083	11.1258	0.0071	0.0104	0.0065
Wilson	2275050012	0.0347	0.0018	0.0781	0.0002	0.0008	0.0000
Winkler	2275020000	0.2141	0.0860	1.2567	0.0032	0.0238	0.0000
Winkler	2275050011	0.0991	0.0018	5.4289	0.0025	0.0052	0.0030
Winkler	2275050012	1.6029	0.6448	4.0382	0.0144	0.1226	0.0000
Winkler	2275001000	0.0126	0.4945	0.0863	0.0056	0.0279	0.0000
Wise	2275020000	0.4772	0.0457	5.0096	0.0045	0.0146	0.0023
Wise	2275060012	0.5446	0.0704	0.8967	0.0043	0.0187	0.0000
Wise	2275050011	5.0728	0.2815	283.1712	0.1475	0.3208	0.1634
Wise	2275050012	3.9972	3.5125	14.3543	0.0466	0.5948	0.0000
Wise	2275001000	0.4951	0.0898	28.2426	0.0004	0.0506	0.0174
Wood	2275020000	0.2280	0.0605	7.5162	0.0018	0.0277	0.0044
Wood	2275050011	5.0007	0.1450	268.8971	0.1466	0.2540	0.1523
Wood	2275050012	1.7697	0.5136	5.8194	0.0153	0.1212	0.0000
Wood	2275001000	0.1191	0.4122	0.7525	0.0051	0.0337	0.0000
Yoakum	2275020000	0.2907	0.0570	1.2632	0.0029	0.0187	0.0000
Yoakum	2275050011	0.4692	0.0171	24.1288	0.0124	0.0247	0.0149
Yoakum	2275050012	1.2847	0.4564	3.0953	0.0133	0.0864	0.0000
Yoakum	2275001000	0.0279	0.4830	0.1655	0.0054	0.0302	0.0000
Young	2275020000	0.9765	0.2880	4.0443	0.0160	0.0725	0.0003
Young	2275060012	0.0800	3.7820	0.7009	0.0423	0.2157	0.0000
Young	2275050011	0.7616	0.1060	42.2805	0.0202	0.0630	0.0239
Young	2275050012	12.8516	4.0574	33.6625	0.1295	0.8393	0.0000
Young	2275001000	0.0938	3.6508	2.1171	0.0409	0.2087	0.0009
Zapata	2275020000	0.2260	0.1485	1.2163	0.0068	0.0345	0.0000
Zapata	2275050011	0.2816	0.0127	16.1638	0.0092	0.0168	0.0099
Zapata	2275050012	1.0157	0.3127	2.1578	0.0088	0.0600	0.0000
Zapata	2275001000	0.0062	0.4480	0.0656	0.0050	0.0250	0.0000
Zavala	2275050011	0.1951	0.0067	8.0334	0.0050	0.0076	0.0047
Zavala	2275050012	0.0004	0.0000	0.0009	0.0000	0.0000	0.0000

*SCC represents the following categories: 2275020000: Commercial Aviation, 2275060012: Air taxis: Turbine Driven, 2275050011: General Aviation: Piston Driven, 2275050012: General Aviation: Turbine Driven, 2275001000: Military, 2275070000: APUs, 2270008005: GSE: Diesel-fueled, 2265008005: GSE: Gasoline-fueled.
Summer weekday emissions were obtained by dividing the annual emissions by 365 days.

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

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

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Anderson	2275020000	0.7393	0.3088	3.6269	0.0087	0.0604	0.0006
Anderson	2275060012	0.1950	5.2203	1.1073	0.0594	0.2969	0.0000
Anderson	2275050011	0.8265	0.0684	38.6055	0.0223	0.0454	0.0217
Anderson	2275050012	5.8766	3.7511	19.4369	0.0852	0.5762	0.0000
Anderson	2275001000	0.0347	0.0678	0.3713	0.0003	0.0098	0.0000
Andrews	2275020000	0.1301	0.0641	0.5580	0.0011	0.0154	0.0000
Andrews	2275060012	0.0228	0.0017	0.0527	0.0002	0.0005	0.0000
Andrews	2275050011	0.2273	0.0082	11.4596	0.0058	0.0118	0.0065
Andrews	2275050012	1.7871	1.5150	8.3769	0.0227	0.2621	0.0000
Andrews	2275001000	0.0006	0.0067	0.0091	0.0000	0.0014	0.0000
Angelina	2275020000	0.2805	0.2457	4.1954	0.0035	0.0443	0.0019
Angelina	2275060012	0.1558	0.0807	0.3275	0.0015	0.0134	0.0000
Angelina	2275050011	1.9746	0.0588	98.1467	0.0508	0.0898	0.0536
Angelina	2275050012	6.5182	14.0335	24.7977	0.1925	1.2117	0.0000
Angelina	2275001000	0.7756	0.1701	3.9081	0.0068	0.0536	0.0003
Aransas	2275020000	4.8661	0.9241	9.6751	0.0397	0.1891	0.0004
Aransas	2275060012	1.3625	10.9177	4.8975	0.1265	0.6913	0.0000
Aransas	2275050011	3.0095	0.1303	160.7636	0.0827	0.1721	0.0908
Aransas	2275050012	19.7527	27.2409	59.3845	0.4608	2.4709	0.0000
Aransas	2275001000	1.5145	0.6574	5.4010	0.0145	0.1528	0.0001
Archer	2275050011	0.2126	0.0075	9.2401	0.0059	0.0088	0.0054
Archer	2275050012	0.0064	0.0005	0.0147	0.0001	0.0002	0.0000
Armstrong	2275050011	0.0784	0.0028	3.6671	0.0023	0.0034	0.0021
Armstrong	2275050012	0.0087	0.0005	0.0196	0.0001	0.0002	0.0000
Atascosa	2275020000	0.2270	0.0508	1.3480	0.0020	0.0167	0.0002
Atascosa	2275050011	1.1684	0.0104	58.1761	0.0356	0.0482	0.0309
Atascosa	2275050012	2.9642	1.7901	8.4677	0.0354	0.2566	0.0000
Atascosa	2275001000	0.3388	0.1309	1.5991	0.0030	0.0347	0.0000
Austin	2275050011	0.3839	0.0141	18.7612	0.0121	0.0177	0.0109
Austin	2275050012	0.0538	0.0306	0.1298	0.0004	0.0047	0.0000
Bailey	2275020000	0.1938	0.0380	0.8421	0.0019	0.0125	0.0000
Bailey	2275050011	1.3875	0.0524	74.8584	0.0464	0.0714	0.0441
Bailey	2275050012	1.1414	0.3192	2.7052	0.0107	0.0641	0.0000
Bailey	2275001000	0.0186	0.3220	0.1104	0.0036	0.0201	0.0000
Bandera	2275050011	0.3500	0.0124	15.8671	0.0101	0.0149	0.0093
Bandera	2275050012	0.0298	0.0292	0.0754	0.0002	0.0041	0.0000
Bastrop	2275050011	2.2743	0.1148	114.5822	0.0665	0.1400	0.0721
Bastrop	2275050012	0.7664	0.2639	2.0978	0.0073	0.0675	0.0000
Bastrop	2275001000	0.9735	0.0942	2.2923	0.0079	0.0298	0.0000
Baylor	2275020000	0.2661	0.0836	0.9921	0.0053	0.0211	0.0000
Baylor	2275050011	0.1585	0.0053	8.9848	0.0039	0.0096	0.0050
Baylor	2275050012	2.1121	0.9013	4.8324	0.0211	0.1460	0.0000
Baylor	2275001000	0.0334	2.0073	0.3345	0.0225	0.1137	0.0000
Bee	2275020000	0.3540	0.0549	0.9094	0.0032	0.0148	0.0001
Bee	2275060012	0.0818	0.0372	0.1706	0.0008	0.0055	0.0000
Bee	2275050011	0.1461	0.0041	7.8937	0.0039	0.0081	0.0043
Bee	2275050012	0.9699	2.1827	4.0001	0.0277	0.2030	0.0000
Bee	2275001000	0.1794	0.1877	0.6261	0.0015	0.0402	0.0000
Bell	2275020000	17.0802	54.5844	74.0493	0.4598	5.4472	0.0019
Bell	2275060012	1.7980	17.4147	7.9483	0.2167	1.1376	0.0000
Bell	2275050011	5.0763	0.4059	266.1086	0.1375	0.2613	0.1551
Bell	2275050012	23.5234	18.1290	66.0035	0.3505	2.2265	0.0000
Bell	2275001000	14.1853	4.3968	43.8767	0.1190	0.7673	0.0002

