ERG NO. 0433.00.008

VEHICLE EMISSIONS INSPECTION PROGRAM TEST FEE ANALYSIS FOR AIRCHECKTEXAS PROGRAM

Prepared for:

Texas Commission on Environmental Quality
Building F, Room 5162
Austin, TX 78711-3087

Prepared by:

Charles Goodhue, Nyssa Ackerley, and Taylor Carlough
Eastern Research Group, Inc.
110 Hartwell Avenue, Lexington, MA 02421
3508 Far West Blvd., Suite 210, Austin, TX 78731

June 20, 2022

Table of Contents

Table of Contents (Continued)

List of Tables

List of Tables (Continued)

List of Tables (Continued)

List of Tables (Continued)

List of Tables (Continued)

List of Figures

EXECUTIVE SUMMARY

A. BACKGROUND

This study assesses the adequacy of the vehicle emissions inspection fee in the AirCheckTexas program areas: i.e., whether revenue from emissions inspections covers the associated costs. It evaluates the adequacy of the fee from the perspective of the station owners (survey respondents) and investors (prospective shop owners considering entry into the emissions inspection market), and through analytical cost models developed from both survey and non-survey data.

This study evaluates the AirCheckTexas motor vehicle emissions inspection fee in four program areas of the state:

- **Houston-Galveston-Brazoria (HGB):** Brazoria, Fort Bend, Galveston, Harris, and Montgomery counties.
- **Dallas–Fort Worth (DFW):** Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant counties.
- **El Paso:** El Paso County.
- **Austin–Round Rock (ARR):** Travis and Williamson counties.

The HGB and DFW program areas are analyzed together because they have the same emissions inspection fee cap and similar types of costs.

All vehicle emissions inspection stations in these program areas must offer both safety-only inspections and safety and emissions inspections; however, this study only evaluates the emissions inspection portion of the fee and the incremental costs associated with performing emissions inspections. Currently, under 30 Texas Administrative Code §114.53 and §114.87, the motor vehicle emissions inspection fee charged by inspection stations is capped at $18.50 for on-board diagnostic (OBD) inspections in the HGB and DFW program areas, $11.50 in the El Paso program area, and $11.50 in the ARR program area. Table ES-1 shows the total inspection-related fees charged to customers, broken down into the safety inspection cost ($7.00) and emissions inspection costs. Acceleration simulation mode and two-speed idle tests were phased out in 2020.

Table ES-1. Safety and Emissions Testing Fees

Program Area	Safety Inspection Test Fee	Emissions Inspection Test Fee (Maximum)	Total Inspection Fee (Paid by Customer to Inspection Station) (Maximum)	Emissions Inspection Administration Fee (Paid by Customer to State at Registration Renewal)
HGB/DFW	$7.00	$18.50	$25.50	$2.50
El Paso	$7.00	$11.50	$18.50	$2.50
ARR	$7.00	$11.50	$18.50	$2.50

In 2001, the 77th Texas Legislature required the Texas Commission on Environmental Quality (TCEQ) to review the fees established for the motor vehicle emissions inspection program at least biennially. This review was performed by Eastern Research Group, Inc. (ERG) in 2005,

2007, 2012, 2014, 2016, 2018, and 2020 (ERG, 2005, 2007, 2012, 2014, 2016, 2018, 2020) and by E.H. Pechan & Associates, Inc. in 2009 (Pechan, 2009). For consistency, the surveys for this study were very similar to past surveys, as were the structures of the cost models developed.

B. SURVEY ADMINISTRATION AND ANALYSIS METHODS

In March 2022, every vehicle emissions inspection station in the four AirCheckTexas program areas received a web-based survey. This electronic survey used branching and conditional logic (i.e., certain questions differed or were skipped based on program area and whether the station performed repairs); in content, it was similar to the 2020 survey. For stations that requested paper copies, ERG also developed six hard copy variations of the survey to reflect the differences in fees and start dates for the current emissions inspection program across program areas and to accommodate both English and Spanish language speakers (see Appendix A). ERG received 879 electronic survey responses and four paper survey responses.

The TCEQ sent communications about the survey directly to the vehicle emissions inspection stations in the form of analyzer notification bulletins. The TCEQ provided advance notice of the survey's launch by sending an initial notification bulletin to the inspection stations on March 2, 2022, a week before the survey start date. The TCEQ sent an invitation bulletin containing the survey's URL (www.tceqsurvey2022.com) on March 9, 2022. Additionally, over the duration of the survey period, the TCEQ sent three bulletins to remind stations to complete their surveys. ERG also sent three reminder emails to stations that had provided email addresses. The TCEQ official deadline to participate was April 5, 2022; however, responses were accepted until April 12, 2022.

ERG provided an email and telephone hotline to survey respondents to help administer requests for paper surveys and answer other questions. ERG offered hotline support in English and Spanish. ERG also accepted surveys by email and fax, though no requests were made for surveys through these methods.

As of March 8, 2022, the Texas Information Management System (TIMS) database identified 5,252 active vehicle emissions inspection stations (excluding fleet and government stations) in the four program areas under study. Table ES-2 shows the distribution of the 5,252 vehicle emissions inspection stations in the TIMS database by program area and station type, plus an additional two brand new stations that were not in the database as of March 8, 2022, but provided responses to the survey.[1] ERG received 883 total survey responses during the survey period, of which 873 were in-scope (i.e., public stations that indicated they offer motor vehicle emissions inspections); 10 respondents stated that they did not offer vehicle emissions inspections. Table ES-3 shows the distribution of these 883 surveys by program area and station type.[2]

[1] Station type for frequency table (ES-2) and response rate calculations (ES-4) in the TIMS database provided to ERG in March 2022 (TEST_REPAIR_FL).

[2] Station type for in-scope facilities was determined by responses to question 9, which asked respondents to choose the best description of other services they offer. Stations reporting "No other services" or "Non-repair services" were classified as test-only facilities; those reporting "Repair services only" and "Repair services and non-repair services" were classed as test-and-repair facilities. For out-of-scope responses, station type was inferred from the TIMS database.

Table ES-2. Number of Texas Emissions Inspection Stations in the TIMS Database by Program Area and Station Type (March 2022)

Program Area	Test-Only	Test-and-Repair	Total Stations
HGB/DFW	1,722	2,853	**4,575**
El Paso	77	153	**230**
ARR	138	311	**449**
Total	**1,937**	**3,317**	**5,254**

Table ES-3. Survey Responses by Program Area and Station Type

Program Area	Test-Only	Test-and-Repair	All Responses	In-Scope* Responses
HGB/DFW	302	441	743	734
El Paso	14	39	53	52
ARR	27	60	87	87
Total	**343**	**540**	**883**	**873**

* In-scope responses are public stations that offer motor vehicle emissions inspections.

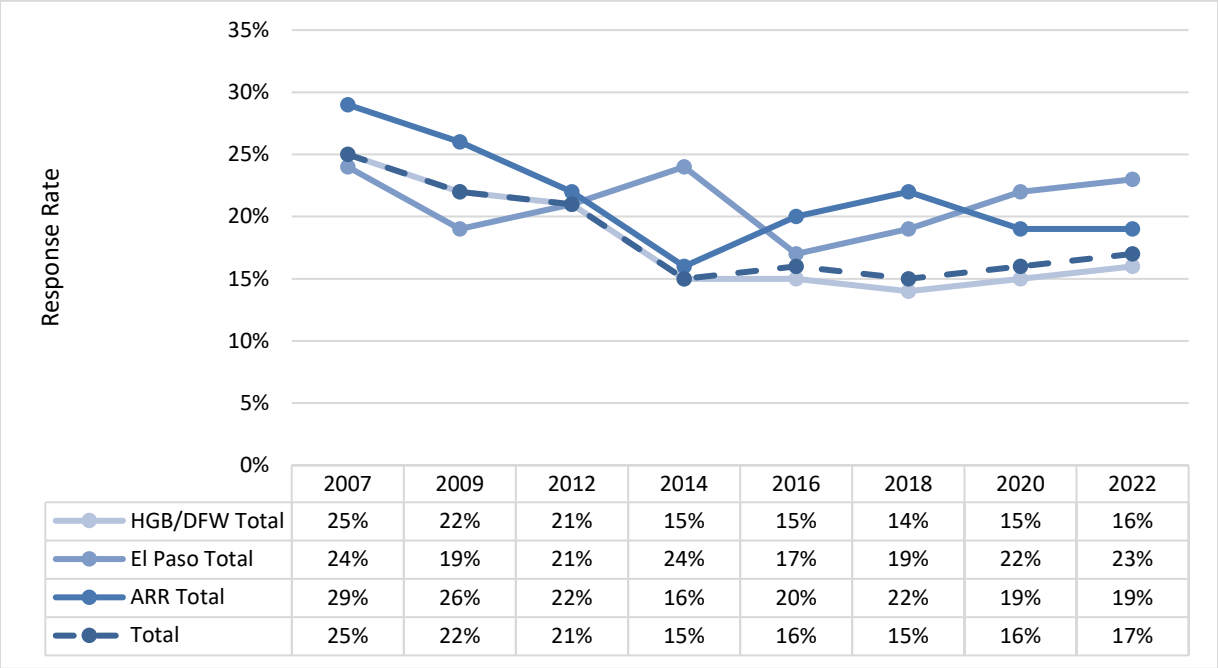
ERG included all surveys received—either electronically or in paper format—in the response rate calculation, but only in-scope responses are included in the analysis and tabulations. Table ES-4 shows the response rate by program area and station type, and Figure ES-1 shows the historical response rate by program area. The overall response rate was 17%, compared to 16% in the 2020 TCEQ inspection and maintenance fee analysis.

Table ES-4. Survey Response Rate by Program Area and Station Type

Program Area	Test-Only	Test-and-Repair	Total*
HGB/DFW	18%	15%	16%
El Paso	18%	25%	23%
ARR	20%	19%	19%
Total	**18%**	**16%**	**17%**

* Response rates were calculated as: (surveys received) ÷ (total active stations).

Figure ES-1. Historical Response Rates by Area

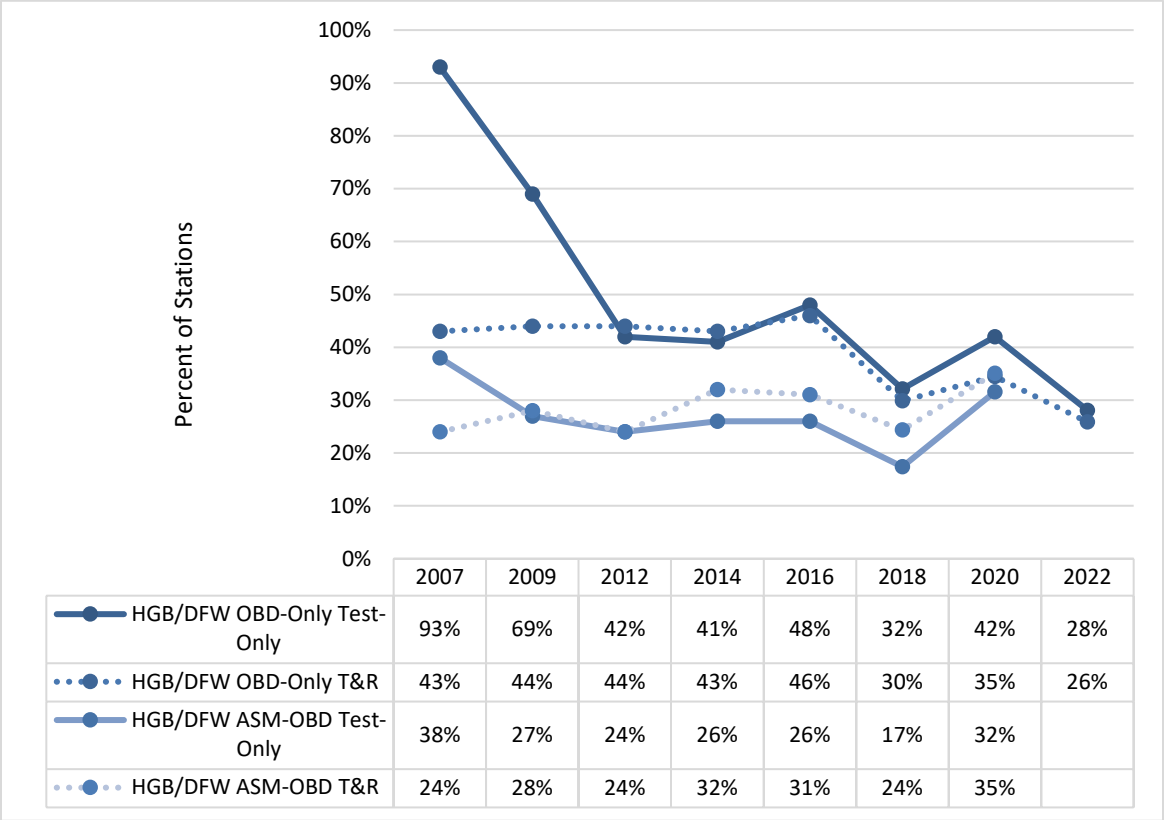


	2007	2009	2012	2014	2016	2018	2020	2022
HGB/DFW Total	25%	22%	21%	15%	15%	14%	15%	16%
El Paso Total	24%	19%	21%	24%	17%	19%	22%	23%
ARR Total	29%	26%	22%	16%	20%	22%	19%	19%
Total	25%	22%	21%	15%	16%	15%	16%	17%

