

APPENDIX G

2017 TEXAS STATEWIDE AIRCRAFT EMISSIONS INVENTORY

Redesignation Request and Maintenance Plan State
Implementation Plan Revision for the Freestone-Anderson and
Titus 2010 Sulfur Dioxide National Ambient Air Quality
Standard Nonattainment Areas

Project Number 2021-007-SIP-NR
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2017 Texas Statewide Aircraft Emissions Inventory

Final Draft

Prepared for:

**Texas Commission on Environmental
Quality
Air Quality Division**

Prepared by:

Eastern Research Group, Inc.

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2017 TEXAS STATEWIDE AIRCRAFT EMISSIONS INVENTORY

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1.0 Executive Summary

The purpose of this study is to develop a set of annual (tons per year) and average summer weekday (tons per day) emission inventories (EI) for Texas airport activities based on a 2017 base year. The inventory will be used for the United States Environmental Protection Agency (EPA) Air Emissions Reporting Requirements (AERR). The inventory will be submitted to the EPA's Emission Inventory System (EIS) and be incorporated into the EPA's 2017 National Emissions Inventory (NEI).

Eastern Research Group (ERG) developed emissions inventories for criteria and hazardous air pollutants (HAPs). The inventories will be used to support airport-related inquiries.

The emissions associated with airport activities are attributed to the following sources with associated source classification codes (SCC):

- Commercial aviation (SCC: 2275020000)
- Air taxis
 - Piston driven (SCC: 2275060011)
 - Turbine driven (SCC: 2275060012)
- General aviation
 - Piston driven (SCC: 2275050011)
 - Turbine driven (SCC: 2275050012)
- Military (SCC: 2275001000)
- Auxiliary Power Units (SCC: 2275070000)
- Ground Support Equipment
 - Compressed natural gas (CNG)-fueled (SCC: 2268008005)
 - Diesel-fueled (SCC: 2270008005)
 - Gasoline-fueled (SCC: 2265008005)
 - Liquefied petroleum gas (LPG)-fueled (SCC: 2267008005).

To estimate emissions from these sources, 2017 activity data provided by local airports were compiled and supplemented with publicly available 2017 activity data. Two approaches were used to estimate emissions from the compiled activity data. For activity data that included aircraft-specific data, ERG used the Federal Aviation Administration's (FAA) Aviation Environmental Design Tool (AEDT) to estimate emissions. If such detailed data were not available, ERG applied a more general approach for different aircraft types (i.e., air taxis, general aviation, and military aircraft) using the EPA's available generic emission estimating procedures for the NEI. Additional information on methodology are included later in the document.

In 2017, general aviation aircraft outfitted with piston engines account for 50% of the total aircraft activities. Commercial aircraft, General aviation aircraft outfitted with jet engines, military aircraft, air taxi aircraft outfitted with jet engines, and air taxi aircraft

outfitted with piston engines account for 19%, 19%, 7%, 4%, and 1% of the total aircraft activities, respectively. Harris County and Tarrant County had the highest aircraft activity, accounting for 13.4% and 12.8% respectively of all Texas activity.

2.0 Introduction

2.1 Purpose and Objectives

The purpose of this study is to develop a set of area-specific annual (tons per year) and average summer weekday (tons per day) EIs for all airport sources including aircraft, Auxiliary Power Units (APU), and Ground Support Equipment (GSE) to support airport related inquires.

To develop the comprehensive inventories for the aircraft source category, ERG conducted the following tasks:

- Compile 2017 activity data from available local and national data sources.
- Calculate 2017 emission estimates using FAA's AEDT version 2d and generic emission factors.
- Calculate annual emissions.
- Calculate average summer weekday emissions.
- Summarize activity and emissions data.

It should be noted that the engine-specific factors used in the AEDT model were derived from testing data used to certify the engines and account for U.S. and international emissions standards. The inventories will be used to support the airport-related inquires.

Section 3.0 of this report identifies the national and local activity data sources included in this study. This section describes how ERG pulled from each activity data source to compile the 2017 activity dataset. This section also documents any assumptions or adjustments that were made to each data source to facilitate the development of the activity dataset.

Section 4.0 summarizes the emissions estimation methodology used to develop the 2017 airport inventory, various summary emissions tables for criteria pollutants, and suggestions for future projects and lessons learned.

The criteria and HAP emissions associated with airport activities are included in the Excel files submitted with this report for 2017.

2.2 Background

This report covers airport activities as point sources in the emission calculation but are summarized as nonroad sources for the Texas Air Emissions Repository (TexAER) and as point and facilities for the EPA's EIS. The AEDT model treats airports as point/facilities. Once the emissions are estimated, the data are aggregated to the county level as nonroad sources for TexAER but will be kept at the point level for EIS. The

aircraft source category includes all aircraft types used for public, private, and military purposes. The emissions associated with airport activities are attributed to the following sources with associated SCC:

- Commercial aviation (SCC: 2275020000)
- Air taxis
 - Piston driven (SCC: 2275060011)
 - Turbine driven (SCC: 2275060012)
- General aviation
 - Piston driven (SCC: 2275050011)
 - Turbine driven (SCC: 2275050012)
- Military (SCC: 2275001000)
- Auxiliary Power Units (SCC: 2275070000)
- Ground Support Equipment
 - Compressed natural gas (CNG)-fueled (SCC: 2268008005)
 - Diesel-fueled (SCC: 2270008005)
 - Gasoline-fueled (SCC: 2265008005)
 - Liquefied petroleum gas (LPG)-fueled (SCC: 2267008005).

Commercial aircraft transport passengers, freight, or both and tend to be larger aircraft that are driven with jet engines. Air taxis (AT), which are also considered to be commercial aircraft, are usually smaller aircraft (less than 60 passengers) that operate on a limited basis compared to larger commercial aircraft that carry between 60 and 800 passengers. General aviation (GA) includes most other aircraft used for recreational flying and personal transportation. Aircraft that support business travel, usually on an unscheduled basis, are included in the GA category.

Aircraft tend to emit significant amounts of air pollutants. The national AT and GA fleet includes both jet and propeller-driven aircraft. Most of the AT and GA fleet are comprised of piston- (or propeller-) driven aircraft, though these aircraft types also include smaller business jets and turboprops. The piston-driven aircraft tend to have higher VOC emissions and lower NO_x emissions than larger turbine-powered aircraft. According to the EPA¹, propeller-driven aircraft and turbine-driven aircraft account for 72.1% and 27.9%, respectively, of all GA emissions. Propeller-driven aircraft and turbine-driven aircraft account for 21.8% and 78.2%, respectively, of all AT emissions¹. EPA has used this estimate as a national-scale default value in published studies investigating lead emissions from aviation sources.

Military aircraft comprise a wide range of aircraft types such as training aircraft, fighter jets, helicopters, and jet- and propeller-driven cargo planes of varying sizes. Because of a lack of information concerning the make-up of the military aircraft fleet, EPA has assumed that most military aircraft are jet-powered.

Aircraft emissions are associated with an aircraft's landing and takeoff (LTO) cycle. The cycle begins when the aircraft approaches the airport on its descent from cruising altitude, then lands and taxis to the gate, where it idles during passenger deplaning. The cycle continues as the aircraft idles during passenger boarding, taxis back onto the runway, takes off, and ascends (or climbs out) to cruising altitude. Figure 2-1 illustrates the six specific operating modes in an LTO cycle:

- Approach
- Taxi/idle-in
- Taxi/idle-out
- Idling
- Takeoff
- Climb out.

The LTO cycle provides a basis for calculating aircraft emissions associated with airports. During each mode of operation, an aircraft engine operates at a specific power setting and fuel consumption rate for a given aircraft make and model. Emissions for one complete cycle are calculated by multiplying emission factors for each operating mode for each specific aircraft engine and the typical period of time the aircraft is operating.

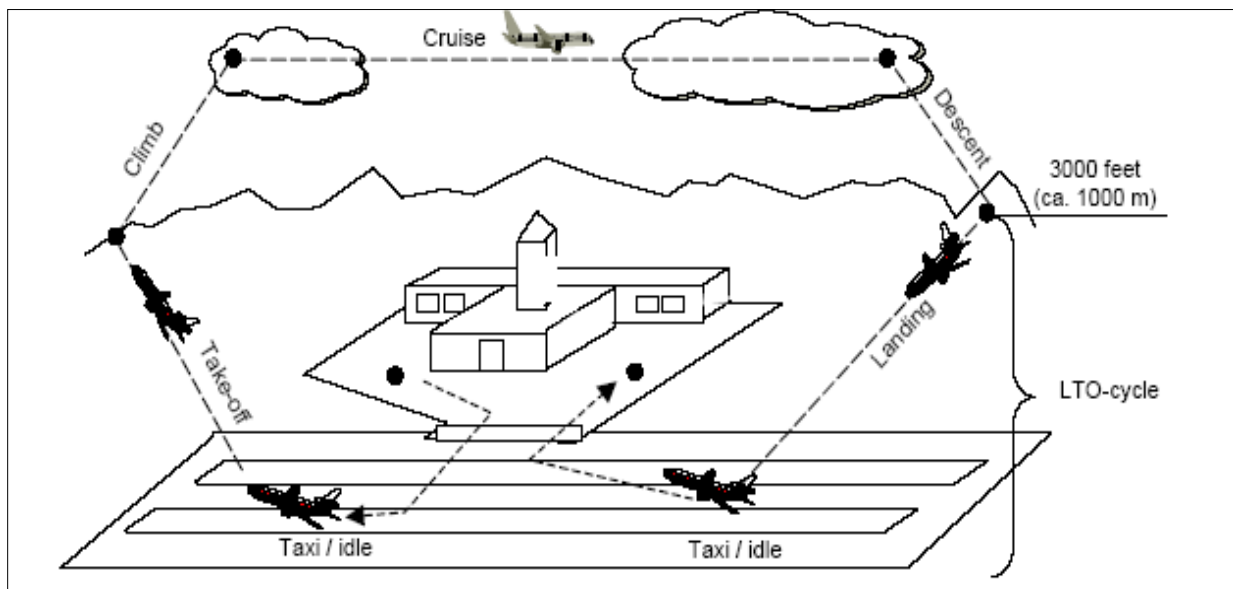


Figure 2-1. Landing and Takeoff Cycle

3.0 Data Sources of Texas Airport Activities Inventoried

ERG obtained various aircraft activity data. There are two general sources of airport data. The preferred sources are from the local airports themselves. The other sources of data are from the publicly available national data sources from the FAA. Section 3.1 discusses the national data sources and Section 3.2 discusses the local data.

3.1 National Data Sources of Texas Airport Activities

To estimate emissions from aircraft operating in Texas, ERG used the activity data compiled by EPA intended for use in the 2017 National Emissions Inventory (NEI). Activity data were compiled from the following sources:

- Bureau of Transportation Statistics (BTS) T-100 segment dataset,²
- FAA Terminal Area Forecast (TAF) dataset/Air Traffic Activity System (ATADS), and ^{3, 4}
- FAA Airport Master Record (5010) dataset.⁵

The compiled data are adjusted for duplicates associated with the three datasets and supplemented with local data discussed further in Section 3.1.4. This section discusses each data source investigated for this project, summarizing the publicly available data and noting any limitations or data gaps.

3.1.1 T-100 Dataset

The T-100 data is an activity dataset that includes information provided by domestic and international commercial air carriers. During the period of performance for this study, only January through October activity data were available for 2017. To obtain the missing months from the 2017 activity dataset, data from November through December for 2016 were adjusted to reflect 2017 data using scale factors developed from the TAF dataset. The T-100 dataset had the most specific data of the three datasets, including airport, aircraft make and model, and LTO cycle data. The engine information was incorporated into the dataset from the FAA's AEDT default engine list. The aircraft categories were assigned to each aircraft with the assumption that T-100 only includes commercial aircraft and air taxis. Aircraft were assigned the AT aircraft category, if the number of seats on the aircraft were less than or equal to 60; otherwise the aircraft was assigned to the commercial air carrier (AC) category.

3.1.2 TAF Dataset

The TAF dataset is an FAA dataset derived from a variety of sources such as reported traffic at FAA towered facilities, data reported directly by airports and FAA derived estimates from historical information. This dataset includes airport, aircraft categories, and operations data.

The aircraft categories included AC, AT, military (MIL), and GA. It can be assumed that 72.1% of all GA activity are powered by propeller-driven aircraft and 27.9% are jet (or turbine) driven; and 21.8% of all AT activity are powered by propeller-driven aircraft and 78.2% are jet (or turbine) driven¹. The aircraft categories from AT and GA were broken out into piston and jet engines. This breakout is important because piston engines have different emission factors than jet engines.

For consistency between the other two datasets, the TAF operations data were converted into LTO cycles. There was overlap between the TAF dataset and T-100 dataset. The T-100 activity had a higher priority than the TAF dataset because it had greater detail; consequently, the duplicate data were removed from the TAF dataset.

3.1.3 5010 Dataset

The 5010 dataset is EPA compiled data from the FAA's airport 5010 master plan data and estimated activity levels based on statistical techniques described in greater detail in the EPA aviation lead report from December 2010⁶. The 5010 data were provided to the states via the EPA's 2014 National Emissions Inventory (NEI). The 5010 data were adjusted to reflect 2017 data using scale factors developed from the TAF dataset.

The 5010 data includes airport, aircraft categories, and LTO cycle data. The aircraft categories include AC, AT, MIL, and GA. The aircraft categories provided by the EPA in the 5010 data were AT and GA broken out into piston and jet engines as they tend to include some of the smallest airports and landing strips.

3.2 Contacting Airports

ERG contacted local Texas airports by telephone and email to request 2017 activity data and to identify and characterize control strategies used or planned at each airport. The airports contacted included the medium to large airports identified for the previous 2011 and 2014 AERR inventory efforts and additional smaller airports that responded for the 2014 AERR inventory effort. Of the 2,016 airports located in Texas, ERG contacted a total of 213 airports.

Each airport was contacted by telephone and asked to provide the following.

- 2017 landing & take-off data for the airport,
- Average taxi-in and taxi-out times for the airport,
- List emission control strategies (i.e. gate electrification, auxiliary power units, etc.) for 2017 and the expected emission reduction, and
- Seasonality of activity (% summer vs. % non-summer).

Of the airports contacted, 23 of the airports submitted 2017 operations data, 15 airports submitted taxi time estimates, 9 airports provided control strategies, and 9 airports provided seasonal data. Table 3-1 summarizes the airports that ERG contacted that provided data. Landing and takeoff data were submitted as LTOs or operations. LTOs, described in Section 2.2, are the landing and takeoff cycle, where operations are landings and takeoffs. For example, to calculate LTOs from operations, operations are divided by two.

3.2.1 Summary of Local Data Received

As noted in the previous section, ERG collected local data from 11% of the airports contacted. In addition, 7% of the airports submitted taxi time estimates. Seasonality data and control strategies were provided by 4% of the airports contacted.

The local data was available in different formats depending on how each airport recorded airport activity. The 2017 operations data were submitted as annual totals, as annual or monthly totals by generic aircraft type categories, and as annual or monthly totals by specific aircraft make and model.

Table 3-1. Summary of 2017 Data Provided by Local Airports*

State Facility Identifier	Facility Name	Contact Name	Number	Data Provided
11R	Brenham Municipal Airport	Kim Hodde	979-337-7212	2017 Operations and Taxi Times
23R	Devine Municipal	Vickie Pumphrey	830-538-4123/830-663-3074	2017 LTOs and Taxi Times
2R9	Karnes County	Ron Hyde	830-583-9884	2017 Operations
7F3	Caddo Mills Municipal Airport	Phil Eaton	214-585-9953	2017 LTOs
84R	Smithville Crawford Municipal Airport	Robert Tamble	512-237-3282	2017 LTOs, Taxi Times, and Seasonality
ABI	Abilene Rgnl	Don Green	325-676-6061	Control Strategies
AMA	Rick Husband Amarillo Intl	Kiley Navarrete	806-335-1671	2017 Operations and Control Strategies
AUS	Austin-Bergstrom Intl	Stephen Dick	512-530-5541	2017 Operations, Taxi Times, Control Strategies, and Seasonality
BBD	Brady Curtis Field	Lisa Perry	325-597-1461	2017 LTOs, Taxi Times, Control Strategies, and Seasonality
BFE	Terry county	Brad Tankersley	806-543-9840	2017 LTOs
COT	Cotulla–La Salle County Airport	E T Page III	830-879-3858	2017 LTOs, Taxi Times, and Seasonality for Commercial Aircraft (Use Publicly Available data for Military and Piston Activities).
CRP	Corpus Christi Intl	Carl Gross	361-289-0171, x1210	2017 Operations, Control Strategies, and Seasonality
DFW	Dallas Fort Worth	Kris Russell	972-973-5591	2017 LTOs, Taxi Times, and Seasonality
DTO	Denton Muni	Chase Patterson	940-349-7736	2017 Operations
E19	Gruver Municipal	Johnnie Williams	806-733-2424	2017 LTO and Taxi Times

Table 3-1. Summary of 2017 Data Provided by Local Airports*

State Facility Identifier	Facility Name	Contact Name	Number	Data Provided
GLS	Scholes Intl At Galveston	Mike Shahan	907-223-4447	2017 Operations, Taxi Times, and Seasonality
HRL	Valley Intl	Bryan Wren	bryan@flythevalley.com	2017 LTO, Taxi Times, and Control Strategies
ILE	Skylark Field Airport	Matthew Van Valkenburgh	254-501-8700	Taxi Times, and Control Strategies
JAS	Jasper County Airport-Bell Field	Mark Allen	409-384-2612 / Airport Phone: 409-381-8151	Taxi Times
LFK	Angelina County Airport	Gary Letney	936-634-7511	2017 LTOs and Taxi Times
ONY	Olney Municipal	Dr. Robert G Stark	940-564-2938	2017 LTOs
PVW	Hale County	Mark Edlin or Gary McCormick	806-293-4121	2017 Operations and Seasonality
PWG	Mcgregor Executive Airport	Rob Blanchard	254-848-5477	2017 Operations and Control Strategies
RYW	Rusty Allen Airport	Roy Jambor	512-527-3540	2017 Operations
SJT	San Angelo Rgnl/Mathis Field	Janice Crimm / Alan Angers (American Airline)	325-659-6409, option 3 / 817-931-5423	2017 LTOs and Taxi Times
TFP	McC Campbell-Porter Airport	Paul Lehnert	361-222-8417	2017 Operations data, Taxi Times, Control Strategies, and Seasonality

* For a more detailed account of the communications between ERG and the airports contacted, see Appendix A.

Of the airports from which ERG collected local data, 12 submitted operations or LTO data as annual totals. Table 3-2a summarizes the 2017 operations data submitted as annual totals and Table 3-2b summarizes the 2017 LTO data submitted as annual totals.

Table 3-2a. 2017 Operations Data: Submitted as Annual Totals

State Facility Identifier	Facility Name	2017 Annual Operations
11R	Brenham Municipal	12,000
AMA	Rick Husband Amarillo International	131,766
DTO	Denton Enterprise	127,566
PWG	Mc Gregor Executive	43,500
RYW	Lago Vista TX - Rusty Allen	37,000
TFP	McC Campbell-Porter	10,000

Table 3-2b. 2017 LTO Data: Submitted as Annual Totals

State Facility Identifier	Facility Name	2017 Annual LTOs
7F3	Caddo Mills Municipal	7,300
BFE	Terry County	1,460
E19	Gruver Municipal	12,000
HRL	Valley International	33,485
LFK	Angelina County	29,200
ONY	Olney Municipal	1,460

Two airports submitted annual operations by generic aircraft type categories. Table 3-3 summarizes the operations by generic aircraft types.

Table 3-3. 2017 Annual Operations Data: Submitted as Annual Totals by Generic Aircraft Type Categories

State Facility Identifier	Air Carrier	Air Taxi	General Aviation Local	General Aviation Itinerant	Military Local	Military Itinerant
2R9	30	-		1,115		1,691
23R	-	-		175	-	-

Five airports submitted operations or LTO data as monthly totals. Table 3-4a, Table 3-4b, and Table 3-4c summarizes the 2017 data submitted as monthly totals by generic aircraft types. Appendix B summarizes the 2017 data submitted as monthly totals by specific aircraft model.

Table 3-4a. Corpus Christi International Airport 2017 Operations Data: Submitted as Monthly Totals by Generic Aircraft Type Categories

Month	Operations					
	Air Carrier	Air Taxi	General Aviation Itinerant	Military Itinerant	General Aviation Local	Military Local
January	738	445	1,320	2,942	176	2,248
February	611	510	1,116	2,802	198	3,116
March	639	691	1,299	2,918	66	3,705
April	602	643	1,368	1,385	144	1,609
May	593	700	1,277	1,942	196	2,510
June	608	672	1,308	2,461	286	2,642
July	595	666	1,325	2,553	172	2,641
August	520	711	1,306	2,771	130	2,154
September	662	651	1,690	3,196	224	3,380
October	697	567	1,506	2,741	254	4,166
November	670	562	1,375	2,272	100	4,096
December	624	605	956	1,883	60	2,045

Table 3-4b. Scholes International Airport at Galveston 2017 Operations Data: Submitted as Monthly Totals by Generic Aircraft Types

Month	Operations									
	AC-in-IFR	AC-in-VFR	AT-in-IFR	AT-in-VFR	GA-in-IFR	GA-in-VFR	GA-loc	MIL-in-IFR	MIL-in-VFR	MIL-loc
January	0	0	122	564	235	655	250	27	35	99
February	0	0	165	503	319	592	370	47	58	86
March	0	0	159	543	306	917	528	53	31	20
April	0	0	146	491	363	1,370	594	16	25	22
May	0	0	148	523	379	1,232	416	27	58	38
June	0	0	134	453	328	1,041	343	42	73	45

**Table 3-4b. Scholes International Airport at Galveston 2017 Operations
Data: Submitted as Monthly Totals by Generic Aircraft Types**

Month	Operations									
	AC- in- IFR	AC- in- VFR	AT- in- IFR	AT- in- VFR	GA- in- IFR	GA- in- VFR	GA- loc	MIL- in- IFR	MIL- in- VFR	MIL- loc
July	0	0	98	516	354	1,441	1,060	7	22	16
August	0	0	107	481	267	797	441	55	36	14
September	1	0	98	532	340	942	500	24	45	23
October	0	0	150	490	306	967	580	35	32	42
November	0	0	156	494	318	983	492	44	39	114
December	0	0	173	382	290	551	280	18	22	8

Table 3-4c. Hale County Airport 2017 Operations Data: Submitted as Monthly Totals by Generic Aircraft Types

Month	Transit Operations						Local Operations				
	Jet	Turbine	Multi-engine	Military Heli-copter	Heli-copter	Single Engine	Jet	Turbine	Heli-copter	Single Engine	Multi-engine
January	13	18	13	21	6	126	2	17	2	240	32
February	8	14	19	32	10	116	7	18	8	208	19
March	10	8	20	10	6	157	9	18	8	295	22
April	14	18	10	0	4	130	6	11	2	228	20
May	20	14	14	0	4	160	4	19	0	220	18
June	14	10	12	0	12	305	5	44	0	196	22
July	7	15	17	22	12	223	3	22	4	236	9
August	12	12	15	0	14	100	2	25	14	165	17
September	4	19	26	46	19	122	0	16	19	223	22
October	10	4	27	2	22	147	1	9	22	260	22
November	17	12	12	0	6	158	2	10	0	270	46
December	8	17	13	4	0	130	2	15	2	192	22

Four airports provided operations or LTO data by specific aircraft make and model. Appendix C summarizes the 2017 data submitted by aircraft make and model.

Of the airports from which ERG collected local data, 15 airports provided taxi time estimates. Table 3-5 summarizes the 2017 taxi time estimates that were provided. Austin-Bergstrom International Airport and Curtis Field Airport provided aircraft specific taxi times.

Table 3-5. 2017 Taxi Time Estimates

State Facility Identifier	Airport Facility	Taxi In (Minutes)	Taxi Out (Minutes)
11R	Brenham Municipal	1	1
23R	Devine Municipal	2.5	2.5
84R	Smithville Crawford Municipal*	-	-
AUS	Austin-Bergstrom International	6	11
BBD	Curtis Field**	-	-
COT	Cotulla-La Salle County	1.5	4
DFW	Dallas/Fort Worth International	11.45	18.55
E19	Gruver Municipal	0.5	0.5
GLS	Scholes International at Galveston	5	5
HRL	Valley International	3	3
ILE	Skylark Field	5	5
JAS	Jasper County-Bell Field	2	2
LFK	Angelina County	1.5	1.5
SJT	San Angelo Regional Airport	5	5
TFP	McC Campbell-Porter	2.5	2.5

*See Appendix Table C-3 for Aircraft Specific Taxi Times

**See Appendix Table C-1 for Aircraft Specific Taxi Times

In addition, 9 airports provided control strategy information. Table 3-6 summarizes the associated emission reductions by airport. The use of electric gates is associated with APU emission reductions and the use of electric GSEs is associated with GSE emission reductions.

Table 3-6. 2017 Control Strategy Reductions

State Facility Identifier	Airport Facility	APU Emission Reduction (%) *	GSE Emission Reduction (%)
ABI	Abilene Regional	50%	
AMA	Rick Husband Amarillo International	100%	
AUS	Austin-Bergstrom International	5%	
BBD	Curtis Field Airport	20%	30%
CRP	Corpus Christi International	100%	4%
HRL	Valley International	100%	15%
ILE	Skylark Field	100%	
PWG	Mc Gregor Executive	100%	
TFP	McC Campbell-Porter	100%	

*APU reductions are a function of the percentage of gates that are electric power, allowing aircraft to connect to the gate and not use APUs. APU percent reduction is the same as the percentage of gates that are electric powered.

Due to the shortened response time for collecting local data, fewer local data were obtained for 2017. Table 3-7 summarizes the total LTOs by source. The total 2017 aircraft LTO (local and publicly available) was 4,557,177 which is a 4.8% increase from the total 2014 LTO of 4,348,275. It should be noted that LTOs associated with GSE were previously being included in the total LTOs. To avoid confusion and the misconception of double counting, LTO's associated with GSE are no longer being included in the total LTOs for the 2017 inventory.

Table 3-7. 2017 Data Source Comparison

Data Source	LTOs	Percentage
Local	765,267	17%
National	3,792,477	83%
Total	4,557,177	100%

In addition to annual estimates, airports were asked to provide seasonal information to aid in summer time daily emission estimates. Of the airports contacted, 9 airports provided seasonality data. Five airports provided monthly LTO and operations data (See Tables 3-4a, 3-4b, and 3-4c; Appendix Tables B-1 and B-2), two airports provided percentages of activity that occurred during the summer months (See Appendix Tables C-1 and C-3), and one airport provided summer time LTOs per day (See Appendix Table C-2). McC Campbell-Porter Airport estimated 1,000 operations per month occurred during the summer months.

Table 3-8 provides a comparison of the local LTOs collected in 2014 and 2017. Only 26 airports provided local data for 2017 versus 32 airports for 2014. This was to be expected due to the shortened period given to airports to provide operations data. In previous inventory efforts, local airports were given at least 3-4 months to provide data. For this inventory they were given only 6-7 weeks total due to the project having a later start date. Additional data elements (though optional) were also included in the data request which may have deterred some airports from participating in the survey efforts. Some of the larger airports did not provide data this time, resulting in roughly half the total local LTO data being collected for 2017 as compared to 2014. Dallas Love Field, Houston International and San Antonio International were the most notable airports that did not provide data in 2017.

Table 3-8. Comparison of Local Data Collected in 2014 and 2017

Airport	Provided Data in 2014	Provided Data in 2017	2014 LTO	2017 LTO
Abilene Rgnl	✓	✓**	28,971	
Angelina County Airport		✓		29,200
Austin-Bergstrom Intl	✓	✓	115,090	93,361
Bailes	✓		534	
Brady Curtis Field		✓		2,002
Brenham Municipal Airport		✓		6,000
Caddo Mills Municipal Airport		✓		7,300
Cleburne Muni	✓		12,228	
Corpus Christi Intl	✓	✓	29,744	44,728
Cotulla–La Salle County Airport		✓		4,942
Covey Trails	✓		260	
Dallas Love Field	✓		84,076	
Dallas/Ft Worth	✓	✓	338,851	327,151
Denton Muni	✓	✓	78,602	63,787
Devine Municipal		✓		175
East Texas Regional	✓		681	
Ellington Field	✓		53,603	
Ferris	✓		520	
Flyin' B	✓		50	
Flying Oaks	✓		130	
George Bush International/ Houston	✓		282,170	
Georgetown Muni	✓		37,514	
Gruver Municipal		✓		12,000
Hale County		✓		2,987
Houston Airpark	✓		1,643	
Jasper County Airport-Bell Field		✓**		

Table 3-8. Comparison of Local Data Collected in 2014 and 2017

Airport	Provided Data in 2014	Provided Data in 2017	2014 LTO	2017 LTO
Karnes County		✓		2,836
Laredo Intl	✓		11,594	
Lone Star Exec	✓		30,517	
Mainland Rgnl Healthcare	✓		30	
McC Campbell-Porter Airport		✓		5,000
Mcgregor Executive Airport		✓		21,750
McKinney National	✓		48,815	
Mc Allen Miller Intl			29,768	
Mesquite Metro	✓		36,774	
North Texas Regional/Perrin Field	✓		39,805	
Olney Municipal		X		1,460
Propwash	✓		2,500	
Republic Helicopters	✓		4,012	
Rick Husband Amarillo Intl		✓		65,893
Rusty Allen Airport		✓		18,500
San Angelo Regional/Mathis Field	✓	✓	1,768	1,872
San Antonio Intl	✓		76,946	
Scholes Intl At Galveston		✓		15,087
Skylark Field Airport		✓**		
Smithville Crawford Municipal Airport		✓		4,294
Star Houston	✓		130	
Sugar Land Regional	✓		43,192	
Terry county		✓		1,460
Valley Intl	✓	✓	19,600	33,483
William P Hobby	✓		113,605	
			Total	1,523,723
				765,267

** Provided Taxi times and/or Control Strategies

4.0 Summary of 2017 Emissions Development

4.1 Emission Estimation Methodology

To develop the most accurate aircraft emission inventory possible, ERG took two different approaches. If aircraft-specific data were available, ERG used the FAA's AEDT model in conjunction with detailed aircraft activity data from T-100. If such detailed data were not available, then ERG applied a more general approach for different aircraft types (i.e., air taxis, general aviation, and military aircraft) using available generic emission estimating procedures. Using these two complementary approaches provides the most accurate emission estimates for the larger commercial jets, which tend to be the most significant aircraft emission source, while still providing estimates for smaller aircraft.

4.1.1 Aircraft Specific Estimation Methodology (AEDT)

AEDT was used for the aircraft-specific activity data. To pull the data into AEDT, EDMS legacy files were employed. The reason for this approach was because FAA provided a tool to create AEDT Standard Input File (ASIF) files using EDMS files. ASIF is the only format AEDT uses for importation. Due to time constraints, developing a standalone tool to generate ASIF files from scratch was not possible. Therefore, the EDMS legacy conversion tool was used. The aircraft-specific activity data were formatted and imported into EDMS. Once the data were in EDMS and quality checks implemented, the EDMS study was exported into an EDMS legacy text file.