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Bell	2275070000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Bell	2265008005	0.1042	0.2623	4.0848	0.0000	0.0000	0.0000
Bell	2270008005	0.0212	0.1168	0.0240	0.0023	0.0000	0.0000
Bexar	2275020000	51.6970	356.0245	322.3607	2.6818	31.3885	0.0368
Bexar	2275060012	2.4110	12.1154	9.9341	0.1411	1.1144	0.0000
Bexar	2275050011	13.3312	0.6986	724.3511	0.4317	0.7960	0.4178
Bexar	2275050012	48.1312	46.0626	150.5707	0.8096	5.7210	0.0000
Bexar	2275001000	64.0372	32.1396	379.4614	0.7498	7.1150	0.0039
Bexar	2275070000	1.4767	14.8747	18.6923	1.7519	2.3982	0.0000
Bexar	2265008005	3.3255	6.6439	115.0182	0.0000	0.0000	0.0000
Bexar	2270008005	0.8907	5.9717	1.7628	0.0754	0.0000	0.0000
Blanco	2275050011	3.1170	0.1072	128.7738	0.0808	0.1211	0.0752
Blanco	2275050012	0.0149	0.0008	0.0335	0.0001	0.0003	0.0000
Bosque	2275020000	0.7581	0.1690	3.8244	0.0071	0.0546	0.0000
Bosque	2275050011	0.6052	0.0761	32.4725	0.0187	0.0448	0.0278
Bosque	2275050012	1.0573	0.4256	2.5823	0.0092	0.0961	0.0000
Bosque	2275001000	0.0642	4.2718	0.6989	0.0478	0.2418	0.0000
Bowie	2275050011	0.0784	0.0030	4.2860	0.0028	0.0040	0.0025
Bowie	2275050012	0.0228	0.0766	0.0738	0.0001	0.0100	0.0000
Brazoria	2275020000	4.7277	1.0941	54.9028	0.0505	0.2860	0.0287
Brazoria	2275060012	0.7491	4.1484	2.3063	0.0530	0.2921	0.0000
Brazoria	2275050011	14.8347	0.7384	777.2265	0.3874	0.7608	0.4470
Brazoria	2275050012	66.1779	19.7081	147.8361	0.7758	4.3229	0.0000
Brazoria	2275001000	0.3108	0.6010	3.0019	0.0095	0.1271	0.0000
Brazoria	2275070000	0.0880	0.8589	4.6749	0.1169	0.2128	0.0000
Brazoria	2265008005	0.4649	1.1133	17.7066	0.0000	0.0000	0.0000
Brazoria	2270008005	0.1054	0.6396	0.1353	0.0256	0.0000	0.0000
Brazos	2275020000	12.4746	33.2084	44.9869	0.3426	3.2303	0.0047
Brazos	2275060012	1.2819	8.3613	4.3720	0.0989	0.5972	0.0000
Brazos	2275050011	3.4480	0.1889	180.0998	0.0962	0.1768	0.1024
Brazos	2275050012	15.0345	14.8825	50.8095	0.2557	1.8687	0.0000
Brazos	2275001000	8.4871	1.4159	25.1139	0.0850	0.4086	0.0006
Brazos	2275070000	0.1087	1.1599	3.2922	0.1736	0.2656	0.0000
Brazos	2265008005	0.5405	1.3043	20.6055	0.0000	0.0000	0.0000
Brazos	2270008005	0.0673	0.4877	0.0857	0.0064	0.0000	0.0000
Brewster	2275020000	0.6961	0.4042	2.2643	0.0060	0.0808	0.0002
Brewster	2275060012	0.4363	2.3311	1.2603	0.0268	0.1597	0.0000
Brewster	2275050011	2.5184	0.1136	148.9440	0.1024	0.1474	0.0859
Brewster	2275050012	4.9102	3.6495	16.1488	0.0542	0.6067	0.0000
Brewster	2275001000	0.0184	0.0124	0.1066	0.0003	0.0027	0.0000
Briscoe	2275050011	0.0008	0.0000	0.0388	0.0000	0.0000	0.0000
Briscoe	2275050012	0.0001	0.0000	0.0002	0.0000	0.0000	0.0000
Brooks	2275020000	0.4581	0.5253	1.8228	0.0135	0.0813	0.0000
Brooks	2275060012	0.8506	5.1432	3.8559	0.0647	0.3914	0.0000
Brooks	2275050011	0.1812	0.0040	8.6333	0.0053	0.0080	0.0048
Brooks	2275050012	4.0270	6.1662	12.0765	0.1247	0.6405	0.0000
Brooks	2275001000	0.1657	0.2923	1.0353	0.0013	0.0639	0.0000
Brown	2275020000	0.5332	0.1579	2.7464	0.0052	0.0386	0.0005
Brown	2275060012	0.1424	1.3867	0.7074	0.0154	0.0949	0.0000
Brown	2275050011	0.8176	0.0233	39.8016	0.0207	0.0393	0.0222
Brown	2275050012	5.1072	1.8129	15.4577	0.0570	0.3509	0.0000
Brown	2275001000	0.3170	0.1083	1.5895	0.0035	0.0302	0.0000
Burleson	2275020000	0.0151	0.1302	0.2180	0.0000	0.0303	0.0000
Burleson	2275050011	0.7013	0.0440	45.0401	0.0230	0.0547	0.0266
Burleson	2275050012	0.0473	0.2648	0.3854	0.0002	0.0523	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Burnet	2275020000	0.8876	1.3673	6.4991	0.0178	0.1475	0.0017
Burnet	2275060012	0.5856	4.9096	2.0554	0.0567	0.3081	0.0000
Burnet	2275050011	3.7697	0.1054	220.6154	0.1272	0.2104	0.1184
Burnet	2275050012	12.4274	11.3424	39.3657	0.2036	1.2325	0.0000
Burnet	2275001000	0.1562	0.0594	1.5679	0.0014	0.0155	0.0004
Caldwell	2275020000	3.4745	4.5667	73.3858	0.0450	0.8612	0.0347
Caldwell	2275060012	1.0352	1.0073	2.1061	0.0168	0.1020	0.0000
Caldwell	2275050011	4.8928	0.3666	258.5828	0.1316	0.2922	0.1546
Caldwell	2275050012	30.7121	9.5421	71.0087	0.3225	1.8114	0.0000
Caldwell	2275001000	2.6850	0.3927	9.0980	0.0251	0.1271	0.0008
Caldwell	2275070000	0.0884	1.0730	4.9718	0.1664	0.2879	0.0000
Caldwell	2265008005	0.5008	1.1791	18.7196	0.0000	0.0000	0.0000
Caldwell	2270008005	0.0866	0.4865	0.0899	0.0024	0.0000	0.0000
Calhoun	2275020000	0.3404	0.0335	0.6800	0.0025	0.0097	0.0001
Calhoun	2275060012	0.1421	0.5372	0.3388	0.0067	0.0351	0.0000
Calhoun	2275050011	1.0124	0.0287	61.1233	0.0419	0.0582	0.0346
Calhoun	2275050012	5.0891	1.1987	12.5232	0.0455	0.2711	0.0000
Calhoun	2275001000	0.5741	0.4123	1.8902	0.0063	0.0856	0.0000
Callahan	2275050011	0.1450	0.0055	7.9316	0.0052	0.0074	0.0046
Callahan	2275050012	0.0385	0.0020	0.0866	0.0003	0.0009	0.0000
Cameron	2275020000	37.8067	177.2799	155.5344	1.6852	17.9126	0.0026
Cameron	2275060012	1.0092	10.6417	7.7822	0.1052	1.1272	0.0000
Cameron	2275050011	5.3685	0.3998	151.9895	0.0959	0.2209	0.0868
Cameron	2275050012	21.7994	16.2342	61.7470	0.3177	2.3356	0.0000
Cameron	2275001000	3.3201	4.0981	15.3300	0.0651	0.7695	0.0001
Cameron	2275070000	1.1506	6.2143	10.3534	0.9353	1.1032	0.0000
Cameron	2265008005	1.5047	3.1478	53.1793	0.0000	0.0000	0.0000
Cameron	2270008005	0.3827	2.6178	0.7579	0.0786	0.0000	0.0000
Camp	2275050011	0.0380	0.0014	2.0790	0.0014	0.0019	0.0012
Camp	2275050012	0.0111	0.0398	0.0367	0.0001	0.0052	0.0000
Carson	2275020000	0.3089	0.0840	1.7802	0.0030	0.0269	0.0000
Carson	2275050011	0.5511	0.0175	28.9953	0.0179	0.0269	0.0166
Carson	2275050012	0.6067	0.2059	1.6244	0.0049	0.0436	0.0000
Cass	2275020000	1.1075	0.5921	5.9387	0.0130	0.1171	0.0000
Cass	2275050011	2.2382	0.0608	133.5541	0.0640	0.1224	0.0752
Cass	2275050012	3.6761	1.9021	5.0526	0.0317	0.2749	0.0000
Castro	2275020000	0.1809	0.0355	0.7860	0.0018	0.0116	0.0000
Castro	2275050011	0.3759	0.0137	18.9759	0.0102	0.0191	0.0116
Castro	2275050012	0.8094	0.2845	1.9487	0.0083	0.0540	0.0000
Castro	2275001000	0.0174	0.3005	0.1030	0.0034	0.0188	0.0000
Chambers	2275020000	1.8694	0.4949	10.6819	0.0179	0.1598	0.0000
Chambers	2275050011	1.8214	0.0724	117.2891	0.0789	0.1177	0.0689
Chambers	2275050012	1.4881	0.3008	2.9548	0.0125	0.0645	0.0000
Cherokee	2275020000	3.2050	0.3869	6.9528	0.0244	0.0999	0.0009
Cherokee	2275060012	0.0232	0.0801	0.1524	0.0006	0.0090	0.0000
Cherokee	2275050011	1.8175	0.0682	92.1848	0.0465	0.0947	0.0525
Cherokee	2275050012	7.7450	1.9601	20.9505	0.0637	0.4957	0.0000
Cherokee	2275001000	0.2965	0.0413	0.8056	0.0022	0.0128	0.0000
Childress	2275020000	0.4181	0.0783	0.7529	0.0030	0.0176	0.0000
Childress	2275060012	0.0272	1.3843	0.2547	0.0155	0.0790	0.0000
Childress	2275050011	0.2089	0.0083	11.0135	0.0066	0.0110	0.0059
Childress	2275050012	1.3507	0.8279	4.6724	0.0128	0.1623	0.0000
Childress	2275001000	0.0655	0.0075	0.2486	0.0006	0.0028	0.0000
Clay	2275050011	1.1229	0.0428	61.4131	0.0399	0.0574	0.0357
Clay	2275050012	0.2978	0.0156	0.6704	0.0019	0.0068	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Cochran	2275020000	0.0711	0.0139	0.3088	0.0007	0.0046	0.0000
Cochran	2275050011	0.1147	0.0042	5.8981	0.0030	0.0060	0.0036
Cochran	2275050012	0.3140	0.1116	0.7566	0.0032	0.0211	0.0000
Cochran	2275001000	0.0068	0.1181	0.0405	0.0013	0.0074	0.0000
Coleman	2275020000	0.2656	0.0436	1.1468	0.0026	0.0131	0.0003
Coleman	2275050011	0.4437	0.0146	22.6596	0.0119	0.0236	0.0139
Coleman	2275050012	4.8966	0.9438	14.5831	0.0499	0.2805	0.0000
Collin	2275020000	14.0152	20.8988	81.6670	0.3194	2.0710	0.0290
Collin	2275060012	6.0454	78.2036	21.2275	0.9428	4.6300	0.0000
Collin	2275050011	8.7691	0.7923	503.0025	0.2744	0.4451	0.3074
Collin	2275050012	44.8768	117.5983	140.5640	1.6899	10.1679	0.0000
Collin	2275001000	0.3455	0.1256	6.0314	0.0037	0.0247	0.0024
Collin	2275070000	0.5271	7.1760	23.2261	1.0648	1.5045	0.0000
Collin	2265008005	0.8919	2.2115	34.6148	0.0000	0.0000	0.0000
Collin	2270008005	0.1810	1.0531	0.2011	0.0195	0.0000	0.0000
Collingsworth	2275020000	0.2820	0.0933	1.5040	0.0025	0.0253	0.0000
Collingsworth	2275050011	0.2267	0.0090	11.1473	0.0067	0.0109	0.0067
Collingsworth	2275050012	1.0316	0.5558	2.3968	0.0094	0.1040	0.0000
Collingsworth	2275001000	0.0282	0.9806	0.2475	0.0111	0.0559	0.0000
Colorado	2275020000	0.5251	0.2514	5.2070	0.0088	0.0658	0.0013
Colorado	2275050011	1.2410	0.0525	70.4592	0.0328	0.0765	0.0403
Colorado	2275050012	3.4293	1.5385	7.6468	0.0337	0.2566	0.0000
Colorado	2275001000	0.3510	1.6885	1.6779	0.0188	0.1605	0.0000
Comal	2275020000	0.0017	0.0003	0.1361	0.0000	0.0001	0.0001
Comal	2275050011	1.9197	0.1067	112.9337	0.0669	0.0991	0.0678
Comal	2275050012	0.2952	0.1474	0.7304	0.0026	0.0235	0.0000
Comanche	2275020000	1.5701	0.5846	9.0222	0.0217	0.1652	0.0000
Comanche	2275050011	0.5742	0.0101	30.5938	0.0153	0.0293	0.0168
Comanche	2275050012	3.8768	1.1445	8.1576	0.0346	0.2157	0.0000
Comanche	2275001000	0.1165	1.4732	0.6827	0.0172	0.0936	0.0000
Concho	2275050011	0.0005	0.0000	0.0191	0.0000	0.0000	0.0000
Cooke	2275020000	0.3661	0.4485	1.6072	0.0062	0.0445	0.0005
Cooke	2275060012	0.1413	2.1690	0.6302	0.0251	0.1298	0.0000
Cooke	2275050011	0.9889	0.0360	54.0882	0.0346	0.0525	0.0311
Cooke	2275050012	3.2215	1.9226	8.2539	0.0435	0.2532	0.0000
Cooke	2275001000	0.1226	0.0338	1.7507	0.0009	0.0083	0.0009
Coryell	2275020000	11.3728	3.8686	79.1661	0.1434	1.1472	0.0000
Coryell	2275050011	0.1476	0.0164	8.0479	0.0048	0.0105	0.0065
Coryell	2275050012	0.2231	0.0812	0.5417	0.0019	0.0190	0.0000
Coryell	2275001000	0.0130	0.8677	0.1420	0.0097	0.0491	0.0000
Cottle	2275020000	0.1106	0.0366	0.5898	0.0010	0.0099	0.0000
Cottle	2275050011	0.1239	0.0048	5.9006	0.0036	0.0057	0.0035
Cottle	2275050012	0.4063	0.2180	0.9439	0.0037	0.0408	0.0000
Cottle	2275001000	0.0111	0.3846	0.0971	0.0044	0.0219	0.0000
Crane	2275020000	0.0866	0.0348	0.5082	0.0013	0.0096	0.0000
Crane	2275050011	0.0517	0.0011	2.6736	0.0013	0.0025	0.0015
Crane	2275050012	0.6478	0.2449	1.6274	0.0058	0.0476	0.0000
Crane	2275001000	0.0051	0.2000	0.0349	0.0023	0.0113	0.0000
Crockett	2275020000	0.1043	0.0437	0.5564	0.0014	0.0111	0.0000
Crockett	2275050011	0.1327	0.0061	7.7972	0.0049	0.0083	0.0047
Crockett	2275050012	3.1638	0.5113	7.2236	0.0301	0.1114	0.0000
Crockett	2275001000	0.0179	0.6070	0.1179	0.0068	0.0348	0.0000
Crosby	2275020000	0.0808	0.0158	0.3509	0.0008	0.0052	0.0000
Crosby	2275050011	1.4340	0.0495	60.2426	0.0370	0.0572	0.0354
Crosby	2275050012	0.3568	0.1268	0.8598	0.0037	0.0240	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Crosby	2275001000	0.0078	0.1342	0.0460	0.0015	0.0084	0.0000
Culberson	2275020000	0.4001	0.3249	2.1053	0.0137	0.0666	0.0000
Culberson	2275050011	0.1878	0.0048	9.4387	0.0054	0.0089	0.0053
Culberson	2275050012	1.8172	1.3027	4.4949	0.0219	0.1770	0.0000
Culberson	2275001000	0.0604	1.4284	0.4354	0.0159	0.0868	0.0000
Dallam	2275050011	0.5377	0.0205	29.4005	0.0191	0.0275	0.0171
Dallam	2275050012	0.1425	0.0074	0.3208	0.0009	0.0033	0.0000
Dallas	2275020000	92.0462	367.9688	501.0962	2.8975	35.9772	0.0691
Dallas	2275060012	14.5556	68.7164	50.6894	0.9288	5.3586	0.0000
Dallas	2275050011	22.0092	1.2781	1067.1720	0.5300	1.0836	0.6205
Dallas	2275050012	174.1110	230.2115	520.8540	3.3525	26.4655	0.0000
Dallas	2275001000	5.1075	15.3948	28.5137	0.1288	1.5863	0.0048
Dallas	2275070000	0.3181	5.0474	25.5115	0.7778	1.1613	0.0000
Dallas	2265008005	6.7448	14.1935	239.2275	0.0000	0.0000	0.0000
Dallas	2270008005	1.4035	9.3255	2.5108	0.0727	0.0000	0.0000
Dawson	2275020000	0.4673	0.1380	2.6962	0.0051	0.0428	0.0000
Dawson	2275050011	0.2754	0.0080	16.5933	0.0109	0.0163	0.0092
Dawson	2275050012	4.8917	2.4026	13.6349	0.0550	0.5423	0.0000
Dawson	2275001000	0.0023	0.0062	0.0296	0.0000	0.0016	0.0000
De Witt	2275020000	0.0140	0.0054	0.0787	0.0002	0.0014	0.0000
De Witt	2275050011	0.0066	0.0003	0.3522	0.0001	0.0003	0.0002
De Witt	2275050012	0.1145	0.0860	0.2486	0.0011	0.0124	0.0000
De Witt	2275001000	0.0006	0.0469	0.0069	0.0005	0.0026	0.0000
Deaf Smith	2275020000	0.2572	0.2752	1.2435	0.0029	0.0512	0.0000
Deaf Smith	2275060012	0.0083	0.6051	0.0886	0.0068	0.0338	0.0000
Deaf Smith	2275050011	0.4979	0.0076	25.4141	0.0135	0.0240	0.0141
Deaf Smith	2275050012	2.1923	2.7829	7.7724	0.0382	0.3492	0.0000
Delta	2275050011	0.0005	0.0000	0.0191	0.0000	0.0000	0.0000
Denton	2275020000	18.6038	10.9174	123.2453	0.2086	1.9820	0.0434
Denton	2275060012	4.7186	9.2486	9.3593	0.1356	0.6690	0.0000
Denton	2275050011	36.7266	1.1893	1959.4648	1.0589	1.9984	1.1117
Denton	2275050012	49.2422	37.5739	137.0602	0.6245	5.2541	0.0000
Denton	2275001000	0.8804	0.3787	11.7586	0.0070	0.1049	0.0053
Denton	2275070000	0.1530	3.4687	13.9924	0.4293	0.7075	0.0000
Denton	2265008005	1.0427	2.6004	40.8441	0.0000	0.0000	0.0000
Denton	2270008005	0.2810	1.4443	0.3174	0.0337	0.0000	0.0000
Dickens	2275050011	0.0756	0.0027	3.5524	0.0023	0.0033	0.0021
Dickens	2275050012	0.0087	0.0005	0.0196	0.0001	0.0002	0.0000
Dimmit	2275020000	0.3320	0.1816	1.2285	0.0040	0.0316	0.0000
Dimmit	2275060012	0.0155	0.1561	0.1086	0.0017	0.0115	0.0000
Dimmit	2275050011	0.1607	0.0053	7.2794	0.0043	0.0072	0.0043
Dimmit	2275050012	1.0336	0.5636	4.2288	0.0116	0.1096	0.0000
Dimmit	2275001000	0.1231	0.0104	0.3746	0.0012	0.0032	0.0000
Donley	2275020000	0.1659	0.0549	0.8847	0.0015	0.0149	0.0000
Donley	2275050011	0.0893	0.0038	4.7463	0.0028	0.0047	0.0029
Donley	2275050012	0.6068	0.3269	1.4099	0.0055	0.0612	0.0000
Donley	2275001000	0.0166	0.5769	0.1456	0.0066	0.0329	0.0000
Duval	2275020000	0.0072	0.0032	0.0349	0.0001	0.0007	0.0000
Duval	2275050011	0.2044	0.0070	8.9654	0.0056	0.0084	0.0052
Duval	2275050012	0.0722	0.0246	0.1654	0.0006	0.0048	0.0000
Duval	2275001000	0.0020	0.0003	0.0069	0.0000	0.0001	0.0000
Eastland	2275020000	3.5904	0.5399	10.6095	0.0360	0.1587	0.0008
Eastland	2275050011	1.2045	0.0330	58.5326	0.0276	0.0561	0.0326
Eastland	2275050012	7.3576	1.2646	17.4038	0.0642	0.3237	0.0000
Eastland	2275001000	0.0011	0.0098	0.0164	0.0000	0.0023	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Ector	2275020000	10.7128	2.9577	26.5386	0.0872	0.7048	0.0007
Ector	2275060012	0.4687	5.9857	1.7068	0.0690	0.3528	0.0000
Ector	2275050011	2.5750	0.1413	137.1937	0.0758	0.1529	0.0755
Ector	2275050012	55.5014	38.8002	130.7449	0.7225	4.8303	0.0000
Ector	2275001000	0.0781	0.0120	1.0242	0.0009	0.0043	0.0004
Edwards	2275020000	0.0233	0.0098	0.1242	0.0003	0.0025	0.0000
Edwards	2275050011	0.2024	0.0073	8.8364	0.0055	0.0085	0.0052
Edwards	2275050012	0.7059	0.1141	1.6118	0.0067	0.0249	0.0000
Edwards	2275001000	0.0040	0.1354	0.0263	0.0015	0.0078	0.0000
El Paso	2275020000	41.6733	270.4860	206.0649	2.0986	22.5620	0.0061
El Paso	2275060012	1.6561	13.8702	11.4915	0.0996	1.5223	0.0000
El Paso	2275050011	0.6646	0.0256	35.4894	0.0162	0.0328	0.0177
El Paso	2275050012	8.2819	17.3567	29.5063	0.2103	1.8116	0.0000
El Paso	2275001000	4.1512	4.4366	23.8818	0.0693	0.6002	0.0003
El Paso	2275070000	1.4836	8.8705	12.7953	1.2061	1.5031	0.0000
El Paso	2265008005	1.9707	3.8866	67.5999	0.0000	0.0000	0.0000
El Paso	2270008005	0.5519	3.8229	1.1418	0.0857	0.0000	0.0000
Ellis	2275020000	5.4897	2.4936	16.2816	0.0587	0.4284	0.0006
Ellis	2275060012	2.3107	11.9593	6.4795	0.1443	0.7833	0.0000
Ellis	2275050011	5.7448	0.6823	312.4270	0.1876	0.4241	0.1818
Ellis	2275050012	21.4740	12.4602	59.2155	0.2473	1.9306	0.0000
Ellis	2275001000	0.3580	0.4998	2.6639	0.0082	0.0590	0.0000
Erath	2275020000	1.5804	0.2346	6.4084	0.0141	0.0643	0.0021
Erath	2275060012	0.1358	0.3850	0.3423	0.0050	0.0270	0.0000
Erath	2275050011	1.6798	0.2226	56.4650	0.0276	0.0867	0.0330
Erath	2275050012	3.5840	0.8938	11.5165	0.0309	0.2129	0.0000
Erath	2275001000	0.0466	0.0108	0.4582	0.0004	0.0030	0.0001
Falls	2275020000	0.0415	0.0092	0.2091	0.0004	0.0030	0.0000
Falls	2275050011	0.0733	0.0057	3.9958	0.0025	0.0045	0.0028
Falls	2275050012	0.0689	0.0223	0.1656	0.0006	0.0053	0.0000
Falls	2275001000	0.0035	0.2336	0.0382	0.0026	0.0132	0.0000
Fannin	2275020000	0.6088	0.1874	3.7167	0.0104	0.0601	0.0000
Fannin	2275050011	1.1688	0.0501	66.1475	0.0286	0.0744	0.0384
Fannin	2275050012	8.7701	2.0729	18.6708	0.0808	0.4401	0.0000
Fannin	2275001000	0.0046	0.3325	0.0487	0.0037	0.0186	0.0000
Fayette	2275020000	0.3444	0.1927	1.2720	0.0034	0.0379	0.0001
Fayette	2275060012	0.6744	2.3751	1.7595	0.0295	0.1634	0.0000
Fayette	2275050011	0.7060	0.0393	30.0790	0.0135	0.0310	0.0169
Fayette	2275050012	8.0418	3.7029	18.5518	0.0963	0.4888	0.0000
Fayette	2275001000	0.0397	0.0141	0.1046	0.0004	0.0032	0.0000
Fisher	2275020000	0.3831	0.1089	1.9112	0.0055	0.0323	0.0000
Fisher	2275050011	0.2331	0.0042	11.3392	0.0056	0.0099	0.0062
Fisher	2275050012	1.6874	0.6299	3.6972	0.0169	0.1240	0.0000
Fisher	2275001000	0.0150	1.0912	0.1598	0.0123	0.0610	0.0000
Floyd	2275020000	0.4070	0.0798	1.7684	0.0040	0.0262	0.0000
Floyd	2275050011	0.7539	0.0276	39.0811	0.0208	0.0395	0.0239
Floyd	2275050012	1.8242	0.6403	4.3913	0.0188	0.1216	0.0000
Floyd	2275001000	0.0391	0.6762	0.2318	0.0075	0.0422	0.0000
Foard	2275050011	0.0901	0.0034	4.9264	0.0032	0.0046	0.0029
Foard	2275050012	0.0239	0.0012	0.0538	0.0002	0.0005	0.0000
Fort Bend	2275020000	13.8730	18.4837	82.0453	0.3411	1.8985	0.0243
Fort Bend	2275060012	6.1001	28.3232	20.1452	0.4010	2.1722	0.0000
Fort Bend	2275050011	5.8483	0.1959	292.1332	0.1467	0.2879	0.1661
Fort Bend	2275050012	49.0821	51.4412	134.8891	0.9626	6.0257	0.0000
Fort Bend	2275001000	0.6354	0.2017	2.1567	0.0065	0.0550	0.0001