C. FINDINGS

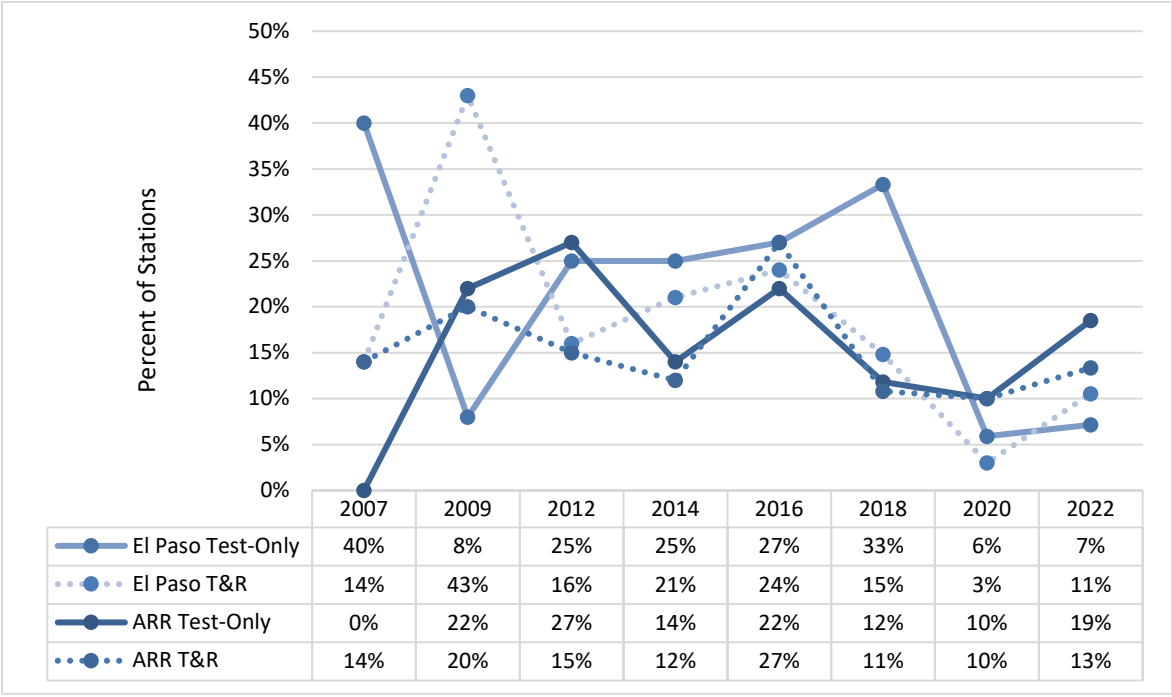
As shown in Figure ES-2, in the HGB/DFW program areas, 28% of test-only stations and 26% of test-and-repair (T&R) stations reported the emissions inspection fee covered their costs. As shown in Figure ES-3, among test-only and T&R respondents in El Paso and ARR, between 7% and 19% of stations reported the fee covers their costs. Compared to 2020, these percentages suggest a moderate increase in the adequacy of the fee in El Paso and ARR, although the percentages are still very low. The figures for stations in the HGB/DFW program areas represent a substantial decrease.

Figure ES-2. Respondents Reporting Test Fees Cover Their Costs: HGB/DFW



	2007	2009	2012	2014	2016	2018	2020	2022
HGB/DFW OBD-Only Test-Only	93%	69%	42%	41%	48%	32%	42%	28%
HGB/DFW OBD-Only T&R	43%	44%	44%	43%	46%	30%	35%	26%
HGB/DFW ASM-OBD Test-Only	38%	27%	24%	26%	26%	17%	32%	
HGB/DFW ASM-OBD T&R	24%	28%	24%	32%	31%	24%	35%	

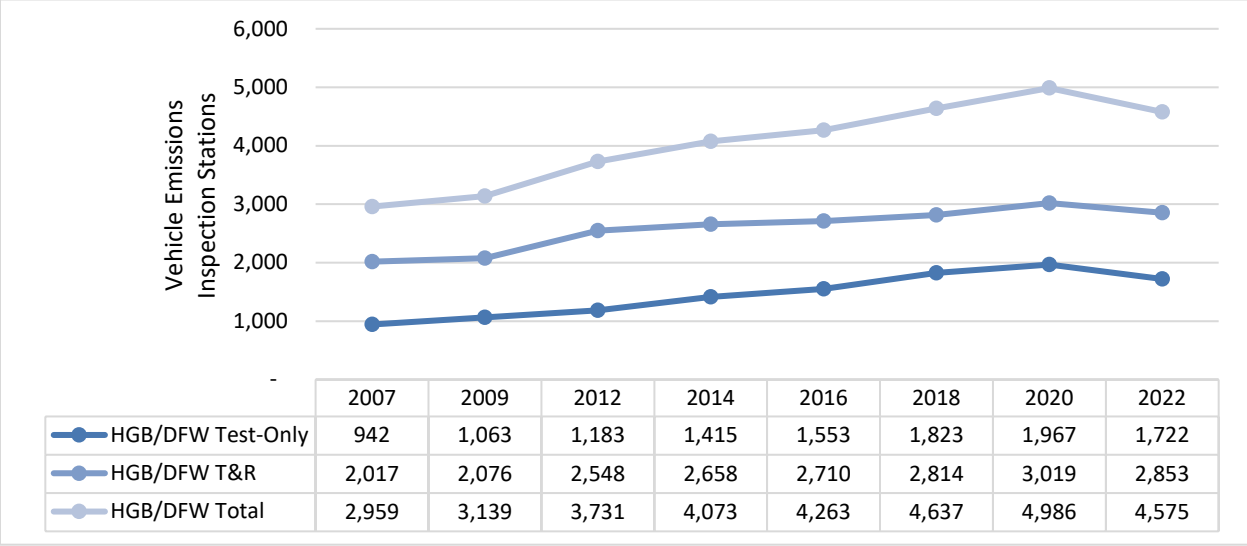
Figure ES-3. Respondents Reporting Test Fees Cover Their Costs: El Paso and ARR



	2007	2009	2012	2014	2016	2018	2020	2022
El Paso Test-Only	40%	8%	25%	25%	27%	33%	6%	7%
El Paso T&R	14%	43%	16%	21%	24%	15%	3%	11%
ARR Test-Only	0%	22%	27%	14%	22%	12%	10%	19%
ARR T&R	14%	20%	15%	12%	27%	11%	10%	13%

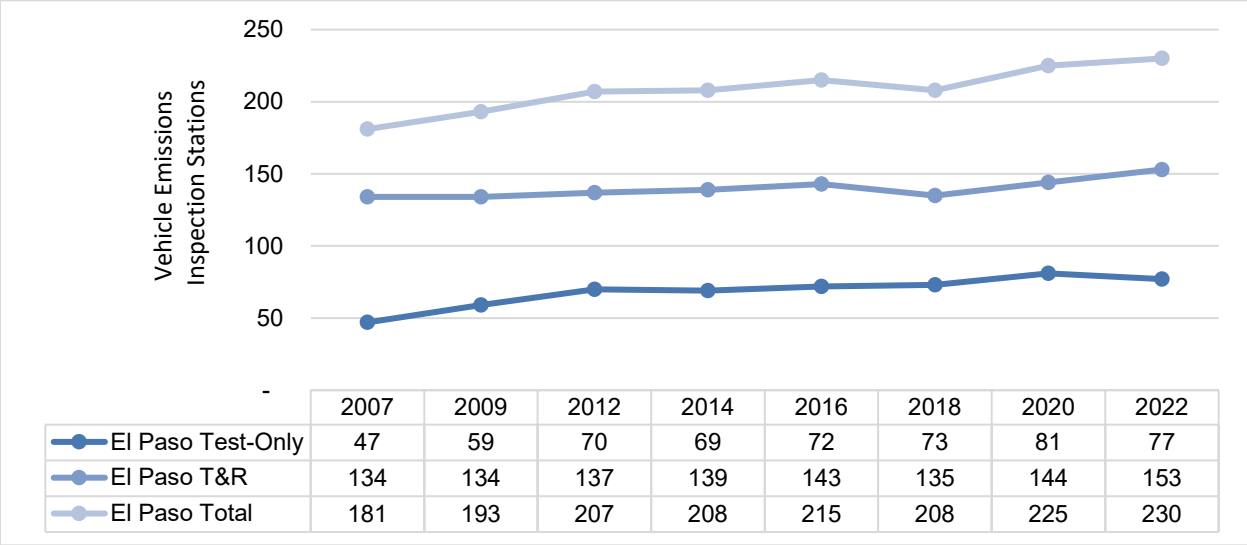
Figure ES-4, Figure ES-5, and Figure ES-6 summarize the station counts for HGB/DFW, El Paso, and ARR, respectively, based on data from the TCEQ Vehicle Identification Database for 2007, 2009, 2012, 2014, 2016, 2018, 2020, and 2022. From 2020 to 2022, the number of stations decreased by 412 (-8%) in HGB/DFW, but increased by five (2%) in El Paso and by 30 (7%) in ARR. An increase in station count is typically one indicator that investors are making the conscious decision to stay in or enter the vehicle emissions inspection market based on a fee they consider adequate. The decrease in stations in the HGB/DFW program areas could be a result of the COVID-19 pandemic. Some stations may have lost revenue from tests during the early stages of the pandemic and never recovered, forcing them to close. This factor is unknown, though, and other market factors could have played a role in this decrease as well.