Through extensive EDMS legacy file testing, edits were made to the file to successfully import into AEDT. Empty International Civil Aviation Organization (ICAO) airport codes were populated with FAA airport codes to prevent the appearance of duplicates during the EDMS to AEDT Standard Input File (ASIF) file conversion. ASIF is an XML file format created by FAA specific to AEDT for importation. Through this conversion, a unique airport code is required.

Additional changes to the EDMS legacy file included updating outdated aircraft/engine combinations and updating the fuel type for Ground Support Equipment (GSE) codes to match with AEDT. Once the EDMS legacy file was successfully imported into AEDT, additional tweaks were required. These updates included adding flight profiles and updating aircraft types to aircraft that included flight profiles.

After confirming all operations had been successfully imported into AEDT, the emissions inventory was run and exported into three .csv files, one file for aircraft operations, one file for criteria emissions, and one file for HAP emissions. Due to how the AEDT model is designed, multiple individual files must be exported and combined to build a complete inventory. These files were exported and formatted for the flight

path below mixing height, APU operations, and GSE operations. The emissions were converted from grams to short tons and additional IDs were added to each file, including state facility identifiers, SCC codes, and aircraft engine type codes. The emissions data were exported as emission factors and were then multiplied by the various operations to estimate total emissions by aircraft type and airport.

4.1.2 Generic Emissions Estimating Procedures

AEDT can provide emission estimates if the aircraft make and model are known. Often this is not the case for air taxis, general aviation, and military aircraft activity in the TAF and 5010 datasets. For smaller airports in Texas without aircraft specific activity from the T100, ERG used the generic approach that relies upon representative criteria emission factors and HAP Speciation Profiles provided by EPA^{7,8,9}, using the following equation:

$$E_{ixj} = LTO_i \times FR_x \times EF_{ij}$$

Where:

- E_{ixj} = Emission estimate for aircraft type i equipped with engine type x and pollutant j (lbs/year)
- LTO_i = Annual count of LTO cycles for aircraft type i
- FR_x = Fraction of LTOs equipped with engine type x
- EF_{ij} = Generic emission factor for aircraft type i equipped with engine type x and pollutant j (lbs/LTO)
- i = Aircraft type (i.e., air taxi, general aviation, and military)
- x = Engine type (i.e., jet or turboprop, and piston engine)
- j = Criteria pollutant j

Critical to the calculation is the application of representative emission factors that account for the different aircraft in the national fleet. Table 4-1 lists the generic emission factors for Criteria Pollutants by aircraft type.

As discussed above, when the GA and AT breakout is unknown, EPA has assumed that 72.1% of all GA activity are powered by propeller-driven aircraft and 27.9% are jet- (or turbine) driven; and 21.8% of all AT activity are powered by propeller-driven aircraft and 78.2% are jet- (or turbine) driven. The 5010 data had the piston and jet engines already disaggregated.

Table 4-1. Emission Factors for Aircraft Types (pounds per LTO)

Aircraft Type	Pollutant					
	CO	NO _x	PM _{10-PRI}	PM _{2.5-PRI}	SO _x	VOC
Commercial	22.38	18.58	1.08	1.05	1.78	6.16
Air Taxi (turbine)	3.61	0.78	0.60	0.59	0.16	1.01
Air Taxi (propeller)	28.13	0.16	0.60	0.42	0.02	0.17
General Aviation (turbine)	9.58	0.32	0.24	0.23	0.07	0.69
General Aviation (propeller)	12.01	0.07	0.24	0.16	0.01	0.15
Military	25.96	22.33	1.39	1.36	2.11	10.87

4.1.3 Controlled and Uncontrolled 2017 Base Year Inventory

This project required controlled and uncontrolled 2017 inventories. The inventory served as the uncontrolled 2017 emissions inventory, and the controlled 2017 baseline inventory was adjusted to account for APU and GSE control strategies.

APU and GSE emissions can be reduced by using electricity and pretreated ventilation air from the terminals. Where local data indicated that such activities are part of the facilities emission reduction strategy, ERG reduced APU emissions by the electric gate utilization rates, and GSE emissions by the electric GSE utilization rates. In Section 3, Table 3-5 summarizes the emission reductions provided by local airports. In addition to control strategies provided for 2017, control strategies listed in the 2011 and 2014 AERR Emission Inventories were also applied. It was assumed that control strategies were iterative.

4.1.4 Calculating Summer Daily Emissions

Summer weekday emissions for 2017 were developed from seasonality provided by airports. As noted in Section 3, 9 airports provided seasonal data that were used to develop seasonality factors. Where monthly data were available, the seasonality factor was developed using the following equation:

$$SF = LTO_S / D_S \times LTO_A$$

Where:

- SF = Seasonality Factor
- LTO_S = Total LTOs in June, July, and August
- D_S = Total Number of Days in June, July, and August (92 days)
- LTO_A = Total Annual LTOs

Where percentages of activity during the summer months were available, the total LTOs in June, July, and August were calculated by applying the percentages of activity during the summer months to the total LTOs. The above equation was then implemented.

Where typical summer day LTOs were available, the seasonal factor was developed by dividing the daily LTOs by the annual LTOs.

Where local data were not available, summer weekday emissions were developed by dividing annual emissions by 365. T-100 data were analyzed to assess if there were any significant seasonality that would warrant a different factor. There was no significant difference. For consistency with past inventories the 1/365 factor (0.00274) was used.

4.2 Summary of Texas Airport Emissions

The results of implementing the emission estimation methodology for the year 2017 are presented in Table 4-2 through Table 4-6. Tables 4-5 and 4-6 are abbreviated to include only the top 25 counties based on LTOs. Figure 4-1 summarizes the LTOs by county using a color gradient.

Table 4-2. Controlled and Uncontrolled Statewide Annual Criteria Emissions (Tons Per Year)

Pollutant	Controlled Emissions	Uncontrolled Emissions
CO	37,506.48	37,623.60
NO _x	14,462.56	14,564.92
PM _{10-PRI}	759.05	773.60
PM _{25-PRI}	661.40	675.95
SO ₂	1,496.81	1,512.25
VOC	3,962.38	3,971.58

Table 4-3. Controlled Statewide Annual Criteria Emissions by Type (Tons Per Year)

Type	CO	NO_x	PM_{10-PRI}	PM_{25-PRI}	SO₂	VOC
Air Taxi, Piston	791.69	3.70	12.98	9.02	0.54	10.34
Air Taxi, Turbine	414.04	74.72	45.95	44.87	16.03	110.95
APU	212.07	173.61	25.56	25.56	25.91	16.22
Commercial	11,530.25	10,183.34	70.42	70.37	1,062.47	1,501.82
General Aviation, Piston	13,843.35	74.67	271.67	187.46	11.53	173.97
General Aviation, Turbine	4,202.11	153.66	99.98	97.60	34.82	349.18
GSE	2,415.97	277.91	12.89	12.19	12.92	85.95
Military	4,096.98	3,520.95	219.60	214.33	332.58	1,713.95
Totals	37,506.48	14,462.56	759.05	661.40	1,496.81	3,962.38

Table 4-4. Uncontrolled Statewide Annual Criteria Emissions by Type (Tons Per Day)

Type	CO	NO _x	PM _{10-PRI}	PM _{25-PRI}	SO ₂	VOC
Air Taxi, Piston	791.69	3.70	12.98	9.02	0.54	10.34
Air Taxi, Turbine	414.04	74.72	45.95	44.87	16.03	110.95
APU	324.94	275.43	40.08	40.08	41.32	25.27
Commercial	11,530.25	10,183.34	70.42	70.37	1,062.47	1,501.82
General Aviation, Piston	13,843.35	74.67	271.67	187.46	11.53	173.97
General Aviation, Turbine	4,202.11	153.66	99.98	97.60	34.82	349.18
GSE	2,420.23	278.45	12.91	12.22	12.95	86.11
Military	4,096.98	3,520.95	219.60	214.33	332.58	1,713.95
Totals	37,623.60	14,564.92	773.60	675.95	1,512.25	3,971.58

Table 4-5. Controlled Annual Criteria Emission for Top 25 Counties (Tons Per Year)

County	CO	NO _x	PM _{10-PRI}	PM _{25-PRI}	SO ₂	VOC	LTO
Tarrant	8,925	5,223	94	86	574	888	926,850
Harris	4,552	2,993	80	71	270	489	819,138
Dallas	2,201	742	37	32	80	165	341,734
Bexar	1,497	689	25	22	72	150	201,526
Travis	1,723	733	14	13	84	213	173,955
Denton	997	10	21	15	2	20	170,700
Brazoria	577	16	13	10	2	20	101,969
McLennan	649	143	19	16	14	78	100,069
El Paso	682	323	16	14	33	99	93,632
Collin	496	7	11	8	1	14	87,925
Wichita	824	554	38	36	53	272	81,970
Cameron	613	390	23	22	37	155	77,365
Potter	552	338	22	21	33	148	75,088
Williamson	413	8	9	7	1	12	72,599
Lubbock	439	127	11	10	13	48	67,103
Lubbock	431	129	12	10	14	55	65,002
Nueces	371	15	9	7	2	15	64,897
Hidalgo	414	114	10	8	12	39	61,567
Midland	582	381	26	25	37	182	61,534
Medina	321	4	7	5	1	9	56,573
Webb	481	275	17	16	27	122	53,052
Grayson	291	5	6	5	1	8	51,163
Bell	329	106	10	9	11	50	48,864
Caldwell	237	7	5	4	1	8	41,424
Brazos	274	98	9	8	10	49	38,536

Table 4-6. Uncontrolled Annual Criteria Emission for Top 25 Counties (Tons Per Year)

County	CO	NO_x	PM₁₀-PRI	PM₂₅-PRI	SO₂	VOC	LTO
Tarrant	8,925	5,223	94	86	574	888	926,850
Harris	4,627	3,067	90	82	281	495	819,138
Dallas	2,201	742	37	32	80	165	341,734
Bexar	1,512	703	27	24	74	151	201,526
Travis	1,724	734	14	13	85	213	173,955
Denton	997	10	21	15	2	20	170,700
Brazoria	577	16	13	10	2	20	101,969
McLennan	649	143	19	16	14	78	100,069
El Paso	691	328	17	15	34	100	93,632
Collin	496	7	11	8	1	14	87,925
Wichita	824	554	38	36	53	272	81,970
Cameron	620	393	23	22	37	156	77,365
Potter	557	340	23	22	33	148	75,088
Williamson	413	8	9	7	1	12	72,599
Lubbock	442	128	11	10	14	49	67,103
Midland	431	129	12	10	14	55	65,002
Fort Bend	371	15	9	7	2	15	64,897
Hidalgo	414	114	10	8	12	39	61,567
Nueces	584	382	26	25	37	183	61,534
Medina	321	4	7	5	1	9	56,573
Webb	481	275	17	16	27	122	53,052
Grayson	291	5	6	5	1	8	51,163
Bell	329	106	10	9	11	50	48,864
Caldwell	237	7	5	4	1	8	41,424
Brazos	274	98	9	8	10	49	38,536

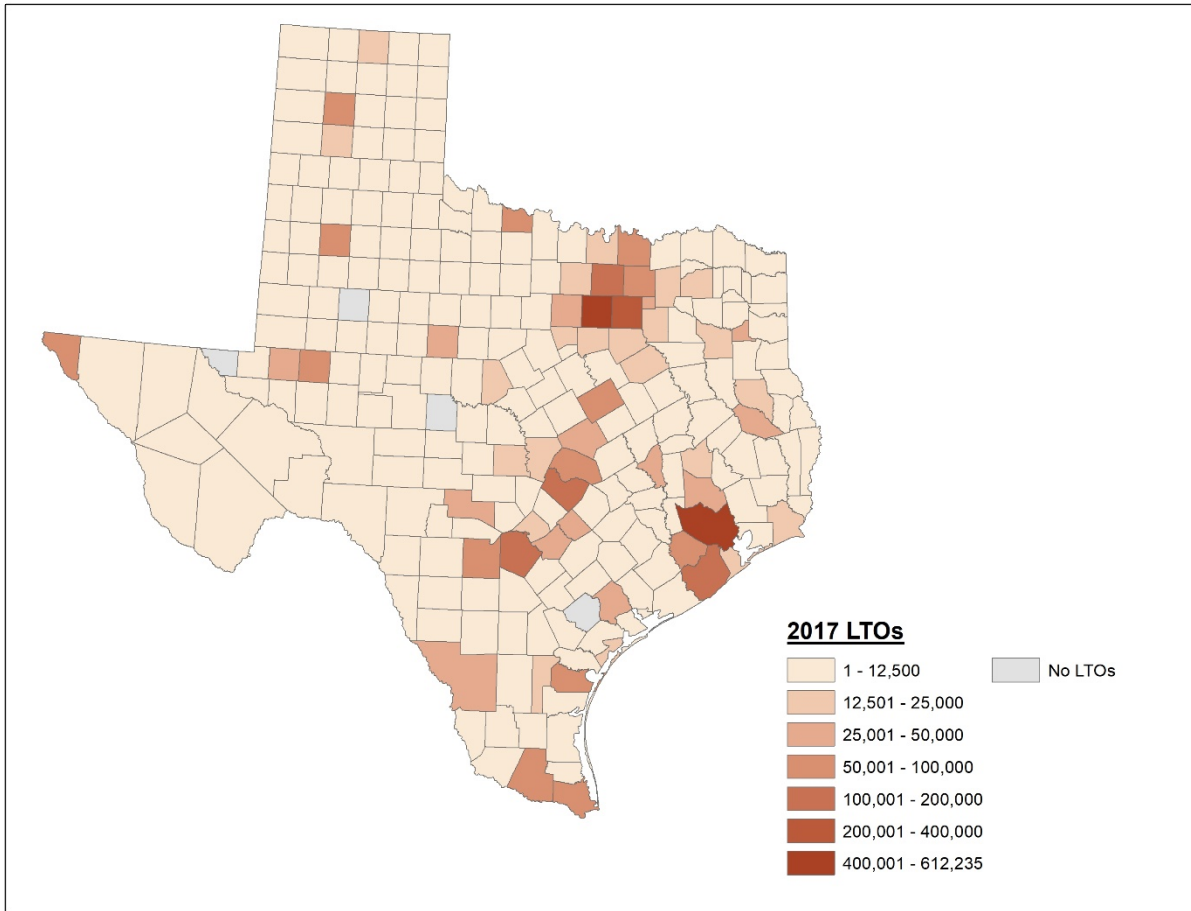


Figure 4-1. 2017 Activity by County (LTOs)

4.3 Future Considerations

When conducting future emissions inventory studies for aircraft, APU's, and GSE, a minimum of 3 months is needed to allow airport staff enough time to compile location specific activity data and provide that data to the contractor. This project was unable to provide enough time for airport staff resulting in a lack of response when compared to previous studies.

Compared to EDMS, AEDT allows for additional data elements to be used to more accurately calculate or spatially allocate emissions. However, very few airports were able to provide these additional data elements. It is possible that if these additional data elements (such as runway information) could be removed from the data request, airports may see this as less burdensome and be more inclined to participate.

In the future ERG will no longer need to utilize the EDMS conversion tool (see Section 4.1.1) to create ASIF files and will instead be able to create ASIF files from scratch. This will likely increase ERG's efficiency in completing future airport inventories.

5.0 References

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8. U.S. EPA/ FAA. *Recommended Best Practice for Quantifying Speciated Gas-Phase Organic Gas Emissions from Aircraft Equipped with Turbofan, Turbojet, and Turboprop Engines*. February 2009.
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Appendix A
TCEQ 2017 Call Log

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
DFW	Dallas Fort Worth	Kris Russell	972-973-5591	FRussell@dfwairport.com	Lindsay Dayton	Call - 3/22/2018 @ 09:35	Kris Russell	Left message.
DFW	Dallas Fort Worth	Kris Russell	972-973-5591	FRussell@dfwairport.com	Lindsay Dayton	Call - 4/25/2018 @ 14:08	Kris Russell	Left message.
DFW	Dallas Fort Worth	Kris Russell	972-973-5591	FRussell@dfwairport.com	Lindsay Dayton	Email - 4/25/2018 @ 15:05	Kris Russell	Sent email requesting operations data.
DFW	Dallas Fort Worth	Kris Russell	972-973-5591	FRussell@dfwairport.com	Lindsay Dayton	Email failed- 4/25/2018 @ 15:05	Kris Russell	Email failed to send. Will try to call back at a later time.
DFW	Dallas Fort Worth	Kris Russell	972-973-5591	askdfw@dfwairport.com	Lindsay Dayton	Email - 4/25/2018 @ 15:07	Kris Russell	Sent email requesting operations data.
DFW	Dallas Fort Worth	Kris Russell	972-973-5591	FRussell@dfwairport.com	Lindsay Dayton	Email - 4/25/2018 @ 15:05	Kris Russell	Sent email requesting operations data (removed attachment).
DFW	Dallas Fort Worth	Kris Russell	972-973-5591	FRussell@dfwairport.com	Lindsay Dayton	Call - 4/27/2018 @ 09:50	Kris Russell	Said they would provide data.
DFW	Dallas Fort Worth	Kris Russell	972-973-5591	FRussell@dfwairport.com	Lindsay Dayton, Jennifer Sellers, Cody Mclain	Email - 4/27/2018 @ 12:07	Kris Russell	Requested call for clarification.
DFW	Dallas Fort Worth	Kris Russell	972-973-5591	FRussell@dfwairport.com econway@dfwairport.com	Jennifer Sellers	Call - 4/30/2018	Kris Russell, Emily Conway	Answered questions.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
DFW	Dallas Fort Worth	Kris Russell, Emily Conway	Kris - 0972-973-5591/M214-995-2449 Emily -0972-973-5565/M979-208-9827	FRussell@dfwairport.com econway@dfwairport.com	Lindsay Dayton, Jennifer Sellers, Cody Mclain	Email - 4/30/2018 @ 09:07	Emily Conway, Kris Russell	Emailed CY2017 TCEQ Data.xlsx
DFW	Dallas Fort Worth	Kris Russell, Emily Conway	Kris - 0972-973-5591/M214-995-2449 Emily -0972-973-5565/M979-208-9827	FRussell@dfwairport.com econway@dfwairport.com	Lindsay Dayton	Email - 4/30/2018 @ 13:15	Emily Conway, Kris Russell	Sent thank you email.
IAH	GEORGE BUSH INTERCONTINENTAL/HOUSTON	Carlos Ortiz / Mike Kenney, Contractor for Jim Parise at Houston Area Airports	281-233-1842 / 727-578-5152	MKenney@KBEnv.com	Lindsay Dayton	Call - 3/22/2018 @ 09:40	Carlos Ortiz	No answer and no voicemail.
IAH	GEORGE BUSH INTERCONTINENTAL/HOUSTON	Mike Kenney	727-578-5152	MKenney@KBEnv.com	Lindsay Dayton	Call - 3/22/2018 @ 10:55	Mike Kenney	Requested email.
IAH	GEORGE BUSH INTERCONTINENTAL/HOUSTON	Mike Kenney	727-578-5152	MKenney@KBEnv.com	Lindsay Dayton	Email - 3/22/2018 @ 11:15	Mike Kenney	Sent email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
IAH	GEORGE BUSH INTERCONTINENTAL/HOUSTON	Mike Kenney	727-578-5152	MKenney@KBEEnv.com	Lindsay Dayton	Call - 4/25/2018 @ 14:10	Mike Kenney	Left message.
IAH	GEORGE BUSH INTERCONTINENTAL/HOUSTON	Mike Kenney	727-578-5152	MKenney@KBEEnv.com	Lindsay Dayton	Email - 4/25/2018 @ 15:17	Mike Kenney	Sent second email requesting operations data.
DAL	Dallas Love Field	Terry Mitchell / Elaine Karnes (Southwest Airlines)	214-670-6086 / 214-792-3572	terry.mitchell@dallascityhall.com / elaine.karnes@wnco.com	Lindsay Dayton	Call - 3/22/2018 @ multiple times	Terry Mitchell	Phone call did not go through.
DAL	Dallas Love Field	Terry Mitchell / Elaine Karnes (Southwest Airlines)	214-670-6086 / 214-792-3572	terry.mitchell@dallascityhall.com / elaine.karnes@wnco.com	Lindsay Dayton	Call - 3/22/2018 @ multiple times	Elaine Karnes	Phone call did not go through.
DAL	Dallas Love Field	Terry Mitchell / Elaine Karnes (Southwest Airlines)	214-670-6086 / 214-792-3572	terry.mitchell@dallascityhall.com / elaine.karnes@wnco.com	Lindsay Dayton	Email - 04/25/2018 @ 15:21	Terry Mitchell	Sent email requesting operations data.
DAL	Dallas Love Field	Terry Mitchell / Elaine Karnes (Southwest Airlines)	214-670-6086 / 214-792-3572	terry.mitchell@dallascityhall.com / elaine.karnes@wnco.com	Lindsay Dayton	Email failed- 04/25/2018 @ 15:21	Terry Mitchell	Email failed - resend without attachment.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
DAL	Dallas Love Field	Terry Mitchell / Elaine Karnes (Southwest Airlines)	214-670-6086 / 214-792-3572	terry.mitchell@dallascityhall.com / elaine.karnes@wnco.com	Lindsay Dayton	Email - 04/25/2018 @ 15:22	Terry Mitchell	Re-sent email requesting operations data.
DAL	Dallas Love Field	Terry Mitchell / Elaine Karnes (Southwest Airlines)	214-670-6086 / 214-792-3572	terry.mitchell@dallascityhall.com / elaine.karnes@wnco.com	Lindsay Dayton	Email failed- 04/25/2018 @ 15:23	Terry Mitchell	Email failed.
DAL	Dallas Love Field	Terry Mitchell / Elaine Karnes (Southwest Airlines)	214-670-6086 / 214-792-3572	terry.mitchell@dallascityhall.com / elaine.karnes@wnco.com	Lindsay Dayton	Email - 04/25/2018 @ 15:25	Terry Mitchell	Emailed request through airport website.
HOU	WILLIAM P HOBBY	Carlos Ortiz / Elaine Karnes (Southwest Airlines) / William Zrioka / Mike Kenney, Contractor for Jim Parise at Houston Area Airports	281-233-1842 / 214-792-3572 / 281-233-1364 / 727-578-5152	elaine.karnes@wnco.com / william.zrioka@houston.tx.gov / MKenney@KBEEnv.com	Lindsay Dayton	Email - 3/22/2018 @ 11:15	Mike Kenney	Sent email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
HOU	WILLIAM P HOBBY	Carlos Ortiz / Elaine Karnes (Southwest Airlines) / William Zrioka / Mike Kenney, Contractor for Jim Parise at Houston Area Airports	281-233-1842 / 214-792-3572 / 281-233-1364 / 727-578-5153	elaine.karnes@wnco.com / william.zrioka@houston.tx.gov / MKenney@KBEnv.com	Lindsay Dayton	Email - 4/25/2018 @ 15:17	Mike Kenney	Sent second email requesting operations data.
AUS	AUSTIN-BERGSTROM INTL	Stephen Dick/ Kane Carpenter	512-530-5541	stephen.dick@austintexas.gov / kane.carpenter@ci.austin.tx.us	Lindsay Dayton	Call - 3/22/2018 @11:45	Stephen Dick	Requested an email with more information. Provided taxi times estimates: 11 min out, 6 min in.
AUS	AUSTIN-BERGSTROM INTL	Stephen Dick/ Kane Carpenter	512-530-5541	stephen.dick@austintexas.gov / kane.carpenter@ci.austin.tx.us	Lindsay Dayton	Email - 3/22/2018 @ 12:15	Stephen Dick	Sent email requesting operations data.
AUS	AUSTIN-BERGSTROM INTL	Stephen Dick/ Kane Carpenter	512-530-5541	stephen.dick@austintexas.gov / kane.carpenter@ci.austin.tx.us	Lindsay Dayton	Email - 4/25/2018 @ 15:41	Stephen Dick (cced Kane Carpenter)	Sent second email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
AUS	AUSTIN-BERGSTROM INTL	Stephen Dick/ Kane Carpenter	512-530-5541	stephen.dick@austintexas.gov / kane.carpenter@ci.austin.tx.us	Lindsay Dayton	Email failed- 4/25/2018 @ 15:41	Kane Carpenter	Sent email requesting operations data. Only went through for stephen.dick@austintexas.gov.
AUS	AUSTIN-BERGSTROM INTL	Stephen Dick	512-530-5541	stephen.dick@austintexas.gov / kane.carpenter@ci.austin.tx.us	Lindsay Dayton	Email returned- 4/30/2018 @ 09:24	Stephen Dick	Received email with 2017 fleet mix file. Do have some electric GSEs.
SAT	SAN ANTONIO INTL	Mary Wells / Steven Southers, Environmental Stewardship Manager	210-207-3847 / 210-207-3402	mary.wells@sanantonio.gov / Steven.Southers@sanantonio.gov	Lindsay Dayton	Call - 3/22/2018 @ 12:23	Joshua Heiss (Mary Wells replacement) email: joshua.heiss@sanantonio.gov	Requested email with more information that he could forward on get the executive teams' approval.
SAT	SAN ANTONIO INTL	Joshua Heiss	210-207-3847 / 210-207-3402	joshua.heiss@sanantonio.gov	Lindsay Dayton	Email - 3/22/2018 @ 13:20	Joshua Heiss	Sent email requesting operations data.
SAT	SAN ANTONIO INTL	Joshua Heiss	210-207-3847 / 210-207-3403	joshua.heiss@sanantonio.gov	Lindsay Dayton	Email - 4/25/2018 @ 15:52	Joshua Heiss	Sent second email requesting operations data.
SSF	STINSON MUNI	Joshua Heiss	210-207-3847		Lindsay Dayton	Call - 3/22/2018 @ 12:35	Joshua Heiss (Mary Wells replacement)	Left a voicemail.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
							email: joshua.heiss@santonio.gov	
SSF	STINSON MUNI	Joshua Heiss	210-207-3847	joshua.heiss@sanantonio.gov	Lindsay Dayton	Call Returned - 3/22/2018 @ 13:15	Joshua Heiss	Would try to get the data.
SSF	STINSON MUNI	Joshua Heiss	210-207-3847	joshua.heiss@sanantonio.gov	Lindsay Dayton	Email - 3/22/2018 @ 13:20	Joshua Heiss	Sent email requesting operations data.
SSF	STINSON MUNI	Joshua Heiss	210-207-3847	joshua.heiss@sanantonio.gov	Lindsay Dayton	Email - 4/25/2018 @ 15:52	Joshua Heiss	Sent second email requesting operations data.
DTO	Denton Muni	Quentin Hix / Patrick Carreno, Airport Ops Mgr	940-349-7736	quentin.hix@cityofdenton.com / patrick.carreno@cityofdenton.com	Lindsay Dayton	Call - 3/22/2018 @ 12:45	Chase Patterson (Quentin Hix and Patrick Carreno no long work with Denton)	Left a voicemail.
DTO	Denton Muni	Chase Patterson	940-349-7736	-	Lindsay Dayton	Call returned- 3/22/2018 @ 17:11	Chase Patterson	Left voicemail - 2017 operations were 127,566 landings and take-offs.
DWH	DAVID WAYNE HOOKS MEMORIAL	Andre Harris, Tower Chief (or Jonathan Cook?)	281-376-9721	jonathan.cook@faa.gov	Lindsay Dayton	Call - 3/22/2018 @ 13:35	Myrna Youngblood (Jonathan Cook now in a	Requested an email detailing the request.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
							different position) email: myrna.g.youngblood@faa.gov	
DWH	DAVID WAYNE HOOKS MEMORIAL	Myrna Youngblood	281-376-9721	myrna.g.youngblood@faa.gov	Lindsay Dayton	Email - 3/22/2018 @ 13:45	Myrna Youngblood	Sent email with additional information.
DWH	DAVID WAYNE HOOKS MEMORIAL	Myrna Youngblood	281-376-9721	myrna.g.youngblood@faa.gov	Lindsay Dayton	Email - 4/25/2018 @ 16:05	Myrna Youngblood	Sent follow-up data request email.
FTW	Fort Worth Meacham Intl	Jeff Kloska	817-392-5400		Lindsay Dayton	Call - 3/22/2018 @ 13:48	Jeff Kloska	Left a voicemail.
FTW	Fort Worth Meacham Intl	Jeff Kloska	817-392-5400	jeff.kloska@fortworthtexas.gov	Lindsay Dayton	Email - 4/25/2018 @ 16:12	Jeff Kloska	Sent email requesting operations data
SPS	SHEPPARD AFB/WICHITA FALLS MUNI	Sarah Johnson, Airport Manager	940-855-3623	sarah.johnson@wichtafallstx.gov	Lindsay Dayton	Call - 3/22/2018 @ 13:57	Jon Waltjen, Airport Admin. (Sarah Johnson no longer with airport) Email: jon.waltjen@wichtafallstx.gov	Provided email contact information: jon.waltjen@wichtafallstx.gov. Most flights in and out are military.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
SPS	SHEPPARD AFB/WICHI TA FALLS MUNI	Jon Waltjen, Airport Admin	940-855-3623	jon.waltjen@wichitafallstx.gov	Lindsay Dayton	Email - 3/22/2018 @ 14:30	Jon Waltjen, Airport Admin.	Sent email requesting operations data.
SPS	SHEPPARD AFB/WICHI TA FALLS MUNI	Jon Waltjen, Airport Admin	940-855-3623	jon.waltjen@wichitafallstx.gov	Lindsay Dayton	Email - 4/25/2018 @ 16:25	Jon Waltjen, Airport Admin.	Sent second email requesting operations data.
TKI	Collin County Regional at Mc Kinney	Eric Pratt/Operations Manager	972-562-4096	epratt@flytki.com	Lindsay Dayton	Call - 3/22/2018 @ 14:45	No Contact	Phone call did not go through.
TKI	Collin County Regional at Mc Kinney	Eric Pratt/Operations Manager	972-562-4096	epratt@flytki.com	Lindsay Dayton	Email - 3/22/2018 @ 14:55	Eric Pratt	Sent email requesting operations data.
TKI	Collin County Regional at Mc Kinney	Ken Carley	972-562-4053	kcarley@flytki.com	Lindsay Dayton	Email - 4/25/2018	Ken Carley	Sent email requesting operations data
EFD	ELLINGTON FIELD	Carlos Ortiz / Mike Kenney, Contractor for Jim Parise at Houston Area Airports	281-233-1842 / 727-578-5152	MKenney@KBEEnv.com	Lindsay Dayton	Email - 3/22/2018 @ 11:15	Mike Kenney	Sent email requesting operations data.
EFD	ELLINGTON FIELD	Carlos Ortiz / Mike Kenney, Contractor for Jim Parise at Houston	281-233-1842 / 727-578-5152	MKenney@KBEEnv.com	Lindsay Dayton	Email - 4/25/2018 @ 15:17	Mike Kenney	Sent second email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
		Area Airports						
AFW	Fort Worth Alliance	Christian Childs	800-318-9268	christian.childs@hillwood.com	Lindsay Dayton	Call - 3/22/2018 @ 15:07	Christian Childs	Left voicemail.
AFW	Fort Worth Alliance	Christian Childs	800-318-9268	christian.childs@hillwood.com	Lindsay Dayton	Email - 4/25/2018 @ 16:47	Christian Childs	Sent email requesting operations data.
IWS	WEST HOUSTON	Woody Lesikar	281-492-2130	woody@westhoustonairport.com	Lindsay Dayton	Call - 3/22/2018 @ 15:14	Woody Lesikar	Left voicemail.
IWS	WEST HOUSTON	Woody Lesikar	281-492-2130	woody@westhoustonairport.com	Lindsay Dayton	Call returned - 3/22/2018 @ 17:44	Woody Lesikar	Left voicemail.
IWS	WEST HOUSTON	Woody Lesikar	281-492-2130	woody@westhoustonairport.com	Lindsay Dayton	Call - 3/23/2018 @ 15:20	Woody Lesikar	Unavailable.
IWS	WEST HOUSTON	Woody Lesikar	281-492-2130	woody@westhoustonairport.com	Lindsay Dayton	Email - 3/23/2018 @ 15:30	Woody Lesikar	Sent email requesting operations data.
IWS	WEST HOUSTON	Woody Lesikar	281-492-2130	woody@westhoustonairport.com	Lindsay Dayton	Emailed back - 3/23/2018 @ 15:30	Woody Lesikar	Asked if mandatory and also asked for code for survey.
IWS	WEST HOUSTON	Woody Lesikar	281-492-2130	woody@westhoustonairport.com	Lindsay Dayton	Email - 3/26/2018 @ 11:06	Woody Lesikar	Returned email stating it was voluntary.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
IWS	WEST HOUSTON	Woody Lesikar	281-492-2130	woody@westhoustonairport.com	Lindsay Dayton	Emailed back - 3/26/2018 @ 12:02	Woody Lesikar	Asked how supplying information will help General Aviation/West Houston Airport.
IWS	WEST HOUSTON	Woody Lesikar	281-492-2130	woody@westhoustonairport.com	Cody Mclain (TCEQ)	3/27/2018	Woody Lesikar	Cody Mclain (TCEQ) is going to contact him.
ELP	EL PASO INTL	Monica Vera	915-212-1843	monica.vera@elpasotexas.gov	Lindsay Dayton	Call - 3/22/2018 @ 15:22	Monica Vera transferred me to Tony Nevares (# 915-212-7325)	Requested email. Provided email addresses: nevarezja@elpasotexas.gov and cc urbinase@elpasotexas.gov.
ELP	EL PASO INTL	Tony Nevares	915-212-7325	nevarezja@elpasotexas.gov	Lindsay Dayton	Email - 3/22/2018 @ 15:45	Tony Nevares	Sent email requesting operations data.
ELP	EL PASO INTL	Tony Nevares	915-212-7325	nevarezja@elpasotexas.gov	Cody Mclain (TCEQ)	Call - 3/27/2018	Tony Nevares	Left voicemail.
ADS	Addison	Joe McAnally/Operations manager	972-392-4861		Lindsay Dayton	Call - 3/22/2018 @15:55	Joe McAnally	Left voicemail.
ADS	Addison	Joe McAnally/Operations manager	972-392-4861		Lindsay Dayton	Returned Call - 3/23/2018 @15:57	Joe McAnally	Requested email. Open to providing data.
ADS	Addison	Joe McAnally/Operations manager	972-392-4861	joe.mcanally@addisonairport.net	Lindsay Dayton	Call - 3/23/2018 @ 16:10	Joe McAnally	Sent email requesting operations data.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
HDO	HONDO MUNI	Robert Lee	(830) 426-3810	rlee@hondo-tx.org	Lindsay Dayton	Call - 3/22/2018 @ 16:10	Ryan Elder	Provided contact information: relder@hondo-tx.org. Open to providing data.
HDO	HONDO MUNI	Ryan Elder	(830) 426-3811	relder@hondo-tx.org	Lindsay Dayton	Email - 3/22/2018 @ 16:20	Ryan Elder	Sent email requesting operations data.
LRD	LAREDO INTL	Jose Flores, Airport Manager / Guillermo Villalobos, Operations Manager	956-795-2000	jlflores@ci.laredo.tx.us / gvillalob2@ci.laredo.tx.us	Lindsay Dayton	Email - 3/22/2018 @ 16:33	Guillermo Villalobos	Sent email requesting operations data. Email returned - does not exist.
LRD	LAREDO INTL	Jose Flores, Airport Manager / Guillermo Villalobos, Operations Manager	956-795-2000	jlflores@ci.laredo.tx.us / gvillalob2@ci.laredo.tx.us	Lindsay Dayton	Email - 3/22/2018 @ 16:35	Jose Flores	Sent email requesting operations data. Email returned - does not exist.
LRD	LAREDO INTL	Elsy D. Borgstedte	956-795-2001	jlflores@ci.laredo.tx.us / gvillalob2@ci.laredo.tx.us	Lindsay Dayton	Email - 3/22/2018 @ 16:36	Elsy D. Borgstedte	Sent email requesting operations data.
LRD	LAREDO INTL	Elsy D. Borgstedte	956-795-2000		Jennifer Sellers	3/23/2018 12:30p	Elsy D. Borgstedte	Ms. Borgstedte left message for Jennifer Sellers.
LRD	LAREDO INTL	Elsy D. Borgstedte	956-795-2000		Jennifer Sellers	3/28/2018 11:15a	Elsy D. Borgstedte	Left message.
LVJ	PEARLAND RGNL	Leah Langfred	281-482-7551	manager@flypearland.com	Lindsay Dayton	Email - 3/22/2018 @ 16:45	Stephen	Provided contact information for Adam