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Fort Bend	2275070000	0.2027	3.2511	13.4725	0.4995	0.7022	0.0000
Fort Bend	2265008005	0.9011	2.2521	35.0539	0.0000	0.0000	0.0000
Fort Bend	2270008005	0.1279	0.8346	0.1480	0.0191	0.0000	0.0000
Franklin	2275050011	1.0830	0.0444	57.1760	0.0280	0.0625	0.0353
Franklin	2275050012	0.2418	0.1727	0.5836	0.0023	0.0303	0.0000
Freestone	2275020000	0.0051	0.0440	0.0737	0.0000	0.0102	0.0000
Freestone	2275050011	0.2389	0.0148	14.8905	0.0075	0.0182	0.0088
Freestone	2275050012	0.0084	0.1035	0.1174	0.0000	0.0193	0.0000
Frio	2275020000	0.1147	0.0816	0.9253	0.0052	0.0194	0.0002
Frio	2275060012	0.8828	4.2057	1.9018	0.0528	0.2547	0.0000
Frio	2275050011	0.2859	0.0049	19.2582	0.0136	0.0198	0.0112
Frio	2275050012	1.7567	2.3229	5.6999	0.0478	0.2388	0.0000
Frio	2275001000	0.0049	0.1043	0.0464	0.0010	0.0081	0.0000
Gaines	2275020000	0.0894	0.1278	0.6019	0.0008	0.0289	0.0000
Gaines	2275050011	1.2041	0.0411	61.0155	0.0393	0.0581	0.0350
Gaines	2275050012	6.3866	2.9050	19.0781	0.0714	0.6708	0.0000
Galveston	2275020000	2.8341	2.8351	13.3067	0.0535	0.3298	0.0029
Galveston	2275060012	0.5299	3.7603	2.0744	0.0482	0.2794	0.0000
Galveston	2275050011	3.5291	0.1690	179.7286	0.0952	0.1746	0.1015
Galveston	2275050012	12.1560	6.5780	31.9843	0.1803	1.0196	0.0000
Galveston	2275001000	0.5643	0.2895	2.7995	0.0065	0.0766	0.0000
Galveston	2275070000	0.0256	0.4250	1.8464	0.0625	0.0931	0.0000
Galveston	2265008005	0.1727	0.4402	6.8297	0.0000	0.0000	0.0000
Galveston	2270008005	0.0317	0.1882	0.0398	0.0041	0.0000	0.0000
Garza	2275020000	0.1938	0.0380	0.8421	0.0019	0.0125	0.0000
Garza	2275050011	0.4597	0.0164	22.1158	0.0120	0.0221	0.0134
Garza	2275050012	0.8564	0.3043	2.0635	0.0089	0.0576	0.0000
Garza	2275001000	0.0186	0.3220	0.1104	0.0036	0.0201	0.0000
Gillespie	2275020000	1.3083	0.6206	7.8929	0.0142	0.1013	0.0024
Gillespie	2275060012	1.0246	7.8969	3.4445	0.0919	0.4987	0.0000
Gillespie	2275050011	1.6462	0.1935	66.0886	0.0420	0.0883	0.0384
Gillespie	2275050012	5.1402	13.4241	16.3932	0.1887	1.0026	0.0000
Gillespie	2275001000	0.1128	0.0361	0.7284	0.0011	0.0108	0.0000
Glasscock	2275050011	0.1246	0.0044	5.5706	0.0035	0.0052	0.0032
Glasscock	2275050012	0.0088	0.0005	0.0199	0.0001	0.0002	0.0000
Goliad	2275020000	1.2316	3.7846	8.2798	0.0350	0.4218	0.0000
Goliad	2275050011	0.0237	0.0010	1.4393	0.0005	0.0014	0.0007
Goliad	2275050012	10.5851	10.6329	35.5207	0.1135	2.2901	0.0000
Goliad	2275001000	3.4162	1.7511	19.6207	0.0443	0.3678	0.0000
Gonzales	2275020000	0.2809	0.1070	1.5738	0.0032	0.0279	0.0000
Gonzales	2275050011	0.1334	0.0055	7.1016	0.0025	0.0067	0.0041
Gonzales	2275050012	2.2697	0.9347	4.6916	0.0224	0.1493	0.0000
Gonzales	2275001000	0.0129	0.9375	0.1373	0.0105	0.0524	0.0000
Gray	2275020000	1.1838	1.6387	10.4999	0.0129	0.3606	0.0009
Gray	2275060012	0.2857	1.1920	0.6594	0.0150	0.0757	0.0000
Gray	2275050011	0.3294	0.0047	17.9792	0.0080	0.0189	0.0102
Gray	2275050012	7.2250	3.3422	18.4160	0.0756	0.4888	0.0000
Gray	2275001000	0.0016	0.0003	0.1221	0.0000	0.0000	0.0000
Grayson	2275020000	3.6107	1.9498	28.4525	0.0429	0.3174	0.0132
Grayson	2275060012	0.3265	1.1954	1.2982	0.0172	0.1046	0.0000
Grayson	2275050011	3.2851	0.1815	188.3646	0.0927	0.2201	0.1136
Grayson	2275050012	13.6249	12.1712	38.5370	0.2188	1.6341	0.0000
Grayson	2275001000	0.2272	1.0554	1.9557	0.0015	0.2208	0.0000
Gregg	2275020000	8.4176	16.3278	40.5591	0.1363	1.6547	0.0116
Gregg	2275060012	0.4922	3.8518	1.5469	0.0469	0.2451	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Gregg	2275050011	5.7800	3.2321	187.1887	0.1200	0.5485	0.1022
Gregg	2275050012	21.2221	13.7068	49.8339	0.3103	1.8205	0.0000
Gregg	2275001000	6.7501	1.4059	36.4390	0.0651	0.4834	0.0013
Gregg	2275070000	0.0479	0.5624	1.7320	0.0795	0.1275	0.0000
Gregg	2265008005	0.3460	0.8680	13.5674	0.0000	0.0000	0.0000
Gregg	2270008005	0.0956	0.8161	0.1933	0.0296	0.0000	0.0000
Grimes	2275020000	0.1865	0.0289	0.6670	0.0017	0.0080	0.0001
Grimes	2275050011	1.0166	0.0596	62.3911	0.0217	0.0770	0.0380
Grimes	2275050012	4.2696	1.1848	9.5251	0.0383	0.2275	0.0000
Guadalupe	2275020000	3.5666	2.1253	33.1394	0.0470	0.3416	0.0147
Guadalupe	2275060012	1.5759	6.2863	4.5837	0.0783	0.4323	0.0000
Guadalupe	2275050011	6.3513	0.3593	339.7051	0.1631	0.3878	0.1972
Guadalupe	2275050012	36.3356	13.6317	94.0427	0.4184	2.3183	0.0000
Guadalupe	2275001000	12.3763	2.7306	90.3383	0.1381	1.0644	0.0002
Hale	2275020000	0.4119	0.0855	1.1314	0.0037	0.0223	0.0001
Hale	2275060012	0.0010	0.0027	0.0128	0.0000	0.0007	0.0000
Hale	2275050011	0.8745	0.0411	43.2369	0.0236	0.0456	0.0263
Hale	2275050012	1.8115	1.2760	5.4352	0.0262	0.1622	0.0000
Hale	2275001000	0.0010	0.0002	0.0874	0.0000	0.0001	0.0000
Hall	2275020000	0.0553	0.0183	0.2949	0.0005	0.0050	0.0000
Hall	2275050011	0.0298	0.0013	1.5821	0.0009	0.0016	0.0010
Hall	2275050012	0.2023	0.1090	0.4700	0.0018	0.0204	0.0000
Hall	2275001000	0.0055	0.1923	0.0485	0.0022	0.0110	0.0000
Hamilton	2275020000	0.6045	0.1347	3.0494	0.0057	0.0435	0.0000
Hamilton	2275050011	0.4135	0.0580	21.9339	0.0124	0.0321	0.0198
Hamilton	2275050012	0.8206	0.3157	2.0018	0.0072	0.0733	0.0000
Hamilton	2275001000	0.0512	3.4061	0.5573	0.0381	0.1928	0.0000
Hansford	2275020000	2.5800	0.5996	12.0601	0.0273	0.1829	0.0000
Hansford	2275050011	1.2582	0.0147	73.4286	0.0438	0.0680	0.0404
Hansford	2275050012	13.2058	4.2129	32.6493	0.1322	0.9459	0.0000
Hansford	2275001000	0.0035	0.2009	0.0397	0.0022	0.0117	0.0000
Hardeman	2275020000	0.4055	0.1341	2.1626	0.0036	0.0364	0.0000
Hardeman	2275050011	0.2182	0.0092	11.6021	0.0068	0.0116	0.0071
Hardeman	2275050012	1.4833	0.7991	3.4464	0.0135	0.1496	0.0000
Hardeman	2275001000	0.0405	1.4101	0.3559	0.0160	0.0804	0.0000
Hardin	2275020000	0.5252	0.1390	3.0011	0.0050	0.0449	0.0000
Hardin	2275050011	0.1554	0.0057	11.3894	0.0071	0.0120	0.0068
Hardin	2275050012	0.3297	0.0901	0.6303	0.0026	0.0175	0.0000
Harris	2275020000	226.9108	1456.4958	1657.1146	12.9591	147.0027	0.1204
Harris	2275060012	17.4510	35.6386	43.2621	0.5437	3.2751	0.0000
Harris	2275050011	26.3938	1.3064	1359.0627	0.6848	1.3309	0.7977
Harris	2275050012	207.0405	155.0165	528.8429	4.3262	19.5453	0.0000
Harris	2275001000	21.5291	36.2627	85.5074	0.3760	4.1131	0.0102
Harris	2275070000	2.5868	37.5630	47.6279	4.6734	5.9272	0.0000
Harris	2265008005	10.0423	21.4376	373.2532	0.0000	0.0000	0.0000
Harris	2270008005	2.7364	15.0529	4.1927	0.0857	0.0000	0.0000
Harrison	2275020000	0.4194	0.1062	3.3899	0.0033	0.0227	0.0016
Harrison	2275060012	1.9227	0.3084	3.1887	0.0157	0.0690	0.0000
Harrison	2275050011	0.7070	0.0268	37.9118	0.0202	0.0389	0.0214
Harrison	2275050012	21.7468	4.8394	43.1476	0.1957	0.9900	0.0000
Harrison	2275001000	0.0256	0.0109	0.1565	0.0002	0.0030	0.0000
Hartley	2275020000	0.6900	0.2269	2.4054	0.0061	0.0474	0.0004
Hartley	2275060012	0.0017	0.1266	0.0185	0.0014	0.0071	0.0000
Hartley	2275050011	1.0446	0.1820	25.9060	0.0187	0.0526	0.0140
Hartley	2275050012	2.0820	0.8561	7.7070	0.0208	0.1856	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Hartley	2275001000	0.0014	0.0016	0.0579	0.0000	0.0003	0.0000
Haskell	2275020000	0.1596	0.0454	0.7963	0.0023	0.0135	0.0000
Haskell	2275050011	0.0969	0.0018	4.7167	0.0023	0.0041	0.0026
Haskell	2275050012	0.7031	0.2625	1.5405	0.0071	0.0517	0.0000
Haskell	2275001000	0.0062	0.4547	0.0666	0.0051	0.0254	0.0000
Hays	2275050011	0.1889	0.0065	7.7639	0.0049	0.0073	0.0045
Hays	2275050012	0.0031	0.1149	0.0413	0.0000	0.0145	0.0000
Hemphill	2275020000	0.1157	0.0594	0.6903	0.0011	0.0158	0.0000
Hemphill	2275050011	0.3775	0.0110	22.3676	0.0133	0.0234	0.0131
Hemphill	2275050012	4.6841	4.3743	14.1375	0.0700	0.5602	0.0000
Henderson	2275020000	0.1263	0.0264	5.8868	0.0006	0.0158	0.0037
Henderson	2275060012	0.0508	3.1892	0.5592	0.0356	0.1821	0.0000
Henderson	2275050011	4.3453	0.2586	255.3792	0.1724	0.2662	0.1513
Henderson	2275050012	6.0869	2.7847	17.0167	0.0721	0.3757	0.0000
Hidalgo	2275020000	14.0814	88.0364	68.0689	0.9403	8.7359	0.0015
Hidalgo	2275060012	1.1277	6.3970	7.4993	0.0700	0.8650	0.0000
Hidalgo	2275050011	3.1092	0.1171	159.2734	0.0883	0.1601	0.0915
Hidalgo	2275050012	18.2250	13.5938	51.3162	0.2605	1.9888	0.0000
Hidalgo	2275001000	2.4884	3.6858	8.5708	0.0480	0.3800	0.0003
Hidalgo	2275070000	0.7241	3.6658	7.0547	0.4974	0.6082	0.0000
Hidalgo	2265008005	1.0237	2.1677	36.3914	0.0000	0.0000	0.0000
Hidalgo	2270008005	0.2021	1.3989	0.3617	0.0065	0.0000	0.0000
Hill	2275020000	0.3178	0.2001	2.8618	0.0047	0.0325	0.0011
Hill	2275050011	0.9701	0.0746	54.1852	0.0294	0.0651	0.0306
Hill	2275050012	1.8778	0.8433	10.9799	0.0170	0.2032	0.0000
Hill	2275001000	0.0447	0.0011	1.9027	0.0000	0.0023	0.0011
Hockley	2275020000	1.7568	0.4618	8.8923	0.0161	0.1413	0.0000
Hockley	2275060012	0.0164	0.0455	0.2163	0.0000	0.0114	0.0000
Hockley	2275050011	0.2587	0.0036	12.5764	0.0053	0.0117	0.0067
Hockley	2275050012	4.0036	1.3300	12.0929	0.0315	0.3257	0.0000
Hockley	2275001000	0.0056	0.0172	0.0688	0.0000	0.0040	0.0000
Hood	2275020000	0.4680	0.2010	5.8767	0.0049	0.0425	0.0026
Hood	2275060012	0.0405	2.9498	0.4319	0.0332	0.1648	0.0000
Hood	2275050011	3.7760	0.2971	189.1651	0.1058	0.2011	0.1043
Hood	2275050012	5.7157	1.6476	32.9598	0.0504	0.3963	0.0000
Hood	2275001000	0.0124	0.0216	0.9587	0.0000	0.0064	0.0006
Hopkins	2275020000	1.3703	0.8599	19.2733	0.0132	0.1408	0.0103
Hopkins	2275060012	0.8669	18.3645	4.2012	0.2081	1.0657	0.0000
Hopkins	2275050011	1.7046	0.1041	100.4756	0.0435	0.1166	0.0590
Hopkins	2275050012	14.7362	15.4986	43.0444	0.2858	1.6022	0.0000
Hopkins	2275001000	0.0971	0.0811	0.6396	0.0008	0.0187	0.0000
Houston	2275020000	1.0125	0.3080	5.7672	0.0113	0.0928	0.0000
Houston	2275050011	0.9098	0.0213	46.2330	0.0240	0.0421	0.0257
Houston	2275050012	1.8940	0.9445	4.8388	0.0190	0.1672	0.0000
Houston	2275001000	0.0669	4.2889	0.6971	0.0481	0.2424	0.0000
Howard	2275020000	2.5153	1.2146	11.4337	0.0291	0.2432	0.0014
Howard	2275060012	0.0620	0.8628	0.2457	0.0100	0.0509	0.0000
Howard	2275050011	1.2548	0.0373	58.3577	0.0542	0.0609	0.0305
Howard	2275050012	9.3054	6.9945	31.1163	0.1185	1.0034	0.0000
Howard	2275001000	2.8034	0.3330	7.0948	0.0209	0.1047	0.0000
Hudspeth	2275020000	0.0690	0.0560	0.3630	0.0024	0.0115	0.0000
Hudspeth	2275050011	0.0694	0.0021	3.1466	0.0019	0.0030	0.0018
Hudspeth	2275050012	0.3148	0.2799	0.7948	0.0038	0.0375	0.0000
Hudspeth	2275001000	0.0104	0.2463	0.0751	0.0027	0.0150	0.0000
Hunt	2275020000	1.3937	5.7426	15.3281	0.0474	0.4927	0.0047