Figure ES-4. Number of Inspection Stations in HGB/DFW Program Areas, 2007 to 2022



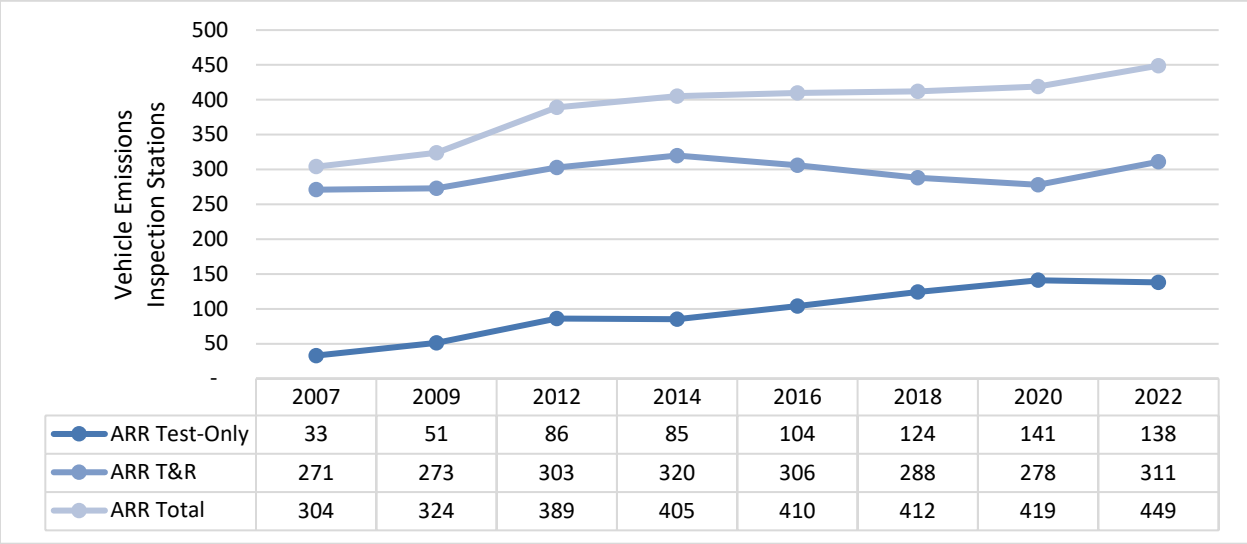
	2007	2009	2012	2014	2016	2018	2020	2022
HGB/DFW Test-Only	942	1,063	1,183	1,415	1,553	1,823	1,967	1,722
HGB/DFW T&R	2,017	2,076	2,548	2,658	2,710	2,814	3,019	2,853
HGB/DFW Total	2,959	3,139	3,731	4,073	4,263	4,637	4,986	4,575

Figure ES-5. Number of Inspection Stations in El Paso Program Area, 2007 to 2022



	2007	2009	2012	2014	2016	2018	2020	2022
El Paso Test-Only	47	59	70	69	72	73	81	77
El Paso T&R	134	134	137	139	143	135	144	153
El Paso Total	181	193	207	208	215	208	225	230

Figure ES-6. Number of Inspection Stations in ARR Program Area, 2007 to 2022



	2007	2009	2012	2014	2016	2018	2020	2022
ARR Test-Only	33	51	86	85	104	124	141	138
ARR T&R	271	273	303	320	306	288	278	311
ARR Total	304	324	389	405	410	412	419	449

In the break-even cost model summarized in Table ES-5, 86% of stations (excluding building costs) in HGB/DFW are shown to have sufficient throughput to generate emissions inspection revenues that meet or exceed variable and fixed costs. In El Paso and ARR, 71% to 73% of stations (excluding building costs) have sufficient throughput to generate emissions inspection revenues that meet or exceed variable and fixed costs. Some stations did not incur incremental building costs in order to offer testing, such as adding or purchasing additional building space, so the analyses are done with and without building costs included.

Table ES-5. Stations At/Above Break-Even Number of Inspections

	HGB/DFW	El Paso	ARR
Monthly break-even number of tests including equipment costs.	34	71	78
Monthly break-even number of tests including equipment and building costs.	92	199	282
Percent of stations above break-even number including equipment costs.	86%	73%	71%
Percent of stations above break-even number including equipment and building costs.	60%	32%	28%

The summary of the percent of stations breaking even since 2012, shown below in Table ES-6, compares 2022 percentages to past years' percentages. In the HGB/DFW program areas, stations had a break-even number of tests greater than in prior years (28 to 34). The increase in break-even tests for stations in the HGB/DFW programs areas is driven largely by the increase in the median hourly wage of emissions inspectors ($15.00 in 2022 compared to $12.50 in 2020). The El Paso program area saw a decrease in the number of tests to break even (80 to 71) and a drop in the percent of stations breaking even (78% to 73%). The decrease in the number of tests to break even is because fixed costs decreased across the El Paso program area, largely as a result of renting analyzers. While the cost of the analyzer itself is higher on a monthly basis to rent than to purchase, maintenance costs are significantly lower when renting. Fixed costs (which include the rent price for analyzers, maintenance costs, and other business expenses

like electricity and a dedicated phone line) decreased from approximately $534 in 2020 to $441 in 2022. The ARR program area also experienced a decrease in the number of break-even tests (99 to 78), but the percent of break-even stations increased slightly (69% to 71%). This change is also due to the much lower maintenance costs recognized by renting analyzers instead of purchasing them. Fixed costs decreased from $509 to $366 between 2020 and 2022.

Table ES-6. Summary of Break-Even Number of Inspections from 2012 to 2022 in All Program Areas, Excluding Building Costs

	HGB/DFW	El Paso	ARR
Break-even tests (2012)	27	70	80
Break-even tests (2014)	26	73	76
Break-even tests (2016)	26	70	79
Break-even tests (2018)	26	70	82
Break-even tests (2020)	28	80	99
Break-even tests (2022)	34	71	78
Percent of stations breaking even (2012)	86%	80%	74%
Percent of stations breaking even (2014)	87%	81%	73%
Percent of stations breaking even (2016)	87%	80%	74%
Percent of stations breaking even (2018)	89%	84%	77%
Percent of stations breaking even (2020)	89%	78%	69%
Percent of stations breaking even (2022)	86%	73%	71%

The model station analysis reveals similar findings. This analysis created area-specific small-, medium-, and large-throughput stations representative of stations in the 25th, 50th (median), and 75th percentiles, respectively, based on emissions inspection throughput for all stations in each region (i.e., not just those that answered the survey). Table ES-7 shows the monthly costs and net revenues at three model stations: small, medium, and large. As in 2020, a few station types have revenues that do not exceed total costs. These cases occur in small model stations in all program areas, as well as medium-sized stations in the El Paso and ARR program areas. All other model station types across the four program areas had net revenues that exceeded costs.[3]

Table ES-7. Monthly Costs and Net Revenues at Model Stations

	HGB/DFW	El Paso	ARR
Small station net revenue	$1,036	$748	$759
Small station total costs	$1,433	$1,578	$1,774
Small stations net revenue – total cost	**($397)**	**($830)**	**($1,015)**
Medium station net revenue	$2,165	$1,622	$1,794
Medium station total costs	$1,885	$1,982	$2,386
Medium station net revenue – total cost	**$279**	**($361)**	**($592)**
Large station net revenue	$4,218	$2,783	$3,565
Large station total costs	$2,708	$2,520	$3,434
Large station net revenue – total cost	**$1,510**	**$263**	**$131**

[3] The monthly profits presented in Table ES-7 may not equal revenue minus costs due to rounding.

On January 1, 2020, all vehicles with model years of 1995 and older became exempt from the vehicle emissions inspection requirements in Texas, and OBD became the only type of emissions inspection performed across AirCheckTexas program areas. Currently, the El Paso and ARR program areas offer OBD vehicle emissions inspections for a maximum of $11.50, while the HGB and DFW program areas offer OBD inspections for a maximum of $18.50.

To get station owners' perspectives on a reasonable OBD inspection fee, ERG asked survey respondents for their opinion on the fee amount they think their customers would be willing to pay and, separately, the fee that would allow revenue from emissions inspections to cover their costs. Table ES-8 and Table ES-9 summarize the responses to these questions. Across all program areas, the median reported value was $25 for what inspection stations thought customers would be willing to pay and $28 for a fee that would allow revenue to cover the costs of performing OBD emissions inspections.

Table ES-8. What Are Customers Willing to Pay?

	HGB/DFW	El Paso	ARR	All Areas
Count of Stations	666	48	81	795
25th percentile	$22.99	$18.00	$16.00	$20.00
50th percentile (median)	$25.50	$20.00	$24.75	$25.00
75th percentile	$35.00	$25.00	$28.88	$35.00
Average	$29.51	$21.82	$24.38	$28.52

Table ES-9. What Revenue Covers Costs?

	HGB/DFW	El Paso	ARR	All Areas
Count of Stations	652	49	78	779
25th percentile	$23.00	$18.00	$18.00	$22.00
50th percentile (median)	$30.00	$25.00	$25.00	$28.00
75th percentile	$39.25	$30.00	$30.00	$35.00
Average	$30.93	$24.43	$26.39	$30.05

I. INTRODUCTION

A. BACKGROUND

This analysis evaluates the adequacy of the AirCheckTexas motor vehicle emissions inspection fee (i.e., whether revenue covers costs) in four program areas:

- **Houston-Galveston-Brazoria (HGB):** Brazoria, Fort Bend, Galveston, Harris, and Montgomery counties.
- **Dallas–Fort Worth (DFW):** Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant counties.
- **El Paso:** El Paso County.
- **Austin–Round Rock (ARR):** Travis and Williamson counties.

Historically, the state of Texas issued inspection stickers to vehicles that successfully passed inspection. However, in accordance with House Bill (HB) 2305, passed by the 83rd Texas Legislature in 2013, the state stopped issuing inspection stickers on March 1, 2015, and implemented a new system, known as the "Two Steps, One Sticker" program, to issue a single registration sticker for vehicles that pass emissions inspection and are permitted to renew registration. As part of this change, inspection stations no longer collect the state's portion of the fee for remittance to the Texas Department of Public Safety, but there is no change to the net emissions inspection fees they keep. The state's portion (i.e., the emissions inspection administration fee) is now paid to the state at registration renewal.

Inspection stations in these program areas must offer both safety-only inspections and safety and emissions inspections; however, this study evaluates only the emissions inspection portion of the fee and the incremental costs associated with performing emissions inspections. Currently, under 30 Texas Administrative Code §114.53 and §114.87, the motor vehicle emissions inspection fee charged by inspection stations is capped at $18.50 per on-board disagnostic (OBD) inspection in both the HGB and DFW program areas, $11.50 in the El Paso program area, and $11.50 in the ARR program area. Table I-1 shows the total inspection-related fees charged to customers, broken down into the safety inspection cost ($7.00) and the emissions inspection costs.

Table I-1. Safety and Emissions Testing Fees

Program Area	Safety Inspection Test Fee	Emissions Inspection Test Fee (Maximum)	Total Inspection Fee (Paid by Customer to Inspection Station) (Maximum)	Emissions Inspection Administration Fee (Paid by Customer to State at Registration Renewal)
HGB/DFW	$7.00	$18.50	$25.50	$2.50
El Paso	$7.00	$11.50	$18.50	$2.50
ARR	$7.00	$11.50	$18.50	$2.50

In 2001, the 77th Texas Legislature required the Texas Commission on Environmental Quality (TCEQ) to review the fee established for the motor vehicle emissions inspection program at least biennially. Texas Health and Safety Code §382.202(f)(1) codifies this review process.

However, on January 1, 2020, all vehicles with model years of 1995 and older became exempt from the vehicle emissions inspection requirements in Texas, and OBD became the only type of emissions inspection performed across AirCheckTexas program areas. Therefore, this study only assesses the OBD inspection fee for stations in the HGB and DFW program areas. Table I-2, below, summarizes when the inspection and maintenance (I/M) program started for each of the four regions. As indicated in the table, OBD inspections in the HGB and DFW program areas began on either May 1, 2002 (Collin, Dallas, Denton, Harris, and Tarrant counties) or May 1, 2003 (Brazoria, Ellis, Fort Bend, Galveston, Johnson, Kaufman, Montgomery, Parker, and Rockwall counties). Acceleration simulation mode (ASM) inspections were also conducted in these program areas, but are now phased out.

Vehicle emissions inspections began in the El Paso program area on January 1, 2007, using two-speed idle (TSI) and OBD inspection technologies. OBD inspections are performed on vehicles with a model year of 1996 and newer. Inspection stations are no longer required to offer TSI inspections.

Vehicle emissions inspections began in the ARR program area on September 1, 2005, using TSI and OBD inspection technologies. OBD inspections are performed on vehicles with a model year of 1996 and newer. As in the El Paso program area, inspection stations are no longer required to offer TSI inspections in ARR.