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
								Arceneaux: adam@flypearland.com.
LVJ	PEARLAND RGNL	Adam Arceneaux	281-482-7552	adam@flypearland.com	Lindsay Dayton	Email - 3/22/2018 @ 16:59	Adam Arceneaux	Sent email requesting operations data.
SJT	SAN ANGELO RGNL/MAT HIS FIELD	Janice Crimm / Alan Angers (American Airline)	325-659-6409, option 3 / 817-931-5423	janice.crimm@cosatx.us / alan.angers@aa.com	Lindsay Dayton	Call- 3/23/2018 @ 10:15	Janice Crimm	Requested email with information and would try to get as much information together as possible.
SJT	SAN ANGELO RGNL/MAT HIS FIELD	Janice Crimm / Alan Angers (American Airline)	325-659-6409, option 3 / 817-931-5423	janice.crimm@cosatx.us / alan.angers@aa.com	Lindsay Dayton	Email- 3/23/2018 @ 10:30	Janice Crimm	Sent email requesting operations data.
SJT	SAN ANGELO RGNL/MAT HIS FIELD	Janice Crimm / Alan Angers (American Airline)	325-659-6409, option 3 / 817-931-5423	janice.crimm@cosatx.us / alan.angers@aa.com	Lindsay Dayton	Emailed back - 3/26/2018 @ 15:30	Janice Crimm	Sent 2017 LTO data (TCEQ 2017 Emissions San Angelo, TX.xlsx)
SJT	SAN ANGELO RGNL/MAT HIS FIELD	Janice Crimm / Alan Angers (American Airline)	325-659-6409, option 3 / 817-931-5423	janice.crimm@cosatx.us / alan.angers@aa.com	Lindsay Dayton	Email- 3/26/2018 @ 15:45	Janice Crimm	Sent thank you email.
GTU	GEORGETOWN MUNI	Curtis Benkendorfer, Airport Manager	512-930-3666/ 512-818-0418 (cell)	curtis.benkendorfer@georgetown.org	Lindsay Dayton	Email- 3/23/2018 @ 10:55	Curtis Benkendorfer	Sent email requesting operations data.
CRP	CORPUS CHRISTI INTL	Carl Gross	361-289-0171, x1210		Lindsay Dayton	Call - 4/25/2018 @ 17:00	Carl Gross	Requested email - said that gates are all electrified. Do not have

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
								taxi times but do have monthly data.
CRP	CORPUS CHRISTI INTL	Carl Gross	361-289-0171, x1210	carlg@cctexas.com	Lindsay Dayton	Email-4/25/2018 @ 17:05	Carl Gross	Sent email requesting operations data.
CRP	CORPUS CHRISTI INTL	Carl Gross	361-289-0171, x1210	carlg@cctexas.com	Lindsay Dayton	Email returned-4/25/2018 @ 17:16	Carl Gross	Supplied 2017 operations data and list of aircrafts that operate at airport
CRP	CORPUS CHRISTI INTL	Carl Gross	361-289-0171, x1210	carlg@cctexas.com	Lindsay Dayton	Email-4/25/2018 @ 17:32	Carl Gross	Sent thank you email.
GKY	Arlington Muni	Richard Stout, OP Mgr	817-459-5571		Lindsay Dayton	Call - 3/23/2018 @ 11:25	Richard Stout	Provided updated contact information for Trent Ballard: trent.ballard@arlingtontx.gov.
GKY	Arlington Muni	Trent Ballard	817-459-5571	trent.ballard@arlingtontx.gov	Lindsay Dayton	Email - 3/23/2018 @ 11:35	Trent Ballard	Sent email requesting operations data.
GKY	Arlington Muni	Trent Ballard	817-459-5571	trent.ballard@arlingtontx.gov	Cody McClain (TCEQ)	Call- 3/27/2018	Trent Ballard	Spoke with Trent, answered questions.
GKY	Arlington Muni	Trent Ballard	817-459-5990		Jennifer Sellers	3/26/2018 5:00p	Trent Ballard	Mr. Ballard left message for Jennifer Sellers.
GKY	Arlington Muni	Trent Ballard	817-459-5990		Jennifer Sellers	3/28/2018 11:15a	Trent Ballard	Left message.
LBX	BRAZORIA COUNTY	Jeff Bilyeu	979-849-5755	jbilyeu@brazoria-county.com	Lindsay Dayton	Email- 3/23/2018 @ 11:18	Jeff Bilyeu	Sent email requesting operations data.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
HQZ	Mesquite Metro	Cynthia Godfrey, Operations Manager	972-216-4130, option 2		Lindsay Dayton	Call - 3/23/2018 @ 11:37		Call did not go through.
HQZ	Mesquite Metro	Eric Pratt/Operations Manager	972-216-4130, option 2	epratt@cityofmesquite.com	Lindsay Dayton	Email - 3/23/2018 @ 11:45	Eric Pratt	Sent email requesting operations data.
LBB	LUBBOCK PRESTON SMITH INTL	Kelly Campbell, Airport Manager / Karen Williams	806-775-3126 x 3131 / 806-775-3127		Lindsay Dayton	Call - 3/23/2018 @ 11:55	Directed to Karen Williams	Left a voicemail.
CNW	TSTC WACO	Kevin Dorton, Director	254-867-4801		Lindsay Dayton	Call - 3/23/2018 @ 12:02		Call did not go through.
GPM	Grand Prairie Muni	Mike Day, Op Officer	972-237-7591	mday@gptx.org	Lindsay Dayton	Email - 3/23/2018 @ 12:15	Mike Day	Sent email requesting operations data.
SGR	SUGAR LAND RGNL	Phillip W. Savko / Krystal EscAMilla, Airport Specialist	281-275-2100	psavko@sugarlandtx.gov / kescAMilla@sugarlandtx.gov	Lindsay Dayton	Email - 3/23/2018 @ 12:30	Phillip Savko	Sent email requesting operations data.
MAF	MIDLAND INTL	Justine Ruff, Interim Director/ADA Appliance Officer	432-560-2200 x 3010		Lindsay Dayton	Call - 3/23/2018 @ 12:37		Referred to tower:432-488-2000.
MAF	MIDLAND INTL	Baldemar Gutierrez	432-488-2000		Lindsay Dayton	Call - 3/23/2018 @ 12:43	Baldemar Gutierrez	Requested email.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
MAF	MIDLAND INTL	Baldemar Gutierrez	432-488-2000		Lindsay Dayton	Email- 3/23/2018 @ 12:55	Baldemar Gutierrez	Sent email requesting operations data.
MAF	MIDLAND INTL	Baldemar Gutierrez	432-488-2000		Lindsay Dayton	Email returned - 3/27/2018 @ 11:29	Baldemar Gutierrez	Does not have information.
MAF	MIDLAND INTL	Aaron Easton, Operations Manager	432-560-2200		Lindsay Dayton	Call - 3/27/2018 @ 12:09	Aaron Easton	Requested an email to be sent aeaston@midlandtexas.gov.
MAF	MIDLAND INTL	Aaron Easton, Operations Manager	432-560-2200	aeaston@midlandtexas.gov	Lindsay Dayton	Email - 3/27/2018 @ 12:35	Aaron Easton	Sent email requesting operations data.
LNC	Lancaster	Mark Divita	(972) 227-5721		Lindsay Dayton	Call- 3/23/2018 @ 13:26	Instructed to contact K. Benbrook (Email: kbenbrook@lancaster-tx.com)	Provided contact information for K. Benbrook: kbenbrook@lancaster-tx.com.
LNC	Lancaster	Kellen Benbrook	(972) 227-5721	kbenbrook@lancaster-tx.com	Lindsay Dayton	Email- 3/23/2018 @ 11:18	Kellen Benbrook	Sent email requesting operations data.
F39 (GYI)	NORTH TEXAS RGNL/PERRIN FIELD	Mike Shahan	903-786-2904	airport@co.garson.tx.us	Lindsay Dayton	Call - 3/23/2018 @ 13:47	Tower	They could not give out information.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
F39 (GYI)	NORTH TEXAS RGNL/PERR IN FIELD	Mike Ream, tower manager	903-786-2904	airport@co.grayson.tx.us	Lindsay Dayton	Email - 3/23/2018 @ 13:52	Mack Ream (tower manager)	Sent email request to general airport email: airport@co.grayson.tx.us.
F39 (GYI)	NORTH TEXAS RGNL/PERR IN FIELD	Mike Ream, tower manager	903-786-2904	airport@co.grayson.tx.us	Lindsay Dayton	Call Returned - 3/23/2018 @ 14:50	Mack Ream (tower manager)	Agreed to send data as best as possible, probably just LTO data by month.
F39 (GYI)	NORTH TEXAS RGNL/PERR IN FIELD	Mike Ream, tower manager	907-223-4447		Jennifer Sellers	3/23/2018 3:00p	Mack Ream	Mr. Ream left message for Jennifer Sellers.
F39 (GYI)	NORTH TEXAS RGNL/PERR IN FIELD	Mike Ream, tower manager	907-223-4447		Jennifer Sellers	3/26/2018 11:30a	Mack Ream	Mr. Ream already spoke to Lindsay Dayton.
F39 (GYI)	NORTH TEXAS RGNL/PERR IN FIELD	Mike Ream, tower manager	907-223-4447	shahanm@co.grayson.tx.us	Lindsey Dayton	Email - 4/4/2018 12:37	Mike Shahan	Received email with LTO data, taxi times, and seasonality.
AMA	RICK HUSBAND AMARILLO INTL	Sarah Freese, Director of Aviation	806-335-1671	sara.freese@AMarillo.gov	Lindsay Dayton	Email- 3/23/2018 @ 14:05	Michael Conner, Director of Aviation	Left a voicemail
AMA	RICK HUSBAND AMARILLO INTL	Michael Conner	806-335-1671	kiley.navarrete@amarillo.gov	Lindsay Dayton	Call returned - 3/27/2018 @ 10:23	Kiley Navarrete	Requested email with more information.
AMA	RICK HUSBAND AMARILLO INTL	Kiley Navarrette	806-335-1671	kiley.navarrete@amarillo.gov	Lindsay Dayton	Email - 3/27/2018 @ 11:53	Kiley Navarrete	Sent email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
AMA	RICK HUSBAND AMARILLO INTL	Kiley Navarrette	806-335-1671	Lucky.Eeds@amarillo.gov	Lindsay Dayton	Email received- 04/05/2018 @ 16:45	Lucky Lynn Eeds	Received email stating that they are working on collecting what information they can.
AMA	RICK HUSBAND AMARILLO INTL	Lucky Lynn Eeds	806-335-1671	Lucky.Eeds@amarillo.gov	Lindsay Dayton	Email received - 05/02/2018 @ 16:10	Lucky Lynn Eeds	Received email with information.
AMA	RICK HUSBAND AMARILLO INTL	Lucky Lynn Eeds	806-335-1671	Lucky.Eeds@amarillo.gov	Lindsay Dayton	Email - 05/03/2018 @ 08:43	Lucky Lynn Eeds	Sent thank you email.
ERV	Kerrville Airport	Bruce McKenzie, Airport Manager	830-896-9399	bruce.mckenzi@kerrvilleairport.com	Lindsay Dayton	Email - 4/25/2018 @16:11	Bruce McKenzie	Sent email requesting operations data.
FWS	Fort Worth Spinks	Will Hickman, Op Mgr	(817) 392-5430	will.hickman@fortworthtexas.gov	Lindsay Dayton	Call- 3/23/2018 @ 14:20	Jamie Vera, Op Mgr	Left message.
FWS	Fort Worth Spinks	Jamie Vera, Op Mgr	(817) 392-5430	-	Lindsay Dayton	Call returned- 3/28/2018 @ 15:57	Jamie Vera, Op Mgr	Use publicly available data.
FWS	Fort Worth Spinks	Jamie Vera, Op Mgr	(817) 392-5430	Jaime.VeraRodriguez@fortworthtexas.gov	Lindsay Dayton	Email received - 3/28/2018 @ 16:06	Jamie Vera, Op Mgr, Aaron Barth Assistant Airport System Director	Sent ATADS data.
FWS	Fort Worth Spinks	Jamie Vera, Op Mgr	(817) 392-5430	Jaime.VeraRodriguez@fo	Lindsay Dayton	Email - 3/28/2018 @ 16:24	Jamie Vera, Op Mgr,	Sent thank you email. Requested taxi-in and taxi-out times,

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
				rworthtexas.gov			Aaron Barth Assistant Airport System Director	seasonality, and control strategy information.
FWS	Fort Worth Spinks	Jamie Vera, Op Mgr	(817) 392-5430	Aaron.Barth@fortworthtexas.gov	Lindsay Dayton	Email received - 3/30/2018 @ 14:32	Aaron Barth Assistant Airport System Director	Left message.
RKP	ARANSAS CO	Gene Johnson, Airport Manager	361-790-0141	manager@krkp.com	Lindsay Dayton	Call - 3/23/2018 @ 14:35	Mike Greer, Airport Manager	Left message.
CXO	LONE STAR EXECUTIVE	Scott Smith	936-788-8311	scott.smith@mctx.org	Lindsay Dayton	Call- 3/23/2018 @ 14:40	James Brown	Changed names to Conroe-North Houston Regional Airport. Provided contact email: james.brown
CXO	LONE STAR EXECUTIVE	James Brown	936-788-8311	james.brown@mctx.org	Lindsay Dayton	Email- 3/23/2018 @ 15:23	James Brown	Sent email requesting operations data.
MFE	McALLEN MILLER INTL	Robbie Ramirez, Properties & Compliance Manager	956-681-1527	rob_ramirez@mcallen.net	Lindsay Dayton	Call- 3/23/2018 @ 15:29	Marco A. Patlan (Properties and Compliance Manager)	Left a voicemail
GGG	EAST TEXAS RGNL	Roy Miller, Airport Director	903-643-3031	Roy.Miller@co.gregg.tx.us	Lindsay Dayton	Call - 3/23/2018 @ 16:23	Brad Kranzmann	Requested email