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Hunt	2275060012	0.8766	0.7354	2.2966	0.0147	0.0988	0.0000
Hunt	2275050011	3.4232	0.1625	189.3943	0.0882	0.2098	0.1125
Hunt	2275050012	12.7409	6.2937	31.9088	0.1566	0.9917	0.0000
Hunt	2275001000	2.3810	18.1451	13.2139	0.1107	1.3333	0.0000
Hutchinson	2275020000	0.8219	0.3904	2.1944	0.0098	0.0502	0.0002
Hutchinson	2275060012	0.0015	0.0040	0.0192	0.0000	0.0010	0.0000
Hutchinson	2275050011	0.2211	0.0109	10.8171	0.0053	0.0120	0.0059
Hutchinson	2275050012	4.6841	1.3425	11.5707	0.0469	0.2677	0.0000
Hutchinson	2275001000	0.0076	0.0104	0.0365	0.0008	0.0023	0.0000
Irion	2275050011	0.0328	0.0013	1.7932	0.0012	0.0017	0.0010
Irion	2275050012	0.0087	0.0005	0.0196	0.0001	0.0002	0.0000
Jack	2275020000	0.1226	0.0320	0.5315	0.0013	0.0091	0.0000
Jack	2275050011	0.2058	0.0103	11.9485	0.0060	0.0125	0.0071
Jack	2275050012	0.5741	0.1211	1.0308	0.0045	0.0257	0.0000
Jack	2275001000	0.0009	0.0375	0.0102	0.0004	0.0023	0.0000
Jackson	2275020000	0.1205	0.0551	0.6964	0.0015	0.0139	0.0000
Jackson	2275050011	3.6470	0.1333	168.1503	0.1053	0.1592	0.0982
Jackson	2275050012	1.7045	1.5054	5.4380	0.0137	0.3282	0.0000
Jackson	2275001000	0.0601	0.7239	0.3575	0.0084	0.0477	0.0000
Jasper	2275020000	0.4730	0.2142	5.5951	0.0041	0.0416	0.0020
Jasper	2275060012	0.6820	0.1973	1.2763	0.0059	0.0371	0.0000
Jasper	2275050011	0.9622	0.0241	48.9135	0.0200	0.0485	0.0272
Jasper	2275050012	9.3674	6.6717	26.1164	0.1466	0.8087	0.0000
Jasper	2275001000	0.3758	0.0899	1.6766	0.0037	0.0280	0.0000
Jeff Davis	2275050011	1.8442	0.0633	75.7402	0.0475	0.0712	0.0442
Jefferson	2275020000	2.9314	6.6340	11.1334	0.0567	0.6905	0.0009
Jefferson	2275060012	1.5968	1.9764	2.8299	0.0350	0.1629	0.0000
Jefferson	2275050011	1.9371	0.0611	106.6962	0.0649	0.1017	0.0590
Jefferson	2275050012	13.0799	12.7700	39.5542	0.2284	1.6657	0.0000
Jefferson	2275001000	0.5051	0.1634	2.4130	0.0045	0.0467	0.0001
Jefferson	2275070000	0.0216	0.3883	2.5247	0.0604	0.0974	0.0000
Jefferson	2265008005	0.2289	0.5618	8.7517	0.0000	0.0000	0.0000
Jefferson	2270008005	0.0149	0.1730	0.0188	0.0028	0.0000	0.0000
Jim Hogg	2275020000	0.0504	0.0645	0.2107	0.0013	0.0075	0.0000
Jim Hogg	2275060012	0.0317	0.3031	0.1474	0.0035	0.0196	0.0000
Jim Hogg	2275050011	0.0387	0.0013	2.1825	0.0014	0.0020	0.0013
Jim Hogg	2275050012	0.2763	0.2802	0.9205	0.0052	0.0316	0.0000
Jim Hogg	2275001000	0.0005	0.0014	0.0212	0.0000	0.0003	0.0000
Jim Wells	2275020000	0.4106	0.5055	1.1938	0.0081	0.0447	0.0001
Jim Wells	2275060012	0.3722	2.4954	0.9580	0.0300	0.1512	0.0000
Jim Wells	2275050011	0.2694	0.0182	14.9158	0.0090	0.0159	0.0081
Jim Wells	2275050012	4.9354	4.0546	13.8355	0.0531	0.8518	0.0000
Jim Wells	2275001000	5.2866	7.3024	19.5564	0.0673	0.8847	0.0001
Johnson	2275020000	4.7698	1.8810	16.3799	0.0488	0.3541	0.0020
Johnson	2275060012	0.8034	2.7242	2.3582	0.0343	0.2017	0.0000
Johnson	2275050011	2.6290	0.1420	140.5645	0.0710	0.1404	0.0802
Johnson	2275050012	10.4313	5.8604	31.1704	0.1174	0.9029	0.0000
Johnson	2275001000	0.4530	0.0239	16.9717	0.0003	0.0228	0.0093
Jones	2275020000	0.4658	0.1328	2.3230	0.0044	0.0376	0.0000
Jones	2275050011	0.8876	0.0316	42.0312	0.0254	0.0414	0.0248
Jones	2275050012	2.9766	1.5694	7.0292	0.0313	0.2331	0.0000
Jones	2275001000	0.0080	0.4522	0.0893	0.0050	0.0262	0.0000
Karnes	2275020000	0.0768	0.0433	0.4557	0.0016	0.0112	0.0000
Karnes	2275050011	0.2754	0.0031	12.5605	0.0046	0.0115	0.0068
Karnes	2275050012	0.3893	0.8661	4.6484	0.0070	0.1045	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Karnes	2275001000	0.1405	0.0277	0.3443	0.0013	0.0068	0.0000
Kaufman	2275020000	1.1773	0.4189	12.5727	0.0149	0.0983	0.0055
Kaufman	2275060012	0.4839	3.6069	1.5149	0.0422	0.2283	0.0000
Kaufman	2275050011	5.5851	0.2622	300.1658	0.1786	0.3350	0.1724
Kaufman	2275050012	12.6925	6.5232	34.2614	0.1500	0.8748	0.0000
Kaufman	2275001000	2.3664	0.1993	2.8753	0.0154	0.0485	0.0000
Kendall	2275050011	0.1401	0.0052	7.0473	0.0045	0.0066	0.0041
Kendall	2275050012	0.0252	0.0013	0.0567	0.0002	0.0006	0.0000
Kenedy	2275050011	0.2181	0.0075	8.9584	0.0056	0.0084	0.0052
Kent	2275020000	0.0639	0.0182	0.3185	0.0009	0.0054	0.0000
Kent	2275050011	0.0392	0.0007	1.9058	0.0009	0.0017	0.0010
Kent	2275050012	0.2812	0.1050	0.6162	0.0028	0.0207	0.0000
Kent	2275001000	0.0025	0.1819	0.0266	0.0020	0.0102	0.0000
Kerr	2275020000	6.6458	6.9840	30.0094	0.1204	0.7638	0.0077
Kerr	2275060012	2.7839	13.4073	7.9033	0.1656	0.8894	0.0000
Kerr	2275050011	2.9978	0.4805	148.1050	0.0859	0.1996	0.0848
Kerr	2275050012	30.2551	16.3228	73.9599	0.3959	2.3096	0.0000
Kerr	2275001000	0.3759	0.1363	5.4981	0.0045	0.0408	0.0025
Kimble	2275020000	0.1307	0.0237	0.3280	0.0011	0.0064	0.0000
Kimble	2275060012	0.0874	0.0826	0.2504	0.0011	0.0106	0.0000
Kimble	2275050011	0.1699	0.0108	10.7588	0.0068	0.0124	0.0065
Kimble	2275050012	1.2497	1.5428	3.4213	0.0247	0.1496	0.0000
Kimble	2275001000	3.9881	0.3165	9.2678	0.0367	0.0988	0.0000
King	2275050011	0.0852	0.0029	3.4992	0.0022	0.0033	0.0020
Kinney	2275020000	0.0362	0.1690	0.1028	0.0029	0.0152	0.0000
Kinney	2275050011	0.2667	0.0095	12.4534	0.0079	0.0117	0.0072
Kinney	2275050012	9.4710	1.1742	25.1780	0.0938	0.3541	0.0000
Kinney	2275001000	11.6297	2.5014	89.7447	0.1326	1.0284	0.0000
Kleberg	2275020000	0.5643	1.5328	2.2135	0.0151	0.1573	0.0000
Kleberg	2275060012	0.0523	0.4260	0.2085	0.0050	0.0282	0.0000
Kleberg	2275050011	0.0496	0.0016	3.7459	0.0024	0.0041	0.0022
Kleberg	2275050012	0.5154	0.4683	1.5424	0.0086	0.0512	0.0000
Kleberg	2275001000	5.8703	5.2521	24.6187	0.0663	1.1338	0.0001
Knox	2275020000	0.0829	0.0274	0.4424	0.0007	0.0074	0.0000
Knox	2275050011	0.2951	0.0106	13.2138	0.0082	0.0126	0.0078
Knox	2275050012	0.3142	0.1640	0.7292	0.0028	0.0308	0.0000
Knox	2275001000	0.0083	0.2884	0.0728	0.0033	0.0164	0.0000
La Salle	2275020000	0.7578	0.2275	2.1800	0.0075	0.0480	0.0000
La Salle	2275060012	0.5037	3.4376	1.8318	0.0404	0.2295	0.0000
La Salle	2275050011	0.2848	0.0105	15.9169	0.0102	0.0163	0.0090
La Salle	2275050012	6.4463	3.8110	15.6612	0.0853	0.4782	0.0000
La Salle	2275001000	3.8753	0.4272	9.2411	0.0293	0.1323	0.0000
Lamar	2275020000	0.4162	0.1194	5.4935	0.0035	0.0333	0.0025
Lamar	2275060012	0.3470	0.3631	0.6684	0.0060	0.0315	0.0000
Lamar	2275050011	2.5759	0.1169	141.2256	0.0833	0.1429	0.0819
Lamar	2275050012	7.2256	1.8977	17.1844	0.0693	0.3990	0.0000
Lamar	2275001000	0.0071	0.0099	0.5862	0.0000	0.0030	0.0004
Lamb	2275020000	0.0468	0.0092	0.2035	0.0005	0.0030	0.0000
Lamb	2275050011	0.6825	0.0236	28.8123	0.0176	0.0274	0.0170
Lamb	2275050012	0.2070	0.0735	0.4987	0.0021	0.0139	0.0000
Lamb	2275001000	0.0045	0.0778	0.0267	0.0009	0.0049	0.0000
Lampasas	2275020000	0.1262	0.0167	3.1032	0.0014	0.0076	0.0014
Lampasas	2275050011	1.2242	0.2376	67.9870	0.0401	0.0916	0.0389
Lampasas	2275050012	0.8813	1.4413	3.1093	0.0179	0.1398	0.0000
Lampasas	2275001000	0.6551	0.0939	2.1802	0.0056	0.0299	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Lavaca	2275020000	0.2633	0.1003	1.4755	0.0030	0.0261	0.0000
Lavaca	2275050011	0.2070	0.0081	10.5046	0.0048	0.0099	0.0060
Lavaca	2275050012	2.1382	0.9160	4.4335	0.0210	0.1451	0.0000
Lavaca	2275001000	0.0121	0.8789	0.1287	0.0099	0.0491	0.0000
Lee	2275020000	0.0110	0.0081	0.7561	0.0000	0.0027	0.0005
Lee	2275050011	0.8437	0.0235	53.5865	0.0340	0.0540	0.0306
Lee	2275050012	0.4376	0.0736	2.2373	0.0035	0.0207	0.0000
Lee	2275001000	0.3297	0.0380	1.0776	0.0029	0.0106	0.0002
Leon	2275050011	0.2869	0.0104	13.8894	0.0089	0.0130	0.0081
Leon	2275050012	0.0418	0.0298	0.1023	0.0003	0.0044	0.0000
Liberty	2275020000	0.9638	0.1251	14.7397	0.0073	0.0466	0.0068
Liberty	2275060012	0.0987	4.1663	0.8087	0.0461	0.2432	0.0000
Liberty	2275050011	1.7858	0.0800	104.3315	0.0463	0.1052	0.0613
Liberty	2275050012	3.9175	0.8333	15.5087	0.0349	0.2465	0.0000
Limestone	2275060012	0.0241	1.4739	0.2663	0.0164	0.0845	0.0000
Limestone	2275050011	0.3371	0.0559	15.3064	0.0085	0.0255	0.0150
Limestone	2275050012	1.1658	1.8351	4.6816	0.0271	0.1789	0.0000
Limestone	2275001000	0.0266	0.0071	0.1535	0.0003	0.0023	0.0000
Lipscomb	2275020000	0.0858	0.0233	0.4945	0.0008	0.0075	0.0000
Lipscomb	2275050011	0.1483	0.0043	6.3168	0.0037	0.0059	0.0036
Lipscomb	2275050012	0.1387	0.0556	0.3841	0.0012	0.0114	0.0000
Live Oak	2275020000	0.1251	0.0339	0.7483	0.0012	0.0109	0.0000
Live Oak	2275050011	0.3032	0.0080	17.9095	0.0122	0.0172	0.0104
Live Oak	2275050012	0.5188	0.1166	2.0683	0.0049	0.0335	0.0000
Live Oak	2275001000	0.0081	0.0212	0.0425	0.0001	0.0045	0.0000
Llano	2275020000	1.8772	1.0505	6.6527	0.0250	0.1328	0.0011
Llano	2275060012	0.9732	3.4413	3.2704	0.0433	0.2706	0.0000
Llano	2275050011	1.7190	0.0714	88.3280	0.0428	0.0843	0.0488
Llano	2275050012	7.3293	3.3936	19.2191	0.0895	0.5578	0.0000
Llano	2275001000	0.0490	0.0162	0.2646	0.0004	0.0041	0.0000
Lubbock	2275020000	36.6101	148.4975	181.0559	1.1785	12.1583	0.0189
Lubbock	2275060012	2.0077	10.9792	6.5964	0.0964	0.9235	0.0000
Lubbock	2275050011	4.7406	0.2324	267.4988	0.1748	0.2602	0.1542
Lubbock	2275050012	25.1277	15.5906	67.8774	0.3318	2.1528	0.0000
Lubbock	2275001000	7.2338	11.6969	32.5518	0.1414	1.3283	0.0001
Lubbock	2275070000	0.3736	5.4647	6.7362	0.6679	0.9013	0.0000
Lubbock	2265008005	1.4573	3.1239	52.4440	0.0000	0.0000	0.0000
Lubbock	2270008005	0.5038	3.5924	1.0321	0.1236	0.0000	0.0000
Lynn	2275020000	0.1034	0.0203	0.4491	0.0010	0.0067	0.0000
Lynn	2275050011	0.1668	0.0061	8.5791	0.0044	0.0088	0.0053
Lynn	2275050012	0.4568	0.1623	1.1006	0.0047	0.0307	0.0000
Lynn	2275001000	0.0099	0.1717	0.0589	0.0019	0.0107	0.0000
Madison	2275020000	0.0053	0.0458	0.0767	0.0000	0.0107	0.0000
Madison	2275050011	0.2367	0.0151	15.4989	0.0079	0.0189	0.0091
Madison	2275050012	0.0175	0.0795	0.1334	0.0001	0.0167	0.0000
Marion	2275020000	0.1910	0.0581	1.1027	0.0022	0.0178	0.0000
Marion	2275050011	0.4576	0.0105	26.9336	0.0189	0.0269	0.0146
Marion	2275050012	0.2614	0.0421	0.5056	0.0021	0.0105	0.0000
Martin	2275020000	0.1181	0.0474	0.6931	0.0018	0.0131	0.0000
Martin	2275050011	0.1103	0.0029	5.2789	0.0028	0.0050	0.0030
Martin	2275050012	0.8834	0.3340	2.2192	0.0080	0.0649	0.0000
Martin	2275001000	0.0070	0.2727	0.0476	0.0031	0.0154	0.0000
Mason	2275020000	0.0302	0.0081	0.1740	0.0003	0.0026	0.0000
Mason	2275050011	0.3633	0.0165	20.3256	0.0113	0.0206	0.0119
Mason	2275050012	0.0707	0.0150	0.1848	0.0006	0.0039	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Matagorda	2275020000	2.0152	0.3780	5.4791	0.0165	0.0960	0.0000