Table I-2. Program Start Dates by Program Area

Program Area	I/M Program Start Date
HGB	May 1, 2002, and May 1, 2003 (varies by county)
DFW	May 1, 2002, and May 1, 2003 (varies by county)
El Paso	January 1, 2007
ARR	September 1, 2005

The TCEQ performs a vehicle emissions inspection program test fee analysis every two years. The analysis was carried out by Eastern Research Group, Inc. (ERG) in 2005, 2007, 2012, 2014, 2016, 2018, and 2020 (ERG, 2005, 2007, 2012, 2014, 2016, 2018, 2020) and by E.H. Pechan & Associates, Inc. in 2009 (Pechan, 2009). For consistency, this year's survey was very similar to past surveys, and the structure of the cost models was also similar to that of previous models.

Beginning on January 1, 2020, stations in all program areas perform only OBD inspections, as all vehicles with model years of 1995 and older previously subject to ASM/TSI inspections became exempt from the vehicle emissions inspection requirements. Due to the timing of this year's analysis and survey, this report primarily assesses the adequacy of the emissions inspection fee based on the inspections throughput for calendar year 2021 (which does not include TSI and ASM inspections) and survey respondents' 2021 operational costs.

B. REPORT ORGANIZATION

Chapter II of this report summarizes the analytical methods used in this project. It introduces the business models used to evaluate the revenue and cost streams for stations that are AirCheckTexas I/M program participants. It also explains the sample survey design and implementation.

Chapter III (HGB/DFW), Chapter IV (El Paso), and Chapter V (ARR) present the survey findings by program area. The HGB and DFW program areas are analyzed together because they have the same emissions inspection fee cap and have similar cost and revenue structures. Within each program area, findings are broken down by test-only and test-and-repair (T&R) stations. Chapter VI presents the cost model analyses for three program area groupings: HGB/DFW, El Paso, and ARR.

This section includes "model station" analyses of representative small, medium, and large stations based on testing throughput, as well as "break-even" analyses to calculate the number of emissions inspections a station must perform per month for revenue to equal costs. While these cost models aggregate data from test-only and T&R stations to better represent the whole industry, the report includes further discussion about how the business models for these station types differ.

Chapter VII summarizes the comments from the survey respondents. Chapter VIII presents the conclusions and findings from this study, including recommendations for future survey efforts. Appendix A provides the survey instruments.

C. REPORT TERMINOLOGY

The analyses presented in chapters III, IV, V, and VI of this report use the statistical terminology "median," "average," "percentile," and "quartile" with the following definitions:

- A median is the number separating the higher half of a sample from the lower half. The median of a list of numbers can be found by arranging all the observations from the lowest to the highest value and picking the middle one (or the average of the two middle values).
- The average is the sum of the observations divided by the number of observations. In the cost model's analyses, the median is typically preferred to the average because the average is often heavily influenced by a few extreme values or outliers.
- The 25th percentile (also known as the 1st quartile) is the value below which 25% of the observations fall (i.e., 25% of values are below this value).
- The 50th percentile (also known as the median or 2nd quartile) is the value below which 50% of the observations fall.
- The 75th percentile (also known as the 3rd quartile) is the value below which 75% of the observations fall (i.e., 25% of values are above this value).
- The interquartile range is the 25th percentile value to 75th percentile value. In short, it is the range of the middle half (50%) of the data where 25% of data are higher than the upper end of the range and 25% of the data are lower than the lower end of the range.
- In the survey results sections, T&R stations are defined as those that self-reported performing "repair services only" or "repair services and non-repair services" in addition to emissions inspections.
- In the survey results sections, test-only stations are defined as those that self-reported performing emissions inspections but do not perform repair services. They may offer other non-repair services.

- In describing the universe of stations and in throughput analysis, the characterization of stations as T&R or test-only (station type) is based on the Texas Information Management System (TIMS) database provided by TCEQ.

In some cases, the average in a given table may be greater than the median because of one or more very large values significantly affecting the average. For this analysis, the cost models use median values to prevent those large values from affecting the results.

II. ANALYSIS METHODS SUMMARY

Beginning in March 2022, ERG conducted a five-week survey of motor vehicle emissions inspection stations in the four AirCheckTexas program areas (HGB, DFW, El Paso, and ARR). As in previous years, the primary goal of the survey was to collect data for use in analytical cost models that assess the adequacy of the vehicle emissions inspection fee in these areas. The data collection was implemented as a web-based survey fielded to all active inspection stations in the four program areas. The survey development, sample design, data collection methods, and response rate are detailed below.

A. SURVEY DEVELOPMENT

To allow for time-trend comparisons, ERG developed a draft questionnaire designed to elicit data largely analogous to those from previous survey years. The most noteworthy revision to the survey was differentiating between owned and rented certified emissions testing analyzers and requesting information on maintenance packages on a per-analyzer basis. Minor revisions to the 2022 survey included slight wording modifications to improve clarity, different itemization of non-equipment-related costs, and the addition of trade-in as an option for decommissioned analyzers.

As in previous years, the survey asked a few questions specifically aimed at categorizing stations by the type of services offered. More specifically, respondents whose stations perform emissions inspections and who reported providing either "no other services" or "non-repair services" were considered to be test-only stations. These stations do not have an additional revenue stream from repairing vehicles. In contrast, T&R stations were defined as those that reported performing "repair services only" or "repair services and non-repair services" in addition to emissions inspections. This distinction is used throughout the analysis to make comparisons between station types.

The survey instrument was coded as a web-based survey using Qualtrics survey software, as well as a paper survey[4] for stations requesting one. The electronic instrument's design relied on conditional branching, or skip logic, to alter respondents' pathways based on their program area or answers to particular questions. This method allowed stations from all four program areas to access the same survey interface and made the online experience straightforward and seamless. Data validation checks (such as range limits and number-only fields) were also coded into the electronic survey, where applicable, to help ensure that responses were formatted appropriately. The survey was translated and offered in both English and Spanish.

[4] Three versions of the paper survey were designed (one covering the HGB and DFW program areas, one covering El Paso, and one covering ARR) to accommodate differences between program areas in start dates for the current emissions inspection program and fee amounts charged for those tests. These versions of the survey were also translated into Spanish for the first time this year.

B. TARGET SURVEY POPULATION

The target population for this survey was active vehicle emissions inspection stations in the four AirCheckTexas program areas. The TCEQ provided ERG with information for 5,254 active public stations,[5] and all of them were invited to participate in the survey.

C. DATA COLLECTION METHODS

Like the 2020 survey, the 2022 initiative was electronic, with paper surveys mailed to respondents by request only. Communications about the survey were sent directly to the vehicle emissions inspection stations via the TCEQ as analyzer notification bulletins. These bulletins are transmitted to the station analyzer (i.e., testing equipment) during regular electronic communications with the TCEQ Vehicle Identification Database (VID); they can be displayed onscreen, printed, and given to the station manager. The timing of a notification's arrival at any specific inspection station depended on when the TCEQ transmitted its bulletin and whether the analyzer had a successful communication with the VID.

The TCEQ provided advance notice of the survey's launch with a pre-notification bulletin to inform station personnel of the upcoming survey and explain its importance. This bulletin was sent on March 2, 2022, one week before the survey launch. A formal invitation containing the survey's URL (www.tceqsurvey2022.com)[6] was also sent via a TCEQ analyzer bulletin on March 9, 2022. The TCEQ sent three reminder bulletins over the survey period, requesting that stations complete the survey online or contact ERG's telephone or email hotline to obtain a paper survey.

ERG also sent email reminders throughout the survey period to stations that had not yet submitted responses. While survey responses were requested by April 5, 2022,[7] ERG accepted responses until April 12, 2022, to accommodate any paper surveys postmarked by the survey deadline.

Before implementation, ERG established an email address and toll-free hotline to field technical questions, concerns, and requests for paper surveys from survey respondents. While the survey was active, ERG fielded 16 calls and 15 emails. Among these hotline inquiries, four requested paper versions of the survey and six expressed difficulties accessing the survey (typically a result of typing the survey URL into a search engine). ERG also accepted surveys by email and fax, although no requests were made for surveys through these methods.

Online survey responses, captured directly in a database, eliminate the need for additional coding and data entry. ERG staff manually entered data from completed paper surveys

[5] These 5,254 stations do not include facilities that service government vehicles or facilities that service their own fleets. Examples of the former include the U.S. Postal Service; examples of the latter include Verizon, Federal Express, and UPS. These facilities test emissions as part of their cost of business (i.e., to maintain their fleet of vehicles), and the operators do not offer these services to the public.

[6] This link is no longer active.

[7] The TCEQ extended the survey period by two days from April 3, 2022, to April 5, 2022.

(returned via U.S. mail) into the online survey. The database of responses was later exported as a comma-separated values (.csv) file for import and analysis in Microsoft Excel and Stata.

D. RESPONSE RATE

The first completed surveys were received on March 9, 2022, and the final response was recorded on April 12, 2022. During this period, 883 responses were received, only four of which were submitted as paper surveys. Of the 883 responses, 10 were deemed ineligible (i.e., out of scope) for not offering motor vehicle emissions inspections.[8] The remaining 873 responses were in-scope (i.e., public stations that offer vehicle emissions inspections). The survey was completed in Spanish by 16 respondents across all four program areas.

Table II-1 shows the breakdown of the 5,254 vehicle emissions inspection stations (excluding fleet and government stations) identified in the TIMS database by program area and station type.[9] Table II-2 shows the breakdown of the 883 survey responses by program area and station type.[10]

Table II-1. Texas Emissions Inspection Stations in the TIMS Database by Program Area/Station Type (March 8, 2022)

Program Area	Test-Only	Test-and-Repair	Total
HGB/DFW	1,722	2,853	4,575
El Paso	77	153	230
ARR	138	311	449
Total	**1,937**	**3,317**	**5,254**

Table II-2. Survey Responses by Program Area and Station Type

Program Area	Test-Only	Test-and-Repair	All Responses	In-Scope* Responses
HGB/DFW	302	441	743	734
El Paso	14	39	53	52
ARR	27	60	87	87
Total	**343**	**540**	**883**	**873**

* In-scope responses include public stations that offer vehicle emissions inspections.

The overall response rate of 17% is similar to the previous TCEQ I/M fee survey studies. This response rate assumes that all stations in the VID are currently operating and received the

[8] As determined by a "No" response to the first survey question. These respondents were screened out of the survey.

[9] Station type for response rate is determined by the station's categorization in the TIMS database provided to ERG in March 2022 (TEST_REPAIR_FL).

[10] Station type for in-scope facilities was determined by responses to question 9, which asked respondents to choose the best description of other services they offer. Stations reporting "No other services" or "Non-repair services" were classified as test-only facilities; those reporting "Repair services only" and "Repair services and non-repair services" were classed as T&R facilities. For out-of-scope responses, station type was inferred from the TIMS database.

analyzer notification bulletins regarding the survey. Table II-3 shows the response rate by program area and station type (see footnote 9). All surveys received, either electronically or in paper format, are included in the response rate calculation, but only in-scope responses are included in the analysis and tabulations.

Table II-3. Survey Response Rate* by Area/Station Type

Program Area	Test-Only	Test-and-Repair	Total
HGB/DFW	18%	15%	16%
El Paso	18%	25%	23%
ARR	20%	19%	19%
Total	**18%**	**16%**	**17%**

* Response rates were calculated as: (surveys received) ÷ (total active stations).

ERG did not follow up with individual stations to discuss any inconsistent or unreasonable responses. No extreme outliers were removed from the data set. High and low values were left in the data set because the median, which is used in the cost model, is not directly influenced by outliers.

ERG also cleaned data to change blank or "missing" survey fields to zero when accurate due to survey skip logic. Some zeros were changed to missing values when interpreted to be nonresponses, such as estimates of square footage and the average cost of emissions repairs.

Other data changes were minor. For example, 10 nonzero wage values below $7.25 were recoded to $7.25 for consistency with Texas minimum wage. Two wage values (0.3 and 0.5) and one per-test value of $0.01 were recoded to missing. Station square footage estimates below the average square footage of an inspection bay were also excluded from the analysis. Two units were inferred for maintenance costs based on best professional judgement using other stations' reported cost per unit. Missing units for equipment costs were not inferred due to lack of information to rely on for inference. Additional recoding was also needed on inconsistent responses regarding decommissioned equipment.