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
GGG	EAST TEXAS RGNL	Brad Kranzman	903-643-3031	brad.kranzman@co.gregg.tx.us	Lindsay Dayton	Email- 3/23/2018 @ 16:43	Brad Kranzman	Sent email requesting operations data.
VCT	VICTORIA RGNL	Jason Milewski, Airport Manager	361-578-2704	jmilewski@prautes.com & sturner@flyvictoriatx.com	Lindsay Dayton	Call - 3/26/2018 @ 09:40	Faye Turner (Airport Operations Manager)	Left a voicemail
ABI	ABILENE RGNL	Don Green	325-676-6061	don.green@abilenetx.com	Lindsay Dayton	Call - 3/26/2018 @ 09:51	Don Green	Do not track this data. Some electric gates on the airport, and no electric GSEs.
ABI	ABILENE RGNL	Don Green	325-676-6061	don.green@abilenetx.com	Lindsay Dayton	Email - 3/26/2018 @ 10:05	Don Green	Sent email requesting operations data.
HYI	SAN MARCOS MUNI	Stacey Batch	(512) 216-6039	admin@texasaviationpartners.com	Lindsay Dayton	Email- 3/23/2018 @ 10:46	Stacey Batch	Sent email requesting operations data.
ODO	ODESSA-SCHLEMEYER FIELD	John Landgraf, Airport Manager	432-332-5058	lca@lcaodesa.com	Lindsay Dayton	Call - 3/26/2018 @10:56	Wrong Number	Directed me to contact David Peck @ 432-498-4041
ODO	ODESSA-SCHLEMEYER FIELD	John Landgraf, Airport Manager	432-332-5058	lca@lcaodesa.com	Lindsay Dayton	Call - 3/26/2018 @10:56	David Peck, 432-498-4041	Left a voicemail
ODO	ODESSA-SCHLEMEYER FIELD	John Landgraf, Airport Manager	432-332-5058	lca@lcaodesa.com	Lindsay Dayton	Returned Call - 3/26/2018 @11:47	David Peck	Said that Cody Mclain (TCEQ) should have all of the information. If not, contact Cathy Moore with Wild Cat aviation to get data: 436-367-5881.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
ODO	ODESSA-SCHLEMEYER FIELD	Cathy Moore with Wildcatter aviation	436-367-5881		Lindsay Dayton	Call- 4/19/2018 @ 16:05	Cathy Moore	Offered to email with more information.
ODO	ODESSA-SCHLEMEYER FIELD	Cathy Moore with Wildcatter aviation	436-367-5881	cathy@wildcatteraviation.com	Lindsay Dayton	Email - 4/19/2018 @ 16:12	Cathy Moore	Sent email requesting operations data.
T41	LA PORTE MUNI	David Mick, Airport Manager	281-471-9650	mickd@laportetx.gov	Lindsay Dayton	Call - 3/26/2018 @ 11:23	Office personnel	Left message. Provided email addresses for her and Mr. Pennell: pennell@laportetx.gov.
T41	LA PORTE MUNI	Don Pennell	281-471-9650	mickd@laportetx.gov	Lindsay Dayton	Email - 3/26/2018 @ 11:23	Don Pennell	Sent email requesting operations data.
CLL	EASTERWOOD FIELD	John Stuart, Astin Aviation	979-775-5255	jstuart@astin.us	Lindsay Dayton	Call - 3/26/2018 @ 13:20	John Stuart no longer with airport. New contact Buddy Whitworth	Provided tower number: 979-846-3996. Tower personnel did not have time to talk.
RBD	Dallas Executive	Darrell Phillips	(214) 670-7612	darrell.phillips@dallascityhall.com	Lindsay Dayton	Call - 3/26/2018 @ 13:25	No answer	Left a voicemail.
AXH	HOUSTON-SOUTHWEST	Len Franklin	281-431-2581	manager@houstonairport.com	Lindsay Dayton	Call - 3/26/2018 @ 13:35	Call did not go through	Call did not go through.
AXH	HOUSTON-SOUTHWEST	Len Franklin	281-431-2581	manager@houstonairport.com	Lindsay Dayton	Email - 3/26/2018 @ 13:45	addressed generally to	Sent email requesting operations data.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
							Houston Southwest Airport Manager	
TPL	DRAUGHON-MILLER CENTRAL TEXAS RGNL	Sharon Rostovich, Airport Manager	254-298-5350	Srostovich@ci.temple.tx.us	Lindsay Dayton	Call - 3/26/2018 @ 14:10	Sharon Rostovich	Left a voicemail.
BAZ	NEW BRAUNFELS	Brendan Haas	830-221-4292	airport@nbtexas.org	Lindsay Dayton	Call - 3/26/2018 @ 14:15	Brendan Haas	Left a voicemail.
HRL	VALLEY INTL	Bryan Wren		bryan@flythevalley.com	Lindsay Dayton	Email - 3/26/2018 @ 14:20	Bryan Wren	Sent email requesting operations data.
HRL	VALLEY INTL	Bryan Wren		bryan@flythevalley.com	Lindsay Dayton	Email returned - 3/26/2018 @ 18:09	Bryan Wren	Sent 2017 LTO data "HRL 2017 data"
HRL	VALLEY INTL	Bryan Wren		bryan@flythevalley.com	Lindsay Dayton	Email - 3/27/2018 @ 08:45	Bryan Wren	Sent thank you email.
T65	MID VALLEY		(956) 969-0291		Lindsay Dayton	Call - 3/26/2018 @ 14:30	Airport Operations	Left a voicemail.
TYR	TYLER POUNDS RGNL	Davis Dickson, Airport Manager	903-531-2343 or 903-595-7201	tyradmin@tylertexas.com	Lindsay Dayton	Email - 3/26/2018 @ 15:00	Davis Dickson, Airport Manager	Sent email requesting operations data.
F46	Rockwall Muni	Todd Parks	972-771-0151		Lindsay Dayton	Call - 3/26/2018 @ 15:15		Left message.
ACT	WACO REGIONAL		254-750-8475		Lindsay Dayton	Call - 3/26/2018 @ 16:15		Provided tower number: 254-759-3015.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
ACT	WACO REGIONAL		254-750-8475		Lindsay Dayton	Call - 3/26/2018 @ 16:20	Spoke with tower	Left message.
T57	Garland/DFW Heloplex	Connie Pyatt	(214) 349-7000		Lindsay Dayton	Call - 3/26/2018 @ 15:20	Connie Pyatt	Requested email.
T57	Garland/DFW Heloplex	Connie Pyatt	(214) 349-7000	connie@skyhelicopters.com	Lindsay Dayton	Email - 3/26/2018 @ 15:30	Connie Pyatt	Sent email requesting operations data.
BRO	BROWNSVILLE/SOUTH PADRE ISLAND INT'L		956-542-4373 x 307		Lindsay Dayton	Call - 3/27/2018 @ 09:20	John Daud	Left a voicemail.
BRO	BROWNSVILLE/SOUTH PADRE ISLAND INT'L	Martha Zuniga			Lindsay Dayton	Call returned- 3/27/2018 @ 10:09	Martha Zuniga	Requested email. Provided contact information: marthaz@cob.us. Open to providing some information.
BRO	BROWNSVILLE/SOUTH PADRE ISLAND INT'L	Martha Zuniga		marthaz@cob.us	Lindsay Dayton	Email- 3/27/2018 @ 10:50	Martha Zuniga	Sent email requesting operations data.
JWY	Mid-Way Rgnl	Judy Demoney	972-923-0080		Lindsay Dayton	Call - 3/27/2018 @ 09:25	Judy Demoney	Left message.
JWY	Mid-Way Rgnl	Tammy Bowen	972-923-0081		Lindsay Dayton	Call - 3/27/2018 @ 10:10	Tammy Bowen	Left message.
JWY	Mid-Way Rgnl	Tammy Bowen	972-923-0082	tbowen@wahachie.com	Lindsay Dayton	Email - 3/27/2018 @ 11:13	Tammy Bowen	Sent email requesting operations data.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
CPT	Cleburne Muni	Sharlette Wilson / Sharlette McLaurin	817-641-5456		Lindsay Dayton	Call - 3/27/2018 @ 09:50	Sharlette Wright	Requested email: sharlette.wright@cleburne.net.
CPT	Cleburne Muni	Sharlette Wright	817-641-5456	sharlette.wright@cleburne.net	Lindsay Dayton	Email - 3/27/2018 @ 11:18	Sharlette Wright	Sent email requesting operations data.
PWG	McGregor Executive Airport	Rob Blanchard	(254) 848-5477	rblanchard@mcgregor-texas.com	Lindsay Dayton	Call - 3/27/2018 @12:40	Rob Blanchard	Left a voicemail
PWG	McGregor Executive Airport	Rob Blanchard	(254) 848-5477	rblanchard@mcgregor-texas.com	Lindsay Dayton	Call returned- 3/27/2018 @16:30	Rob Blanchard	Provided estimate: 42,000-45,000 operations. Provided control strategies: electric gates at entrance to airport.
CWC	Kickapoo Airport	Jon Waltjen, Airport Admin	940-855-3623	jon.waltjen@wichitafallstx.gov	Lindsay Dayton	Email - 3/27/2018 @ 12:51	Jon Waltjen, Airport Admin.	Sent email requesting operations data.
CWC	Kickapoo Airport	Jon Waltjen, Airport Admin	940-855-3623	jon.waltjen@wichitafallstx.gov	Lindsay Dayton	Email - 04/25/2018 @ 16:25	Jon Waltjen, Airport Admin.	Sent second email requesting operations data.
GLS	SCHOLES INTL AT GALVESTON	Hud Hopkins	409-741-4609	airport@galvestontx.gov	Lindsay Dayton	Email - 3/27/2018 @ 13:35	Hud Hopkins	Sent email requesting operations data.
GLS	SCHOLES INTL AT GALVESTON	Mike Shahan	907-223-4447		Jennifer Sellers	4/4/2018 12:31	Mike Shahan	Can provide operations by month.
GLS	SCHOLES INTL AT GALVESTON	Mike Shahan	409-741-4609	Mshahan@galvestontx.gov	Lindsay Dayton	Email - 4/4/2018 @ 12:37	Mike Shahan	Sent email with monthly 2017 operations and taxi times.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
GDJ	Granbury Regional Airport	Gary Hawkins, Airport Aviation Director	817-579-8533	ghawkins@granbury.org	Lindsay Dayton	Call - 3/27/2018 @13:58	Pat Stewart, Operations Supervisor	Requested email and would give us as much information as he could.
GDJ	Granbury Regional Airport	Pat Stewart, Operations Supervisor	817-579-8533	pstewart@granbury.org	Lindsay Dayton	Email - 3/27/2018 @ 14:30	Pat Stewart, Operations Supervisor	Sent email requesting operations data.
TRL	Terrell Muni	Melissa Hardin	972.524.1601	info@terrellairport.com	Lindsay Dayton	Call - 3/27/2018 @ 13:42	Melissa Hardin	Out of the office.
TRL	Terrell Muni	Melissa Hardin	972.524.1601	info@terrellairport.com	Lindsay Dayton	Call - 4/6/2018 @ 13:15	Melissa Hardin	Out of the office.
MDD	Midland AirPark							See MAF. Owned by City of Midland.
MWL	Mineral Wells	Bobby Bateman, Manager	(940) 328-7808		Lindsay Dayton	Call - 3/27/2018 @ 14:43	Bobby Bateman (no longer works at airport spoke with staff)	Provided updated contact: Wayne Sanderson.
MWL	Mineral Wells	Wayne Sanderson	(940) 328-7808		Lindsay Dayton	Call - 4/6/2018 @ 13:19	Wayne Sanderson	Requested email. Do not track data.
MWL	Mineral Wells	Wayne Sanderson	(940) 328-7809	wsanderson@mineralwells.com	Lindsay Dayton	Email - 4/6/2018 @13:25	Wayne Sanderson	Sent email requesting operations data.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
				llsairport.com				
GVT	Greenville Municipal Airport - Majors Field	Ty Helton	903-457-3168	thelton@ci.greenville.tx.us	Lindsay Dayton	Call - 3/27/2018 @ 14:50	Ty Helton	Requested email.
GVT	Greenville Municipal Airport - Majors Field	Ty Helton	903-457-3168	thelton@ci.greenville.tx.us	Lindsay Dayton	Email - 3/27/2018 @ 15:03	Ty Helton	Sent email requesting operations data.
OCH	A.L. Mangham, Jr. Regional Airport	Mary Uresti	936-560-9567	urestim@ci.nacogdoches.tx.us	Lindsay Dayton	Email - 3/27/2018 @ 15:20	Mary Uresti	Sent email requesting operations data.
UTS	Huntsville Municipal Airport	ARON KULHAVY, AICP	(936) 295-8136		Lindsay Dayton	Call - 3/27/2018 @15:25	Wade Gillespie	Provided email: wairco@sbcglobal.net.
UTS	Huntsville Municipal Airport	Wade Gillespie	(936) 295-8136	wairco@sbcglobal.net	Lindsay Dayton	Email - 3/27/2018 @15:31	Wade Gillespie	Sent email requesting operations data.
UTS	Huntsville Municipal Airport	Wade Gillespie	(936) 295-8136	wairco@sbcglobal.net	Lindsay Dayton	Email failed - 3/27/2018 @15:31	Wade Gillespie	Email failed to send.
UTS	Huntsville Municipal Airport	Wade Gillespie	(936) 295-8136	wairco@yahoo.com	Lindsay Dayton	Call - 4/6/2018 @12:44	Wade Gillespie	Provided correct email: wairco@yahoo.com.
UTS	Huntsville Municipal Airport	Wade Gillespie	(936) 295-8136	wairco@yahoo.com	Lindsay Dayton	Email - 4/6/2018 @12:44	Wade Gillespie	Sent email requesting operations data.
PVW	HALE COUNTY	Mark Edlin or Gary McCormick	806-293-4121	support@rocket-aviation.com	Lindsay Dayton	Email - 3/27/2018 @ 15:45	Stacie Hardage	Sent email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
PVW	HALE COUNTY	Stacie Hardage	806-293-4121	support@rocket-aviation.com	Lindsay Dayton	Email returned-3/30/2018 @ 17:37	Stacie Hardage	Open to providing available data.
PVW	HALE COUNTY	Stacie Hardage	806-293-4121	support@rocket-aviation.com	Lindsay Dayton	Email received - 4/3/2018 @ 10:46	Stacie Hardage	Sent spreadsheet of the 2017 Traffic Movements.
PVW	HALE COUNTY	Stacie Hardage	806-293-4121	support@rocket-aviation.com	Lindsay Dayton	Email - 4/03/2018 @ 09:35	Stacie Hardage	Sent thank you email.
PVW	HALE COUNTY	Stacie Hardage	806-293-4121	support@rocket-aviation.com	Lindsay Dayton	Email - 5/15/2018 @ 014:03	Stacie Hardage	Sent email asking for clarification of column names.
SLR	Sulphur Springs Airport	JOEY BAKER	903-885-4911		Lindsay Dayton	Call - 3/28/2018 @ 13:40	Joey Baker	Out of Office.
SLR	Sulphur Springs Airport	JOEY BAKER	903-885-4911	jbaker@sulferspringstx.org	Lindsay Dayton	Email - 3/28/2018 @ 13:45	Joey Baker	Sent email requesting operations data.
BBD	Brady Curtis Field	Lisa Perry	325-597-1461	crtisfld@centex.net	Lindsay Dayton	Call - 3/28/2018 @ 13:55	Lisa Perry	Out of Office.
BBD	Brady Curtis Field	Lisa Perry	325-597-1461	crtisfld@centex.net	Lindsay Dayton	Email - 3/28/2018 @ 14:17	Lisa Perry	Sent email requesting operations data.
BBD	Brady Curtis Field	Lisa Perry	325-597-1461	crtisfld@centex.net	Lindsay Dayton	Email returned - 4/24/2018 @ 13:19	Lisa Perry	Received email with operations information.
BBD	Brady Curtis Field	Lisa Perry	325-597-1461	crtisfld@centex.net	Lindsay Dayton	Email - 5/3/2018 @ 13:19	Lisa Perry	Sent thank you email.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
LFK	Angelina County Airport	GARY LETNEY	936-634-7511		Lindsay Dayton	Call - 3/28/2018 @ 14:20	Gary Letney	Out of Office.
LFK	Angelina County Airport	GARY LETNEY	936-634-7511		Lindsay Dayton	Call - 4/6/2018 @ 14:20	Gary Letney	Estimated 80 LTOs per day; 1.5 minute average taxi-in, taxi-out time; electric gate used; busy in April and November.
RYW	Rusty Allen Airport	Roy Jambor	(512) 527-3540		Lindsay Dayton	Call - 3/28/2018 @ 14:23	Roy Jambor	Left a voicemail.
RYW	Rusty Allen Airport	Roy Jambor	(512) 527-3540		Lindsay Dayton	Call returned- 3/28/2018 @ 19:12	Roy Jambor	Left a voicemail. Provided Estimates: Fiscal year (October-October) 37,000 annual operations.
BMQ	BURNET MUNI KATE CRADDOCK FIELD	Crista Bromley/manager	512-756-6655		Lindsay Dayton	Call - 2/28/2018 @ 14:31	Leslie Baugh (new manager)	Transferred to her personal line - 830-613-0431
BMQ	BURNET MUNI KATE CRADDOCK FIELD	Leslie Baugh	830-613-0431		Lindsay Dayton	Call - 2/28/2018 @ 14:32	Leslie Baugh (new manager)	Left a voicemail.
PEQ	Pecos Municipal Airport	COLEY MEANS	(432) 445-2421		Lindsay Dayton	Call - 3/28/2018 @ 14:35		Provided update phone number: 432-447-2788.
PEQ	Pecos Municipal Airport	COLEY MEANS	(432) 447-2488		Lindsay Dayton	Call - 3/28/2018 @ 14:37		Out of Office.
PEQ	Pecos Municipal Airport	COLEY MEANS	(432) 447-2488		Lindsay Dayton	Call - 4/6/2018 @ 13:30		No answer and no voicemail.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
PEQ	Pecos Municipal Airport	Joseph Todd	(432) 447-2488		Lindsay Dayton	Call returned - 4/6/2018 @ 13:34	Joseph Todd	Requested email with more information
PEQ	Pecos Municipal Airport	Joseph Todd	(432) 447-2488	jtodd@crosbyflying.com	Lindsay Dayton	Emailed - 4/6/2018 @ 13:45	Joseph Todd	Sent email with more information.
ILE	Skylark Field Airport	MATTHEW VAN VALKENBURGH	254-501-8700		Lindsay Dayton	Call - 3/28/2018 @ 14:48	Jim Livingston, Assistant Director	Left a voicemail.
ILE	Skylark Field Airport	Jim Livingston, Assistant Director	254-501-8700		Lindsay Dayton	Call returned- 4/2/2018 @ 10:43	Jim Livingston, Assistant Director	Use publicly available data. Taxi Times estimates: 5-minute Taxi-in/Taxi-out time, and control strategies: electric gate controls access.
ILE	Skylark Field Airport	Jim Livingston, Assistant Director	254-501-8700		Lindsay Dayton	Call - 4/6/2018 @ 10:43	Jim Livingston, Assistant Director	Thanked him for information.
11R	Brenham Municipal Airport	KIM HODDE	979-337-7212		Lindsay Dayton	Call - 3/28/2018 @ 14:55	Kim Hodde	Left a voicemail.
11R	Brenham Municipal Airport	KIM HODDE	979-337-7212		Lindsay Dayton	Call returned- 4/13/2018 @ 13:10	Jack	Estimated: 12,000 operations, 1-minute taxi-in/taxi-out time.
ALI	Alice International Airport	CHARLES BRAZZELL	361-460-1367	cbrazzell@ci tyofalice.org	Lindsay Dayton	Call - 3/28/2018 @ 15:13		Phone call did not go through.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
ALI	Alice International Airport	CHARLES BRAZZELL	361-460-1367	cbrazzell@cityofalice.org	Lindsay Dayton	Email - 3/28/2018 @ 15:20	Charles Brazzell	Sent email requesting operations data.
GLE	Gainesville Municipal Airport	DAVID VINTON	940-668-4565		Lindsay Dayton	Call - 3/28/2018 @ 15:25	David Vinton	Left message. Provided email: dvinton@cogtx.org.
GLE	Gainesville Municipal Airport	DAVID VINTON	940-668-4565	dvinton@cogtx.org	Lindsay Dayton	Email - 3/28/2018 @ 15:30	David Vinton	Sent email requesting operations data.
GLE	Gainesville Municipal Airport	DAVID VINTON	940-668-4565	dvinton@cogtx.org	Lindsay Dayton	Call returned- 4/2/2018 @ 14:50	David Vinton	Do not track data.
BPT	Jack Brooks Regional Airport	ALEX RUPP	409-719-4900		Lindsay Dayton	Call - 3/28/2018 @ 15:33	Alex Rupp	Requested email.
BPT	Jack Brooks Regional Airport	ALEX RUPP	409-719-4900	arupp@co.jefferson.tx.us	Lindsay Dayton	Email - 3/28/2018 @ 15:47	Alex Rupp	Sent email requesting operations data.
BPT	Jack Brooks Regional Airport	ALEX RUPP	409-719-4900	arupp@co.jefferson.tx.us	Lindsay Dayton	Email returned- 3/28/2018 @ 15:53	Alex Rupp	Inquiring with the Airlines on taxi-in, taxi out times for their commercial flights. They do not track data.
BPT	Jack Brooks Regional Airport	ALEX RUPP	409-719-4900	arupp@co.jefferson.tx.us	Lindsay Dayton	Email - 3/28/2018 @ 15:47	Alex Rupp	Sent thank you email.
CVB	Castroville Municipal Airport	CLAUDIA MORA	830-931-0234	claudia.more@castrovilletx.gov	Lindsay Dayton	Call - 04/06/2018 @ 10:33		Left a voicemail.
07F	Gladewater Municipal Airport	THEO MELANCON	903-845-2586		Lindsay Dayton	Call - 04/06/2018 @ 10:56	Judy	Do not track data.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
BPG	McMahon-Wrinkle Airport		432-264-2362		Lindsay Dayton	Call - 04/06/2018 @13:55		Provided contact, Jim Little.
BPG	McMahon-Wrinkle Airport	Jim Little, Airport Director	432-264-2362	apdir@mybigspring.com	Lindsay Dayton	Email - 04/25/2018 @ 17:23	Jim Little	Sent email requesting operations data.
XBP	Bridgeport Municipal Airport	Ryan Nolting	940-683-3464		Lindsay Dayton	Call - 04/06/2018 @14:20		Provided new contact number for Ryan Nolting (940-683-3481).
XBP	Bridgeport Municipal Airport	Ryan Nolting	940-683-3481		Lindsay Dayton	Call - 04/06/2018 @14:22	Ryan Nolting	Left a voicemail
XBP	Bridgeport Municipal Airport	Ryan Nolting	940-683-3481		Lindsay Dayton	Call returned - 04/09/2018 @12:22	Ryan Nolting	Do not track data.
TA74	AMOCO heliport	Brian Dinsmoor/manager	713-581-3100		Lindsay Dayton	Call - 04/12/2018 @10:00		Called multiple times, number going to voicemail system.
PIL	Port Isabel-Cameron County Airport	JOE VEGA	(956) 761-3700		Lindsay Dayton	Call - 04/12/2018 @10:05		Left a voicemail
SEP	Stephenville Clark Regional Airport	BILL SMITH OR TODD DOWNS	254-965-2795		Lindsay Dayton	Call - 04/12/2018 @10:06	Bill Smith	Requested email. Provided updated point of contact: Todd Downs.
SEP	Stephenville Clark Regional Airport	BILL SMITH OR TODD DOWNS	254-965-2795	aviation180@embarqmail.com	Lindsay Dayton	Email - 04/12/2018 @10:20	Bill Smith	Sent email requesting operations data.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
ATA	Hall-Miller Municipal Airport	DAVID COCKRELL, City Manager, City of Atlanta, TX	903-796-2192		Lindsay Dayton	Call - 04/12/2018 @ 13:42	David Cockrell	Left a voicemail.
BWD	Brownwood Regional Airport	Bobby Burks	325-643-1482		Lindsay Dayton	Call - 04/12/2018 @ 13:47		Office personnel provided email address: bburks@ci.brownwood.tx.us.
BWD	Brownwood Regional Airport	Bobby Burks	325-643-1482	bburks@ci.brownwood.tx.us	Lindsay Dayton	Emailed - 04/12/2018 @ 13:53	Bobby Burks	Sent email requesting operations data.
TFP	McC Campbell-Porter Airport	PAUL LEHNERT	361-758-2000 (website) AirNav - 361-758-5018 or 361-222-8417		Lindsay Dayton	Call - 04/12/2018 @ 14:00	Paul Lehnert	Annual operations estimate: 10,000 operations a year; Seasonality estimates: Dec-Feb 500 ops per month, Mar-Nov 1,000 ops per month; Taxi-times estimates: 2 to 3 minutes in/out; 2 fuel trucks; GSE notes: 1 self-serve fuel, AC hook up for aircrafts runs 20hrs a month, 2 electric roaming gates that open 2 times a day.
50R	Lockhart Municipal Airport	Vance Rodgers	512-398-3461		Lindsay Dayton	Call - 04/12/2018 @ 14:22	Vance Rodgers	Left voicemail.
50R	Lockhart Municipal Airport	Vance Rodgers	512-398-3461		Lindsay Dayton	Call returned - 04/12/2018 @ 15:05	Vance Rodgers	Email request.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
50R	Lockhart Municipal Airport	Vance Rodgers	512-398-3461	vrodgers@lockhart-tx.org	Lindsay Dayton	Email-04/12/2018 @ 15:15	Vance Rodgers	Sent email requesting operations data.
50R	Lockhart Municipal Airport	Vance Rodgers	512-398-3461	vrodgers@lockhart-tx.org	Lindsay Dayton	Email returned-04/12/2018 @ 16:39	Vance Rodgers	Asked if mandatory and said they had no one there to complete it.
50R	Lockhart Municipal Airport	Vance Rodgers	512-398-3461	vrodgers@lockhart-tx.org	Lindsay Dayton	Email-04/13/2018 @ 11:00	Vance Rodgers	Sent email asking if more generalized information was available.
CRS	Corsicana Municipal Airport, C. David Campbell Field	Terry L. Franks	903-654-4884	canifly@wifi45.com	Lindsay Dayton	Email - 04/12/2018 @ 13:33	Terry L. Franks	Invalid email address.
CRS	Corsicana Municipal Airport, C. David Campbell Field	Terry L. Franks	903-654-4884	canifly@wifi45.com	Lindsay Dayton	Call - 04/12/2018 @ 13:36	Corsicana Public Works Department	Left a voicemail.
JSO	Cherokee County Airport	Clint Goff	903-586-8219	airport@cocherokee.org	Lindsay Dayton	Emailed - 04/12/2018 @ 14:27	Clint Goff	Sent email requesting operations data.
CFD	Coulter Field	BRANDON REID	979-209-5233		Lindsay Dayton	Call - 04/12/2018 @ 14:45		Left a voicemail
ASL	Harrison County Airport		903-935-8400		Lindsay Dayton	Call - 04/12/2018 @ 14:52		Phone call did not go through.
ASL	Harrison County Airport		903-938-1394		Lindsay Dayton	Call - 04/12/2018 @ 15:00		Do not track data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
F17	Center Municipal Airport	Allen Penick	936-598-8119		Lindsay Dayton	Call - 04/13/2018 @ 10:42		Left a voicemail
DHT	Dalhart Municipal Airport	James Stroud (City Mgr.)	806-244-5511		Lindsay Dayton	Call - 04/13/2018 @ 11:05		Provided email contact for James Stroud: james@dalharttx.gov.
DHT	Dalhart Municipal Airport	James Stroud (City Mgr.)	806-244-5511	james@dalharttx.gov	Lindsay Dayton	Email - 04/13/2018 @ 11:15	James Stroud	Sent email requesting operations data.
T82	Gillespie county	Tony Lombardi	830-990-5764	tlombardi@gillespiecounty.org	Lindsay Dayton	Email - 04/13/2018 @ 11:21	Tony Lombardi	Sent email requesting operations data.
T82	Gillespie county	Tony Lombardi	830-990-5764	tlombardi@gillespiecounty.org	Lindsay Dayton	Email returned- 04/13/2018 @ 11:46	Tony Lombardi	Do not track data.
T82	Gillespie county	Tony Lombardi	830-990-5764	tlombardi@gillespiecounty.org	Lindsay Dayton	Email - 04/13/2018 @ 11:56	Tony Lombardi	Sent email thanking him for his response
PPA	Perry Lefors Field Airport	Richard Peet (County Judge)	806-669-8007		Lindsay Dayton	Call - 04/13/2018 @ 11:25		Phone call did not go through.
MRF	Marfa Municipal Airport	Rudy Estor	432-295-3906		Lindsay Dayton	Call - 04/13/2018 @ 11:29	Rudy Estor	Provided contact information for Chase Snobgrass: 832-588-8888.
MRF	Marfa Municipal Airport	Chase Snobgrass	832-588-8888		Lindsay Dayton	Call - 04/13/2018 @ 11:30	Chase Snobgrass	Left a voicemail
LUD	Decatur Municipal Airport	Greg Hall	940-627-2855, 940-393-0262		Lindsay Dayton	Call - 04/13/2018 @12:00	Greg Hall	Provided email contact for Greg Hall: ghall@decaturtx.org.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
LUD	Decatur Municipal Airport	Greg Hall	940-627-2855, 940-393-0262	ghall@decat urtx.org	Lindsay Dayton	Call - 04/13/2018 @12:03	Greg Hall	Sent email requesting operations data.
PYX	Perryton Ochiltree County Airport	Kerry Kelly	(806) 435- 4226		Lindsay Dayton	Call - 04/13/2018 @13:29	Kerry Kelly	Agreed to help, requested email
PYX	Perryton Ochiltree County Airport	Kerry Kelly	(806) 435- 4226	kellyav@ptsi .net	Lindsay Dayton	Email - 04/13/2018 @ 13:30	Kerry Kelly	Sent email requesting operations data.
BMT	Beaumont Municipal Airport	DR. JOSEPH MAJDALAN I, PE, (Public Works Director)	409-866-0084, 409-880-3725		Lindsay Dayton	Call - 04/13/2018 @13:48		Left a voicemail.
BMT	Beaumont Municipal Airport	DR. JOSEPH MAJDALAN I, PE, (Public Works Director)	409-880-3725		Lindsay Dayton	Call - 04/13/2018 @13:48		Phone call did not go through.
BKD	Stephens County Airport	GARY FULLER, COUNTY JUDGE	254-559-2190		Lindsay Dayton	Call - 04/13/2018 @13:55		Left a voicemail.
BKD	Stephens County Airport	GARY FULLER, COUNTY JUDGE	254-559-2190		Lindsay Dayton	Call returned- 04/13/2018 @14:20	Stephani e	Provided contact number for Weldon Scriber: 325-698-5560.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
BKD	Stephens County Airport	Weldon Scribner	325-698-5560		Lindsay Dayton	Call - 04/13/2018 @14:23	Secretary	Left a voicemail.
BKD	Stephens County Airport	Weldon Scribner	325-698-5560		Lindsay Dayton	Call returned- 04/17/2018 @17:57	Weldon Scribner	Left a voicemail.
LLN	Levelland Municipal Airport	RICHARD HARVEY	806-897-4774		Lindsay Dayton	Call - 04/13/2018 @14:02		Left a voicemail
4F2	Panola County Airport- Sharpe Field	City of Carthage	903-693-0391		Lindsay Dayton	Call - 04/13/2018 @14:10		Left a voicemail
DRT	Del Rio International Airport	JUAN C. ONOFRE	(830) 734-4857		Lindsay Dayton	Call - 04/13/2018 @14:14		Left a voicemail
OSA	Mount Pleasant Regional Airport		(903) 575-4020	airport@mpcity.org	Lindsay Dayton	Call - 04/13/2018 @14:17	James	Provided contact information for Paul Henderson: phenderson@mpcity.org /airport@mpcity.org.
6R3	Cleveland Municipal Airport		281-592-1282		Lindsay Dayton	Call - 04/13/2018 @14:25		Do not track data.
AQO	Llano Municipal Airport	Roy Buntyn	(325) 247-5635		Lindsay Dayton	Call - 04/13/2018 @14:40		Do not track data.
7F3	Caddo Mills Municipal Airport	Phil Eaton	2145859953		Lindsay Dayton	Call - 04/13/2018 @14:45		Do not track data. Estimated 20 LTOs per day.
F05	Wilbarger County Airport	DAVID NIX	9405522182		Lindsay Dayton	Call - 04/13/2018 @14:46	David Nix	Disconnected.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
F05	Wilbarger County Airport	DAVID NIX	9405522182		Lindsay Dayton	Called back - 04/13/2018 @14:48	David Nix	Use publicly available data.
84R	Smithville Crawford Municipal Airport	Robert Tamble	5122373282	smbuilds@gmail.com	Lindsay Dayton	Email - 04/25/2018 @17:28	Robert Tamble	Sent email requesting operations data.
84R	Smithville Crawford Municipal Airport	Robert Tamble	5122373282	smbuilds@gmail.com	Lindsay Dayton	Email - 04/26/2018 @10:07	Sandy Meyerson	Said they would assist.
84R	Smithville Crawford Municipal Airport	Robert Tamble	5122373282	smbuilds@gmail.com	Lindsay Dayton	Email - 04/30/2018 @10:07	Robert Tamble	Sent email requesting operations data.
84R	Smithville Crawford Municipal Airport	Robert Tamble	5122373282	smbuilds@gmail.com	Lindsay Dayton	Email - 04/30/2018 @10:07	Robert Tamble	Sent thank you email.
HRX	Hereford Municipal Airport	SHAWN FRYE	(806) 258-7289 / 806-344-7710		Lindsay Dayton	Call - 04/17/2018 @ 10:00	Shawn Frye	Use publicly available data.
JXI	Fox Stephens Field - Gilmer Municipal Airport	FRED LAWTON / JEFF ELLINGTON, CITY MGR	903-843-8209 / 903-843-2552		Lindsay Dayton	Call- 04/17/2018 @ 10:05	Pam Pyeatt	Send email requesting operations information
JXI	Fox Stephens Field - Gilmer Municipal Airport	Pam Pyeatt	903-843-8209 / 903-843-2552		Lindsay Dayton	Email- 04/17/2018 @ 10:17	Pam Pyeatt	Do not track data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
JXI	Fox Stephens Field - Gilmer Municipal Airport	Pam Pyeatt	903-843-8209 / 903-843-2552		Lindsay Dayton	Emailed back- 04/17/2018 @ 10:17	Pam Pyeatt	Sent thank you email.
GRK	Killeen-Fort Hood Regional Airport		(254) 501-6100	airport@kill eentexas.gov	Lindsay Dayton	Email- 04/17/2018 @ 10:25	Operations Manager	Send email requesting operations information
GRK	Killeen-Fort Hood Regional Airport	Mike Wilson	(254) 501-8704	airport@kill eentexas.gov	Lindsay Dayton	Called Jennifer - 04/17/2018 @17:00	Mike Wilson	Left a voicemail
GRK	Killeen-Fort Hood Regional Airport	Mike Wilson	(254) 501-8704	airport@kill eentexas.gov	Lindsay Dayton	Call - 04/18/2018 @10:00	Mike Wilson	Might provide data.
COT	Cotulla-La Salle County Airport	E T PAGE III	(830) 879-3858		Lindsay Dayton	Call- 04/17/2018 @ 10:30	E.T. Page	Agreed to help, requested email
COT	Cotulla-La Salle County Airport	E T PAGE III	(830) 879-3858	pageav78014@sbcglobal.net	Lindsay Dayton	Email- 04/17/2018 @ 10:38	E.T. Page	Sent email requesting operations data.
COT	Cotulla-La Salle County Airport	E T PAGE III	(830) 879-3858	pageav78014@sbcglobal.net	Lindsay Dayton	Email- 04/17/2018 @ 10:43	E.T. Page	Responded to email saying he would try to get it sent by the end of the day
COT	Cotulla-La Salle County Airport	E T PAGE III	(830) 879-3858	pageav78014@sbcglobal.net	Lindsay Dayton	Email- 04/17/2018 @ 10:54	E.T. Page	Sent thank you email.
COT	Cotulla-La Salle County Airport	E T PAGE III	(830) 879-3858	pageav78014@sbcglobal.net	Lindsay Dayton	Email- 04/17/2018 @ 15:30	E.T. Page	Sent email with operations reports.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
COT	Cotulla–La Salle County Airport	E T PAGE III	(830) 879-3858	pageav78014@sbcglobal.net	Lindsay Dayton	Email- 05/3/2018 @ 09:45	E.T. Page	Sent thank you email.
RPH	Graham Airport	WILL BUTLER	940.549.6150		Lindsay Dayton	Call - 04/17/2018 @ 11: 27	Will Butler	Phone number did not work.
RPH	Graham Airport	WILL BUTLER	940.549.6150		Lindsay Dayton	Call - 04/17/2018 @ 11: 45	Will Butler	Phone number did not work.
JAS	Jasper County Airport-Bell Field	MARK ALLEN	409-384-2612 / Airport Phone: 409-381-8151		Lindsay Dayton	Call- 04/17/2018 @ 11:33	Ryan Boyett	Do not track operations data. Provided estimates for taxi times: 2 minutes in/out; GSE notes: 1 small GPU, 1 air cart for ground AC, no type of lab service; Seasonality notes: busy - Sept-Nov, Mar-July.
UVA	Uvalde Flight Center / Garner Field Airport	Cesar Gonzales, Operations Manager	830-279-0877	manager@uvaldeflightcenter.com	Lindsay Dayton	Email- 04/17/2018 @ 11:15	Cesar Gonzales	Sent email requesting operations data.
PSN	Palestine Municipal Airport	Tim Perry	903-731-8455	timperry@palestine-tx.org	Lindsay Dayton	Email- 04/17/2018 @ 11:18	Tim Perry	Sent email requesting operations data.
ORG	Orange County Airport	Tom Foreman, FBO	409-882-7861	sabineaviationfbo@exed.net	Lindsay Dayton	Email- 04/17/2018 @ 11:25	Tom Foreman	Sent email requesting operations data.
2F5	Lamesa Municipal Airport	John Farris	806-759-7747		Lindsay Dayton	Call - 04/19/2018 @ 15:37	John Farris	Requested email.
2F5	Lamesa Municipal Airport	John Farris	806-759-7747	airport2f5@yahoo.com	Lindsay Dayton	Email - 04/19/2018 @ 15:37	John Farris	Sent email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
E01	Roy Hurd Memorial Airport	Gary Willhelm	432-943-9527		Lindsay Dayton	Call - 04/19/2018 @ 16:15	Gary Willhelm	Phone call did not go through.
E01	Roy Hurd Memorial Airport	Gary Willhelm	432-943-9527	city@cityofmonahans.org	Lindsay Dayton	Call - 04/19/2018 @ 16:15	Gary Willhelm	Sent email requesting operations data.
F49	Slaton Municipal Airport	Larry Neal	806-828-5892 / Airport: 806-796-7618		Lindsay Dayton	Call - 04/19/2018 @ 16:25	Larry Neal	Provided email contact for Larry Neal: larry@nealaircraft.com.
F49	Slaton Municipal Airport	Larry Neal	806-828-5892 / Airport: 806-796-7618	larry@nealaircraft.com	Lindsay Dayton	Email - 04/19/2018 @ 16:2	Larry Neal	Sent email requesting operations data.
RFI	Rusk County Airport	Rob Franks	903-657-7081	airportmanager@co.rusk.tx.us	Lindsay Dayton	Email - 04/18/2018 @ 22:13	Rob Franks	Sent email requesting operations data.
ELA	Eagle Lake Airport	SYLVIA RUCKA, City Mgr.	979-234-2640	citysecretary@coeltx.net	Lindsay Dayton	Email - 04/23/2018 @ 09:28	Sylvia Rucka	Sent email requesting operations data.
OF2	Bowie Municipal Airport	Stony L. Lowrance	940-841-4156	slowrance@cityofbowietx.com	Lindsay Dayton	Email - 04/18/2018 @ 22:15	Stony L. Lowrance	Sent email requesting operations data.
OF2	Bowie Municipal Airport	Stony L. Lowrance	940-841-4156	slowrance@cityofbowietx.com	Lindsay Dayton	Email failed - 04/18/2018 @ 22:15	Stony L. Lowrance	Email did not work.
SNK	Winston Field Airport	Robert Snedeker	325-573-5332/1122	wnstnapt@co.scurry.tx.com	Lindsay Dayton	Email - 04/23/2018 @ 11:00	Robert Snedeker	Sent email requesting operations data.
SNK	Winston Field Airport	Robert Snedeker	325-573-5332/1122	wnstnapt@co.scurry.tx.com	Lindsay Dayton	Email failed - 04/23/2018 @ 11:00	Robert Snedeker	Email returned - could not send to address

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
E35	Fabens Airport	Alfredo Olivas	915-764-3549/915-637-4450		Lindsay Dayton	Call - 04/26/2018 @ 09:43	Alfredo Olivas	Left a voicemail
3T5	Fayette Regional Air Center Airport	Joseph Caldwell, Airport Mgr.	(979) 242-4056	joseph.caldwell@co.fayette.tx.us	Lindsay Dayton	Email - 04/18/2018 @ 22:19	Joseph Caldwell	Sent email requesting operations data.
3T5	Fayette Regional Air Center Airport	Joseph Caldwell, Airport Mgr.	(979) 242-4056	joseph.caldwell@co.fayette.tx.us	Lindsay Dayton	Email returned- 04/20/2018 @ 09:41	Joseph Caldwell	This data is not tracked.
3T5	Fayette Regional Air Center Airport	Joseph Caldwell, Airport Mgr.	(979) 242-4056	joseph.caldwell@co.fayette.tx.us	Lindsay Dayton	Email - 04/20/2018 @ 09:45	Joseph Caldwell	Sent thank you email.
GNC	Gaines County Airport	Lex Hinds	432-758-6455		Lindsay Dayton	Call - 04/26/2018 @ 09:43		Left message.
E38	Alpine-Casparis Municipal Airport	Johnny Galvan/Jessica Garza, City Mgr.	(432) 837-5929	city.manager@ci.alpine.tx.us	Lindsay Dayton	Email - 04/19/2018 @14:55	Jessica Garza	Sent email requesting operations data.
I06	Tulia, City of Tulia/ Swisher County Municipal	Harold Keeter	806-995-3547 806-995-3555		Lindsay Dayton	Call - 04/26/2018 @ 09:51	Harold Keeter	Provided email contact for Harold Keeter: h.keeter@swisher-tx.org.
I06	Tulia, City of Tulia/ Swisher County Municipal	Harold Keeter	806-995-3547 806-995-3555	h.keeter@swisher-tx.org	Lindsay Dayton	Email - 04/26/2018 @ 09:52	Harold Keeter	Sent email requesting operations data.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
F00	Jones Field	Lance Capehart	903-583-7555		Lindsay Dayton	Call - 04/26/2018 @ 09:57	Lance Capehart	Left message.
GOP	Gatesville Municipal Airport	William Perry	254-865-8951	william.perry@ci.gatesville.tx.us	Lindsay Dayton	Email - 04/18/2018 @22:21	William Perry	Sent email requesting operations data.
GOP	Gatesville Municipal Airport	William Perry	254-865-8951	william.perry@ci.gatesville.tx.us	Lindsay Dayton	Email failed - 04/18/2018 @22:21	William Perry	Email failed to send.
PRX	Cox Field	Jerry Richey	903-784-4648	jrviation@neto.com	Lindsay Dayton	Email - 04/23/2018 @ 11:04	Jerry Richey	Sent email requesting operations data.
DUX	Moore County Airport	Brandon Cox	806-935-6995		Lindsay Dayton	Call - 4/26/2018 @ 10:01	Brandon Cox	Would send data if available.
LZZ	Lampasas	Chris Eicher	512-734-1076	ceicher@ci.lampasas.tx.us	Lindsay Dayton	Email - 04/19/2018 @ 14:22	Chris Eicher	Sent email requesting operations data.
GYB	Giddings-Lee County	Joseph Sills	979-542-6081	sillsav8@gmail.com	Lindsay Dayton	Email - 04/19/2018 @ 15:02	Joseph Sills	Sent email requesting operations data.
PEZ	Pleasanton Municipal Airport	Bruce Pearson	830-569-3155	jroberts@pleasantontx.gov	Lindsay Dayton	Email - 04/23/2018 @ 11:10	Roberts	Sent email requesting operations data.
F44	Athens Municipal	Thanasis Kombos	903-675-5131	tkombos@athenstexas.us	Lindsay Dayton	Email - 04/19/2018 @ 15:05	Thanasis Kombos	Sent email requesting operations data.
F44	Athens Municipal	Ryan Adams	903-675-5131	tkombos@athenstexas.us	Lindsay Dayton	Email - 04/19/2018 @ 15:05	Ryan Adams	Do not track data.
BYY	Bay City Municipal	James Mason	979-244-5037	airport@cityofbaycity.org	Lindsay Dayton	Email - 04/19/2018 @ 15:08	James Mason	Sent email requesting operations data.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
00R	Livingston Municipal Airport	Marilyn Sutton	936-327-4311	citysecretary@livingston.net	Lindsay Dayton	Email - 04/23/2018 @ 11:12	Ms. Sutton	Sent email requesting operations data.
00R	Livingston Municipal Airport	Marilyn Sutton	936-327-4311	citysecretary@livingston.net	Lindsay Dayton	Email returned- 04/24/2018 @ 10:00	Ms. Sutton	Provided updated contact information: Billy S. Wiggins, citymanager@livingston.net/936-327-4311.
00R	Livingston Municipal Airport	Billy S. Wiggins	936-327-4311	citysecretary@livingston.net	Lindsay Dayton	Email - 04/25/2018 @ 15:32	Billy S. Wiggins	Sent email requesting operations data.
00R	Livingston Municipal Airport	Jim Wright	936-327-4311	citysecretary@livingston.net	Lindsay Dayton	Email - 04/26/2018 @ 14:57	Jim Wright	Do not track data.
00R	Livingston Municipal Airport	Jim Wright	936-327-4311	citysecretary@livingston.net	Lindsay Dayton	Email - 04/26/2018 @ 14:57	Jim Wright	Sent thank you email.
INJ	Hillsboro Municipal Airport	John Graham	254-582-3731	jgraham@hillsborotx.org	Lindsay Dayton	Email - 04/19/2018 @ 15:13	John Graham	Sent email requesting operations data.
INJ	Hillsboro Municipal Airport	John Graham	254-337-7051	jgraham@hillsborotx.org	Cody Mclain (TCEQ)	Call	John Graham	Contacted TCEQ with questions. Will contact ERG when/if providing data.
MKN	Comanche Count-City	Douglas Bowden	325-356-2616		Lindsay Dayton	Call - 4/26/2018 @ 10:05	Secretary	Provided contact information for Douglas Bowden: dbowden@sidney.esc14.net/325-203-0357.
MKN	Comanche Count-City	Douglas Bowden	325-356-2616	dbowden@sidney.esc14.net	Lindsay Dayton	Email - 4/26/2018 @10:08	Douglas Bowen	Sent email requesting operations data.
BGD	Hutchinson County	Dennis O'Bryant	806-273-0137	borgerairport@cableone.net	Lindsay Dayton	Email - 04/19/2018 @15:15	Dennis O'Bryant	Sent email requesting operations data.