Matagorda	2275060012	0.0622	2.7272	0.5869	0.0306	0.1571	0.0000
Matagorda	2275050011	1.0090	0.0392	58.6535	0.0321	0.0595	0.0327
Matagorda	2275050012	4.8868	5.8238	14.2216	0.0930	0.5769	0.0000
Matagorda	2275001000	1.0626	1.7831	5.2190	0.0087	0.3787	0.0003
Maverick	2275020000	0.0686	0.0470	0.3378	0.0007	0.0085	0.0000
Maverick	2275060012	0.0007	0.0017	0.0081	0.0000	0.0004	0.0000
Maverick	2275050011	0.0443	0.0006	2.2661	0.0010	0.0022	0.0012
Maverick	2275050012	0.7119	0.3626	1.7790	0.0065	0.0641	0.0000
Maverick	2275001000	0.0124	0.0009	0.0287	0.0001	0.0003	0.0000
Mcculloch	2275020000	1.2950	0.9238	6.4923	0.0262	0.1572	0.0009
Mcculloch	2275060012	0.8736	7.6910	4.5256	0.0909	0.4840	0.0000
Mcculloch	2275050011	0.4497	0.0108	26.0325	0.0140	0.0249	0.0145
Mcculloch	2275050012	7.3974	2.1459	20.7804	0.0688	0.4527	0.0000
Mcculloch	2275001000	0.2135	0.0233	0.7334	0.0016	0.0072	0.0002
Mclennan	2275020000	25.7866	27.4353	80.7434	0.3314	3.1149	0.0085
Mclennan	2275060012	7.2683	4.4036	17.6340	0.0933	0.4987	0.0000
Mclennan	2275050011	4.4289	0.4188	283.1027	0.1293	0.3008	0.1833
Mclennan	2275050012	54.7037	41.1746	146.3168	0.6911	4.5373	0.0000
Mclennan	2275001000	44.7791	12.9699	117.0100	0.3780	2.1975	0.0005
Mclennan	2275070000	0.0608	0.6461	2.0757	0.0949	0.1522	0.0000
Mclennan	2265008005	0.5056	1.2583	19.6155	0.0000	0.0000	0.0000
Mclennan	2270008005	0.0538	0.3974	0.0617	0.0021	0.0000	0.0000
Mcmullen	2275050011	0.0433	0.0015	1.7821	0.0011	0.0017	0.0010
Mcmullen	2275050012	0.0001	0.0000	0.0002	0.0000	0.0000	0.0000
Medina	2275020000	1.5198	0.7559	6.8271	0.0413	0.1736	0.0006
Medina	2275060012	0.0811	0.9214	0.3838	0.0107	0.0581	0.0000
Medina	2275050011	2.0407	0.1358	118.8438	0.0644	0.1356	0.0703
Medina	2275050012	8.8244	3.3059	20.4359	0.0906	0.5296	0.0000
Medina	2275001000	0.6898	9.1342	3.4620	0.1061	0.5412	0.0000
Menard	2275020000	0.0133	0.0056	0.0709	0.0002	0.0014	0.0000
Menard	2275050011	0.0872	0.0033	4.3258	0.0028	0.0042	0.0025
Menard	2275050012	0.4116	0.0656	0.9395	0.0039	0.0144	0.0000
Menard	2275001000	0.0023	0.0773	0.0150	0.0009	0.0044	0.0000
Midland	2275020000	24.0625	86.3017	102.5707	0.7835	8.4546	0.0011
Midland	2275060012	4.6563	30.3189	19.6188	0.3284	2.3285	0.0000
Midland	2275050011	2.2600	0.1141	132.6011	0.0835	0.1344	0.0759
Midland	2275050012	33.7643	35.9055	106.2343	0.6215	3.8663	0.0000
Midland	2275001000	5.0709	2.0921	21.4231	0.0599	0.4030	0.0001
Midland	2275070000	0.7196	3.8717	7.0572	0.4973	0.6657	0.0000
Midland	2265008005	0.9700	2.0022	34.2108	0.0000	0.0000	0.0000
Midland	2270008005	0.2757	2.0360	0.5515	0.0401	0.0000	0.0000
Milam	2275020000	0.0205	0.1760	0.2947	0.0000	0.0409	0.0000
Milam	2275050011	0.8897	0.0573	57.8988	0.0292	0.0711	0.0342
Milam	2275050012	0.0509	0.3043	0.4761	0.0001	0.0637	0.0000
Mills	2275020000	0.3401	0.1086	1.9646	0.0041	0.0328	0.0000
Mills	2275050011	0.3163	0.0107	15.4507	0.0088	0.0153	0.0092
Mills	2275050012	1.5304	0.2477	3.5542	0.0149	0.0731	0.0000
Mitchell	2275020000	0.1383	0.0393	0.6902	0.0020	0.0117	0.0000
Mitchell	2275050011	0.0845	0.0015	4.1069	0.0020	0.0036	0.0023
Mitchell	2275050012	0.6093	0.2275	1.3351	0.0061	0.0448	0.0000
Mitchell	2275001000	0.0054	0.3941	0.0577	0.0044	0.0220	0.0000
Montague	2275020000	0.2298	0.0722	0.8569	0.0046	0.0182	0.0000
Montague	2275050011	0.1702	0.0059	9.5824	0.0046	0.0100	0.0054
Montague	2275050012	1.8339	0.8181	4.2073	0.0182	0.1312	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Montague	2275001000	0.0289	1.7336	0.2889	0.0194	0.0982	0.0000
Montgomery	2275020000	9.1736	12.9851	42.9586	0.1598	1.6019	0.0077
Montgomery	2275060012	2.6923	13.4668	9.0528	0.1831	1.0121	0.0000
Montgomery	2275050011	8.8913	0.7930	348.9140	0.1804	0.3480	0.2091
Montgomery	2275050012	29.7832	53.2694	93.1121	0.8877	5.2152	0.0000
Montgomery	2275001000	3.5992	0.6727	23.8008	0.0284	0.1842	0.0092
Montgomery	2275070000	0.1751	2.4936	9.5330	0.3624	0.5475	0.0000
Montgomery	2265008005	0.6145	1.4998	23.5885	0.0000	0.0000	0.0000
Montgomery	2270008005	0.1090	0.7414	0.1394	0.0218	0.0000	0.0000
Moore	2275020000	1.7464	1.1410	6.2477	0.0226	0.1466	0.0003
Moore	2275060012	0.0206	1.2312	0.2285	0.0137	0.0708	0.0000
Moore	2275050011	0.7319	0.0448	37.3868	0.0230	0.0423	0.0212
Moore	2275050012	6.4295	3.7435	16.4709	0.0787	0.5109	0.0000
Moore	2275001000	0.0514	0.0082	0.1139	0.0006	0.0021	0.0000
Morris	2275020000	0.0030	0.0009	0.0172	0.0000	0.0003	0.0000
Morris	2275050011	0.0068	0.0001	0.3994	0.0003	0.0004	0.0002
Morris	2275050012	0.0050	0.0399	0.0217	0.0000	0.0051	0.0000
Motley	2275050011	0.0004	0.0000	0.0197	0.0000	0.0000	0.0000
Motley	2275050012	0.0001	0.0000	0.0002	0.0000	0.0000	0.0000
Nacogdoches	2275020000	0.9058	0.4415	10.1917	0.0130	0.0865	0.0046
Nacogdoches	2275060012	0.6315	5.6095	2.1476	0.0651	0.3455	0.0000
Nacogdoches	2275050011	2.2263	0.1126	111.4053	0.0533	0.1119	0.0643
Nacogdoches	2275050012	10.3431	22.4864	31.5825	0.3191	1.8022	0.0000
Nacogdoches	2275001000	0.1515	0.0608	0.8898	0.0014	0.0172	0.0000
Navarro	2275020000	2.3153	0.2510	5.6822	0.0208	0.0931	0.0005
Navarro	2275050011	1.7725	0.1536	108.2082	0.0573	0.1070	0.0633
Navarro	2275050012	9.3926	4.9024	32.5283	0.1120	0.7614	0.0000
Navarro	2275001000	0.0127	0.0000	0.4436	0.0000	0.0004	0.0002
Newton	2275020000	0.1780	0.0471	1.0173	0.0017	0.0152	0.0000
Newton	2275050011	0.0530	0.0019	3.8805	0.0024	0.0041	0.0023
Newton	2275050012	0.1116	0.0212	0.2105	0.0009	0.0047	0.0000
Nolan	2275020000	0.3050	0.1951	0.8028	0.0030	0.0315	0.0000
Nolan	2275060012	0.0336	1.2519	0.2618	0.0138	0.0741	0.0000
Nolan	2275050011	0.3085	0.0142	15.1158	0.0081	0.0152	0.0084
Nolan	2275050012	1.8303	0.5385	4.6961	0.0199	0.1241	0.0000
Nolan	2275001000	0.1059	0.0296	0.7467	0.0010	0.0095	0.0001
Nueces	2275020000	25.5756	85.9350	114.1854	0.7906	9.8717	0.0026
Nueces	2275060012	0.8526	6.4123	6.4823	0.0584	0.7556	0.0000
Nueces	2275050011	2.0407	0.0760	120.9223	0.0692	0.1161	0.0686
Nueces	2275050012	31.3289	18.3462	93.2850	0.3769	3.3910	0.0000
Nueces	2275001000	14.3648	10.2044	43.7809	0.2104	1.4933	0.0006
Nueces	2275070000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Nueces	2265008005	1.2202	2.6718	44.3364	0.0000	0.0000	0.0000
Nueces	2270008005	0.3143	2.3416	0.5915	0.0520	0.0000	0.0000
Ochiltree	2275020000	0.1611	0.0624	0.5528	0.0015	0.0142	0.0000
Ochiltree	2275050011	0.2375	0.0010	11.6262	0.0055	0.0102	0.0062
Ochiltree	2275050012	1.7520	0.6099	7.0032	0.0156	0.1467	0.0000
Oldham	2275020000	0.7550	0.2052	4.3515	0.0074	0.0657	0.0000
Oldham	2275050011	0.3005	0.0031	14.3177	0.0071	0.0127	0.0077
Oldham	2275050012	1.2210	0.4894	3.3804	0.0103	0.1005	0.0000
Orange	2275020000	1.6200	0.1864	3.6463	0.0157	0.0591	0.0000
Orange	2275060012	0.4544	1.5197	1.0395	0.0194	0.1006	0.0000
Orange	2275050011	0.6125	0.0160	32.5459	0.0156	0.0326	0.0183
Orange	2275050012	6.8963	1.4137	20.5421	0.0635	0.3665	0.0000
Orange	2275001000	0.0617	0.0164	0.3553	0.0006	0.0053	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Palo Pinto	2275020000	0.1144	0.0298	0.4961	0.0012	0.0085	0.0000
Palo Pinto	2275050011	0.2493	0.0116	13.6083	0.0072	0.0139	0.0080
Palo Pinto	2275050012	0.5396	0.1801	0.9906	0.0042	0.0325	0.0000
Palo Pinto	2275001000	0.0008	0.0350	0.0095	0.0004	0.0021	0.0000
Panola	2275020000	0.0034	0.0002	0.1851	0.0000	0.0003	0.0001
Panola	2275050011	0.1868	0.0040	10.9993	0.0078	0.0109	0.0059
Panola	2275050012	0.1965	0.0829	0.7119	0.0018	0.0173	0.0000
Parker	2275020000	1.5789	1.1705	17.8023	0.0233	0.1849	0.0082
Parker	2275060012	1.3171	2.9965	3.3838	0.0380	0.2454	0.0000
Parker	2275050011	13.7781	0.5369	721.7751	0.2931	0.5270	0.4229
Parker	2275050012	10.8085	7.2908	37.4488	0.1310	1.1807	0.0000
Parker	2275001000	1.8989	0.3145	15.7060	0.0151	0.1021	0.0070
Parmer	2275050011	1.6650	0.0572	68.3784	0.0429	0.0643	0.0399
Pecos	2275020000	0.4778	0.2305	1.5378	0.0043	0.0445	0.0000
Pecos	2275060012	0.0372	0.9104	0.2821	0.0099	0.0562	0.0000
Pecos	2275050011	0.3572	0.0103	19.8489	0.0118	0.0194	0.0112
Pecos	2275050012	1.3366	0.6818	4.4920	0.0156	0.1354	0.0000
Pecos	2275001000	1.2303	0.1517	3.0328	0.0092	0.0463	0.0000
Polk	2275020000	1.0585	0.3220	6.0294	0.0118	0.0970	0.0000
Polk	2275050011	0.8010	0.0168	41.1107	0.0205	0.0373	0.0226
Polk	2275050012	1.9595	0.9863	5.0124	0.0197	0.1743	0.0000
Polk	2275001000	0.0699	4.4839	0.7287	0.0503	0.2535	0.0000
Potter	2275020000	11.1743	41.3396	47.9560	0.3761	4.0886	0.0016
Potter	2275060012	2.0020	9.1107	6.0366	0.0762	0.8085	0.0000
Potter	2275050011	0.4617	0.0432	22.7381	0.0110	0.0268	0.0131
Potter	2275050012	10.7040	10.7588	29.9005	0.1624	1.2515	0.0000
Potter	2275001000	10.9302	14.3450	54.2058	0.1851	1.8017	0.0004
Potter	2275070000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Potter	2265008005	0.7674	1.6112	27.2516	0.0000	0.0000	0.0000
Potter	2270008005	0.2438	1.9749	0.5271	0.0579	0.0000	0.0000
Presidio	2275020000	0.9654	0.9198	3.2318	0.0186	0.1145	0.0000
Presidio	2275060012	0.7274	2.3764	2.3615	0.0336	0.1909	0.0000
Presidio	2275050011	0.4060	0.0152	20.4697	0.0119	0.0209	0.0111
Presidio	2275050012	3.3227	2.8440	10.1112	0.0546	0.3882	0.0000
Presidio	2275001000	0.2255	0.8804	0.8737	0.0118	0.0650	0.0000
Rains	2275050011	0.0409	0.0016	2.2366	0.0015	0.0021	0.0013
Rains	2275050012	0.0108	0.0006	0.0244	0.0001	0.0002	0.0000
Randall	2275020000	0.3939	0.2560	7.4552	0.0071	0.0587	0.0033
Randall	2275060012	0.0669	0.0075	0.1053	0.0005	0.0020	0.0000
Randall	2275050011	4.1362	0.2247	248.4565	0.1682	0.2633	0.1429
Randall	2275050012	16.7306	4.8104	49.0374	0.1752	1.0977	0.0000
Randall	2275001000	0.0184	0.0136	0.3288	0.0001	0.0037	0.0001
Reagan	2275020000	0.0255	0.0107	0.1363	0.0003	0.0027	0.0000
Reagan	2275050011	0.0213	0.0011	1.4506	0.0009	0.0016	0.0009
Reagan	2275050012	0.7748	0.1252	1.7691	0.0074	0.0273	0.0000
Reagan	2275001000	0.0044	0.1487	0.0289	0.0017	0.0085	0.0000
Real	2275020000	0.0340	0.0143	0.1817	0.0005	0.0036	0.0000
Real	2275050011	0.0776	0.0032	3.9515	0.0025	0.0040	0.0024
Real	2275050012	1.0331	0.1675	2.3589	0.0098	0.0364	0.0000
Real	2275001000	0.0058	0.1982	0.0385	0.0022	0.0114	0.0000
Red River	2275050011	0.2289	0.0091	11.5622	0.0058	0.0125	0.0071
Red River	2275050012	0.0408	0.0190	0.0953	0.0004	0.0039	0.0000
Reeves	2275020000	1.3586	0.3976	4.6484	0.0133	0.0835	0.0006
Reeves	2275060012	0.7205	2.5662	1.7580	0.0321	0.1748	0.0000
Reeves	2275050011	0.8484	0.0219	47.2072	0.0257	0.0471	0.0267