Except as described above and in footnote 9, data in the following sections are displayed as submitted by the respondent. Sometimes, very high or very low data points heavily influence the "average" (i.e., mean) value shown in the tables. Therefore, the median values are likely most representative of a typical station. As mentioned above, one or two extreme values in a data set have no direct impact on the median, although removing them may slightly affect the median depending on the spread of the data.

III. HGB/DFW SURVEY RESULTS

This chapter describes the survey responses for test-only and T&R stations in the HGB/DFW program areas (the survey instrument itself can be found in Appendix A). Any survey fields that were left blank are reported as "missing." Due to rounding, the percentages in some tables do not total exactly 100%. Results are not provided for some basic questions that are not highly relevant to the analysis of the emissions inspection fee.

A. GENERAL STATION INFORMATION

Table III-1summarizes the typical hours of operation of stations in the HGB/DFW program areas, the number of hours these stations spend open per day, and the number of stations closed on each day of the week. This information is not directly input into the cost model, but it does provide some insight into labor usage between station types, as test-only stations are required to pay inspectors for their entire shifts regardless of whether they are conducting inspections, and they may not be able to deploy the labor elsewhere. Overall, test-only and T&R stations have similar operating hours, although a higher percentage of T&R stations are closed on the weekends.

Table III-1. Hours of Operation—HGB/DFW

Day	Median Open Time	Median Close Time	Median Hours Open	Number Open	Number Closed
Test-Only					
Monday	8:30 a.m.	5:30 p.m.	9	198	4
Tuesday	8:30 a.m.	5:30 p.m.	9	199	3
Wednesday	8:30 a.m.	5:30 p.m.	9	199	3
Thursday	8:30 a.m.	5:30 p.m.	9	200	2
Friday	8:30 a.m.	5:30 p.m.	9	200	2
Saturday	8:30 a.m.	5:30 p.m.	8.5	178	24
Sunday	8:30 a.m.	4:30 p.m.	–	54	148
Test-and-Repair					
Monday	8:30 a.m.	5:30 p.m.	9	527	5
Tuesday	8:30 a.m.	5:30 p.m.	9	531	1
Wednesday	8:30 a.m.	5:30 p.m.	9	529	3
Thursday	8:30 a.m.	5:30 p.m.	9	530	2
Friday	8:30 a.m.	5:30 p.m.	9	527	5
Saturday	8:30 a.m.	5:30 p.m.	9	392	140
Sunday	8:30 a.m.	5:30 p.m.	–	52	480

Table III-2 and Table III-3 summarize the number of emissions inspection bays at each station and the uses for those bays. Table III-2 shows how many bays are used exclusively for emissions testing, while Table III-3 counts the bays used for emissions testing and other work. The majority of stations in the HGB/DFW program areas have one bay used exclusively for emissions testing.

Table III-2. Number of Bays Used Exclusively for Testing—HGB/DFW

Number of Bays	Number of Responses	Percent of Total Responses
Test Only		
0	43	21.3%
1	121	59.9%
2	32	15.8%
3	3	1.5%
4	2	1.0%
5+	1	0.5%
Total	**202**	**100.0%**
Test-and-Repair		
0	112	21.1%
1	385	72.4%
2	29	5.5%
3	2	0.4%
4	2	0.4%
5+	2	0.4%
Total	**532**	**100.0%**

Table III-3. Number of Bays Used for Testing and Other Uses—HGB/DFW

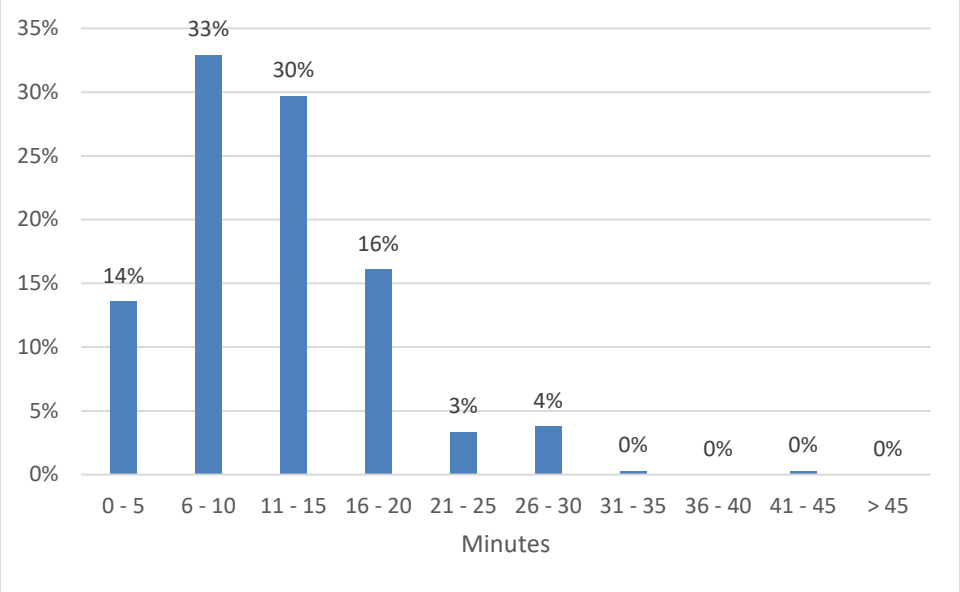
Number of Bays	Number of Responses	Percent of Total Responses
Test-Only		
0	113	55.9%
1	62	30.7%
2	19	9.4%
3	4	2.0%
4	2	1.0%
5+	2	1.0%
Total	**202**	**100.0%**
Test-and-Repair		
0	242	45.5%
1	162	30.5%
2	48	9.0%
3	21	3.9%
4	8	1.5%
5	11	2.1%
6	5	0.9%
7	10	1.9%
8	10	1.9%
9	5	0.9%
10+	10	2.0%
Total	**532**	**100.0%**

B. THE EMISSIONS INSPECTION PROCESS

Figure III-1 shows the distribution of survey responses regarding the average time (in minutes) to conduct emissions testing for OBD tests. The median length of an OBD test in the HGB/DFW

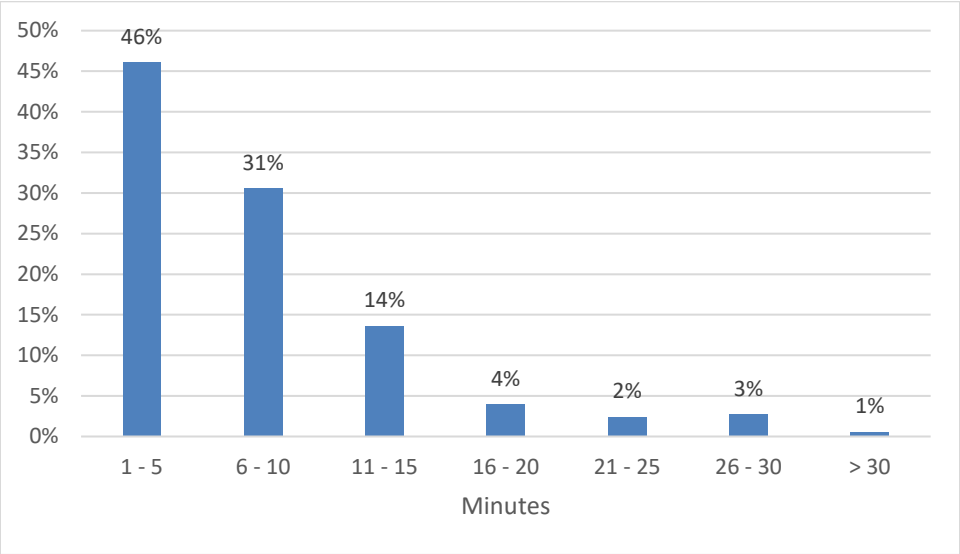
program areas is 13.5 minutes. Most respondents (79%) indicated that OBD tests take somewhere between 6 and 20 minutes.

Figure III-1. Average Time in Minutes to Conduct OBD Emissions Tests—HGB/DFW



Respondents were also asked how much additional time, on average, is spent with each emissions inspection customer to explain either the emissions inspection process or reasons for failure and recommended repairs. The median additional time spent with inspection customers is 10 minutes in the HGB/DFW program areas. Figure III-2 shows the distribution of survey responses for this question. More than three quarters of respondents spend, on average, between 1 and 10 additional minutes with emissions inspection customers; 4% of respondents spend more than 25 extra minutes with these customers.

Figure III-2. Average Additional Time in Minutes Spent with Emissions Inspection Customers—HGB/DFW



C. REPAIR SERVICE REVENUE

Stations offering repair services in addition to emissions testing provided information about the revenue from repairing vehicles that failed emissions inspections. Since the relevant questions applied only to T&R stations, the results shown below in Table III-4, Table III-5, and Table III-6 represent only T&R stations. Table III-4 shows that the majority of stations reported between 1% and 20% of their repair revenue was generated from repairs following failed emissions inspections.

Table III-4. Percent of Repair Revenues Resulting from Failed Emissions Inspections—HGB/DFW

Percent of Repair Revenues from Failed Inspections	Number of Responses	Percent of Total Responses
0%	75	14.1%
1–20%	400	75.2%
21–40%	41	7.7%
41–60%	13	2.4%
61–80%	1	0.2%
81–100%	1	0.2%
Missing	1	0.2%
Total	**532**	**100.0%**

Table III-5 shows a median of four repair jobs from failed emissions inspections. Figure III-3 is a histogram showing the distribution of repair jobs from failed inspections. A majority of stations report up to 10 repair jobs per month resulting from failed emissions inspections.

Table III-5. Typical Number of Repair Jobs per Month Resulting from Failed Emissions Tests—HGB/DFW

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
2	4	10	10	440

Figure III-3. Distribution of Typical Number of Repair Jobs per Month Resulting from Failed Emissions Tests— HGB/DFW

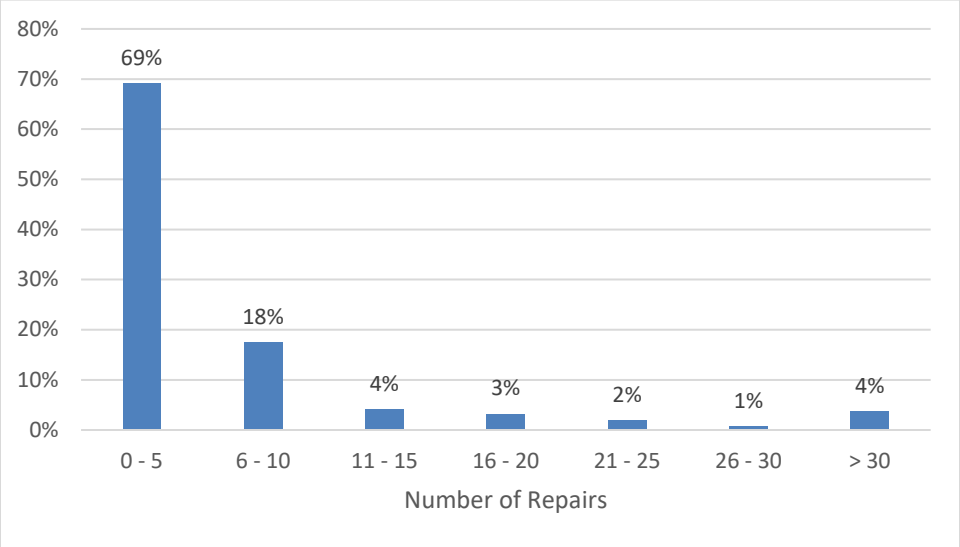
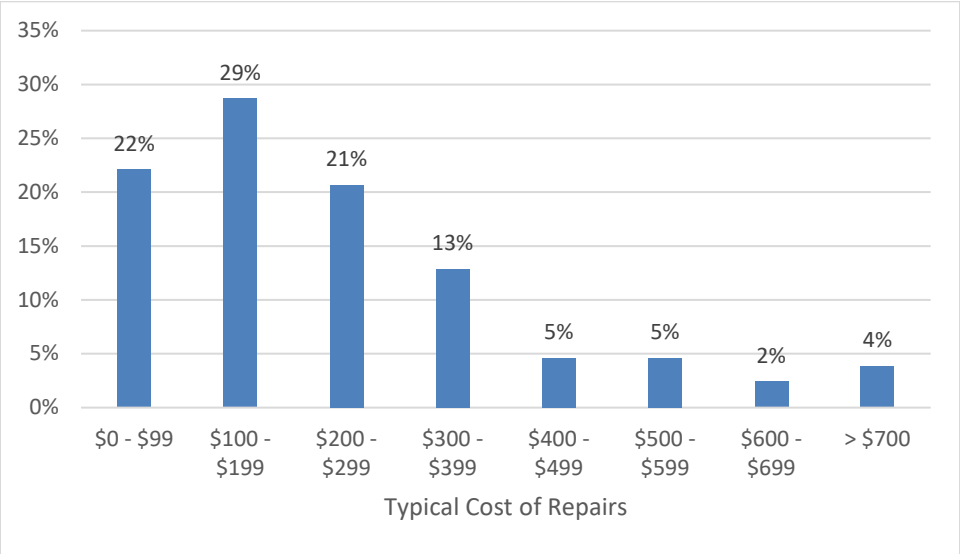


Table III-6 shows that the average cost of a repair following a failed emissions inspection was $232 with a median of $180. Figure III-4 illustrates the distribution of responses regarding average cost of repairs following a failed inspection. This information only provides gross revenue generated from repairs from failed inspections; it does not provide any insight into the additional profit from these repairs. Additionally, it does not feed directly into the cost model, but rather informs supplemental discussion about additional revenue from repairs.