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State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
FST	Fort Stockton-Pecos County	George Riggs	432-336-6261 / 432-336-6134	flyfst@wfisp.com	Lindsay Dayton	Email - 04/19/2018 @15:18	George Riggs	Sent email requesting operations data.
ARM	Wharton Regional	David Allen	979-532-3210		Lindsay Dayton	Call 4/26/2018 @ 10:35	David Allen	Left a voicemail
PKV	Calhoun County	Dianna Stanger	361-552-1228	fly@calhounaircenter.com	Lindsay Dayton	Email - 04/19/2018 @15:21	Dianna Stanger	Sent email requesting operations data.
PKV	Calhoun County	Dianna Stanger	361-552-1228	fly@calhounaircenter.com	Lindsay Dayton	Email failed- 04/19/2018 @15:21	Dianna Stanger	Email failed to send.
IKG	Kleberg County Airport	Mike Muzyczyn, FBO	361-592-1225	eliteflyers@yahoo.com	Lindsay Dayton	Email - 04/23/2018 @ 11:30	Mike Muzyczyn	Sent email requesting operations data.
SWW	Avenger Field	Kirk Harris\Bob Elliott	325-236-6313	pipelinebob@gmail.com	Lindsay Dayton	Email - 04/23/2018 @ 11:33	Bob Elliott	Sent email requesting operations data.
DKR	Houston County	Lonnie Hunt	936-544-3255	countyjudge@co.houston.tx.us	Lindsay Dayton	Email - 04/19/2018 @15:25	Lonnie hunt	Sent email requesting operations data.
E11	Andrews County	Robert Vargas	432-524-1447	rvargas@co.andrews.tx.us	Lindsay Dayton	Email - 04/19/2018 @15:27	Robert Vargas	Sent email requesting operations data.
26R	Jackson county	Rick McClure	361-652-4163	ramcclure@aep.com	Lindsay Dayton	Email - 04/19/2018 @15:28	Rick McClure	Sent email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
BFE	Terry county	Brad Tankersley	806-543-9840		Lindsay Dayton	Call 4/26/2018 @ 10:41	Brad Tankersley	3-4 transients a day 2-3 local planes flying a day Local planes include: 3 twins – single engine 1 jet 18 or 19 single engine planes March-April slow months (windy) Summer months slower too Sept-Nov busiest months *completely unattended No APU, no mechanic
COM	Coleman Municipal	Randy Long\Larry Weise	325-625-5495	chamber@colemantexas.org	Lindsay Dayton	Email - 04/23/2018 @ 11:35	Larry Weise	Sent email requesting operations data.
OZA	Ozona Municipal	Charles McCleary	325-392-2030	mcclearyaircraft@aol.com	Lindsay Dayton	Email - 04/19/2018 @15:30	Charles McCleary	Sent email requesting operations data.
ETN	Eastland Municipal	Bode Zietz	254-629-1588	etnaero@txol.net	Lindsay Dayton	Email - 04/20/2018 @ 08:53	Bode Zietz	Sent email requesting operations data.
LIU	Littlefield Taylor Brown Municipal	Tom Brown	806-777-5030		Lindsay Dayton	Call 4/26/2018 @ 10:50	Tom Brown	requested email
LIU	Littlefield Taylor Brown Municipal	Tom Brown	806-777-5030	tombrown@valornet.com	Lindsay Dayton	Email 4/26/2018 @ 10:55	Tom Brown	Sent email requesting operations data.
T78	Liberty Municipal	Gary Broz/ Jose A Dobladd	281-630-0779 / (936)587-4150	gbroz@cityofliberty.org	Lindsay Dayton	Email - 04/23/2018 @ 11:37	Gary Broz	Sent email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
BEA	Beeville Municipal	Beeville Air services FBO	361-358-0410	beeveillairservices@yahoo.com	Lindsay Dayton	Email - 04/20/2018 @ 08:56	Beeville Air Services FBO	Sent email requesting operations data.
JCT	Kimble County	Bill Davis	325-446-2820		Lindsay Dayton	Call - 04/26/2018 @ 11:10	Airport Attendant	Do not track data.
MNZ	Hamilton Municipal	Ryan Polster	254-386-3939	citysecretary@ci.hamilton.tx.us	Lindsay Dayton	Email - 04/23/2018 @ 11:39	Ryan Polster	Sent email requesting operations data.
41F	Floydada Municipal	Mitch Probasco	806-983-2314	proflytx@hotmail.com	Lindsay Dayton	Email - 04/20/2018 @ 09:05	Mitch Probasco	Sent email requesting operations data
7F7	CLIFTON MUNICIPAL / ISENHOWER FIELD	Tim Talley	254-675-3771	cliftonaero@digitex.net	Lindsay Dayton	Email - 04/20/2018 @ 09:07	Tim Talley	Sent email requesting operations data.
RBO	Nueces County	Ruben Saenz	361-387-1700	ruben.saenz@co.nueces.tx.us	Lindsay Dayton	Email - 04/20/2018 @ 09:012	Ruben Saenz	Sent email requesting operations data.
PSX	Palacios Municipal	William Shaffer	(361) 972-2143 /361-972-2400		Lindsay Dayton	Call - 04/26/2018 @ 12:05	William Shaffer	Left a voicemail
PSX	Palacios Municipal	William Shaffer	(361) 972-2143 /361-972-2400		Lindsay Dayton	Call returned- 04/26/2018 @ 12:31	William Shaffer	Do not track data.
ONY	Olney Municipal	Dr. Robert G Stark	940-564-2938		Lindsay Dayton	Call - 4/26/2018 @ 12:08	Dr. Robert G Stark	Provided estimate of 3-5 LTOs per day.
23R	Devine Municipal	Vickie Pumphrey	830-538-4123/830-663-3074		Lindsay Dayton	Call - 4/26/2018 @ 12:19	Vickie Pumphrey	Left a voicemail

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
23R	Devine Municipal	Vickie Pumphrey	830-538-4123/830-663-3074		Lindsay Dayton	Call returned-4/26/2018 @ 12:20	Vickie Pumphrey	Left a voicemail
23R	Devine Municipal	Vickie Pumphrey	830-538-4123/830-663-3074		Lindsay Dayton	Call - 4/26/2018 @ 12:22	Vickie Pumphrey	Provided estimate of 150-200 LTO per year; general aviation (GA); taxi time 5 minutes; busier during holidays, spring and mid-summer.
F53	Franklin county	Jennifer Jordan	903-348-0991		Lindsay Dayton	Call - 4/26/2018 @ 12:27	Jennifer Jordan	Do no track data.
LXY	Mexia-Limestone County	Buddy Miller	254-562-2857	barbaram@trim-aire.com	Lindsay Dayton	Email - 04/20/2018 @ 09:14	Buddy Miller	Sent email requesting operations data.
F41	Ennis Municipal	Scott Dixon	972-875-1234	citymanager@ennistx.gov	Lindsay Dayton	Email - 04/20/2018 @ 09:16	Scott Dixon	Sent email requesting operations data.
BKS	Brooks County	Bond Cosby	361-850-3430/361-325-2909		Lindsay Dayton	Call - 04/26/2018 @ 16:21	Bond Cosby	Requested email
BKS	Brooks County	Bond Cosby	361-850-3430	bond@cosbyair.com	Lindsay Dayton	Email - 04/26/2018 @ 16:24	Bond Cosby	Sent email requesting operations data.
F01	Quanah Municipal	Paula Wilson, City Mgr.	940-663-5336	cofq@sbcglobal.net	Lindsay Dayton	Email - 04/20/2018 @ 09:20	Paula Wilson	Sent email requesting operations data.
HHF	Hemphill County	Bill Kendall	806-679-4774	bckendall@sbcglobal.net	Lindsay Dayton	Email - 04/20/2018 @ 09:22	Bill Kendall	Sent email requesting operations data.
E42	Major Samuel B Cornelius Field	Jim Murray	806-659-2524		Lindsay Dayton	Call - 4/26/2018 @ 12:43	Jim Murray	Ext. 6 for city manager - no answer/no voicemail picked up

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
T90	Chambers county Winnie Stowell	Kelly Trahan	409-267-2719	ktarahan@co.chambers.tx.us	Lindsay Dayton	Email - 04/20/2018 @ 09:25	Kelly Trahan	Sent email requesting operations data.
T90	Chambers county Winnie Stowell	Kelly Trahan	409-267-2719	ktarahan@co.chambers.tx.us	Lindsay Dayton	Email returned- 04/20/2018 @ 10:16	Kelly Trahan	Do not track this here (T90) or at T00. No electric gates
LHB	Hearne Municipal	Terry Thomas	979-279-3461		Lindsay Dayton	Call - 4/26/2018 @ 12:45	Terry Thomas	Left message.
EBG	S TX International Airport at Edinburg	Debra Melvin	956-292-2047/ 956-522-3580	dmelvin@cityofedinburg.com	Lindsay Dayton	Email - 04/20/2018 @ 09:29	Debra Melvin	Sent email requesting operations data.
2F7	Commerce Municipal	Michael Wiblin; FBO - MARK KROTCKY EDGE AVIATION 903-461-1374	903-886-1139		Lindsay Dayton	Call - 4/26/2018 @ 12:47	Michael Wiblin; Fbo - Mark Krotcky Edge Aviation 903-461-1374	Incorrect phone number.
2F7	Commerce Municipal	Dan Tolbert	903-886-1101		Lindsay Dayton	Call - 4/26/2018 @ 14:13	Dan Tolbert	Left a voice mail.
E52	Oldham County	Larry Groneman	806-679-6682	larrygronemangsc@gmail.com	Lindsay Dayton	Email - 04/20/2018 @ 09:31	Larry Groneman	Sent email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
RFG	Rooke Field	Ruth Vandervlugt ; FBO VANAIR AVIATION 361-526-4241/5562	361-526-4241		Lindsay Dayton	Call - 04/26/2018 @ 14:16	Ruth Vandervlugt; Fbo Vanair Aviation 361-526-4241/5562	Left a voicemail
T00	Anahuac Airport	Kelly Trahan	409-267-2719	ktrahan@co.chambers.tx.us	Lindsay Dayton	Email - 04/20/2018 @ 09:29	Kelly Trahan	Sent email requesting operations data.
T00	Anahuac Airport	Kelly Trahan	409-267-2719	ktrahan@co.chambers.tx.us	Lindsay Dayton	Email returned- 04/20/2018 @ 10:16	Kelly Trahan	Do not track data. Provided control strategy information: 1 out of 6 gates electric (2018).
45R	Silsbee, Hawthorne Field	Michelle Dougharty	409-246-5251	michelle.dougharty@co.hardin.tx.us	Lindsay Dayton	Email - 04/23/2018 @11:45	Michelle Dougharty	Sent email requesting operations data.
45R	Silsbee, Hawthorne Field	Dale Williford	409-782-7620		Cody Mclain (TCEQ)	Call	Dale Williford	Called TCEQ with questions. They will contact ERG when/if providing data.
F56	Arledge Field	Alan Plumlee	325-773-2591		Lindsay Dayton	Call - 04/26/2018 @ 14:18	City personnel	Do not track this data.
F06	Marian AirPark	Jon Sessions	806-447-2544		Lindsay Dayton	Call - 04/26/2018 @ 14:35		Provided email contact for Sherrie Dunlap: city.sherrie@windstream.net.
F06	Marian AirPark	Sherrie Dunlap, City secretary	806-447-2544	city.sherrie@windstream.net	Lindsay Dayton	Email - 04/26/2018 @ 15:10	Sherrie Dunlap, City secretary	Sent email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
F51	Winnsboro Municipal	Jeffrey Howell	903-342-3654	jhowell@winnsborotexas.com	Lindsay Dayton	Email - 04/23/2018 @ 11:59	Jeffrey Howell	Sent email requesting operations data.
F51	Winnsboro Municipal	Jeffrey Howell	903-342-3654	jhowell@winnsborotexas.com	Lindsay Dayton	Email failed- 04/23/2018 @ 12:00	Jeffrey Howell	Email failed to send
E19	Gruver Municipal	Johnnie Williams	806-733-2424		Lindsay Dayton	Call - 04/26/2018 @ 15:50	Johnnie Williams	Provided estimate of 12,000 LTO per year; taxi in and out times 30 seconds; busy May-August.
T55	Dimmitt Municipal	BJ Potts	806-647-2155		Lindsay Dayton	Call - 04/26/2018 @ 15:57	BJ Potts	Do not track data.
T35	Cameron Municipal AirPark	Rhett Parker	254-697-6646	rparker@camerontexas.net	Lindsay Dayton	Email - 04/23/2018 @ 12:10	Rhett Parker	Sent email requesting operations data.
T35	Cameron Municipal AirPark	Rhett Parker	254-697-6646	rparker@camerontexas.net	Lindsay Dayton	Email failed - 04/23/2018 @ 12:10	Rhett Parker	Email failed to send
15F	Haskell Municipal	Jannet Moller	940-864-2333	citymanager@haskelltexasusa.com	Lindsay Dayton	Email - 04/23/2018 @ 12:13	Jannet Moller	Sent email requesting operations data.
2T1	Muleshoe Municipal	Zanea Carpenter	806-272-4528	zcarpenter@city-of-muleshoe.com	Lindsay Dayton	Email - 04/23/2018 @ 12:15	Zanea Carpenter	Sent email requesting operations data.
CZT	Dimmitt County	Ernest Martinez	830-255-1312		Lindsay Dayton	Call - 04/26/2018 @ 16:08	Ernest Martinez	Left a voicemail
LBR	Red River City - JD Trissell Field	Dan Halley	903-631-9531	drhewo@aol.com	Lindsay Dayton	Email - 04/23/2018 @ 12:20	Dan Halley	Sent email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
LBR	Red River City - JD Trissell Field	Dan Halley	903-631-9531	drhewo@aol.com	Lindsay Dayton	Email failed - 04/23/2018 @ 12:20	Dan Halley	Email failed to send
INK	Winkler County	Charles Cooper	432-527-3481	charlescooper47@yahoo.com	Lindsay Dayton	Email - 04/23/2018 @ 12:23	Charles Cooper	Sent email requesting operations data.
2R9	Karnes County	Ron Hyde	830-583-9884	ronhyde7@gmail.com	Lindsay Dayton	Email - 04/23/2018 @ 12:25	Ron Hyde	Sent email requesting operations data.
2R9	Karnes County	Ron Hyde	830-583-9884	ronhyde7@gmail.com	Lindsay Dayton	Email returned - 04/23/2018 @ 12:25	Ron Hyde	Sent email with estimates.
2R9	Karnes County	Ron Hyde	830-583-9884	ronhyde7@gmail.com	Lindsay Dayton	Email - 04/23/2018 @ 12:25	Ron Hyde	Sent thank you email.
60F	Seymour Municipal	Steve Biedereman, City Manager	940-889-3148		Lindsay Dayton	Call - 04/26/2018 @ 16:10	Steve Biedereman	Left a voicemail
60F	Seymour Municipal	Steve Biedereman, City Manager	940-889-3148		Lindsay Dayton	Call returned - 05/01/2018 @ 11:46	Steve Biedereman	Do not track data.
F85	Cochran County	Judge Pat Henry	806-266-5508	pshenry@co.cochran.tx.us	Lindsay Dayton	Email - 4/25/2018 @17:15	Judge Pat Henry	Sent email requesting operations data.
HBV	Jim Hogg County	Clark Rossi	956-693-7751 / 956-763-3329		Lindsay Dayton	Call - 04/26/2018 @ 16:15	Clark Rossi	Provided contact information for Bond Cosby (BKS).
HBV	Jim Hogg County	Bond Cosby	361-850-3430	bond@cosbyair.com	Lindsay Dayton	Email - 04/26/2018 @ 16:15	Bond Cosby	Sent email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
F21	Memphis Municipal	Kirby Gardenhire	806-259-3001		Lindsay Dayton	Call - 04/26/2018 @ 16:28	Kirby Gardenhire	Left message.
21F	Jacksboro Municipal	Jacky Hall	940-567-6321		Lindsay Dayton	Call - 04/26/2018 @ 16:28	Jacky Hall	No answer and voicemail was full.
T71	Cuero Municipal	Jessie Villereal	(361) 275-4779		Lindsay Dayton	Call - 4/26/2018 @ 16:34	Jessie Villereal	Provided contact Jennifer Zufelt.
T71	Cuero Municipal	Jennifer Zufelt	(361) 275-4779	jzufelt@cityofcuero.com	Lindsay Dayton	Email - 4/26/2018 @ 16:37	Jennifer Zufelt	Sent email requesting operations data.
5T9	Maverick County Memorial International	David Saucedo	830-773-3824		Lindsay Dayton	Call - 4/27/2018 @ 11:20	David Saucedo	Provided contact number: 830-773-1716.
5T9	Maverick County Memorial International	David Saucedo	830-773-1716		Lindsay Dayton	Call - 4/27/2018 @ 11:22	David Saucedo	No answer.
49T	CBD Vertiport	Darrell Phillips	214-670-7612 / 214-670-6791		Lindsay Dayton	Call - 4/27/2018 @ 11:24	Darrell Phillips	Left a message.
SKF	Kelly Field	Danny Jones	210-362-7838		Lindsay Dayton	Call - 4/27/2018 @ 11:26	Danny Jones	Requested email and open to providing available data.
SKF	Kelly Field	Danny Jones	210-362-7838	danny.jones@portsanantonio.us	Lindsay Dayton	Email - 4/27/2018 @ 11:31	Danny Jones	Sent email requesting operations data.
5F1	Garza County Municipal	Bill Aten	806-759-4009		Lindsay Dayton	Email - 4/27/2018 @ 11:36	Bill Aten	Busy, offered to send an email.
5F1	Garza County Municipal	Bill Aten	806-759-4009	baten56@aol.com	Lindsay Dayton	Email - 4/27/2018 @ 11:52	Bill Aten	Sent email requesting operations data.

Table A-1. TCEQ 2017 Call Log

State Facility Identifier	Facility Name	Contact Name	Number	Email Address	ERG Contact Name	Date/Time Contacted	Airport Contact Name	Response
5F1	Garza County Municipal	Bill Aten	806-759-4009	baten56@ao1.com	Lindsay Dayton	Email failed- 4/27/2018 @ 11:52	Bill Aten	Email failed to send.
VHN	Culberson County	Larry Simpson	432-283-2237		Lindsay Dayton	Call - 4/27/2018 @ 11:57	Larry Simpson	Provided email address: simpson@telstar1.com.
VHN	Culberson County	Larry Simpson	432-283-2237	simpson@telstar1.com	Lindsay Dayton	Call - 4/27/2018 @ 11:57	Larry Simpson	Sent email requesting operations data.
T60	Stonewall County	Ronnie Moorhead	940-989-3393	stoco.judge@srcaccess.net	Lindsay Dayton	Email - 4/25/2018 @17:18	Ronnie Moorhead	Sent email requesting operations data.
T60	Stonewall County	Ronnie Moorhead	940-989-3393	stoco.judge@srcaccess.net	Lindsay Dayton	Email failed- 4/25/2018 @17:18	Ronnie Moorhead	Email failed to send.
D10	Dallas - Ft Worth TRACON	Richard Powell, Operations Manager	972-615-2502		Lindsay Dayton	Call - 4/27/2018 @ 12:05	Richard Powell, Operations Manager	Left a voicemail
I90	Houston TRACON		281-443-5845		Lindsay Dayton	Call - 4/27/2018 @ 12:10		Provided contact information for Mike Richardson: 281-443-5805.
I90	Houston TRACON	Mike Richardson	281-443-5805		Lindsay Dayton	Call - 4/27/2018 @ 1:10	Mike Richardson	Do not track data.

Appendix B
2017 Local Operations Submitted as Monthly Totals by
Aircraft Type

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
Unknown	1159	1415	1698	1342	1219	1219	855	794	128	204	110	69
337E								2				
A106		1										
A109	1	2							2	4		
A139						1						
A300										1		
A306	78	72	86	87	94	97	83	108	87	79	83	91
A30B						1	1		2			
A310					3		2					
A319	835	786	1003	1165	1174	1012	1024	1119	1173	1228	1145	1069
A320	670	637	886	832	874	1204	1682	1538	1151	1248	1217	1270
A321	462	429	526	507	637	599	690	705	748	731	743	669
A332								1				
A333				2	1							
AA1				1								
AA5	6	4	9		4	7	8	2	18	5	1	3
AA5A			1									
AC11	2	2			2				2		2	2
AC45									1			
AC50												2
AC56										2		
AC6L		2										
AC80									2			
AC90		4	4	1	2	2		6	2	5	6	8
AC95		2	2							2		2

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
AC9T			1									
AERO							1		1			
AEST			6	9		3	12	2	4	2	4	
ANG1											1	
AS35					1				1			
AS50	3	13	21	11	16	11	14	13	2	7		3
ASTA				1								
ASTR	7	3	13	7	4	2		2	8	2		5
AT43											2	
B06	7	3	6	4	5	12	18	2		4		
B190	2											
B206										1		
B350	201	175	221	239	264	206	186	225	272	276	224	120
B36T		2	2				1			1		
B38M										3	1	16
B407						4	2	2			2	1
B412					1							
B429							4					
B430						1				1		
B58T						1						
B60												2
B60T										2		
B712	108	112	45	85	110	47	10	97	300	377	224	179
B722		6	2		2						2	10
B732			2									

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
B733	846	752	942	855	631	645	633	591	487	6	7	
B734		8	2	4	2	4		6	4		4	
B735										6	4	2
B736						2						
B737	2284	2094	2478	2465	2728	2777	2800	2700	2579	3340	2951	2963
B738	878	765	1029	1121	1673	1702	1596	1499	1160	1350	1653	1573
B739	296	277	541	696	748	677	521	510	492	536	460	617
B744				24	2	8	2	2	14	32	2	
B748			1									
B752	197	150	254	147	65	46	44	48	54	88	57	90
B753	2								8	8		
B762	2	2		2	2	2	2	6	4	2	4	1
B763	52	38	60	55	67	62	63	64	18	6		
B772			1		2	10		2			2	
B77W						2						
B788				2	2		1					
B789	59	54	62	59	58	60	61	60	60	62	56	54
BE10	1				2				2	1	1	
BE18			1				2				2	
BE20	189	210	189	199	135	142	174	148	232	230	204	141
BE23					2	1						
BE24						1			2			
BE30	38	30	21	20	33	33	30	15	21	43	20	43
BE33	14	11	22	25	12	7	3	6	11	18	15	7
BE34				1								

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
BE35	12	16	13	20	19	19	8	12	28	14	17	15
BE36	42	45	49	43	60	72	59	40	55	57	41	32
BE40	57	45	69	64	47	64	64	42	58	79	72	36
BE55	1	8	6	9	17	11	7	7	8	6	5	4
BE58	30	22	13	17	25	20	8	17	17	14	23	8
BE60	2	6	2			1				2	4	
BE76						2	2	2				1
BE80						3	4					
BE9										1		
BE90	1	2			2			1		2	1	1
BE95			2		1		2	1				
BE9L	59	67	55	87	80	35	46	50	44	64	43	68
BE9T	10	2	2	6	6	2	6	18	10	15	14	17
BK17								1	3	3	1	
BL17		2		2	1	1			4			6
BL8					1	2		1			1	
BT17								1				
BT36								1				
C10T								1	1			
C130	3											
C140					2			1	11	4		
C150	1	2	2		4	3	8				1	1
C152	36	18	26	25	34	29	26	26	56	77	51	44
C162		1										
C170									1			

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
C172	406	178	191	341	497	546	590	491	570	638	456	409
C177	4	3			12	9	9	7	20	13	3	
C177R		1										
C17R									1			
C180		1		4	3	3	2		1			
C182	21	39	40	33	27	54	57	39	69	47	53	49
C185			1		2	2	1		1			
C195										4		
C205											3	
C206	33	15	8	38	25	14	3	17	24	30	18	10
C208	250	249	285	245	274	266	234	284	263	288	262	291
C210	6	9	4	14	13	10	3	14	19	21	3	8
C240	4	2	4	11	2	10	5	6	3	3	4	8
C252									1			
C25A	60	55	75	66	76	68	50	55	92	53	50	53
C25B	28	34	41	36	44	33	32	21	55	43	63	57
C25C	32	26	36	34	21	12	20	14	21	32	29	30
C25L											1	
C25M										4		2
C295		2										
C303				1				2				
C305										1		
C310	8	8	10	19	11	6	5	9	9	13	20	7
C337						3	8	4				
C340	1	9	10	4	8	28	21	9	4	7	8	

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
C400										1		
C401	3	3	4	6	3							
C402	5	5	6	4	3							8
C404								1	6			
C412									1			
C414	15	27	19	21	14	6	18	16	9	29	23	19
C421	64	18	9	28	12	58	98	53	14	22	11	20
C425	12	5	11	11	5	6	6	4	14	14	10	8
C441	16	8	8	11	16	8	2	2	11	6	9	16
C500			1	1	6		11			4	4	
C501	6	14	2	5	5	2	8	9	8	3	9	5
C510	23	24	30	16	20	29	5	38	10	18	26	8
C525	92	84	93	94	86	65	82	89	71	86	95	52
C550	33	43	63	43	23	38	39	30	61	86	52	30
C551	4			3		6		2	3	8		2
C55B											5	3
C560	121	101	185	132	149	162	139	107	158	136	135	115
C56X	186	194	278	230	189	156	148	143	169	207	220	167
C650	53	25	35	43	48	46	30	36	58	44	47	36
C680	70	80	119	136	86	77	94	52	92	110	78	71
C68A					4		2	9	22	24	25	41
C72R		3	7	1	6	2	2	2	1	5	2	2
C750	92	92	127	95	89	78	78	76	90	131	79	80
C77R	6	2	4		3	3	3			4		
C82R	2	2				5	3		1			

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
CH60					1							
CH7B							2	1				
CJ6								1	1			
CL30	45	91	115	103	72	69	66	110	115	157	140	100
CL35	39	27	52	27	39	41	24	32	47	59	40	60
CL60	58	71	106	75	103	78	63	80	114	140	94	73
CN35								3				
COL		2								1		
COL2			1									
COL3	7	7	3	10	10	4	10	4	10	9	2	
COL4	29	18	19	11	15	13	8	8	10	20	15	11
CP30						3						
CRJ2	6	6		11	2	2		6	10	10	6	2
CRJ7	205	189	72	250	294	148	115	115	93	73	106	90
CRJ9	450	323	437	231	246	248	238	135	166	121	52	150
CRUZ		2						4		2		
CVLT									2			
D328					2	3	11	1	5	10	3	3
DA20						1		1	2	2	1	1
DA40	1	4	2	3	6	2	5	9	14	16	4	24
DA42		4						2		2	2	
DC10	65	59	56	58	64	68	67	69	68	60	63	63
DC3T		2								2		
DC87										4		
DECA											2	