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Reeves	2275050012	7.7012	7.9589	26.1806	0.1423	1.2043	0.0000
Reeves	2275001000	2.4239	0.2741	3.9543	0.0170	0.0730	0.0000
Refugio	2275020000	0.2913	0.0946	1.6958	0.0029	0.0276	0.0000
Refugio	2275050011	0.1928	0.0059	9.5572	0.0047	0.0097	0.0053
Refugio	2275050012	1.3725	0.9580	3.9617	0.0146	0.1665	0.0000
Refugio	2275001000	0.0219	1.5913	0.2330	0.0179	0.0889	0.0000
Roberts	2275020000	0.0172	0.0047	0.0989	0.0002	0.0015	0.0000
Roberts	2275050011	0.0389	0.0013	2.0871	0.0013	0.0019	0.0012
Roberts	2275050012	0.0364	0.0116	0.0964	0.0003	0.0025	0.0000
Robertson	2275050011	0.4057	0.0225	23.9262	0.0128	0.0282	0.0141
Robertson	2275050012	0.0303	0.1550	0.4558	0.0001	0.0336	0.0000
Robertson	2275001000	0.0007	0.0059	0.0098	0.0000	0.0014	0.0000
Rockwall	2275020000	0.0445	0.0066	3.9463	0.0007	0.0044	0.0016
Rockwall	2275050011	4.5175	0.1530	264.9352	0.1517	0.2679	0.1516
Rockwall	2275050012	1.8338	3.2107	9.5824	0.0302	0.4349	0.0000
Rockwall	2275001000	0.0168	0.0031	1.5380	0.0000	0.0031	0.0010
Runnels	2275020000	0.1957	0.0821	1.0447	0.0026	0.0208	0.0000
Runnels	2275050011	0.2015	0.0099	13.2003	0.0083	0.0142	0.0080
Runnels	2275050012	5.9503	0.9605	13.5854	0.0565	0.2094	0.0000
Runnels	2275001000	0.0336	1.1397	0.2213	0.0128	0.0653	0.0000
Rusk	2275020000	0.0470	0.0151	1.0143	0.0006	0.0051	0.0005
Rusk	2275060012	0.0157	1.1417	0.1672	0.0128	0.0638	0.0000
Rusk	2275050011	1.4716	0.0386	72.1966	0.0390	0.0721	0.0391
Rusk	2275050012	0.6231	0.1017	1.5430	0.0055	0.0274	0.0000
Rusk	2275001000	0.0214	0.0406	0.2000	0.0000	0.0086	0.0000
Sabine	2275020000	0.0690	0.0210	0.3932	0.0008	0.0063	0.0000
Sabine	2275050011	0.0504	0.0010	2.5807	0.0013	0.0023	0.0014
Sabine	2275050012	0.1280	0.0920	0.3357	0.0013	0.0148	0.0000
Sabine	2275001000	0.0046	0.2924	0.0475	0.0033	0.0165	0.0000
San Augustine	2275020000	0.0115	0.0035	0.0655	0.0001	0.0011	0.0000
San Augustine	2275050011	0.0088	0.0002	0.4459	0.0002	0.0004	0.0002
San Augustine	2275050012	0.0212	0.0107	0.0543	0.0002	0.0019	0.0000
San Augustine	2275001000	0.0008	0.0487	0.0079	0.0005	0.0028	0.0000
San Jacinto	2275050011	0.0386	0.0015	2.1085	0.0014	0.0020	0.0012
San Jacinto	2275050012	0.0102	0.0005	0.0230	0.0001	0.0002	0.0000
San Patricio	2275020000	2.8330	1.1957	10.2025	0.0273	0.2254	0.0005
San Patricio	2275060012	1.0403	0.1923	1.7492	0.0087	0.0394	0.0000
San Patricio	2275050011	2.7275	0.1163	149.2094	0.0811	0.1499	0.0816
San Patricio	2275050012	7.7130	3.2225	33.0055	0.0839	0.7349	0.0000
San Patricio	2275001000	0.9832	0.3453	3.5235	0.0091	0.0858	0.0000
San Saba	2275020000	0.3527	0.1127	2.0373	0.0043	0.0340	0.0000
San Saba	2275050011	0.2676	0.0090	13.3288	0.0075	0.0134	0.0080
San Saba	2275050012	1.5830	0.2567	3.6767	0.0154	0.0758	0.0000
Schleicher	2275020000	0.0426	0.0179	0.2271	0.0006	0.0045	0.0000
Schleicher	2275050011	0.0360	0.0018	2.4368	0.0015	0.0027	0.0015
Schleicher	2275050012	1.2913	0.2087	2.9484	0.0123	0.0455	0.0000
Schleicher	2275001000	0.0073	0.2478	0.0481	0.0028	0.0142	0.0000
Scurry	2275020000	0.1462	0.1390	0.4970	0.0019	0.0196	0.0000
Scurry	2275060012	1.2007	1.4354	3.1642	0.0195	0.1523	0.0000
Scurry	2275050011	0.2874	0.0101	16.3802	0.0093	0.0176	0.0097
Scurry	2275050012	2.1380	0.5633	5.9433	0.0197	0.1208	0.0000
Scurry	2275001000	0.0160	0.0202	0.1174	0.0003	0.0048	0.0000
Shackelford	2275020000	0.2235	0.0635	1.1149	0.0032	0.0188	0.0000
Shackelford	2275050011	0.1555	0.0032	7.6872	0.0040	0.0068	0.0043
Shackelford	2275050012	0.9896	0.3677	2.1685	0.0099	0.0725	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Shackelford	2275001000	0.0087	0.6366	0.0932	0.0072	0.0356	0.0000
Shelby	2275020000	0.4935	0.0942	6.0386	0.0038	0.0305	0.0030
Shelby	2275050011	0.9193	0.0147	46.3556	0.0224	0.0429	0.0253
Shelby	2275050012	14.3817	103.3570	41.3143	1.2212	6.3381	0.0000
Shelby	2275001000	0.0378	0.0101	0.2177	0.0004	0.0032	0.0000
Sherman	2275050011	0.0605	0.0021	2.4858	0.0016	0.0023	0.0015
Smith	2275020000	7.5808	22.4972	29.8288	0.1476	2.1093	0.0043
Smith	2275060012	1.5797	5.5691	4.0331	0.0712	0.3963	0.0000
Smith	2275050011	0.9385	0.0643	52.6040	0.0268	0.0479	0.0306
Smith	2275050012	12.0170	8.5413	30.1443	0.1982	1.1099	0.0000
Smith	2275001000	0.2508	0.1200	2.0027	0.0022	0.0341	0.0005
Smith	2275070000	0.0421	0.6662	2.5914	0.0952	0.1464	0.0000
Smith	2265008005	0.3317	0.8223	12.8161	0.0000	0.0000	0.0000
Smith	2270008005	0.0334	0.2794	0.0432	0.0022	0.0000	0.0000
Somervell	2275050011	0.1133	0.0039	4.6567	0.0029	0.0044	0.0027
Somervell	2275050012	0.0011	0.0393	0.0143	0.0000	0.0049	0.0000
Starr	2275020000	0.4248	0.2037	2.4504	0.0077	0.0496	0.0000
Starr	2275050011	0.0720	0.0019	3.5852	0.0023	0.0033	0.0021
Starr	2275050012	0.9493	0.5514	2.2763	0.0117	0.0825	0.0000
Starr	2275001000	0.0256	1.8421	0.2730	0.0207	0.1031	0.0000
Stephens	2275020000	0.2791	0.0885	2.0201	0.0030	0.0267	0.0002
Stephens	2275060012	0.0283	0.0709	0.3380	0.0008	0.0164	0.0000
Stephens	2275050011	0.7796	0.0325	51.1916	0.0326	0.0530	0.0297
Stephens	2275050012	8.9648	2.4074	24.0151	0.0782	0.5591	0.0000
Stephens	2275001000	0.0255	0.0163	0.8921	0.0000	0.0044	0.0005
Sterling	2275050011	0.0604	0.0021	2.5571	0.0016	0.0024	0.0015
Sterling	2275050012	0.0015	0.0001	0.0034	0.0000	0.0000	0.0000
Stonewall	2275020000	0.0319	0.0091	0.1593	0.0005	0.0027	0.0000
Stonewall	2275050011	0.2525	0.0084	10.5238	0.0065	0.0098	0.0061
Stonewall	2275050012	0.1407	0.0525	0.3083	0.0014	0.0103	0.0000
Stonewall	2275001000	0.0012	0.0909	0.0133	0.0010	0.0051	0.0000
Sutton	2275020000	0.0426	0.0179	0.2271	0.0006	0.0045	0.0000
Sutton	2275050011	0.0784	0.0033	4.1769	0.0026	0.0043	0.0025
Sutton	2275050012	1.2921	0.2364	2.9583	0.0123	0.0489	0.0000
Sutton	2275001000	0.0073	0.2478	0.0481	0.0028	0.0142	0.0000
Swisher	2275020000	0.1744	0.0342	0.7579	0.0017	0.0112	0.0000
Swisher	2275050011	0.8236	0.0292	37.7758	0.0221	0.0367	0.0225
Swisher	2275050012	0.7909	0.2749	1.9026	0.0081	0.0523	0.0000
Swisher	2275001000	0.0168	0.2898	0.0993	0.0032	0.0181	0.0000
Tarrant	2275020000	414.4202	3136.1441	2889.0389	28.4551	282.0852	0.0790
Tarrant	2275060012	16.7153	88.0154	66.0107	1.0869	7.0606	0.0000
Tarrant	2275050011	39.1437	2.3394	2083.3415	1.0007	1.9122	1.2302
Tarrant	2275050012	198.4897	233.4482	556.1221	3.6096	25.4783	0.0000
Tarrant	2275001000	63.4495	124.4496	364.9921	1.2577	14.0479	0.0188
Tarrant	2275070000	4.7414	58.2394	91.8354	8.1785	9.2737	0.0000
Tarrant	2265008005	14.5961	30.0997	513.6839	0.0000	0.0000	0.0000
Tarrant	2270008005	4.0712	27.7184	8.0221	0.7868	0.0000	0.0000
Taylor	2275020000	9.2592	35.8642	32.7221	0.1988	3.1818	0.0019
Taylor	2275060012	0.7492	3.4204	2.1095	0.0358	0.2505	0.0000
Taylor	2275050011	2.7380	0.1663	141.4826	0.0898	0.1374	0.0833
Taylor	2275050012	9.1471	5.3542	23.5962	0.1223	0.7677	0.0000
Taylor	2275001000	11.9467	17.8601	63.2627	0.2274	2.6034	0.0006
Taylor	2275070000	0.0320	0.3232	0.9327	0.0480	0.0808	0.0000
Taylor	2265008005	0.5425	1.3276	20.7876	0.0000	0.0000	0.0000
Taylor	2270008005	0.0475	0.4064	0.0568	0.0028	0.0000	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Terrell	2275050011	0.0514	0.0021	3.1176	0.0022	0.0031	0.0018
Terrell	2275050012	0.0126	0.0009	0.0291	0.0001	0.0003	0.0000
Terry	2275020000	0.4070	0.0798	1.7684	0.0040	0.0262	0.0000
Terry	2275050011	0.6569	0.0239	33.7803	0.0174	0.0346	0.0209
Terry	2275050012	1.7996	0.6782	4.3475	0.0186	0.1260	0.0000
Terry	2275001000	0.0391	0.6762	0.2318	0.0075	0.0422	0.0000
Throckmorton	2275020000	0.0052	0.0016	0.0195	0.0001	0.0004	0.0000
Throckmorton	2275050011	0.0031	0.0001	0.1770	0.0001	0.0002	0.0001
Throckmorton	2275050012	0.0416	0.0178	0.0952	0.0004	0.0029	0.0000
Throckmorton	2275001000	0.0007	0.0395	0.0066	0.0004	0.0022	0.0000
Titus	2275020000	0.3965	0.2491	11.5975	0.0073	0.0456	0.0060
Titus	2275060012	0.0154	0.8750	0.1729	0.0097	0.0508	0.0000
Titus	2275050011	1.8619	0.1112	102.0990	0.0569	0.1059	0.0581
Titus	2275050012	26.1234	4.1651	65.9086	0.2428	1.1302	0.0000
Titus	2275001000	0.0078	0.0105	0.4375	0.0000	0.0032	0.0003
Tom Green	2275020000	12.6825	42.3894	49.5656	0.2847	3.9079	0.0040
Tom Green	2275060012	0.3589	4.7014	1.5625	0.0523	0.2861	0.0000
Tom Green	2275050011	1.5147	0.1117	71.7681	0.0378	0.0710	0.0405
Tom Green	2275050012	16.2077	9.6118	42.8438	0.2050	1.2534	0.0000
Tom Green	2275001000	20.3139	3.8532	89.2211	0.2385	1.2731	0.0005
Tom Green	2275070000	0.0801	0.8320	1.9119	0.1199	0.1928	0.0000
Tom Green	2265008005	0.7518	1.8388	28.9901	0.0000	0.0000	0.0000
Tom Green	2270008005	0.2270	2.0646	0.4926	0.0798	0.0000	0.0000
Travis	2275020000	77.8174	495.0554	511.6040	3.5512	45.3300	0.0385
Travis	2275060012	3.5353	17.1033	14.8650	0.2245	1.5382	0.0000
Travis	2275050011	7.4725	0.3958	376.8005	0.1762	0.4015	0.2087
Travis	2275050012	41.9743	38.5956	117.4135	0.7462	4.6992	0.0000
Travis	2275001000	6.8355	17.4317	36.0937	0.1378	2.3946	0.0025
Travis	2275070000	1.5650	18.8720	20.0478	2.1451	2.9985	0.0000
Travis	2265008005	4.1596	7.9895	141.0041	0.0000	0.0000	0.0000
Travis	2270008005	1.0392	6.8781	2.0624	0.0426	0.0000	0.0000
Trinity	2275020000	0.2761	0.0840	1.5729	0.0031	0.0253	0.0000
Trinity	2275050011	0.3018	0.0079	15.8009	0.0086	0.0145	0.0089
Trinity	2275050012	0.5368	0.2978	1.3771	0.0053	0.0510	0.0000
Trinity	2275001000	0.0182	1.1697	0.1901	0.0131	0.0661	0.0000
Tyler	2275020000	0.2671	0.0707	1.5260	0.0026	0.0228	0.0000
Tyler	2275050011	0.1172	0.0043	7.8801	0.0050	0.0081	0.0047
Tyler	2275050012	0.1784	0.0715	0.3523	0.0014	0.0123	0.0000
Upshur	2275020000	0.0626	0.0138	5.0200	0.0009	0.0102	0.0032
Upshur	2275050011	4.7036	0.8042	131.3888	0.0865	0.2166	0.0728
Upshur	2275050012	1.8053	1.5661	7.8365	0.0197	0.2586	0.0000
Upton	2275020000	0.0242	0.0097	0.1423	0.0004	0.0027	0.0000
Upton	2275050011	0.0143	0.0003	0.8023	0.0004	0.0008	0.0004
Upton	2275050012	0.1822	0.0686	0.4574	0.0016	0.0133	0.0000
Upton	2275001000	0.0014	0.0560	0.0098	0.0006	0.0032	0.0000
Uvalde	2275020000	1.0777	0.2463	2.8075	0.0097	0.0494	0.0004
Uvalde	2275060012	0.4581	2.0257	1.4322	0.0278	0.1417	0.0000
Uvalde	2275050011	0.8000	0.0362	42.2344	0.0271	0.0451	0.0232
Uvalde	2275050012	9.0633	3.3195	22.4512	0.1094	0.5856	0.0000
Uvalde	2275001000	0.5106	0.0635	1.2654	0.0048	0.0172	0.0000
Val Verde	2275020000	11.6487	18.5773	36.7927	0.1925	2.0080	0.0008
Val Verde	2275060012	0.0363	0.4484	0.2171	0.0052	0.0327	0.0000
Val Verde	2275050011	0.4551	0.0154	23.4673	0.0133	0.0228	0.0131
Val Verde	2275050012	4.2641	2.6794	13.7608	0.0628	0.4121	0.0000
Val Verde	2275001000	53.6148	9.5580	303.4552	0.5813	3.6221	0.0001