Table III-6. Typical Repair Costs for an Emissions Test Failure—HGB/DFW

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
$100	$180	$300	$232	411

Figure III-4. Distribution of Typical Repair Costs for an Emissions Test Failure—HGB/DFW



D. EMISSIONS INSPECTORS

Table III-7 summarizes the total number of vehicle emissions inspectors employed per station, by station type, for HGB/DFW. Most stations in these program areas employ one, two, or three inspectors. While most test-only stations in HGB/DFW employ three or fewer inspectors, three stations reported employing more than 10 inspectors. T&R stations report a wider range of inspectors employed, with 20 T&R stations employing 10 or more inspectors. Stations in HGB/DFW employ a median of two inspectors.

Table III-7. Number of Emissions Inspectors Currently Employed by Stations—HGB/DFW

Number of Inspectors Employed by Station	Number of Responses	Percent of Total Responses
Test-Only		
1	63	31.2%
2	60	29.7%
3	38	18.8%
4	25	12.4%
5+	16	8.0%
Total	**202**	**100.0%**
Test-and-Repair		
1	149	28.0%
2	162	30.5%
3	109	20.5%
4	51	9.6%
5+	61	11.7%
Total	**532**	**100.0%**

Table III-8 provides numbers of emissions inspectors per station, broken down into full-time and part-time inspectors. "Full-time inspectors" are full-time employees qualified to perform inspections. They may spend all, some, or just a little of their work time doing inspections. "Part-time inspectors" are part-time employees qualified to perform inspections, who likewise may spend only some of their working time doing inspections. The tables show that 48% of test-only and 61% of T&R stations had more than one inspector working full time.

Table III-8. Number of Full-Time Emissions Inspectors—HGB/DFW

Number of Full-Time Inspectors Employed by Station	Number of Responses	Percent of Total Responses
Test-Only		
0	8	4.0%
1	98	48.5%
2	42	20.8%
3	32	15.8%
4	11	5.4%
5+	11	5.5%
Total	**202**	**100.0%**
Test-and-Repair		
0	7	1.3%
1	205	38.5%
2	151	28.4%
3	78	14.7%
4	36	6.8%
5+	55	10.6%
Total	**532**	**100.00%**

Table III-9. Number of Part-Time Emissions Inspectors—HGB/DFW

Number of Part-Time Inspectors Employed by Station	Number of Responses	Percent of Total Responses
Test-Only		
0	133	65.8%
1	44	21.8%
2	17	8.4%
3	5	2.5%
4	2	1.0%
5+	1	0.5%
Total	**202**	**100.0%**
Test-and-Repair		
0	417	78.4%
1	77	14.5%
2	26	4.9%
3	8	1.5%
4	2	0.4%
5+	2	0.4%
Total	**532**	**100.0%**

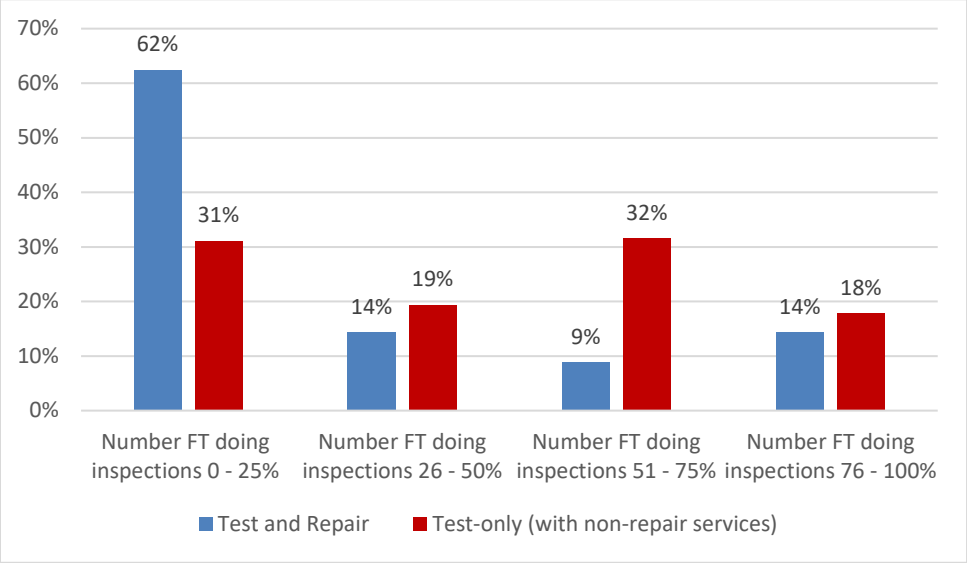
To explore the extent to which stations offering repair or non-repair services focus on activities other than emissions inspections, stations were asked how much time inspectors spend performing emissions inspections. Table III-10 shows the number of stations and total number of inspectors by services offered, as well as how many of those stations employ at least one full-time inspector spending more than half their time conducting inspections. Around 37% of test-only stations offer non-repair services (typically general maintenance services such as oil changes and filter replacements), but 61% of those that do offer other services have at least one full-time inspector working more than half their time conducting inspections. Over half of T&R stations offer both repair and non-repair services in addition to emissions testing. About 36% of T&R stations have at least one full-time inspector spending more than half their time on inspections.

Table III-10. Deployment of Labor by Station Type and Services Offered—HGB/DFW

Station Type and Services Offered	Count of All Stations	Percent of Station Type	Count of Stations Employing at Least One Full-Time Inspector Conducting Inspections at Least 51% of the Time	Percent Relative to All Stations	Full-Time Inspectors	Part-Time Inspectors
Test-Only	**202**				**470**	**106**
No other services	127	17%	NA	NA	223	78
Non-repair services	75	10%	46	61%	247	28
Test-and-Repair	**532**		**223**	**42%**	**1,622**	**172**
Repair services only	206	28%	105	51%	490	63
Repair and non-repair services	326	44%	118	36%	1132	109
Total	**734**	**100%**	**269**		**2092**	**278**

Figure III-5 shows the distribution of full-time inspectors by percent of time doing inspections. For T&R, the figure shows that full-time workers' labor is not spent only on inspections; therefore, ERG assumed that inspectors are doing other work when not inspecting vehicles and did not include this time in the cost model (i.e., this justifies only including incremental inspection time).

Figure III-5. Full-Time Inspectors by Percent of Time Spent Doing Inspections—HGB/DFW



* Note: FT stands for full-time.

Table III-11 summarizes average hourly wages (unloaded[11]) paid to emissions inspectors, as well as per-test commissions paid, by station type. Overall, the median reported hourly wage for emissions inspectors at test-only stations ($14) was similar to that at T&R stations ($15). These values are similar to the $14.30 and $14.80 hourly wages shown for the HGB and DFW areas, respectively, for level 1 auto service technicians and mechanics, as reported by the Foreign Labor Certification Data Center (FLC, 2022). The cost model uses hourly wage information directly; it does not include per-test payments since most inspectors are paid hourly or by salary (as opposed to commission).

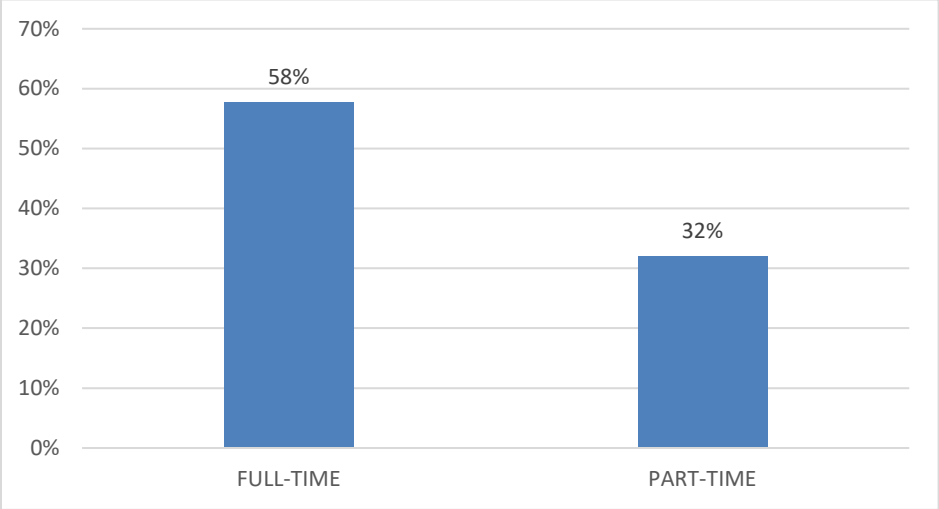
Table III-11. Current Wages Paid to Emissions Inspectors, Hourly ($/hr) and Per-Test—HGB/DFW

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
Hourly/Salary				
Test-Only				
$11	$14	$15	$20.05	147
Test-and-Repair				
$12.50	$15	$19	$25.00	407
Per-Test				
Test-Only				
$6.00	$10.00	$12.00	$9.53	25
Test-and-Repair				
$3.00	$7.25	$11.20	$8.29	106

[11] These are wages without accounting for benefits the employee might receive.

The survey also asked how many full- and part-time emissions inspectors received benefits (e.g., "health care, paid leave, etc."). Determining the number of inspectors who receive benefits allows the cost model to adjust the Bureau of Labor Statistics (BLS) fringe benefit rate to control for those inspectors who do receive benefits and those who do not. As shown in Figure III-6, 58% of full-time emissions inspectors and 32% of part-time inspectors in HGB/DFW receive benefits.

Figure III-6. Percent of Emissions Inspectors Receiving Benefits—HGB/DFW



Respondents were asked if they incurred costs to train employees to conduct emissions inspections. If so, they were asked to provide dollar figures for different types of costs related to training, such as inspector training application fees, food and lodging costs, and wages paid for both on-the-job training and time spent in training courses. Table III-12 shows that test-only and T&R stations in HGB/DFW were similarly likely to incur training costs (between 29% and 32%).

Table III-12. Does Your Station Incur Training Costs?—HGB/DFW

Incur Training Costs?	Number of Responses	Percent of Total Responses
Test-Only		
Yes	59	29.2%
No	114	56.4%
Not sure	28	13.9%
Missing	1	0.5%
Total	**202**	**100.0%**
Test-and-Repair		
Yes	170	32.0%
No	299	56.2%
Not sure	62	11.7%
Missing	1	0.2%
Total	**532**	**100.0%**

E. EMISSIONS TESTING EQUIPMENT, BUILDING, AND OTHER COSTS

Table III-13 shows cost data for certified emissions testing analyzers. Emissions testing equipment data are presented on a per-unit basis rather than a per-station basis because stations may have more than one certified emissions testing analyzer. Because of the per-unit basis, totals may be larger than the number of stations that responded to the survey.