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
DH6C									1			
DH8B										1		
DH8D							1					
DHC6	1				1	1		1	6	1		
DV20						1						3
E120	2	2									2	
E135	2	6	5	4	8	3	7	5	10	12	2	8
E145	8	2	15	8	11	25	37	28	12	18	16	22
E170	773	886	1100	729	749	775	760	556	373	367	380	355
E190	151	97	130	149	114	137	122	130	160	195	177	216
E300						2	1	1				
E35L	22	13	11	6	17	16	20	5	2	5	2	6
E45X	16	8	6	5	11	4	15	1	3		3	4
E50P	63	42	66	43	69	63	44	38	47	47	52	40
E545	2	4	7		13	8	5	4	7	14	7	14
E550	4	4	10	8	6	10	4	15	9	19	8	10
E55P	89	110	112	121	115	89	95	96	71	138	132	108
E75L	122	161	145	71	116	111	140	254	384	431	302	350
E75S	154	163	133	46	43	47	39	28		5		1
EA50	17	14	24	31	30	20	32	19	19	26	14	17
EC20					1	4	2	3				
EC30		1		2	1							
EC35		3	1	1		1		1	1	2		1
EC45		1			1			20	17	30	25	20
EC55		1		1								

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
EPIC											2	
ERAC						1						
EV97					1							
EVOL			2	2								
EXP			1		1				1	2	2	3
EXPA										1	1	
EXPR										2	1	
F2TH	74	90	68	79	50	52	38	35	74	76	63	61
F4U										2		
F900	73	52	89	85	49	48	46	62	96	93	92	59
FA10	10	3	14	6		9		11	4	4	9	6
FA20	6	4	8	4	4	7	7	13	11	6	14	7
FA50	40	48	52	39	34	22	30	38	36	41	35	19
FA7X	2	4	10	6	4				8	21	11	
FLT2								1				
FOX						5	2	4				
G150	16	20	28	24	4	10	15	15	21	38	17	29
G159							4					
G200				1								
G280	26	27	22	37	35	28	14	11	32	28	20	16
G650									1			
GA8									7			
GALX	42	24	43	51	44	35	21	27	21	32	38	35
GC1						1		2				
GL5T	10	7	6	8	18	8	4	12	16	13	10	12

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
GLAS			1			1			2		2	
GLEK	22	16	38	26	23	10	17	21	24	21	26	20
GLF2				2		1						
GLF3	7		5	2	14	5	6	7	19	8	6	2
GLF4	56	68	91	92	62	40	64	64	80	97	101	61
GLF5	30	40	111	49	62	47	26	31	36	67	51	35
GLF6	17	13	15	21	11	4	10	7	9	15	11	7
GLSP									2			
GYRO										1		
H125												1
H25										1		
H25A	3	3			2	5	1	2	2	3		1
H25B	73	133	108	88	91	92	69	94	86	167	127	90
H25C		4	10	4			2		2	6	5	2
H269	1	12	14	8	23	9	5	16	5	14	16	2
H47								5	1			4
HA4T	2	2	8	5	3	4		2	2	6	4	
HDJT		4	3	2	9	2	3	2	2	2		
HELI								1	1	1		
HELO	3	6	10	6	4	9	9	66	96	94	75	42
HFLO										1		
HROC									2			
HS25		1								1		
HUSK	1			1								
HXA					1		1					

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
HXB		1	1		1	1	2	1	2	5		1
HXBA				1								
J328	6	4	10	14	1	7	12	5	6	4	2	15
JS31	9	21	21	27								
JS32	28	13	19	19								
JS41	10	10	14									
KODI			4			1						
KR2						1	11	16				
L29									2			
LA25												2
LAN												1
LAN4			2									
LANC								1	2	1		
LEG2			2	1	3	2	1	3		1		
LEZY											1	
LGEZ				1					1		1	
LJ24									2			2
LJ25			2	1	1					1		
LJ31	21	22	17	20	23	22	18	6	12	26	23	27
LJ35	17	13	19	20	26	36	27	20	24	12	24	22
LJ40	16	10	19	15	13	21	11	12	20	24	47	15
LJ45	76	67	64	103	76	94	74	65	58	79	92	90
LJ55	10	30	12	23	6	4	4	8	19	6	10	9
LJ60	44	65	66	84	71	72	71	83	39	62	88	58
LJ68												1

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
LJ70					2							
LJ75	26	29	22	33	27	19	24	29	40	26	23	26
LNC2						1			8	4		8
LNC4		4	2	4		3	1		4			3
LNC8					2							
LNCE												1
LTK							1					
M20			1	1	1			2	1			1
M20K												1
M20M									1			
M20P	15	22	14	17	18	42	29	20	33	27	16	15
M20T	5	7	14	9	11	9	15	11	12	12	10	7
M28P										1		
M35		2				1	2					
M5		2					2					
MAUL					2			1				
MD11	35	32	47	32	32	31	22	31	25	34	28	29
MD60									1			
MD82	31	21	26	20	37	38	37	68	31	42	49	32
MD83	119	95	96	130	171	223	215	159	168	258	234	192
MD88	10	2	2	10	16	14	22	10	4	4	14	125
MD90	210	207	127	110	87	128	87	32	4	2	83	2
MKE						34	59	32				
ML3											1	
MO20	4	1	3	2	4	4		6	9	3	4	2

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
MO21			2			1	1		1			1
MO25				1								
MU02					1							
MU2	18	8	16	10	17	10	4	5	2	8	3	10
MU30	8	6	6	8	8	8	4	10	4		10	12
NG5										1		
NG5A										1		
NLA-450											2	
P180	2	3	7	8	8	2	7	5	15	31	25	13
P200	1											
P2008		1										
P208	1							1	3	4	2	
P210	2			2	2	14		5	10	10	7	6
P28A	2		1		5	3	4	3	5	5	3	2
P28B		2			1			2			1	
P28R	41	33	42	62	46	50	17	33	48	59	43	14
P28T						1	1	1	1			
P29R			1									
P32R	2	2	3	4			3	8	14	10	2	6
P32T			1									
P46T	34	34	38	54	62	43	38	37	32	40	34	32
P-51								2				
PA12					1	2		1				
PA20					1							
PA23					1	4	4		1			

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
PA24	6	2	3		3	1	2	4	11	2	2	2
PA27	2	3	2		12	20	3	5	1			10
PA28	62	51	61	77	60	58	64	90	80	79	81	69
PA30	2	1				4	7		4	4	2	
PA31		2		2		3	3	3	8	3		
PA32	11	1	12	14	4	12	11	2	8	13	2	5
PA34	10		3	6	1	3	6	2	5	3	2	
PA38	3	2	5	4	1	4	9	8	6		4	
PA44		2	5	6	18	55	12	22	16	3	6	7
PA46	21	6	4	19	12	8	14	9	12	8	11	13
PAY1	1		2	2			2		1	1		6
PAY2	4	2	7	4	2	2	2	4	4	2	1	3
PAY3	3											
PAZT								1				2
PC12	79	94	102	93	102	82	87	62	83	200	198	166
PITS						1	6	1				
PRM1	8	12	18	13	11	6	10	8	14	7	20	5
PS28			1									
R22			2	2	2	2	2		2	1		2
R44	1			1		5	1		3	3	9	1
R66			12									
RANG					1							
RV10				2	1							
RV12											1	
RV4		1						2		2		2

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
RV4A		1										
RV6						1	2	1	3		1	
RV7				2				2	1	1	1	2
RV8		1			2		2	4		3		2
S108			1									
S22T		4							6	10	1	9
S76	2	7	5	1	3		1		1			
SB20	9	14			4				4	14	4	10
SBR1	4	2				6	4	4	6	6		4
SH36								7	3			
SR20	6	4	9	4	3		2	5	2	5	4	1
SR22	148	118	130	140	110	89	75	101	118	111	71	77
SW3	4		7	6	10	2	8	5	7	8		4
SW4		2	1		1	2			2	2	2	
SYMP	1	1										
T1				1								
T182										2		
T206										2		
T208			8	7	10	8	10	2	1		3	
T210		1										
T240		2										
T337							1					
T38		4	13	1	5	5	10	2	9		2	8
T6									2			1
TB10								2				

Table B-1. Austin-Bergstrom International Airport 2017 Operations Data: Submitted as Monthly Totals by Aircraft Type

Aircraft Type	Operations											
	January	February	March	April	May	June	July	August	September	October	November	December
TB20									2	2		
TBM	2	2								2		
TBM1									1			
TBM7	15	12	18	12	11	19	10	11	16	5	11	8
TBM8	13	15	7	15	13	20	10	2	33	17	28	14
TBM9		2	2	2	2		2		2	6	4	2
TECH									1			
TEX2			1					3				
TNAV								1				
TRIN									2			
TTWO						1						
TVL4								2		2		
UH45								1				
UH47								1	26			
V35C							1					
VELO	3	5	3	2	1		4	6			1	2
VEZE						6	1					
VLTJ						1						
WACO	16	2	1	24	66	31		9	57	43	40	22
WW24		14	7	8	4	2	6	12	10	10	7	3
YM5							2					
Z7PE									1			
ZZZ				1								

Table B-2. Cotulla-La Salle County Airport 2017 LTO Data: Submitted as Monthly Totals by Aircraft Type for Commercial Aircraft¹

Aircraft	LTO											
	January	February	March	April	May	June	July	August	September	October	November	December
AC144			1									
ASTR								2		1		
AT602					12		24					
B300/B350				3						11	14	12
BD700 / GLEX	1											
BE20/BE25	1	7	2	1	1	4	2		6	7	7	8
BE30/BE35	12		7		6	3	2	1	1			
BE40	2											3
BE90/C90A	3	2		3		2			2	2	7	2
C208	1				1				1			
C25/C525	6	2		1	5			1	3	5	10	10
C425/C441	1	2	2	2						3	3	2
C500/C501/C550/C560	8	6	5	8	1	1	1	1	6	9	16	12
C510	2		2		1							
C56XL			2				2				3	3
C650	1	1									1	4
C680/C68A			7							1		
C750												1
CL30 / CL35	2	2	1	1				2	1	1		6
CL60	1	4	2				1			1	7	2
E50P	1	1	4	3	3	1		1	5	5	5	5
E55P	1			2					1	2	1	3
EA50	1	1										
F2TH/FA20	2	1	1	1					1	3	4	1
FA10			1	1	1			1	2		7	7
FA10/FA100	6											

Table B-2. Cotulla-La Salle County Airport 2017 LTO Data: Submitted as Monthly Totals by Aircraft Type for Commercial Aircraft¹

Aircraft	LTO											
	January	February	March	April	May	June	July	August	September	October	November	December
FA50/FA90		1	1	1				1			3	1
G150	1											
G280	2			1								
G3										1	1	1
G5				2				1				
H25A										1		
H25B		1	1							1		
LJ31A										1		
LJ35						1						
LJ40/LJ45/LJ75	5			3		3		1	3	1	4	1
LJ55/LJ60		1				2					2	
MU-2B						1	1			1		
P180		1					1			2	6	
P210N			1									
PA31 / PAY1, 2		1							1			
PA46/P46T	4	2	2	1	1			3	1	2	4	4
PC12		1	3	1					3	5	2	3
PRM1		1										
SW3	2	2		2	1							
SW3 / SW4						2						4
TBM 700/ 800			2									

¹Public data was used for Military and Piston Engines

Appendix C
2017 Local Operations Submitted by Aircraft Type

Table C-1. Curtis Field Airport 2017 Operations Data: Submitted as Annual LTOs by Aircraft Type

Aircraft Model	Engine	LTO	Taxi in Time (min)	Taxi out Time (min)	Seasonality Summer (%)
DCO-65 (L2A)	A&C65 Series	58	3	3	40
Kolibri 150A	O-320 Series	2	3	3	0
Aeronca 65-CA	A&C65 Series	2	3	3	0
Aerostar 600	IO-540 Series	4	3	3	100
208B (Caravan)	PT-6A-140	4	4	4	0
K35 (Baron)	10-470 Series	24	3	3	50
369E (MD-500)	250-C20 Series	26	2	2	0
B24R (Siera)	I0360 Series	38	3	3	50
M-20G (Mooney)	O&VO-360 Series	78	3	3	50
Hatz C B-1	O-290 Series Lycoming	40	3	3	50
PA-46-310P (Malibu)	TSIO-520 Series	18	3	3	60
B300 (King Air)	PT6A-60A P&W Canada	34	5	5	50
PA-24-250	O-540 Series Lycoming	10	3	3	10
PA-24-260	T10-540-Series Lycoming	2	3	3	0
SR22 (Cirrus)	IO-550 Series Cont Motor	36	3	3	50
SR22 (Cirrus)	IO-550-N Cont Motor	8	3	3	15
RV6	O&VO-360 Series Lycoming	12	3	3	50
R44 II	IO-540-AE1A5 Lycoming	20	2	2	50
F90	PT6 Series 578HP U/A Canada	6	5	5	50
206B Bell	250 Series 250HP Allison	6	2	2	50
Gulfstream G-150	TFE731-40R	4	5	7	50
525C Cessna	FJ44-4A Williams	6	4	10	60
T210L	TSIO-520 Series Cont Motors	24	3	3	50
Beech 58 (Baron)	IO-550-C	26	3	3	50
172N (Cessna)	O-320 Series	36	3	3	50
172B (Cessna)	O-300 Ser	22	3	3	50
TR182 (Cessna)	T10-540 Ser	28	3	3	50
415-CD (Ercoupe)	?	28	3	3	50
B300 (King Air)	PT-6A-60A	6	3	3	40
560XL (Cessna)	PW545 SER	4	5	5	50
340A (Cessna)	TSIO-520 Ser	6	3	3	0

Table C-1. Curtis Field Airport 2017 Operations Data: Submitted as Annual LTOs by Aircraft Type

Aircraft Model	Engine	LTO	Taxi in Time (min)	Taxi out Time (min)	Seasonality Summer (%)
B300 (King Air)	?	18	3	3	50
PA-32-300 (Piper)	T10-540 Ser	10	3	3	50
47G-3B-1	TV0-435Ser	14	3	3	70
AT-502B	PT6A-34AG	64	3	3	80
AT402B	PT6A-34AG	18	3	3	0
206L-1 (Bell)	250-C30 Ser	6	2	2	100
206B Bell	250-C20 Series	6	2	2	0
58 (Baron)	IO-550 SERIES	4	3	3	0
Bellanca	?	6	3	3	0
J35	IO-470 Series	6	3	3	0
M35 (Bonanza)	IO-470 Series	6	3	3	20
172L (Cessna)	O-320 Series	8	3	3	100
182A (Cessna)	?	2	3	3	0
AT-802A	PT6A-65AG	2	3	3	100
PA-28-080 (Archer)	O-360-A1D	2	3	3	0
58 (Baron)	IO-550 Series	2	3	3	0
58 (Baron)	IO 520 Series	6	3	3	20
95-C55	IO 520 Series	2	3	3	0
58P	TSIO-520 Series	2	3	3	0
Bearhawk	O-540-A4D5	2	3	3	100
206B (Bell)	250 Series 250HP	2	2	2	0
407	250-C47B	2	2	2	0
OH-58A (Bell)	T63-A-720	2	2	2	0
47G2	VO-435-A1F	2	2	2	0
A36 (Bonanza)	IO 520 Series	4	3	3	50
V35 (Bonanza)	IO 520 Series	2	3	3	0
C35 (Bonanza)	E185 Series	2	3	3	100
A36 (Bonanza)	TSIO-550 Series	2	3	3	0
172C (Cessna)	O-300 Series	2	3	3	0
172G (Cessna)	O-300 Series	2	3	3	50
162 (Cessna)	O-200	2	3	3	0
182S (Cessna)	IO-540 Series	4	3	3	50
182P (Cessna)	O-320 Series	6	3	3	25
172P (Cessna)	O-320 Series	2	3	3	0
182Q (Cessna)	O-470 Series	2	3	3	0
T210M	TSIO-520 Series	2	3	3	0

Table C-1. Curtis Field Airport 2017 Operations Data: Submitted as Annual LTOs by Aircraft Type

Aircraft Model	Engine	LTO	Taxi in Time (min)	Taxi out Time (min)	Seasonality Summer (%)
414 (Cessna)	TSIO-520 Series	2	3	3	0
177B (Cardinal)	O&VO-360 Series	2	3	3	100
TR182 (Cessna)	0-540 Series	2	3	3	0
172S (Cessna)	IO-360-L2A	6	3	3	0
172N (Cessna)	0-360-A4M	2	3	3	100
172K (Cessna)	0-320 Series	6	3	3	50
172F (Cessna)	0-300 Series	4	3	3	0
172K (Cessna)	0-300 Series	2	3	3	0
180 (Cessna)	0-470 Series	2	3	3	100
182N (Cessna)	0-470 Series	2	3	3	100
172R (Cessna)	10360 Series A&C	2	3	3	100
182T (Cessna)	IO-540 Series	8	3	3	50
182P (Cessna)	0-470 Series	6	3	3	0
U206G	IO 520 Series	4	3	3	50
210M (Cessna)	IO 520 Series	2	3	3	100
T210N (Cessna)	TSIO-520 Ser	2	3	3	0
421C (Cessna)	GTSIO-520 Ser	2	3	3	0
T210L (Cessna)	TSIO-520 Series	2	3	3	0
182B (Cessna)	0-470 Series	2	3	3	0
182K (Cessna)	0-470 Series	2	3	3	100
170	C145 Series	2	3	3	50
R44 II	IO-540 Series	6	2	2	50
R44 II	IO-540-AE1A5	6	2	2	50
PA-28-140	0-320 Series	4	3	3	50
PA-42	?	6	3	3	30
525 (Cessna)	FJ 44 Series	6	3	3	40
525A (Cessna)	FJ 44 Series	4	3	3	0
525C Cessna	FJ44-4A	8	3	3	25
560XL (Cessna)	PW545 SER	4	3	3	50
B200	PT6A-52	2	3	3	100
C90	PT6A-60A	2	3	3	100
B300	PT6A-60A	6	3	3	100
E-90	TPE331 Series	2	3	3	0
B300	?	4	3	3	50
PA-32RT-300	IO-540 Series	2	3	3	100
MXT-7-180	O&VO-360 Series	2	3	3	100

Table C-1. Curtis Field Airport 2017 Operations Data: Submitted as Annual LTOs by Aircraft Type

Aircraft Model	Engine	LTO	Taxi in Time (min)	Taxi out Time (min)	Seasonality Summer (%)
M-7-260C	?	2	3	3	100
PA 31P 350	T10-540- Series	2	3	3	100
M20F	10360 Series	2	3	3	0
PC-12/45	PT6A-67B	8	3	3	60
PA 46-350P	T10-540 Series	2	3	3	100
PC-12/47E	PT6A-67P	4	3	3	0
EMB-505	PW535E	2	3	3	100
EMB-500	PW617F-E	2	3	3	0
PC-12/47	PT6A-67B	2	3	3	0
PA-28-161	O-320 Series	2	3	3	100
PA-28R-201T	TSIO-360 Series	2	3	3	0
L-21B	?	2	3	3	0
R22 Beta	O-320 Series	4	2	2	50
R22 Beta	O-320-B2C	4	2	2	100
R44	O-540-F-1B5	2	2	2	100
R22	O-360-J2A	4	2	2	0
R44 II	IO-540-AE1A5	4	2	2	50
R44 II	IO-540 Series	6	2	2	0
269C-1 (Schweizer)	HO-360	2	3	3	100
PA-34-200T	?	2	3	3	100
S2R-T34	PT6A Series	2	3	3	100
PA-18-150	O-360-A1D	2	3	3	0
TBM700	PT6A66D	4	3	3	100
GC-1B	C125 Series	2	3	3	100
Velocity 173 EL XL	?	6	3	3	100
RV8	?	12	3	3	50
206L-4 (BELL)	250-C30P	2	3	3	0
A119	PT6 Series	2	3	3	100
560	JT15D 5 Series	2	3	3	0
560	PW535B	4	3	3	50
7ECA	O-235 Series	2	3	3	100
Falcon 900 EX	TFE731-60-1C	2	3	3	0
Gulfstream G-150	TFE73140AR200	2	3	3	0
GA8 TC-320	TIO-540-AH1A	2	3	3	100
AA-5	O-320 Series	2	3	3	100
369FF	250 20&30 Series	2	2	2	0

Table C-1. Curtis Field Airport 2017 Operations Data: Submitted as Annual LTOs by Aircraft Type

Aircraft Model	Engine	LTO	Taxi in Time (min)	Taxi out Time (min)	Seasonality Summer (%)
Hawker 900XP	TFE731-50R	4	3	3	50
A-1B	O-360 Series	2	3	3	0
180E	STDIO-520 Series	2	3	3	100
U206G	IO 520 Series	2	3	3	0
182J	O-470 Series	2	3	3	0
182E	O-470 Series	2	3	3	0
AA-5A	?	2	3	3	0
7GCBC	O-320 Series	2	3	3	0
PA-28-161	?	4	3	3	0
AH - Apache Helicopter	?	192			65
UH - Blackhawk Helicopter	?	214			50
Huey Helicopter	?	24	2	2	50
CH Chinook Helicopter	?	96	3	3	50
King Air 90	?	32	3	3	50
Lakota	?	2	2	2	0
Bell 407	?	2	2	2	0
RV6	?	2	3	3	0
RV7	?	2	3	3	0
P-51	?	2	3	3	100
P-32	?	2	3	3	100
L4	?	2	3	3	100
Hughes 500	?	2	2	2	0
Diamond DA-40	?	2	3	3	100
Eurocopter	?	4	2	2	100
Grumman	?	4	3	3	50

**Table C-2. Dallas/Fort Worth International Airport 2017 LTOs and 2017 Summer Day LTOs:
Airport Submitted by Specific Aircraft Type**

Aircraft Model	Engine	APU1	LTO	Summer Daily LTO
Boeing 737-800 with winglets	CFM56-7B27	APU 131-9	62,834	182
Airbus 321-200	CFM56-5B3/P	APU GTCP 36-300 (80 HP)	46,699	137
Bombardier CRJ-900	CF34-8C5 LEC (8GE110)	APU GTCP 85 (200 HP)	40,486	116
Embraer ERJ 170	CF34-8E5 LEC (8GE108)	AUP GTCP 36-150	30,808	91
Embraer ERJ 145-EU	AE3007A1 Type 1	APU GTCP 36-150	23,701	70
MD - 83	JT8D-219	APU GTCP85-98 (200 HP)	21,873	64
Airbus 319-100	V2524-A5	APU GTCP 36-300 (80 HP)	14,385	39
Bombardier CRJ-700	CF34-8C1	APU GTCP 85 (200 HP)	11,439	37
Airbus 320-200	CFM56-5B4	APU GTCP 36-300 (80 HP)	10,615	33
MD - 82	JT8D-219	APU GTCP85-98 (200 HP)	7,314	20
Boeing 767-300 ER	CF6-80C2B6	APU GTCP331-200ER (143 HP)	4,871	13
Embraer ERJ 175-LR	CF34-8E2A1	APU 131-9	4,182	12
Embraer ERJ 135	AE3007A1/3 Type 2	APU GTCP 36-150	3,957	2
Embraer ERJ 175	CF34-8E2A1	APU 131-9	3,329	10
MD - 88	JT8D-217C	APU GTCP85-98 (200 HP)	3,302	9
Boeing 777-200	Trent 892	APU GTCP331-500 (143 HP)	3,273	9
Bombardier CRJ-200	CF34-3B	APU GTCP 36-150[RR]	3,239	4
Boeing 757-200	RB211-535E48	APU GTCP331-200ER (143 HP)	3,023	10
Cessna 208 Caravan	PT6A-114A	None	2,661	9
Boeing 777-300ER	GE90-115B	APU GTCP331-500 (143 HP)	2,184	6
Boeing 737-900	CFM56-7B26 (8CM051)	APU 131-9	2,011	6
Pilatus PC-12	PT6A-67	None	1,910	5
Airbus 300B4-600	CF6-80C2A3 1862M39	APU GTCP331-200ER (143 HP)	1,700	5
Boeing 787-8 Dreamliner	CF6-80C2B6F 1862M39	APU 131-9	1,688	4
Boeing 787-9 Dreamliner	CF6-80C2B6F 1862M39	APU 131-9	1,557	5
MD - 11	CF6-80C2D1F 1862M39	APU TSCP700-4B (142 HP)	1,544	4
Boeing 747-400	CF6-80C2B1F 1862M39	APU PW901A	1,524	4
Boeing 737-700	CFM56-7B20	APU 131-9	1,069	4
Boeing 767-200	CF6-80A	APU GTCP331-200ER (143 HP)	1,056	2
Boeing 717-200	BR700-715A1-30 Improved Fuel Injector	APU GTCP 85 (200 HP)	1,035	2
Embraer ERJ 190	CF34-10A16	APU GTCP 36-150	1,025	3
Boeing 777-200LR	GE90-110B1	APU 131-9	805	2
Boeing 747-8	GEnx-1B54	APU 131-9	761	2
Raytheon Beech 1900-C	PT6A-65B	None	675	2
Boeing DC-10-10	CF6-50A	APU TSCP700-4B (142 HP)	618	2
Raytheon Beech 99	PT6A-20	None	513	1
Fairchild SA-26-T Merlin II	PT6A-60	None	489	2

Table C-2. Dallas/Fort Worth International Airport 2017 LTOs and 2017 Summer Day LTOs: Airport Submitted by Specific Aircraft Type

Aircraft Model	Engine	APU1	LTO	Summer Daily LTO
Airbus 380-800	GP7270	APU 131-9	361	1
Cessna 560 Citation Excel	JT15D-5, -5A, -5B	None	354	1
BAE Jetstream 32	TPE331-12UA	None	345	2
Bombardier Challenger 300	AE3007A1 Type 2	None	295	
Airbus 330-300	CF6-80C2B5F	APU GTCP 331-350	277	1
Raytheon Super King Air 200	PT6A-42	None	211	1
Raytheon Hawker 800	TFE731-3	APU GTCP 36-150	178	
Cessna 680 Citation Sovereign	PW306B	None	177	
Raytheon Super King Air 300	PT6A-60A	None	174	1
Bombardier Challenger 600	ALF 502L-2	APU GTCP 36-100	173	
MD - 90	V2525-D5	APU 131-9	137	1
Dassault Falcon 2000	PW308C	APU GTCP 36-150[RR]	123	
Cessna 750 Citation X	AE3007C Type 2	None	108	
Gulfstream IV-SP	TAY 611-8C	APU GTCP 36-100	105	

¹Unable to include APU types through current emission estimation methodology.

Table C-3. Smithville Crawford Municipal Airport 2017 LTOs: Submitted by Specific Aircraft Type

Aircraft Model	LTO	Taxi in Time (min)	Taxi out Time (min)	Seasonality Summer (%)
C-150	100	3	3	70%
C-152	30	3	3	70%
C-172	3500	3	3	70%
C-177	35	3	3	70%
C-185	10	3	3	70%
C-182	50	3	3	70%
C-210	24	3	3	70%
C-310	2	3	3	70%
C-414	20	4	4	50%
C-421	4	4	4	50%
C-500	5	5	5	50%
C-550	3	5	5	50%
BE-33	15	4	4	60%
BE-36	40	4	4	60%

Table C-3. Smithville Crawford Municipal Airport 2017 LTOs: Submitted by Specific Aircraft Type

Aircraft Model	LTO	Taxi in Time (min)	Taxi out Time (min)	Seasonality Summer (%)
BE-56	16	5	5	50%
BE-200	8	5	5	50%
BE-350	6	5	5	50%
PA-11	12	3	3	70%
PA-18	12	3	3	70%
PA-22	4	3	3	70%
PA-24	26	4	4	70%
PA-28	36	4	4	70%
PA-34	3	4	4	50%
P-M500	4	4	4	50%
SR-20	5	4	4	50%
SR-22	16	4	4	50%
DA-20	12	3	3	50%
DA-40	16	4	4	50%
DA-62	24	4	4	50%
R-22	250	2	2	50%
R-44	6	2	2	50%

Table C-4. San Angelo Regional Airport 2017 LTOs: Submitted by Specific Aircraft Type

Aircraft Model	Engine	LTO
Boeing 737-400	CFM56-3	10
Boeing 737-800	CFM56-7B	4
CRJ-200	CF34-3B1	63
CRJ-700	CF34-8C1	881
Bombardier CRJ-700	CF34-8C5B1	16
ERJ140	AE 3007-A1	12
ERJ145	AE 3007-A1	886

Appendix D
Full County Controlled Emissions

Table D-1. Controlled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO _x	PM _{10-PRI}	PM _{25-PRI}	SO ₂	VOC
Anderson	3.78E+01	7.34E-01	8.00E-01	6.20E-01	1.18E-01	1.13E+00
Andrews	2.95E+01	3.57E-01	6.15E-01	4.74E-01	7.21E-02	7.82E-01
Angelina	1.78E+02	2.39E+01	5.10E+00	4.32E+00	2.53E+00	1.52E+01
Aransas	2.21E+02	1.29E+02	9.50E+00	8.96E+00	1.23E+01	6.44E+01
Archer	1.19E+01	1.55E-01	2.50E-01	1.95E-01	3.19E-02	3.40E-01
Armstrong	1.68E+00	9.11E-03	3.32E-02	2.29E-02	1.40E-03	2.11E-02
Atascosa	3.15E+01	6.35E+00	9.08E-01	7.80E-01	6.34E-01	3.60E+00
Austin	1.41E+01	1.36E-01	2.89E-01	2.14E-01	2.61E-02	3.02E-01
Bailey	1.97E+01	2.63E-01	4.15E-01	3.25E-01	5.42E-02	5.75E-01
Bandera	5.22E+00	3.30E-02	1.04E-01	7.28E-02	5.50E-03	7.54E-02
Bastrop	5.36E+01	1.72E-01	8.33E-02	6.68E-02	5.57E-02	6.90E-01
Baylor	9.07E+00	1.10E-01	1.89E-01	1.46E-01	2.22E-02	2.41E-01
Bee	2.35E+01	2.84E-01	4.91E-01	3.78E-01	5.73E-02	6.22E-01
Bell	3.29E+02	1.06E+02	9.97E+00	8.91E+00	1.11E+01	5.03E+01
Bexar	1.50E+03	6.89E+02	2.54E+01	2.22E+01	7.15E+01	1.50E+02
Blanco	4.89E+00	2.64E-02	9.63E-02	6.64E-02	4.07E-03	6.12E-02
Bosque	2.28E+01	2.55E-01	4.73E-01	3.59E-01	5.06E-02	5.60E-01
Bowie	1.30E+00	7.04E-03	2.56E-02	1.77E-02	1.08E-03	1.63E-02
Brazoria	5.77E+02	1.57E+01	1.30E+01	1.02E+01	2.31E+00	1.95E+01
Brazos	2.74E+02	9.77E+01	9.07E+00	8.23E+00	1.00E+01	4.91E+01
Brewster	3.21E+01	6.54E-01	6.79E-01	5.24E-01	1.02E-01	9.59E-01
Briscoe	6.41E-03	3.47E-05	1.26E-04	8.71E-05	5.34E-06	8.03E-05
Brooks	1.68E+01	1.98E-01	3.49E-01	2.68E-01	3.98E-02	4.35E-01
Brown	7.19E+01	2.65E+00	1.62E+00	1.28E+00	3.58E-01	2.77E+00
Burleson	9.00E+00	1.08E-01	1.88E-01	1.44E-01	2.18E-02	2.37E-01
Burnet	1.09E+02	4.59E+00	2.40E+00	1.88E+00	5.65E-01	4.34E+00
Caldwell	2.37E+02	7.39E+00	5.21E+00	4.09E+00	1.01E+00	8.45E+00
Calhoun	4.16E+01	8.77E+00	1.19E+00	1.02E+00	8.70E-01	4.93E+00
Callahan	1.84E+00	1.09E-02	3.63E-02	2.53E-02	1.77E-03	2.51E-02
Cameron	6.13E+02	3.90E+02	2.29E+01	2.16E+01	3.70E+01	1.55E+02
Camp	9.22E-01	9.78E-03	1.90E-02	1.43E-02	1.92E-03	2.16E-02
Carson	1.55E+01	1.91E-01	3.24E-01	2.50E-01	3.88E-02	4.19E-01
Cass	5.78E+01	6.92E-01	1.21E+00	9.27E-01	1.40E-01	1.52E+00
Castro	8.59E+00	9.58E-02	1.78E-01	1.35E-01	1.90E-02	2.11E-01
Chambers	5.97E+01	7.20E-01	1.25E+00	9.59E-01	1.46E-01	1.58E+00
Cherokee	6.44E+01	1.06E+00	1.36E+00	1.05E+00	1.83E-01	1.84E+00
Childress	9.49E+00	1.17E-01	1.99E-01	1.53E-01	2.37E-02	2.56E-01
Clay	1.30E+01	1.84E-01	2.76E-01	2.19E-01	3.82E-02	4.01E-01