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Val Verde	2275070000	0.0210	0.1875	0.5965	0.0300	0.0460	0.0000
Val Verde	2265008005	0.2240	0.5452	8.6346	0.0000	0.0000	0.0000
Val Verde	2270008005	0.0941	0.8634	0.2147	0.0361	0.0000	0.0000
Van Zandt	2275020000	0.0274	0.0103	0.1586	0.0004	0.0030	0.0000
Van Zandt	2275050011	0.6420	0.0193	32.3230	0.0197	0.0308	0.0184
Van Zandt	2275050012	0.1538	0.1232	0.3529	0.0011	0.0184	0.0000
Van Zandt	2275001000	0.0026	0.1877	0.0275	0.0021	0.0105	0.0000
Victoria	2275020000	5.0213	1.6665	20.2659	0.0649	0.3630	0.0017
Victoria	2275060012	0.3297	3.9833	1.4336	0.0508	0.2634	0.0000
Victoria	2275050011	0.4078	0.0157	22.1791	0.0126	0.0210	0.0121
Victoria	2275050012	7.9289	10.4449	25.7820	0.1689	1.1338	0.0000
Victoria	2275001000	15.7179	2.7208	56.5645	0.1442	0.8897	0.0003
Victoria	2275070000	0.0259	0.4562	1.4362	0.0657	0.0914	0.0000
Victoria	2265008005	0.2829	0.7792	11.9956	0.0000	0.0000	0.0000
Victoria	2270008005	0.1379	0.8568	0.2319	0.0291	0.0000	0.0000
Walker	2275020000	1.0769	0.2200	3.8087	0.0096	0.0629	0.0000
Walker	2275060012	2.4670	13.3692	7.5578	0.1651	0.9155	0.0000
Walker	2275050011	1.3595	0.0576	81.7141	0.0430	0.0845	0.0467
Walker	2275050012	16.5464	5.4978	47.6511	0.1720	1.0926	0.0000
Walker	2275001000	0.2785	0.0950	2.1168	0.0024	0.0254	0.0002
Waller	2275020000	1.7124	1.3470	8.8733	0.0254	0.1868	0.0019
Waller	2275060012	0.8767	4.1353	2.8976	0.0556	0.3093	0.0000
Waller	2275050011	2.4881	0.0923	136.5985	0.0840	0.1207	0.0790
Waller	2275050012	7.8071	6.0891	24.6729	0.1246	0.7970	0.0000
Waller	2275001000	0.2058	0.0334	1.9661	0.0028	0.0118	0.0007
Ward	2275020000	0.8735	0.6555	5.3699	0.0120	0.1388	0.0000
Ward	2275050011	0.2784	0.0070	14.4820	0.0070	0.0129	0.0083
Ward	2275050012	1.3566	0.5784	3.4526	0.0122	0.1090	0.0000
Ward	2275001000	0.1022	0.6807	1.3298	0.0046	0.0899	0.0000
Washington	2275020000	4.5103	0.9347	12.9066	0.0382	0.2148	0.0012
Washington	2275060012	1.3825	7.4730	4.9464	0.0846	0.5411	0.0000
Washington	2275050011	1.7060	0.0818	93.0616	0.0443	0.0989	0.0514
Washington	2275050012	10.9051	6.3857	29.8368	0.1180	0.9721	0.0000
Washington	2275001000	0.0210	0.0746	0.2357	0.0000	0.0164	0.0000
Webb	2275020000	31.7920	126.6753	112.2233	1.5886	12.0397	0.0010
Webb	2275060012	0.5114	2.2897	1.5931	0.0316	0.1696	0.0000
Webb	2275050011	0.8200	0.0221	44.0960	0.0289	0.0397	0.0252
Webb	2275050012	25.2808	23.2387	72.2328	0.4465	3.0173	0.0000
Webb	2275001000	2.4591	1.4847	7.8609	0.0304	0.2248	0.0001
Webb	2275070000	0.3663	3.6989	6.5095	0.5868	0.6772	0.0000
Webb	2265008005	1.1424	2.4683	40.8201	0.0000	0.0000	0.0000
Webb	2270008005	0.2663	1.9270	0.5116	0.0526	0.0000	0.0000
Wharton	2275020000	0.4563	0.2051	0.9760	0.0057	0.0339	0.0000
Wharton	2275060012	0.0752	1.0533	0.3340	0.0119	0.0635	0.0000
Wharton	2275050011	1.9168	0.0712	99.1442	0.0618	0.0939	0.0575
Wharton	2275050012	3.4133	1.5174	9.2823	0.0351	0.2257	0.0000
Wharton	2275001000	0.0171	0.0549	0.2739	0.0002	0.0114	0.0001
Wheeler	2275020000	0.1106	0.0366	0.5898	0.0010	0.0099	0.0000
Wheeler	2275050011	0.0595	0.0025	3.1642	0.0019	0.0032	0.0019
Wheeler	2275050012	0.4045	0.2179	0.9399	0.0037	0.0408	0.0000
Wheeler	2275001000	0.0111	0.3846	0.0971	0.0044	0.0219	0.0000
Wichita	2275020000	22.3606	32.8874	88.4361	0.3104	3.4141	0.0146
Wichita	2275060012	5.9848	3.8095	13.8612	0.0906	0.3561	0.0000
Wichita	2275050011	2.8980	0.0909	148.2391	0.0741	0.1481	0.0843
Wichita	2275050012	18.2717	6.9403	47.8626	0.1979	1.2452	0.0000