Respondents were asked to report information for analyzers owned by the station and analyzers rented by the station. In HGB/DFW, respondents reported paying a median value of $8,000 for analyzers they purchased. A new certified OBD analyzer typically ranges in price from $6,895 to $7,450, which coincides well with the reported survey values. The median price reported for rented equipment is $220 per month. This rental price is comparable to the published rental prices for OBD analyzers, which are between $195 and $199 before taxes.

Table III-13. Cost of Certified Emissions Testing Analyzers by Equipment Type—HGB/DFW

Equipment Type	25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
Owned	$3,000	$8,000	$10,000	$10,466	357
Rented	$212	$220	$245	$261.40	406

As shown in Table III-14, 19% of equipment was purchased with cash (i.e., paid in full versus a bank loan or lease). Nearly half of respondents reported renting their certified emissions analyzers. For the cost model, it is assumed that stations are renting emissions inspection equipment, so the cost models use the median rent price reported by stations across all program areas ($220).

Table III-14. Financing Mechanisms for Emissions Testing Equipment—HGB/DFW

Finance Type	Number of Responses	Percent of Total Responses
Paid cash	167	18.9%
Lease-to-purchase	46	5.2%
Bank loan	41	4.6%
Rented	432	48.9%
Not disclosed	197	22.3%
Total	**883**	**100.0%**

* Of the 734 respondents in the HGB/DFW program area, 18% (131 stations) reported more than one certified analyzer.

For stations that did not pay with cash, Table III-15 shows that the median lease-to-purchase or bank loan term is five years. Figure III-7 more clearly illustrates the distribution of loan terms for the HGB/DFW program areas. The majority of leased analyzers have a loan term under six years.

Table III-15. Lease-to-Purchase or Bank Loan Term (Years)—HGB/DFW

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
3.0	5.0	5.0	4.6	47

Figure III-7. Distribution of the Lease-to-Purchase or Bank Loan Term (Years)—HGB/DFW

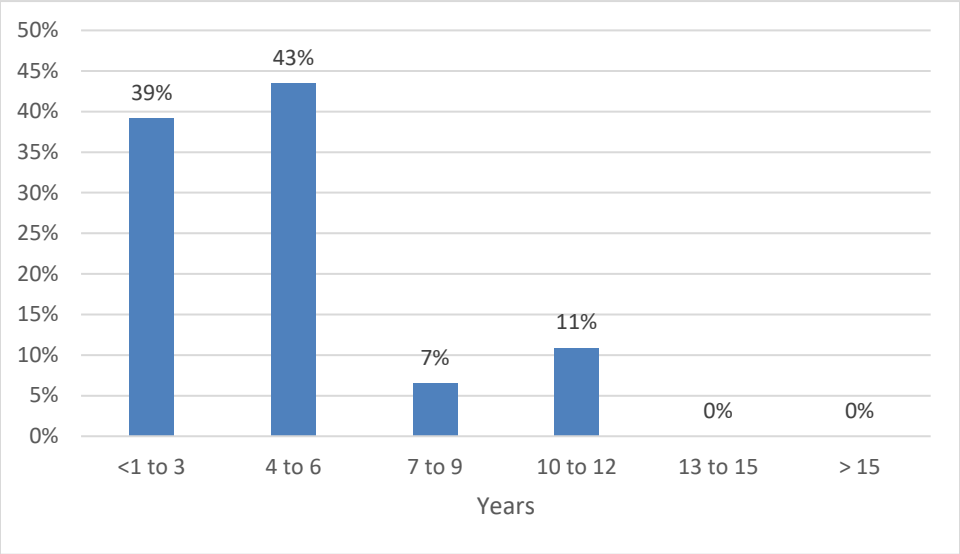
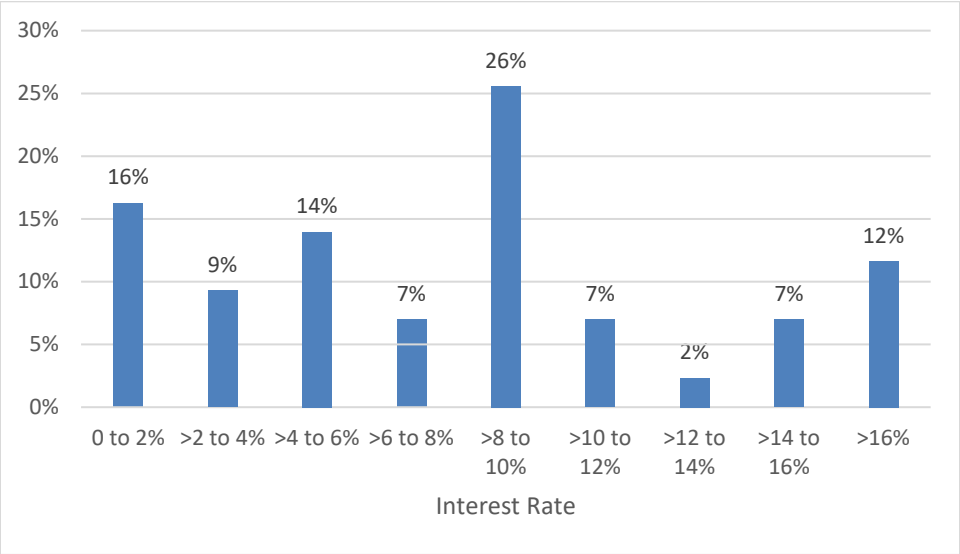


Table III-16 summarizes the survey responses regarding lease-to-purchase or bank loan interest rates. The average and median lease-to-purchase or loan rates in HGB/DFW are similar at around 9%. Figure III-8 presents the distributions of interest rates as reported by respondents.

Table III-16. Interest Rates for Lease-to-Purchase or Bank Loan—HGB/DFW

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
4.0%	9.0%	12.0%	8.8%	43

Figure III-8. Distribution of the Interest Rates for Lease-to-Purchase or Bank Loan—HGB/DFW



More T&R stations (29.1%) than test-only stations (22.9%) in HGB/DFW report having maintenance plans. Table III-17 shows that T&R stations report paying a lower median annual maintenance cost than test-only stations ($1,500 and $1,680, respectively). At the same time, the average T&R station pays more for a maintenance package than test-only stations.

Table III-17. Annual Maintenance Package Costs—HGB/DFW

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
Test-Only				
$1,000	$1,680	$2,500	$1,877	21
Test-and-Repair				
$800	$1,500	$2,580	$2,183	57

Many stations also incur maintenance costs not covered by a service contract or maintenance package agreement. As shown in Table III-18, these additional costs were very low compared to the maintenance packages shown in Table III-17 for test-only and T&R stations; T&R stations had an extra maintenance cost of $100, while the median test-only station did not have any extra maintenance costs.

Table III-18. Extra Annual Maintenance Costs for Stations with Maintenance Plans—HGB/DFW

Station Type	25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
Test-Only	$0	$0	$800	$765	160
Test-and-Repair	$0	$100	$650	$600	444

Table III-19 summarizes the results on whether stations have ever gotten rid of emissions testing equipment they no longer needed. Similar numbers of test-only and T&R stations (43% and 45%, respectively) reported getting rid of equipment.

Table III-19. Stations That Got Rid of Emissions Testing Equipment—HGB/DFW

Ever Got Rid of Equipment?	Number of Responses	Percent of Total Responses
Test-Only		
Yes	87	43.1%
No	89	44.1%
Not sure	26	12.9%
Missing	0	0.0%
Total	**202**	**100.0%**
Test-and-Repair		
Yes	241	45.3%
No	237	44.5%
Not sure	49	9.2%
Missing	5	0.9%
Total	**532**	**100.0%**

Survey data show that stations that got rid of OBD analyzers owned them for about nine years on average before getting rid of them (see Table III-20). Table III-21 shows how stations got rid of their emissions testing equipment. A total of 290 stations provided details on how they got rid of 376 emissions analyzers. Table III-22 and Table III-23 show costs and revenues from getting rid of emissions testing equipment. The majority of equipment was decommissioned for free, but the median price for those who paid to get rid of equipment was $300 and the median revenue for selling OBD equipment was $1,250.

Table III-20. Years Owned Before Stations Got Rid of Equipment—HGB/DFW

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
5	10	13	9.4	369

Table III-21. How Stations Got Rid of Equipment—HGB/DFW

Free, Paid, or Sold?	Number of Responses	Percent of Total Responses
I sold this	11	2.9%
I paid to get rid of this	72	19.1%
I got rid of this for free	219	58.2%
I traded this in	26	6.9%
Not disclosed	48	12.8%
Total Analyzers	**376**	**100.0%**

Table III-22. Cost to Get Rid of Equipment—HGB/DFW

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
$100	$300	$1,200	$2,423	67

Table III-23. Revenue from Getting Rid of Equipment—HGB/DFW

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
$500	$1,250	$3,000	$1,680	10

In the HGB/DFW program areas, the majority of both test-only (81%) and T&R (83%) stations reported that they did not ever add or acquire building space (i.e., bay space) to perform vehicle emissions testing. The analytical model is designed to provide results both with and without emissions testing related building costs to assess the financial health of stations that either have only equipment costs or those that have both testing-related building space costs and equipment costs. Table III-24 provides an overview of the number of stations that purchased or rented/leased their building space. Among all stations in HGB/DFW, less than half of stations (41%) own the building space used for vehicle emissions testing while 59% rent or lease their space, with more T&R stations owning than renting compared to test-only stations (43% and 33%, respectively).

Table III-24. Building Space Rented or Purchased?—HGB/DFW

Purchase or Rent?	Number of Responses	Percent of Total Responses
Test-Only		
Purchase	67	33.2%
Rent/lease	131	64.9%
Missing	4	2.0%
Total	**202**	**100.0%**
Test-and-Repair		
Purchase	226	42.5%
Rent/lease	294	55.3%
Missing	12	2.3%
Total	**532**	**100.0%**

Less than one-fifth of stations offer reduced-fee and/or free emissions inspections (other than performing obligatory free retests after a vehicle failed inspection at their station). As Table III-25 shows, 19.8% of test-only stations and 17.3% of T&R stations provided free emissions inspections. Common reasons for providing free tests included providing free inspections for general customer satisfaction, for customers just outside the 15-day retest window, and to friends, family, and employees.

Table III-25. Free Emissions Tests (Except Free Retests)—HGB/DFW

Free Tests Ever Given?	Number of Responses	Percent of Total Responses
Test-Only		
Yes	40	19.8%
No	162	80.2%
Total	**202**	**100.00%**
Test-and-Repair		
Yes	92	17.3%
No	440	82.7%
Total	**532**	**100.00%**

Table III-26 shows, across station types, similar rates of charging a reduced fee (less than $18.50), excluding free retests for previously failed vehicles. The percent of stations that occasionally offer reduced-fee emissions inspections ranges from 11.7% (T&R) to 13.9% (test-only). While a majority of stations do not offer tests at reduced fees, as Table III-27 shows, a typical fee reduction among the 10% of stations that do was $5.50, or a median reduced fee charge of $13.

Table III-26. Reduced-Fee Emissions Tests (Less than $18.50)—HGB/DFW

Charged Less than $18.50?	Number of Responses	Percent of Total Responses
Test-Only		
Yes	28	13.9%
No	174	86.1%
Total	**202**	**100.0%**
Test-and-Repair		
Yes	62	11.7%
No	470	88.3%
Total	**532**	**100.0%**

Table III-27. Typical Reduced Fees Charged (Less than $18.50)—HGB/DFW

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
$12.00	$13.00	$15.00	$13.25	74

Respondents were also asked whether the fee for emissions inspections covers the associated costs. As shown in Table III-28, the majority of respondents answered “no”: 72.8% of test-only stations responded that the fee did not cover the costs, along with 72% of T&R stations. Though the cost model does not include this information, it is important to the overall discussion of whether fees cover costs. Chapter VII provides an overview of stations’ explanations for why the fee does not cover costs.