Table D-1. Controlled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO_x	PM₁₀-PRI	PM₂₅-PRI	SO₂	VOC
Cochran	3.40E+00	4.12E-02	7.10E-02	5.47E-02	8.32E-03	9.03E-02
Coke	9.20E-01	1.11E-02	1.92E-02	1.48E-02	2.23E-03	2.43E-02
Coleman	2.13E+01	2.57E-01	4.44E-01	3.42E-01	5.20E-02	5.64E-01
Collin	4.96E+02	6.72E+00	1.07E+01	8.32E+00	1.33E+00	1.38E+01
Collingsworth	1.17E+01	4.72E-01	2.58E-01	2.03E-01	5.94E-02	4.64E-01
Colorado	3.97E+01	4.78E-01	8.28E-01	6.37E-01	9.66E-02	1.05E+00
Comal	1.11E+02	1.32E+00	2.32E+00	1.78E+00	2.66E-01	2.90E+00
Comanche	2.79E+01	3.35E-01	5.82E-01	4.48E-01	6.76E-02	7.35E-01
Cooke	8.81E+01	1.58E+00	1.85E+00	1.42E+00	2.57E-01	2.51E+00
Coryell	4.43E+01	2.18E+00	9.87E-01	7.80E-01	2.60E-01	1.93E+00
Cottle	3.37E+00	4.05E-02	7.04E-02	5.41E-02	8.19E-03	8.89E-02
Crane	3.83E+00	4.61E-02	8.00E-02	6.15E-02	9.30E-03	1.01E-01
Crockett	2.37E+01	6.96E-01	5.11E-01	3.98E-01	9.55E-02	8.13E-01
Crosby	1.69E+01	2.41E-01	3.59E-01	2.85E-01	5.02E-02	5.25E-01
Culberson	3.11E+00	1.13E+00	1.07E-01	9.55E-02	1.09E-01	5.82E-01
Dallam	8.15E+00	1.01E-01	1.71E-01	1.32E-01	2.05E-02	2.21E-01
Dallas	2.20E+03	7.42E+02	3.71E+01	3.16E+01	8.00E+01	1.65E+02
Dawson	4.12E+01	5.01E-01	8.61E-01	6.63E-01	1.01E-01	1.10E+00
Deaf Smith	3.93E+01	6.91E-01	8.30E-01	6.40E-01	1.15E-01	1.13E+00
Delta	6.41E-03	3.47E-05	1.26E-04	8.71E-05	5.34E-06	8.03E-05
Denton	9.97E+02	1.01E+01	2.05E+01	1.50E+01	1.77E+00	2.00E+01
DeWitt	1.33E+00	1.50E-02	2.77E-02	2.10E-02	3.00E-03	3.31E-02
Dickens	1.10E+00	5.95E-03	2.17E-02	1.50E-02	9.16E-04	1.38E-02
Dimmit	8.55E+00	9.93E-02	1.78E-01	1.36E-01	1.99E-02	2.18E-01
Donley	5.32E+00	6.42E-02	1.11E-01	8.54E-02	1.30E-02	1.41E-01
Duval	6.97E+00	6.61E-02	1.42E-01	1.05E-01	1.26E-02	1.47E-01
Eastland	3.12E+01	3.75E-01	6.50E-01	5.00E-01	7.57E-02	8.23E-01
Ector	1.46E+02	1.77E+00	3.05E+00	2.35E+00	3.57E-01	3.87E+00
Edwards	3.63E+00	3.18E-02	7.37E-02	5.39E-02	5.96E-03	7.09E-02
Ellis	1.38E+02	2.87E+00	2.94E+00	2.27E+00	4.47E-01	4.20E+00
El Paso	6.82E+02	3.23E+02	1.57E+01	1.43E+01	3.33E+01	9.91E+01
Erath	6.77E+01	1.02E+00	1.42E+00	1.09E+00	1.82E-01	1.86E+00
Falls	1.43E+00	1.38E-02	2.92E-02	2.17E-02	2.65E-03	3.06E-02
Fannin	4.40E+01	4.96E-01	9.11E-01	6.93E-01	9.88E-02	1.09E+00
Fayette	3.57E+01	4.04E-01	7.40E-01	5.63E-01	8.05E-02	8.88E-01
Fisher	1.11E+01	1.33E-01	2.31E-01	1.77E-01	2.68E-02	2.91E-01
Floyd	1.92E+01	2.23E-01	3.99E-01	3.05E-01	4.48E-02	4.90E-01
Foard	1.36E+00	1.75E-02	2.85E-02	2.22E-02	3.57E-03	3.82E-02

Table D-1. Controlled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO _x	PM ₁₀ -PRI	PM ₂₅ -PRI	SO ₂	VOC
Fort Bend	3.71E+02	1.51E+01	8.77E+00	7.01E+00	1.98E+00	1.52E+01
Franklin	2.10E+01	2.60E-01	4.39E-01	3.39E-01	5.27E-02	5.69E-01
Freestone	4.40E+00	5.29E-02	9.19E-02	7.06E-02	1.07E-02	1.16E-01
Frio	1.51E+01	1.78E-01	3.14E-01	2.41E-01	3.57E-02	3.90E-01
Gaines	5.18E+01	6.38E-01	1.10E+00	8.45E-01	1.29E-01	1.38E+00
Galveston	1.08E+02	1.02E+01	3.43E+00	2.93E+00	1.22E+00	7.80E+00
Garza	2.94E+00	2.83E-02	6.01E-02	4.46E-02	5.44E-03	6.28E-02
Gillespie	5.12E+01	1.57E+00	1.12E+00	8.71E-01	2.12E-01	1.76E+00
Glasscock	8.46E-01	4.58E-03	1.67E-02	1.15E-02	7.04E-04	1.06E-02
Gonzales	6.70E+00	7.88E-02	1.40E-01	1.07E-01	1.58E-02	1.73E-01
Gray	6.39E+01	7.73E-01	1.33E+00	1.03E+00	1.56E-01	1.70E+00
Grayson	2.91E+02	4.62E+00	6.13E+00	4.72E+00	8.05E-01	8.12E+00
Gregg	2.11E+02	3.70E+01	6.48E+00	5.59E+00	3.86E+00	2.14E+01
Grimes	1.45E+01	1.74E-01	3.02E-01	2.32E-01	3.52E-02	3.82E-01
Guadalupe	2.07E+02	3.54E+01	5.69E+00	4.82E+00	3.57E+00	2.07E+01
Hale	2.30E+01	1.01E+00	5.06E-01	3.93E-01	1.20E-01	9.07E-01
Hall	3.40E+00	4.12E-02	7.10E-02	5.47E-02	8.32E-03	9.03E-02
Hamilton	2.14E+01	2.59E-01	4.54E-01	3.49E-01	5.20E-02	5.55E-01
Hansford	8.84E+01	1.07E+00	1.85E+00	1.42E+00	2.16E-01	2.35E+00
Hardeman	1.25E+01	1.51E-01	2.60E-01	2.01E-01	3.05E-02	3.31E-01
Hardin	1.22E+01	1.50E-01	2.55E-01	1.97E-01	3.05E-02	3.30E-01
Harris	4.55E+03	2.99E+03	7.98E+01	7.15E+01	2.70E+02	4.89E+02
Harrison	4.95E+01	6.22E-01	1.04E+00	8.04E-01	1.27E-01	1.36E+00
Hartley	3.27E+01	1.22E+00	7.15E-01	5.61E-01	1.57E-01	1.25E+00
Haskell	6.80E+00	8.23E-02	1.42E-01	1.09E-01	1.66E-02	1.81E-01
Hays	5.18E+00	3.28E-02	1.03E-01	7.22E-02	5.47E-03	7.49E-02
Hemphill	1.93E+01	2.26E-01	4.01E-01	3.07E-01	4.53E-02	4.96E-01
Henderson	3.87E+01	1.01E+00	8.29E-01	6.43E-01	1.43E-01	1.25E+00
Hidalgo	4.14E+02	1.14E+02	9.74E+00	8.34E+00	1.23E+01	3.92E+01
Hill	3.81E+01	4.35E-01	7.91E-01	6.03E-01	8.70E-02	9.57E-01
Hockley	4.02E+01	4.92E-01	8.43E-01	6.50E-01	9.95E-02	1.08E+00
Hood	1.03E+02	1.20E+00	2.15E+00	1.64E+00	2.40E-01	2.63E+00
Hopkins	9.74E+01	1.41E+00	2.05E+00	1.58E+00	2.60E-01	2.69E+00
Houston	2.75E+01	3.25E-01	5.73E-01	4.40E-01	6.55E-02	7.14E-01
Howard	7.10E+01	7.03E+00	1.72E+00	1.41E+00	7.47E-01	4.74E+00
Hudspeth	8.73E+00	1.07E-01	1.83E-01	1.41E-01	2.18E-02	2.36E-01
Hunt	1.28E+02	1.32E+01	3.13E+00	2.55E+00	1.39E+00	8.74E+00
Hutchinson	2.84E+01	3.99E-01	5.95E-01	4.59E-01	7.46E-02	7.79E-01

Table D-1. Controlled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO _x	PM ₁₀ -PRI	PM ₂₅ -PRI	SO ₂	VOC
Irion	5.53E-01	2.99E-03	1.09E-02	7.52E-03	4.60E-04	6.93E-03
Jack	8.90E+00	9.56E-02	1.84E-01	1.39E-01	1.88E-02	2.11E-01
Jackson	5.63E+01	1.45E+00	1.22E+00	9.73E-01	2.25E-01	2.02E+00
Jasper	5.71E+01	6.90E-01	1.19E+00	9.17E-01	1.39E-01	1.51E+00
Jeff Davis	6.41E-03	3.47E-05	1.26E-04	8.71E-05	5.34E-06	8.03E-05
Jefferson	1.29E+02	1.63E+01	3.18E+00	2.65E+00	1.89E+00	9.48E+00
Jim Hogg	1.89E+00	1.92E-02	3.89E-02	2.90E-02	3.73E-03	4.24E-02
Jim Wells	1.49E+02	1.12E+02	7.36E+00	7.10E+00	1.06E+01	5.48E+01
Johnson	1.11E+02	1.42E+00	2.34E+00	1.79E+00	2.68E-01	2.85E+00
Jones	2.93E+01	3.48E-01	6.11E-01	4.68E-01	7.01E-02	7.64E-01
Karnes	3.02E+01	1.92E+01	1.35E+00	1.28E+00	1.82E+00	9.44E+00
Kaufman	1.10E+02	1.34E+00	2.30E+00	1.77E+00	2.72E-01	2.94E+00
Kendall	2.16E+00	1.17E-02	4.25E-02	2.93E-02	1.80E-03	2.70E-02
Kenedy	5.46E-01	2.96E-03	1.08E-02	7.43E-03	4.55E-04	6.84E-03
Kent	1.84E+01	2.21E-01	3.84E-01	2.95E-01	4.47E-02	4.85E-01
Kerr	1.79E+02	2.15E+00	3.72E+00	2.86E+00	4.34E-01	4.69E+00
Kimble	2.22E+01	8.19E-01	4.85E-01	3.80E-01	1.05E-01	8.43E-01
King	1.10E+00	5.95E-03	2.17E-02	1.49E-02	9.15E-04	1.38E-02
Kinney	3.54E+00	1.91E-02	6.97E-02	4.81E-02	2.94E-03	4.43E-02
Kleberg	2.39E+01	1.85E+00	5.69E-01	4.61E-01	2.05E-01	1.37E+00
Knox	1.59E+01	1.86E-01	3.31E-01	2.53E-01	3.75E-02	4.10E-01
Lamar	5.36E+01	1.01E+00	1.16E+00	9.14E-01	1.76E-01	1.70E+00
Lamb	2.61E+01	4.65E-01	5.53E-01	4.30E-01	7.95E-02	7.81E-01
Lampasas	3.32E+01	3.86E-01	6.91E-01	5.28E-01	7.74E-02	8.48E-01
La Salle	4.27E+01	1.30E+01	1.29E+00	1.12E+00	1.26E+00	7.08E+00
Lavaca	8.99E+00	1.07E-01	1.87E-01	1.44E-01	2.15E-02	2.35E-01
Lee	4.05E+01	1.58E+00	8.86E-01	6.93E-01	1.98E-01	1.55E+00
Leon	4.24E+00	2.77E-02	8.44E-02	5.95E-02	4.69E-03	6.32E-02
Liberty	6.43E+01	3.22E+00	1.43E+00	1.13E+00	3.80E-01	2.79E+00
Limestone	1.31E+01	1.54E-01	2.72E-01	2.09E-01	3.10E-02	3.38E-01
Lipscomb	2.55E+00	1.87E-02	5.11E-02	3.64E-02	3.29E-03	4.21E-02
Live Oak	7.84E+00	8.70E-02	1.62E-01	1.23E-01	1.73E-02	1.91E-01
Llano	7.69E+01	7.56E+00	1.89E+00	1.55E+00	8.06E-01	5.10E+00
Lubbock	4.39E+02	1.27E+02	1.09E+01	9.57E+00	1.33E+01	4.85E+01
Lynn	8.58E+00	9.96E-02	1.78E-01	1.36E-01	2.00E-02	2.19E-01
McCulloch	3.66E+01	9.89E-01	5.86E-02	5.50E-02	1.96E-01	2.26E+00
McLennan	6.49E+02	1.43E+02	1.87E+01	1.62E+01	1.45E+01	7.82E+01
McMullen	5.53E-01	2.99E-03	1.09E-02	7.52E-03	4.60E-04	6.93E-03

Table D-1. Controlled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO _x	PM ₁₀ -PRI	PM ₂₅ -PRI	SO ₂	VOC
Madison	2.41E+00	2.52E-02	4.96E-02	3.72E-02	4.94E-03	5.56E-02
Marion	5.79E+00	7.03E-02	1.21E-01	9.32E-02	1.42E-02	1.54E-01
Martin	5.10E+00	5.80E-02	1.06E-01	8.07E-02	1.16E-02	1.28E-01
Mason	5.91E+00	6.84E-02	1.23E-01	9.39E-02	1.37E-02	1.50E-01
Matagorda	6.52E+01	9.11E+00	1.68E+00	1.41E+00	9.34E-01	5.59E+00
Maverick	3.47E+00	4.47E-02	7.29E-02	5.68E-02	9.13E-03	9.77E-02
Medina	3.21E+02	3.97E+00	6.70E+00	5.16E+00	7.92E-01	8.53E+00
Menard	2.86E+00	2.76E-02	5.85E-02	4.34E-02	5.31E-03	6.13E-02
Midland	4.31E+02	1.29E+02	1.16E+01	1.03E+01	1.42E+01	5.53E+01
Milam	1.93E+01	2.21E-01	4.01E-01	3.06E-01	4.43E-02	4.87E-01
Mills	2.21E+00	1.20E-02	4.35E-02	3.00E-02	1.84E-03	2.77E-02
Mitchell	1.32E+01	1.65E-01	2.76E-01	2.14E-01	3.35E-02	3.60E-01
Montague	4.04E+01	7.66E-01	8.60E-01	6.65E-01	1.25E-01	1.20E+00
Montgomery	2.20E+02	2.43E+01	5.65E+00	4.67E+00	2.58E+00	1.60E+01
Moore	5.56E+01	8.36E-01	1.17E+00	9.01E-01	1.51E-01	1.55E+00
Morris	4.38E-01	8.18E-03	9.66E-03	8.11E-03	1.77E-03	1.77E-02
Motley	6.05E-01	7.32E-03	1.26E-02	9.72E-03	1.48E-03	1.61E-02
Nacogdoches	8.77E+01	2.71E+00	1.90E+00	1.48E+00	3.67E-01	3.09E+00
Navarro	7.58E+01	8.88E-01	1.58E+00	1.21E+00	1.78E-01	1.95E+00
Newton	1.76E+00	2.17E-02	3.68E-02	2.84E-02	4.40E-03	4.75E-02
Nolan	2.95E+01	3.59E-01	6.17E-01	4.75E-01	7.26E-02	7.87E-01
Nueces	5.82E+02	3.81E+02	2.58E+01	2.47E+01	3.72E+01	1.82E+02
Ochiltree	5.44E+01	6.59E-01	1.14E+00	8.75E-01	1.33E-01	1.44E+00
Oldham	1.25E+01	1.51E-01	2.60E-01	2.01E-01	3.05E-02	3.31E-01
Orange	3.48E+01	5.24E-01	8.12E-01	6.41E-01	1.06E-01	1.03E+00
Palo Pinto	1.47E+01	1.73E-01	3.07E-01	2.35E-01	3.48E-02	3.80E-01
Panola	3.25E+01	1.77E+00	7.33E-01	5.83E-01	2.08E-01	1.51E+00
Parker	1.93E+02	3.64E+00	4.07E+00	3.13E+00	5.84E-01	5.61E+00
Parmer	2.26E+01	2.67E-01	4.70E-01	3.61E-01	5.37E-02	5.86E-01
Pecos	3.09E+01	1.21E+00	6.86E-01	5.40E-01	1.54E-01	1.21E+00
Polk	2.66E+01	3.19E-01	5.56E-01	4.27E-01	6.43E-02	6.99E-01
Potter	5.52E+02	3.38E+02	2.24E+01	2.12E+01	3.26E+01	1.48E+02
Presidio	4.89E+01	5.91E-01	1.02E+00	7.84E-01	1.19E-01	1.29E+00
Rains	9.64E-01	1.00E-02	1.98E-02	1.49E-02	1.96E-03	2.21E-02
Randall	1.28E+02	1.52E+00	2.67E+00	2.05E+00	3.05E-01	3.33E+00
Reagan	6.76E+00	8.11E-02	1.41E-01	1.08E-01	1.64E-02	1.78E-01
Real	4.31E+00	4.81E-02	8.93E-02	6.78E-02	9.58E-03	1.06E-01
Red River	4.53E+00	5.39E-02	9.44E-02	7.25E-02	1.09E-02	1.18E-01

Table D-1. Controlled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO _x	PM ₁₀ -PRI	PM ₂₅ -PRI	SO ₂	VOC
Reeves	9.00E+01	3.67E+01	3.44E+00	3.14E+00	3.56E+00	1.90E+01
Refugio	1.21E+01	1.44E-01	2.52E-01	1.94E-01	2.91E-02	3.17E-01
Roberts	2.09E+00	2.14E-02	4.29E-02	3.21E-02	4.18E-03	4.74E-02
Robertson	1.12E+01	1.21E-01	2.31E-01	1.75E-01	2.40E-02	2.67E-01
Rockwall	1.57E+02	2.01E+00	3.28E+00	2.52E+00	3.95E-01	4.22E+00
Runnels	9.91E+00	1.19E-01	2.10E-01	1.61E-01	2.39E-02	2.57E-01
Rusk	3.66E+01	2.64E+00	8.49E-01	6.83E-01	2.94E-01	1.99E+00
Sabine	3.80E+00	4.96E-02	7.99E-02	6.24E-02	1.02E-02	1.09E-01
San Augustine	2.43E+00	2.93E-02	5.07E-02	3.90E-02	5.93E-03	6.43E-02
San Jacinto	6.44E-01	3.49E-03	1.27E-02	8.76E-03	5.36E-04	8.07E-03
San Patricio	6.70E+01	8.13E-01	1.40E+00	1.08E+00	1.65E-01	1.78E+00
San Saba	6.00E+00	6.89E-02	1.25E-01	9.50E-02	1.38E-02	1.51E-01
Schleicher	3.36E+00	3.64E-02	6.94E-02	5.24E-02	7.19E-03	8.02E-02
Scurry	3.17E+01	3.84E-01	6.63E-01	5.10E-01	7.77E-02	8.42E-01
Shackelford	1.21E+01	1.46E-01	2.53E-01	1.94E-01	2.96E-02	3.21E-01
Shelby	6.93E+01	1.00E+00	1.45E+00	1.12E+00	1.85E-01	1.92E+00
Sherman	7.98E-01	9.58E-03	1.66E-02	1.28E-02	1.93E-03	2.10E-02
Smith	1.23E+02	1.01E+01	3.07E+00	2.55E+00	1.49E+00	6.55E+00
Somervell	2.29E+00	1.72E-02	4.60E-02	3.30E-02	3.07E-03	3.88E-02
Starr	1.55E+00	1.45E-02	3.17E-02	2.34E-02	2.76E-03	3.22E-02
Stephens	4.42E+01	5.27E-01	9.21E-01	7.07E-01	1.06E-01	1.16E+00
Sterling	7.06E-01	4.02E-03	1.39E-02	9.67E-03	6.36E-04	9.26E-03
Stonewall	3.16E+00	4.49E-02	6.71E-02	5.33E-02	9.35E-03	9.79E-02
Sutton	5.14E+00	6.09E-02	1.07E-01	8.21E-02	1.23E-02	1.34E-01
Swisher	2.10E+01	2.45E-01	4.37E-01	3.34E-01	4.92E-02	5.39E-01
Tarrant	8.93E+03	5.22E+03	9.39E+01	8.61E+01	5.74E+02	8.88E+02
Taylor	2.57E+02	1.15E+02	9.71E+00	8.99E+00	1.15E+01	5.70E+01
Terrell	1.47E+00	1.40E-02	3.01E-02	2.23E-02	2.69E-03	3.12E-02
Terry	8.56E+00	1.06E-01	1.79E-01	1.39E-01	2.16E-02	2.33E-01
Throckmorton	1.99E-01	2.40E-03	4.16E-03	3.20E-03	4.84E-04	5.26E-03
Titus	4.79E+01	5.78E-01	1.00E+00	7.69E-01	1.17E-01	1.27E+00
Tom Green	2.19E+01	7.42E+00	2.26E-01	1.82E-01	9.26E-01	1.40E+00
Travis	1.72E+03	7.33E+02	1.39E+01	1.31E+01	8.44E+01	2.13E+02
Trinity	5.06E+00	5.65E-02	1.05E-01	7.95E-02	1.12E-02	1.24E-01
Tyler	5.46E+00	6.47E-02	1.14E-01	8.73E-02	1.30E-02	1.42E-01
Upshur	5.54E+01	6.79E-01	1.16E+00	8.93E-01	1.38E-01	1.49E+00
Upton	2.45E+00	2.95E-02	5.12E-02	3.94E-02	5.95E-03	6.47E-02
Uvalde	3.78E+01	2.14E+00	8.80E-01	7.04E-01	2.52E-01	1.80E+00

Table D-1. Controlled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO_x	PM₁₀-PRI	PM₂₅-PRI	SO₂	VOC
Val Verde	4.58E+01	2.61E+00	1.13E+00	9.16E-01	3.81E-01	2.22E+00
Van Zandt	1.19E+01	1.22E-01	2.44E-01	1.83E-01	2.39E-02	2.71E-01
Victoria	3.54E+02	2.64E+02	1.75E+01	1.69E+01	2.51E+01	1.30E+02
Walker	9.98E+01	2.42E+01	3.00E+00	2.61E+00	2.38E+00	1.33E+01
Waller	6.18E+01	7.10E-01	1.28E+00	9.79E-01	1.42E-01	1.56E+00
Ward	3.74E+01	4.53E-01	7.81E-01	6.01E-01	9.15E-02	9.93E-01
Washington	3.63E+01	5.44E-01	7.60E-01	5.83E-01	9.63E-02	9.88E-01
Webb	4.81E+02	2.75E+02	1.75E+01	1.65E+01	2.74E+01	1.22E+02
Wharton	4.21E+01	1.05E+00	8.99E-01	6.96E-01	1.51E-01	1.35E+00
Wheeler	3.71E+00	4.46E-02	7.75E-02	5.96E-02	9.00E-03	9.78E-02
Wichita	8.24E+02	5.54E+02	3.78E+01	3.62E+01	5.27E+01	2.72E+02
Wilbarger	4.86E+01	1.13E+00	1.04E+00	8.03E-01	1.69E-01	1.53E+00
Willacy	4.47E+00	4.65E-02	9.20E-02	6.91E-02	9.10E-03	1.03E-01
Williamson	4.13E+02	7.59E+00	8.81E+00	6.82E+00	1.25E+00	1.21E+01
Wilson	3.34E+00	1.81E-02	6.59E-02	4.54E-02	2.78E-03	4.19E-02
Winkler	4.34E+00	6.06E-01	1.12E-01	9.43E-02	6.24E-02	3.76E-01
Wise	1.39E+02	1.60E+00	2.88E+00	2.20E+00	3.21E-01	3.52E+00
Wood	6.83E+01	8.23E-01	1.43E+00	1.10E+00	1.66E-01	1.81E+00
Yoakum	2.87E+01	3.48E-01	5.99E-01	4.61E-01	7.03E-02	7.62E-01
Young	4.67E+01	6.21E-01	9.78E-01	7.53E-01	1.19E-01	1.27E+00
Zapata	9.75E+00	1.14E-01	2.03E-01	1.55E-01	2.28E-02	2.49E-01
Zavala	3.40E+00	2.45E-02	6.82E-02	4.85E-02	4.30E-03	5.54E-02

Appendix E
Full County Uncontrolled Emissions

Table E-1. Uncontrolled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO_x	PM_{10-PRI}	PM_{25-PRI}	SO₂	VOC
Anderson	3.78E+01	7.34E-01	8.00E-01	6.20E-01	1.18E-01	1.13E+00
Andrews	2.95E+01	3.57E-01	6.15E-01	4.74E-01	7.21E-02	7.82E-01
Angelina	1.78E+02	2.39E+01	5.10E+00	4.32E+00	2.53E+00	1.52E+01
Aransas	2.21E+02	1.29E+02	9.50E+00	8.96E+00	1.23E+01	6.44E+01
Archer	1.19E+01	1.55E-01	2.50E-01	1.95E-01	3.19E-02	3.40E-01
Armstrong	1.68E+00	9.11E-03	3.32E-02	2.29E-02	1.40E-03	2.11E-02
Atascosa	3.15E+01	6.35E+00	9.08E-01	7.80E-01	6.34E-01	3.60E+00
Austin	1.41E+01	1.36E-01	2.89E-01	2.14E-01	2.61E-02	3.02E-01
Bailey	1.97E+01	2.63E-01	4.15E-01	3.25E-01	5.42E-02	5.75E-01
Bandera	5.22E+00	3.30E-02	1.04E-01	7.28E-02	5.50E-03	7.54E-02
Bastrop	5.36E+01	1.72E-01	8.33E-02	6.68E-02	5.57E-02	6.90E-01
Baylor	9.07E+00	1.10E-01	1.89E-01	1.46E-01	2.22E-02	2.41E-01
Bee	2.35E+01	2.84E-01	4.91E-01	3.78E-01	5.73E-02	6.22E-01
Bell	3.29E+02	1.06E+02	9.97E+00	8.91E+00	1.11E+01	5.03E+01
Bexar	1.51E+03	7.03E+02	2.71E+01	2.40E+01	7.36E+01	1.51E+02
Blanco	4.89E+00	2.64E-02	9.63E-02	6.64E-02	4.07E-03	6.12E-02
Bosque	2.28E+01	2.55E-01	4.73E-01	3.59E-01	5.06E-02	5.60E-01
Bowie	1.30E+00	7.04E-03	2.56E-02	1.77E-02	1.08E-03	1.63E-02
Brazoria	5.77E+02	1.57E+01	1.30E+01	1.02E+01	2.31E+00	1.95E+01
Brazos	2.74E+02	9.77E+01	9.07E+00	8.23E+00	1.00E+01	4.91E+01
Brewster	3.21E+01	6.54E-01	6.79E-01	5.24E-01	1.02E-01	9.59E-01
Briscoe	6.41E-03	3.47E-05	1.26E-04	8.71E-05	5.34E-06	8.03E-05
Brooks	1.68E+01	1.98E-01	3.49E-01	2.68E-01	3.98E-02	4.35E-01
Brown	7.19E+01	2.65E+00	1.62E+00	1.28E+00	3.58E-01	2.77E+00
Burleson	9.00E+00	1.08E-01	1.88E-01	1.44E-01	2.18E-02	2.37E-01
Burnet	1.09E+02	4.59E+00	2.40E+00	1.88E+00	5.65E-01	4.34E+00
Caldwell	2.37E+02	7.39E+00	5.21E+00	4.09E+00	1.01E+00	8.45E+00
Calhoun	4.16E+01	8.77E+00	1.19E+00	1.02E+00	8.70E-01	4.93E+00
Callahan	1.84E+00	1.09E-02	3.63E-02	2.53E-02	1.77E-03	2.51E-02
Cameron	6.20E+02	3.93E+02	2.33E+01	2.20E+01	3.74E+01	1.56E+02
Camp	9.22E-01	9.78E-03	1.90E-02	1.43E-02	1.92E-03	2.16E-02
Carson	1.55E+01	1.91E-01	3.24E-01	2.50E-01	3.88E-02	4.19E-01
Cass	5.78E+01	6.92E-01	1.21E+00	9.27E-01	1.40E-01	1.52E+00
Castro	8.59E+00	9.58E-02	1.78E-01	1.35E-01	1.90E-02	2.11E-01
Chambers	5.97E+01	7.20E-01	1.25E+00	9.59E-01	1.46E-01	1.58E+00
Cherokee	6.44E+01	1.06E+00	1.36E+00	1.05E+00	1.83E-01	1.84E+00
Childress	9.49E+00	1.17E-01	1.99E-01	1.53E-01	2.37E-02	2.56E-01
Clay	1.30E+01	1.84E-01	2.76E-01	2.19E-01	3.82E-02	4.01E-01