County	SCC*	VOC	NOx	CO	PM10/ PM2.5	SO2	Pb
Wichita	2275001000	315.7348	64.5462	2115.1125	3.1617	26.0016	0.0063
Wichita	2275070000	0.0318	0.2828	0.6501	0.0426	0.0667	0.0000
Wichita	2265008005	0.3196	0.7801	18.1778	0.0000	0.0000	0.0000
Wichita	2270008005	4.5162	43.7350	12.0264	2.2525	0.0000	0.0000
Wilbarger	2275020000	0.1597	0.0281	1.4875	0.0011	0.0100	0.0006
Wilbarger	2275060012	0.0689	0.8626	0.2575	0.0102	0.0493	0.0000
Wilbarger	2275050011	0.6075	0.0567	31.0058	0.0182	0.0347	0.0172
Wilbarger	2275050012	3.6073	1.8690	11.3615	0.0352	0.3234	0.0000
Wilbarger	2275001000	0.0076	0.0106	0.2521	0.0000	0.0025	0.0001
Willacy	2275020000	0.0452	0.0217	0.2605	0.0008	0.0053	0.0000
Willacy	2275050011	0.0712	0.0026	3.9264	0.0026	0.0037	0.0023
Willacy	2275050012	0.1192	0.0596	0.2831	0.0014	0.0092	0.0000
Willacy	2275001000	0.0027	0.1958	0.0290	0.0022	0.0110	0.0000
Williamson	2275020000	10.4466	1.6828	66.3540	0.0897	0.4921	0.0251
Williamson	2275060012	0.7376	3.8090	2.3562	0.0543	0.2761	0.0000
Williamson	2275050011	10.5439	0.8631	598.6065	0.2471	0.4763	0.3612
Williamson	2275050012	36.5341	9.8266	90.8811	0.3196	2.0072	0.0000
Williamson	2275001000	0.5985	0.1156	8.8243	0.0050	0.0367	0.0035
Williamson	2275070000	0.0201	0.3180	1.3684	0.0481	0.0720	0.0000
Williamson	2265008005	0.3493	0.9216	14.1915	0.0000	0.0000	0.0000
Williamson	2270008005	0.0782	0.3395	0.0796	0.0014	0.0000	0.0000
Wilson	2275050011	0.2275	0.0083	11.1258	0.0071	0.0104	0.0065
Wilson	2275050012	0.0347	0.0018	0.0781	0.0002	0.0008	0.0000
Winkler	2275020000	0.2141	0.0860	1.2567	0.0032	0.0238	0.0000
Winkler	2275050011	0.0991	0.0018	5.4289	0.0025	0.0052	0.0030
Winkler	2275050012	1.6029	0.6448	4.0382	0.0144	0.1226	0.0000
Winkler	2275001000	0.0126	0.4945	0.0863	0.0056	0.0279	0.0000
Wise	2275020000	0.4772	0.0457	5.0096	0.0045	0.0146	0.0023
Wise	2275060012	0.5446	0.0704	0.8967	0.0043	0.0187	0.0000
Wise	2275050011	5.0728	0.2815	283.1712	0.1475	0.3208	0.1634
Wise	2275050012	3.9972	3.5125	14.3543	0.0466	0.5948	0.0000
Wise	2275001000	0.4951	0.0898	28.2426	0.0004	0.0506	0.0174
Wood	2275020000	0.2280	0.0605	7.5162	0.0018	0.0277	0.0044
Wood	2275050011	5.0007	0.1450	268.8971	0.1466	0.2540	0.1523
Wood	2275050012	1.7697	0.5136	5.8194	0.0153	0.1212	0.0000
Wood	2275001000	0.1191	0.4122	0.7525	0.0051	0.0337	0.0000
Yoakum	2275020000	0.2907	0.0570	1.2632	0.0029	0.0187	0.0000
Yoakum	2275050011	0.4692	0.0171	24.1288	0.0124	0.0247	0.0149
Yoakum	2275050012	1.2847	0.4564	3.0953	0.0133	0.0864	0.0000
Yoakum	2275001000	0.0279	0.4830	0.1655	0.0054	0.0302	0.0000
Young	2275020000	0.9765	0.2880	4.0443	0.0160	0.0725	0.0003
Young	2275060012	0.0800	3.7820	0.7009	0.0423	0.2157	0.0000
Young	2275050011	0.7616	0.1060	42.2805	0.0202	0.0630	0.0239
Young	2275050012	12.8516	4.0574	33.6625	0.1295	0.8393	0.0000
Young	2275001000	0.0938	3.6508	2.1171	0.0409	0.2087	0.0009
Zapata	2275020000	0.2260	0.1485	1.2163	0.0068	0.0345	0.0000
Zapata	2275050011	0.2816	0.0127	16.1638	0.0092	0.0168	0.0099
Zapata	2275050012	1.0157	0.3127	2.1578	0.0088	0.0600	0.0000
Zapata	2275001000	0.0062	0.4480	0.0656	0.0050	0.0250	0.0000
Zavala	2275050011	0.1951	0.0067	8.0334	0.0050	0.0076	0.0047
Zavala	2275050012	0.0004	0.0000	0.0009	0.0000	0.0000	0.0000

*SCC represents the following categories: 2275020000: Commercial Aviation, 2275060012: Air taxis: Turbine Driven, 2275050011: General Aviation: Piston Driven, 2275050012: General Aviation: Turbine Driven, 2275001000: Military, 2275070000: APUs, 2270008005: GSE: Diesel-fueled, 2265008005: GSE: Gasoline-fueled
Summer weekday emissions were obtained by dividing the annual emissions by 365 days.

APPENDIX G: UNCONTROLLED AND CONTROLLED EMISSION RAW DATA (ELECTRONIC ONLY)

Available from the TCEQ upon request.

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

Available from the TCEQ upon request.