Table E-1. Uncontrolled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO _x	PM _{10-PRI}	PM _{25-PRI}	SO ₂	VOC
Cochran	3.40E+00	4.12E-02	7.10E-02	5.47E-02	8.32E-03	9.03E-02
Coke	9.20E-01	1.11E-02	1.92E-02	1.48E-02	2.23E-03	2.43E-02
Coleman	2.13E+01	2.57E-01	4.44E-01	3.42E-01	5.20E-02	5.64E-01
Collin	4.96E+02	6.72E+00	1.07E+01	8.32E+00	1.33E+00	1.38E+01
Collingsworth	1.17E+01	4.72E-01	2.58E-01	2.03E-01	5.94E-02	4.64E-01
Colorado	3.97E+01	4.78E-01	8.28E-01	6.37E-01	9.66E-02	1.05E+00
Comal	1.11E+02	1.32E+00	2.32E+00	1.78E+00	2.66E-01	2.90E+00
Comanche	2.79E+01	3.35E-01	5.82E-01	4.48E-01	6.76E-02	7.35E-01
Cooke	8.81E+01	1.58E+00	1.85E+00	1.42E+00	2.57E-01	2.51E+00
Coryell	4.43E+01	2.18E+00	9.87E-01	7.80E-01	2.60E-01	1.93E+00
Cottle	3.37E+00	4.05E-02	7.04E-02	5.41E-02	8.19E-03	8.89E-02
Crane	3.83E+00	4.61E-02	8.00E-02	6.15E-02	9.30E-03	1.01E-01
Crockett	2.37E+01	6.96E-01	5.11E-01	3.98E-01	9.55E-02	8.13E-01
Crosby	1.69E+01	2.41E-01	3.59E-01	2.85E-01	5.02E-02	5.25E-01
Culberson	3.11E+00	1.13E+00	1.07E-01	9.55E-02	1.09E-01	5.82E-01
Dallam	8.15E+00	1.01E-01	1.71E-01	1.32E-01	2.05E-02	2.21E-01
Dallas	2.20E+03	7.42E+02	3.71E+01	3.16E+01	8.00E+01	1.65E+02
Dawson	4.12E+01	5.01E-01	8.61E-01	6.63E-01	1.01E-01	1.10E+00
Deaf Smith	3.93E+01	6.91E-01	8.30E-01	6.40E-01	1.15E-01	1.13E+00
Delta	6.41E-03	3.47E-05	1.26E-04	8.71E-05	5.34E-06	8.03E-05
Denton	9.97E+02	1.01E+01	2.05E+01	1.50E+01	1.77E+00	2.00E+01
DeWitt	1.33E+00	1.50E-02	2.77E-02	2.10E-02	3.00E-03	3.31E-02
Dickens	1.10E+00	5.95E-03	2.17E-02	1.50E-02	9.16E-04	1.38E-02
Dimmit	8.55E+00	9.93E-02	1.78E-01	1.36E-01	1.99E-02	2.18E-01
Donley	5.32E+00	6.42E-02	1.11E-01	8.54E-02	1.30E-02	1.41E-01
Duval	6.97E+00	6.61E-02	1.42E-01	1.05E-01	1.26E-02	1.47E-01
Eastland	3.12E+01	3.75E-01	6.50E-01	5.00E-01	7.57E-02	8.23E-01
Ector	1.46E+02	1.77E+00	3.05E+00	2.35E+00	3.57E-01	3.87E+00
Edwards	3.63E+00	3.18E-02	7.37E-02	5.39E-02	5.96E-03	7.09E-02
Ellis	1.38E+02	2.87E+00	2.94E+00	2.27E+00	4.47E-01	4.20E+00
El Paso	6.91E+02	3.28E+02	1.66E+01	1.52E+01	3.42E+01	9.98E+01
Erath	6.77E+01	1.02E+00	1.42E+00	1.09E+00	1.82E-01	1.86E+00
Falls	1.43E+00	1.38E-02	2.92E-02	2.17E-02	2.65E-03	3.06E-02
Fannin	4.40E+01	4.96E-01	9.11E-01	6.93E-01	9.88E-02	1.09E+00
Fayette	3.57E+01	4.04E-01	7.40E-01	5.63E-01	8.05E-02	8.88E-01
Fisher	1.11E+01	1.33E-01	2.31E-01	1.77E-01	2.68E-02	2.91E-01
Floyd	1.92E+01	2.23E-01	3.99E-01	3.05E-01	4.48E-02	4.90E-01
Foard	1.36E+00	1.75E-02	2.85E-02	2.22E-02	3.57E-03	3.82E-02

Table E-1. Uncontrolled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO _x	PM _{10-PRI}	PM _{25-PRI}	SO ₂	VOC
Fort Bend	3.71E+02	1.51E+01	8.77E+00	7.01E+00	1.98E+00	1.52E+01
Franklin	2.10E+01	2.60E-01	4.39E-01	3.39E-01	5.27E-02	5.69E-01
Freestone	4.40E+00	5.29E-02	9.19E-02	7.06E-02	1.07E-02	1.16E-01
Frio	1.51E+01	1.78E-01	3.14E-01	2.41E-01	3.57E-02	3.90E-01
Gaines	5.18E+01	6.38E-01	1.10E+00	8.45E-01	1.29E-01	1.38E+00
Galveston	1.08E+02	1.02E+01	3.43E+00	2.93E+00	1.22E+00	7.80E+00
Garza	2.94E+00	2.83E-02	6.01E-02	4.46E-02	5.44E-03	6.28E-02
Gillespie	5.12E+01	1.57E+00	1.12E+00	8.71E-01	2.12E-01	1.76E+00
Glasscock	8.46E-01	4.58E-03	1.67E-02	1.15E-02	7.04E-04	1.06E-02
Gonzales	6.70E+00	7.88E-02	1.40E-01	1.07E-01	1.58E-02	1.73E-01
Gray	6.39E+01	7.73E-01	1.33E+00	1.03E+00	1.56E-01	1.70E+00
Grayson	2.91E+02	4.62E+00	6.13E+00	4.72E+00	8.05E-01	8.12E+00
Gregg	2.11E+02	3.70E+01	6.48E+00	5.59E+00	3.86E+00	2.14E+01
Grimes	1.45E+01	1.74E-01	3.02E-01	2.32E-01	3.52E-02	3.82E-01
Guadalupe	2.07E+02	3.54E+01	5.69E+00	4.82E+00	3.57E+00	2.07E+01
Hale	2.30E+01	1.01E+00	5.06E-01	3.93E-01	1.20E-01	9.07E-01
Hall	3.40E+00	4.12E-02	7.10E-02	5.47E-02	8.32E-03	9.03E-02
Hamilton	2.14E+01	2.59E-01	4.54E-01	3.49E-01	5.20E-02	5.55E-01
Hansford	8.84E+01	1.07E+00	1.85E+00	1.42E+00	2.16E-01	2.35E+00
Hardeman	1.25E+01	1.51E-01	2.60E-01	2.01E-01	3.05E-02	3.31E-01
Hardin	1.22E+01	1.50E-01	2.55E-01	1.97E-01	3.05E-02	3.30E-01
Harris	4.63E+03	3.07E+03	9.01E+01	8.18E+01	2.81E+02	4.95E+02
Harrison	4.95E+01	6.22E-01	1.04E+00	8.04E-01	1.27E-01	1.36E+00
Hartley	3.27E+01	1.22E+00	7.15E-01	5.61E-01	1.57E-01	1.25E+00
Haskell	6.80E+00	8.23E-02	1.42E-01	1.09E-01	1.66E-02	1.81E-01
Hays	5.18E+00	3.28E-02	1.03E-01	7.22E-02	5.47E-03	7.49E-02
Hemphill	1.93E+01	2.26E-01	4.01E-01	3.07E-01	4.53E-02	4.96E-01
Henderson	3.87E+01	1.01E+00	8.29E-01	6.43E-01	1.43E-01	1.25E+00
Hidalgo	4.14E+02	1.14E+02	9.74E+00	8.34E+00	1.23E+01	3.92E+01
Hill	3.81E+01	4.35E-01	7.91E-01	6.03E-01	8.70E-02	9.57E-01
Hockley	4.02E+01	4.92E-01	8.43E-01	6.50E-01	9.95E-02	1.08E+00
Hood	1.03E+02	1.20E+00	2.15E+00	1.64E+00	2.40E-01	2.63E+00
Hopkins	9.74E+01	1.41E+00	2.05E+00	1.58E+00	2.60E-01	2.69E+00
Houston	2.75E+01	3.25E-01	5.73E-01	4.40E-01	6.55E-02	7.14E-01
Howard	7.10E+01	7.03E+00	1.72E+00	1.41E+00	7.47E-01	4.74E+00
Hudspeth	8.73E+00	1.07E-01	1.83E-01	1.41E-01	2.18E-02	2.36E-01
Hunt	1.28E+02	1.32E+01	3.13E+00	2.55E+00	1.39E+00	8.74E+00
Hutchinson	2.84E+01	3.99E-01	5.95E-01	4.59E-01	7.46E-02	7.79E-01

Table E-1. Uncontrolled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO_x	PM_{10-PRI}	PM_{25-PRI}	SO₂	VOC
Irion	5.53E-01	2.99E-03	1.09E-02	7.52E-03	4.60E-04	6.93E-03
Jack	8.90E+00	9.56E-02	1.84E-01	1.39E-01	1.88E-02	2.11E-01
Jackson	5.63E+01	1.45E+00	1.22E+00	9.73E-01	2.25E-01	2.02E+00
Jasper	5.71E+01	6.90E-01	1.19E+00	9.17E-01	1.39E-01	1.51E+00
Jeff Davis	6.41E-03	3.47E-05	1.26E-04	8.71E-05	5.34E-06	8.03E-05
Jefferson	1.29E+02	1.63E+01	3.18E+00	2.65E+00	1.89E+00	9.48E+00
Jim Hogg	1.89E+00	1.92E-02	3.89E-02	2.90E-02	3.73E-03	4.24E-02
Jim Wells	1.49E+02	1.12E+02	7.36E+00	7.10E+00	1.06E+01	5.48E+01
Johnson	1.11E+02	1.42E+00	2.34E+00	1.79E+00	2.68E-01	2.85E+00
Jones	2.93E+01	3.48E-01	6.11E-01	4.68E-01	7.01E-02	7.64E-01
Karnes	3.02E+01	1.92E+01	1.35E+00	1.28E+00	1.82E+00	9.44E+00
Kaufman	1.10E+02	1.34E+00	2.30E+00	1.77E+00	2.72E-01	2.94E+00
Kendall	2.16E+00	1.17E-02	4.25E-02	2.93E-02	1.80E-03	2.70E-02
Kenedy	5.46E-01	2.96E-03	1.08E-02	7.43E-03	4.55E-04	6.84E-03
Kent	1.84E+01	2.21E-01	3.84E-01	2.95E-01	4.47E-02	4.85E-01
Kerr	1.79E+02	2.15E+00	3.72E+00	2.86E+00	4.34E-01	4.69E+00
Kimble	2.22E+01	8.19E-01	4.85E-01	3.80E-01	1.05E-01	8.43E-01
King	1.10E+00	5.95E-03	2.17E-02	1.49E-02	9.15E-04	1.38E-02
Kinney	3.54E+00	1.91E-02	6.97E-02	4.81E-02	2.94E-03	4.43E-02
Kleberg	2.39E+01	1.85E+00	5.69E-01	4.61E-01	2.05E-01	1.37E+00
Knox	1.59E+01	1.86E-01	3.31E-01	2.53E-01	3.75E-02	4.10E-01
Lamar	5.36E+01	1.01E+00	1.16E+00	9.14E-01	1.76E-01	1.70E+00
Lamb	2.61E+01	4.65E-01	5.53E-01	4.30E-01	7.95E-02	7.81E-01
Lampasas	3.32E+01	3.86E-01	6.91E-01	5.28E-01	7.74E-02	8.48E-01
La Salle	4.27E+01	1.30E+01	1.29E+00	1.12E+00	1.26E+00	7.08E+00
Lavaca	8.99E+00	1.07E-01	1.87E-01	1.44E-01	2.15E-02	2.35E-01
Lee	4.05E+01	1.58E+00	8.86E-01	6.93E-01	1.98E-01	1.55E+00
Leon	4.24E+00	2.77E-02	8.44E-02	5.95E-02	4.69E-03	6.32E-02
Liberty	6.43E+01	3.22E+00	1.43E+00	1.13E+00	3.80E-01	2.79E+00
Limestone	1.31E+01	1.54E-01	2.72E-01	2.09E-01	3.10E-02	3.38E-01
Lipscomb	2.55E+00	1.87E-02	5.11E-02	3.64E-02	3.29E-03	4.21E-02
Live Oak	7.84E+00	8.70E-02	1.62E-01	1.23E-01	1.73E-02	1.91E-01
Llano	7.69E+01	7.56E+00	1.89E+00	1.55E+00	8.06E-01	5.10E+00
Lubbock	4.42E+02	1.28E+02	1.13E+01	9.88E+00	1.36E+01	4.87E+01
Lynn	8.58E+00	9.96E-02	1.78E-01	1.36E-01	2.00E-02	2.19E-01
McCulloch	3.68E+01	1.03E+00	6.11E-02	5.74E-02	1.97E-01	2.27E+00
McLennan	6.49E+02	1.43E+02	1.87E+01	1.62E+01	1.45E+01	7.82E+01
McMullen	5.53E-01	2.99E-03	1.09E-02	7.52E-03	4.60E-04	6.93E-03

Table E-1. Uncontrolled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO_x	PM_{10-PRI}	PM_{25-PRI}	SO₂	VOC
Madison	2.41E+00	2.52E-02	4.96E-02	3.72E-02	4.94E-03	5.56E-02
Marion	5.79E+00	7.03E-02	1.21E-01	9.32E-02	1.42E-02	1.54E-01
Martin	5.10E+00	5.80E-02	1.06E-01	8.07E-02	1.16E-02	1.28E-01
Mason	5.91E+00	6.84E-02	1.23E-01	9.39E-02	1.37E-02	1.50E-01
Matagorda	6.52E+01	9.11E+00	1.68E+00	1.41E+00	9.34E-01	5.59E+00
Maverick	3.47E+00	4.47E-02	7.29E-02	5.68E-02	9.13E-03	9.77E-02
Medina	3.21E+02	3.97E+00	6.70E+00	5.16E+00	7.92E-01	8.53E+00
Menard	2.86E+00	2.76E-02	5.85E-02	4.34E-02	5.31E-03	6.13E-02
Midland	4.31E+02	1.29E+02	1.16E+01	1.03E+01	1.42E+01	5.53E+01
Milam	1.93E+01	2.21E-01	4.01E-01	3.06E-01	4.43E-02	4.87E-01
Mills	2.21E+00	1.20E-02	4.35E-02	3.00E-02	1.84E-03	2.77E-02
Mitchell	1.32E+01	1.65E-01	2.76E-01	2.14E-01	3.35E-02	3.60E-01
Montague	4.04E+01	7.66E-01	8.60E-01	6.65E-01	1.25E-01	1.20E+00
Montgomery	2.20E+02	2.43E+01	5.65E+00	4.67E+00	2.58E+00	1.60E+01
Moore	5.56E+01	8.36E-01	1.17E+00	9.01E-01	1.51E-01	1.55E+00
Morris	4.38E-01	8.18E-03	9.66E-03	8.11E-03	1.77E-03	1.77E-02
Motley	6.05E-01	7.32E-03	1.26E-02	9.72E-03	1.48E-03	1.61E-02
Nacogdoches	8.77E+01	2.71E+00	1.90E+00	1.48E+00	3.67E-01	3.09E+00
Navarro	7.58E+01	8.88E-01	1.58E+00	1.21E+00	1.78E-01	1.95E+00
Newton	1.76E+00	2.17E-02	3.68E-02	2.84E-02	4.40E-03	4.75E-02
Nolan	2.95E+01	3.59E-01	6.17E-01	4.75E-01	7.26E-02	7.87E-01
Nueces	5.84E+02	3.82E+02	2.60E+01	2.49E+01	3.74E+01	1.83E+02
Ochiltree	5.44E+01	6.59E-01	1.14E+00	8.75E-01	1.33E-01	1.44E+00
Oldham	1.25E+01	1.51E-01	2.60E-01	2.01E-01	3.05E-02	3.31E-01
Orange	3.48E+01	5.24E-01	8.12E-01	6.41E-01	1.06E-01	1.03E+00
Palo Pinto	1.47E+01	1.73E-01	3.07E-01	2.35E-01	3.48E-02	3.80E-01
Panola	3.25E+01	1.77E+00	7.33E-01	5.83E-01	2.08E-01	1.51E+00
Parker	1.93E+02	3.64E+00	4.07E+00	3.13E+00	5.84E-01	5.61E+00
Parmer	2.26E+01	2.67E-01	4.70E-01	3.61E-01	5.37E-02	5.86E-01
Pecos	3.09E+01	1.21E+00	6.86E-01	5.40E-01	1.54E-01	1.21E+00
Polk	2.66E+01	3.19E-01	5.56E-01	4.27E-01	6.43E-02	6.99E-01
Potter	5.57E+02	3.40E+02	2.28E+01	2.16E+01	3.30E+01	1.48E+02
Presidio	4.89E+01	5.91E-01	1.02E+00	7.84E-01	1.19E-01	1.29E+00
Rains	9.64E-01	1.00E-02	1.98E-02	1.49E-02	1.96E-03	2.21E-02
Randall	1.28E+02	1.52E+00	2.67E+00	2.05E+00	3.05E-01	3.33E+00
Reagan	6.76E+00	8.11E-02	1.41E-01	1.08E-01	1.64E-02	1.78E-01
Real	4.31E+00	4.81E-02	8.93E-02	6.78E-02	9.58E-03	1.06E-01
Red River	4.53E+00	5.39E-02	9.44E-02	7.25E-02	1.09E-02	1.18E-01

Table E-1. Uncontrolled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO _x	PM _{10-PRI}	PM _{25-PRI}	SO ₂	VOC
Reeves	9.00E+01	3.67E+01	3.44E+00	3.14E+00	3.56E+00	1.90E+01
Refugio	1.21E+01	1.44E-01	2.52E-01	1.94E-01	2.91E-02	3.17E-01
Roberts	2.09E+00	2.14E-02	4.29E-02	3.21E-02	4.18E-03	4.74E-02
Robertson	1.12E+01	1.21E-01	2.31E-01	1.75E-01	2.40E-02	2.67E-01
Rockwall	1.57E+02	2.01E+00	3.28E+00	2.52E+00	3.95E-01	4.22E+00
Runnels	9.91E+00	1.19E-01	2.10E-01	1.61E-01	2.39E-02	2.57E-01
Rusk	3.66E+01	2.64E+00	8.49E-01	6.83E-01	2.94E-01	1.99E+00
Sabine	3.80E+00	4.96E-02	7.99E-02	6.24E-02	1.02E-02	1.09E-01
San Augustine	2.43E+00	2.93E-02	5.07E-02	3.90E-02	5.93E-03	6.43E-02
San Jacinto	6.44E-01	3.49E-03	1.27E-02	8.76E-03	5.36E-04	8.07E-03
San Patricio	6.70E+01	8.13E-01	1.40E+00	1.08E+00	1.65E-01	1.78E+00
San Saba	6.00E+00	6.89E-02	1.25E-01	9.50E-02	1.38E-02	1.51E-01
Schleicher	3.36E+00	3.64E-02	6.94E-02	5.24E-02	7.19E-03	8.02E-02
Scurry	3.17E+01	3.84E-01	6.63E-01	5.10E-01	7.77E-02	8.42E-01
Shackelford	1.21E+01	1.46E-01	2.53E-01	1.94E-01	2.96E-02	3.21E-01
Shelby	6.93E+01	1.00E+00	1.45E+00	1.12E+00	1.85E-01	1.92E+00
Sherman	7.98E-01	9.58E-03	1.66E-02	1.28E-02	1.93E-03	2.10E-02
Smith	1.23E+02	1.01E+01	3.07E+00	2.55E+00	1.49E+00	6.55E+00
Somervell	2.29E+00	1.72E-02	4.60E-02	3.30E-02	3.07E-03	3.88E-02
Starr	1.55E+00	1.45E-02	3.17E-02	2.34E-02	2.76E-03	3.22E-02
Stephens	4.42E+01	5.27E-01	9.21E-01	7.07E-01	1.06E-01	1.16E+00
Sterling	7.06E-01	4.02E-03	1.39E-02	9.67E-03	6.36E-04	9.26E-03
Stonewall	3.16E+00	4.49E-02	6.71E-02	5.33E-02	9.35E-03	9.79E-02
Sutton	5.14E+00	6.09E-02	1.07E-01	8.21E-02	1.23E-02	1.34E-01
Swisher	2.10E+01	2.45E-01	4.37E-01	3.34E-01	4.92E-02	5.39E-01
Tarrant	8.93E+03	5.22E+03	9.39E+01	8.61E+01	5.74E+02	8.88E+02
Taylor	2.58E+02	1.15E+02	9.75E+00	9.03E+00	1.16E+01	5.71E+01
Terrell	1.47E+00	1.40E-02	3.01E-02	2.23E-02	2.69E-03	3.12E-02
Terry	8.56E+00	1.06E-01	1.79E-01	1.39E-01	2.16E-02	2.33E-01
Throckmorton	1.99E-01	2.40E-03	4.16E-03	3.20E-03	4.84E-04	5.26E-03
Titus	4.79E+01	5.78E-01	1.00E+00	7.69E-01	1.17E-01	1.27E+00
Tom Green	2.30E+01	7.79E+00	3.21E-01	2.78E-01	1.00E+00	1.48E+00
Travis	1.72E+03	7.34E+02	1.40E+01	1.32E+01	8.46E+01	2.13E+02
Trinity	5.06E+00	5.65E-02	1.05E-01	7.95E-02	1.12E-02	1.24E-01
Tyler	5.46E+00	6.47E-02	1.14E-01	8.73E-02	1.30E-02	1.42E-01
Upshur	5.54E+01	6.79E-01	1.16E+00	8.93E-01	1.38E-01	1.49E+00
Upton	2.45E+00	2.95E-02	5.12E-02	3.94E-02	5.95E-03	6.47E-02
Uvalde	3.78E+01	2.14E+00	8.80E-01	7.04E-01	2.52E-01	1.80E+00

Table E-1. Uncontrolled Annual Criteria Emission by County (Tons Per Year)

County	CO	NO_x	PM_{10-PRI}	PM_{25-PRI}	SO₂	VOC
Val Verde	4.58E+01	2.61E+00	1.13E+00	9.16E-01	3.81E-01	2.22E+00
Van Zandt	1.19E+01	1.22E-01	2.44E-01	1.83E-01	2.39E-02	2.71E-01
Victoria	3.54E+02	2.64E+02	1.75E+01	1.69E+01	2.51E+01	1.30E+02
Walker	9.98E+01	2.42E+01	3.00E+00	2.61E+00	2.38E+00	1.33E+01
Waller	6.18E+01	7.10E-01	1.28E+00	9.79E-01	1.42E-01	1.56E+00
Ward	3.74E+01	4.53E-01	7.81E-01	6.01E-01	9.15E-02	9.93E-01
Washington	3.63E+01	5.44E-01	7.60E-01	5.83E-01	9.63E-02	9.88E-01
Webb	4.81E+02	2.75E+02	1.75E+01	1.65E+01	2.74E+01	1.22E+02
Wharton	4.21E+01	1.05E+00	8.99E-01	6.96E-01	1.51E-01	1.35E+00
Wheeler	3.71E+00	4.46E-02	7.75E-02	5.96E-02	9.00E-03	9.78E-02
Wichita	8.24E+02	5.54E+02	3.78E+01	3.62E+01	5.27E+01	2.72E+02
Wilbarger	4.86E+01	1.13E+00	1.04E+00	8.03E-01	1.69E-01	1.53E+00
Willacy	4.47E+00	4.65E-02	9.20E-02	6.91E-02	9.10E-03	1.03E-01
Williamson	4.13E+02	7.59E+00	8.81E+00	6.82E+00	1.25E+00	1.21E+01
Wilson	3.34E+00	1.81E-02	6.59E-02	4.54E-02	2.78E-03	4.19E-02
Winkler	4.34E+00	6.06E-01	1.12E-01	9.43E-02	6.24E-02	3.76E-01
Wise	1.39E+02	1.60E+00	2.88E+00	2.20E+00	3.21E-01	3.52E+00
Wood	6.83E+01	8.23E-01	1.43E+00	1.10E+00	1.66E-01	1.81E+00
Yoakum	2.87E+01	3.48E-01	5.99E-01	4.61E-01	7.03E-02	7.62E-01
Young	4.67E+01	6.21E-01	9.78E-01	7.53E-01	1.19E-01	1.27E+00
Zapata	9.75E+00	1.14E-01	2.03E-01	1.55E-01	2.28E-02	2.49E-01
Zavala	3.40E+00	2.45E-02	6.82E-02	4.85E-02	4.30E-03	5.54E-02

Appendix F
Statewide Annual LTOs

Table F-1. Statewide Annual LTOs

County	LTOs
Anderson	6,639.49
Andrews	5,200.00
Angelina	29,499.52
Aransas	24,100.02
Archer	2,111.00
Armstrong	280.19
Atascosa	4,882.43
Austin	2,439.93
Bailey	3,506.24
Bandera	876.38
Bastrop	4,741.39
Baylor	1,601.07
Bee	4,148.19
Bell	45,316.42
Bexar	161,910.58
Blanco	813.38
Bosque	3,997.35
Bowie	216.55
Brazoria	101,968.81
Brazos	36,362.91
Brewster	5,616.91
Briscoe	1.07
Brooks	2,951.65
Brown	12,656.46
Burleson	1,587.19
Burnet	18,836.60
Caldwell	41,424.00
Calhoun	6,375.41
Callahan	307.01
Cameron	67,530.94
Camp	160.62
Carson	2,737.11
Cass	10,191.35
Castro	1,503.87
Chambers	10,528.00
Cherokee	11,328.46
Childress	1,677.80
Clay	2,335.71
Cochran	600.00
Coke	162.28
Coleman	3,751.07
Collin	87,924.78
Collingsworth	2,030.00
Colorado	6,995.58
Comal	19,631.64

Table F-1. Statewide Annual LTOs

County	LTOs
Comanche	4,921.35
Cooke	15,413.73
Coryell	7,608.99
Cottle	595.04
Crane	675.81
Crockett	4,135.71
Crosby	3,030.89
Culberson	413.46
Dallam	1,441.31
Dallas	273,024.45
Dawson	7,274.42
Deaf Smith	6,905.16
Delta	1.07
Denton	170,690.52
DeWitt	233.79
Dickens	183.16
Dimmit	1,502.01
Donley	937.98
Duval	1,202.27
Eastland	5,495.81
Ector	25,763.15
Edwards	622.70
El Paso	75,608.29
Ellis	24,267.28
Erath	11,889.21
Falls	246.74
Fannin	7,701.41
Fayette	6,250.11
Fisher	1,948.48
Floyd	3,367.98
Foard	241.09
Fort Bend	64,887.54
Franklin	3,709.91
Freestone	776.35
Frio	2,655.59
Gaines	9,150.39
Galveston	19,258.10
Garza	507.88
Gillespie	8,881.20
Glasscock	140.82
Gonzales	1,179.23
Gray	11,270.47
Grayson	51,162.31
Gregg	34,655.75
Grimes	2,549.03

Table F-1. Statewide Annual LTOs

County	LTOs
Guadalupe	32,750.31
Hale	3,936.77
Hall	600.00
Hamilton	3,759.42
Hansford	15,600.00
Hardeman	2,201.07
Hardin	2,154.96
Harris	582,885.20
Harrison	8,769.82
Hartley	5,675.00
Haskell	1,200.00
Hays	869.40
Hemphill	3,389.31
Henderson	6,744.26
Hidalgo	57,582.89
Hill	6,687.23
Hockley	7,104.34
Hood	18,177.56
Hopkins	17,170.74
Houston	4,845.63
Howard	11,814.96
Hudspeth	1,543.10
Hunt	21,243.04
Hutchinson	5,005.00
Irion	92.08
Jack	1,552.36
Jackson	10,017.00
Jasper	10,068.11
Jeff Davis	1.07
Jefferson	20,956.24
Jim Hogg	328.29
Jim Wells	13,303.20
Johnson	19,503.68
Jones	5,158.44
Karnes	3,082.75
Kaufman	19,388.22
Kendall	359.24
Kenedy	90.97
Kent	3,247.82
Kerr	31,465.45
Kimble	3,851.07
King	182.99
Kinney	588.52
Kleberg	4,046.02
Knox	2,795.54

Table F-1. Statewide Annual LTOs

County	LTOs
La Salle	5,817.83
Lamar	9,543.50
Lamb	4,607.96
Lampasas	5,835.45
Lavaca	1,584.16
Lee	7,001.93
Leon	713.41
Liberty	11,014.59
Limestone	2,298.96
Lipscomb	431.53
Live Oak	1,370.86
Llano	12,805.72
Lubbock	60,403.55
Lynn	1,507.52
Madison	418.73
Marion	1,022.72
Martin	895.14
Mason	1,038.12
Matagorda	10,546.26
Maverick	616.29
McCulloch	2,094.34
McLennan	98,448.96
McMullen	92.05
Medina	56,573.15
Menard	494.42
Midland	57,573.79
Milam	3,386.85
Mills	367.76
Mitchell	2,334.72
Montague	7,102.60
Montgomery	36,612.38
Moore	9,796.67
Morris	81.65
Motley	106.71
Nacogdoches	15,284.90
Navarro	13,338.04
Newton	311.28
Nolan	5,210.70
Nueces	58,159.46
Ochiltree	9,600.00
Oldham	2,201.07
Orange	6,218.39
Palo Pinto	2,592.08
Panola	5,579.96
Parker	33,737.92

Table F-1. Statewide Annual LTOs

County	LTOs
Parmer	3,973.35
Pecos	5,355.73
Polk	4,693.76
Potter	65,947.91
Presidio	8,616.89
Rains	167.68
Randall	22,545.19
Reagan	1,191.15
Real	754.68
Red River	797.47
Reeves	11,912.90
Refugio	2,131.78
Roberts	362.53
Robertson	1,953.05
Rockwall	27,631.09
Runnels	1,745.06
Rusk	6,200.00
Sabine	675.39
San Augustine	428.15
San Jacinto	107.26
San Patricio	11,827.06
San Saba	1,052.67
Schleicher	586.12
Scurry	5,600.00
Shackelford	2,134.26
Shelby	12,215.00
Sherman	140.65
Smith	20,450.41
Somervell	388.92
Starr	267.59
Stephens	7,782.64
Sterling	117.76
Stonewall	567.35
Sutton	904.46
Swisher	3,692.87
Tarrant	612,235.12
Taylor	32,431.64
Terrell	254.34
Terry	1,514.96
Throckmorton	35.16
Titus	8,450.61
Tom Green	3,344.34
Travis	119,916.26
Trinity	885.37
Tyler	961.32

Table F-1. Statewide Annual LTOs

County	LTOs
Upshur	9,780.05
Upton	432.76
Uvalde	6,497.74
Val Verde	8,030.67
Van Zandt	2,061.61
Victoria	32,018.34
Walker	14,956.07
Waller	10,847.71
Ward	6,600.00
Washington	6,368.96
Webb	48,223.40
Wharton	7,348.20
Wheeler	654.55
Wichita	80,887.13
Wilbarger	8,503.20
Willacy	777.63
Williamson	72,599.22
Wilson	556.55
Winkler	704.96
Wise	24,351.93
Wood	12,042.95
Yoakum	5,060.05
Young	8,237.71
Zapata	1,713.53
Zavala	575.86