Table III-28. Does Fee Cover Emissions Testing Costs?—HGB/DFW

Fee Covers Testing Costs?	Number of Responses	Percent of Total Responses
Test-Only		
No	147	72.8%
Yes	52	25.7%
Missing	3	1.5%
Total	**202**	**100.0%**
Test-and-Repair		
No	383	72.0%
Yes	144	27.1%
Missing	5	0.9%
Total	**532**	**100.0%**

ERG compared responses to these questions on free and reduced-fee emissions tests and the adequacy of the fee to cover test-related expenses. In the HGB/DFW program area, 19.9% of stations that indicate the $18.50 emissions test fee covers their costs say they offer free tests. This percent is slightly higher than the 17.4% of respondents that say the fee does not cover their emissions-test-related costs, but who still offer free tests. Similarly, 13.8% of stations that indicate the $18.50 emissions test fee covers their costs say they offer tests for reduced fees, while a slightly lower 11.9% of respondents that indicate the fee does not cover their emissions-test-related costs say they offer tests for reduced fees.

IV. EL PASO SURVEY RESULTS

This chapter describes the survey responses for test-only and T&R stations in the El Paso program area (the survey instrument itself can be found in Appendix A). Any survey fields that were left blank are reported as "missing." Due to rounding, the percentages in some tables do not total exactly 100%. Results are not provided for some basic questions that are not highly relevant to the analysis of the emissions inspection fee.

As noted in Chapter II, only nine test-only stations in El Paso responded to the survey, compared to 43 T&R stations that responded, so caution should be taken in assessing these data due to the extremely small sample size.

A. GENERAL STATION INFORMATION

Table IV-1 summarizes the typical hours of operation of stations in El Paso, the number of hours these stations are open per day, and the number of stations closed on each day of the week. This information is not directly input into the cost model, but it does provide some insight into labor usage between station types, as test-only stations are required to pay inspectors for their entire shifts regardless of whether they are conducting inspections. Overall, test-only and T&R stations have generally similar operating hours.

Table IV-1. Hours of Operation—El Paso

Day	Median Open Time	Median Close Time	Median Hours Open	Number Open	Number Closed
Test-Only					
Monday	8:30 a.m.	5:30 p.m.	9	9	0
Tuesday	8:30 a.m.	5:30 p.m.	9	9	0
Wednesday	8:30 a.m.	5:30 p.m.	9	9	0
Thursday	8:30 a.m.	5:30 p.m.	9	9	0
Friday	8:30 a.m.	5:30 p.m.	9	9	0
Saturday	8:30 a.m.	5:30 p.m.	9	9	0
Sunday	–	–	–	3	6
Test-and-Repair					
Monday	7:30 a.m.	5:30 p.m.	10	42	1
Tuesday	7:30 a.m.	5:30 p.m.	10	43	0
Wednesday	7:30 a.m.	5:30 p.m.	10	43	0
Thursday	7:30 a.m.	5:30 p.m.	10	43	0
Friday	7:30 a.m.	5:30 p.m.	10	43	0
Saturday	7:30 a.m.	3:00 p.m.	9	35	8
Sunday	–	–	–	4	39

Table IV-2 and Table IV-3 summarize the number of emissions inspection bays at each station and the uses for those bays. Table IV-2 shows how many bays in the station are used exclusively for emissions testing, while Table IV-3 counts the bays used for emissions testing and other work. The majority of test-only and T&R stations each have one bay used exclusively for testing.

Table IV-2. Number of Bays Used Exclusively for Testing—El Paso

Number of Bays	Number of Responses	Percent of Total Responses
Test-Only		
0	1	11.1%
1	8	88.9%
Total	**9**	**100.0%**
Test-and-Repair		
0	8	18.6%
1	34	79.1%
2	1	2.3%
Total	**43**	**100.0%**

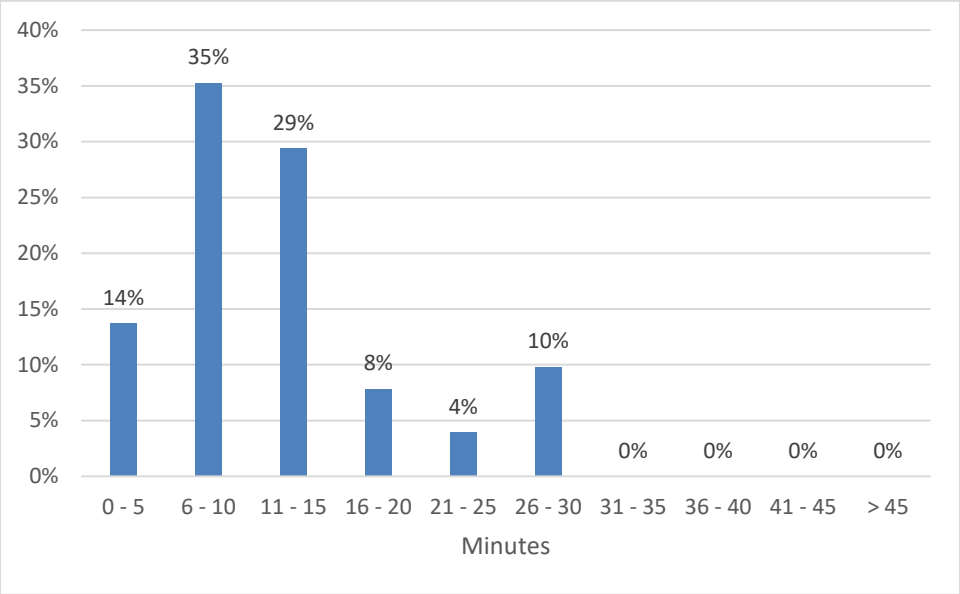
Table IV-3. Number of Bays Used for Testing and Other Uses—El Paso

Number of Bays	Number of Responses	Percent of Total Responses
Test-Only		
0	4	44.4%
1	4	44.4%
2	1	11.1%
Total	**9**	**100.0%**
Test-and-Repair		
0	24	55.8%
1	13	30.2%
2	3	7.0%
3	2	4.7%
5+	1	2.3%
Total	**43**	**100.0%**

B. THE EMISSIONS INSPECTION PROCESS

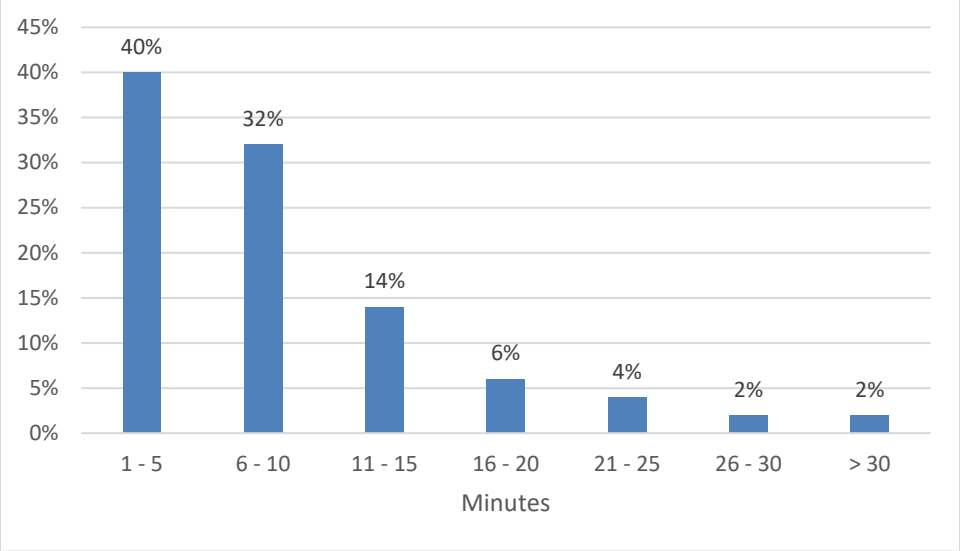
Figure IV-1 shows the distribution of survey responses regarding the average time (in minutes) for OBD tests. No stations reported testing times greater than 30 minutes. In El Paso, the median length of an OBD test is 12 minutes.

Figure IV-1. Average Time in Minutes to Conduct OBD Emissions Tests—El Paso



Respondents were asked how much additional time, on average, emissions inspectors spend with each emissions inspection customer to explain either the inspection process or reasons for failure and recommended repairs. The median length of additional time spent with inspection customers in El Paso is nine minutes. Nearly three-quarters of stations reported spending 10 or fewer additional minutes per customer.

Figure IV-2. Average Additional Time in Minutes Spent with Emissions Inspection Customers—El Paso



C. REPAIR SERVICE REVENUE

Stations offering repair services in addition to emissions inspections provided information about the revenue stream generated from repairs to vehicles that failed emissions inspections. Since the relevant questions were applicable only to T&R stations, the results shown below represent only T&R stations.

As Table IV-4 shows, 62.8% of T&R stations reported that between 1% and 20% of their repair revenue came from failed emissions repairs. No station reported that between 81% and 100% of its repair revenue came directly from failed emissions inspections.

Table IV-4. Percent of Repair Revenues Resulting from Failed Emissions Inspections—El Paso

Percent of Repair Revenues from Failed Inspections	Number of Responses	Percent of Total Responses
0%	2	4.7%
1–20%	27	62.8%
21–40%	5	11.6%
41–60%	5	11.6%
61–80%	3	7.0%
81–100%	0	0.0%
Missing	1	2.3%
Total	**33**	**100.0%**

Table IV-5 shows that the average number of repair jobs per month that are generated from failed emissions inspections is 12.6, while the median is eight repair jobs per month. The interquartile range is 18, with the middle half of the stations averaging between two and 20 repair jobs per month from failed emissions tests. Figure IV-3 shows the distribution of the responses in a histogram. The average cost of such a repair was $162, with a median value of $139 (Table IV-6). Figure IV-4 shows the distribution of the average cost of repairs from failed inspections. This information only gives insight into the gross revenue generated from repairs from failed inspections; it does not provide any insight into the additional profit from these repairs. Additionally, it does not feed directly into the cost model, but rather informs supplemental discussion about additional revenue from repairs.

Table IV-5. Typical Number of Repair Jobs per Month Resulting from Failed Emissions Tests—El Paso

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
2	8	20	13	38

Figure IV-3. Distribution of Typical Number of Repair Jobs per Month Resulting from Failed Emissions Tests—El Paso

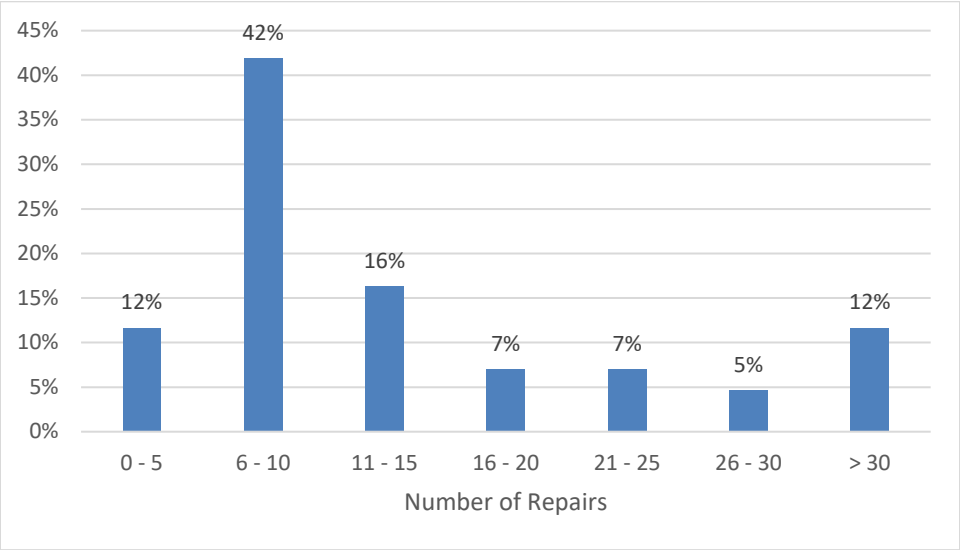
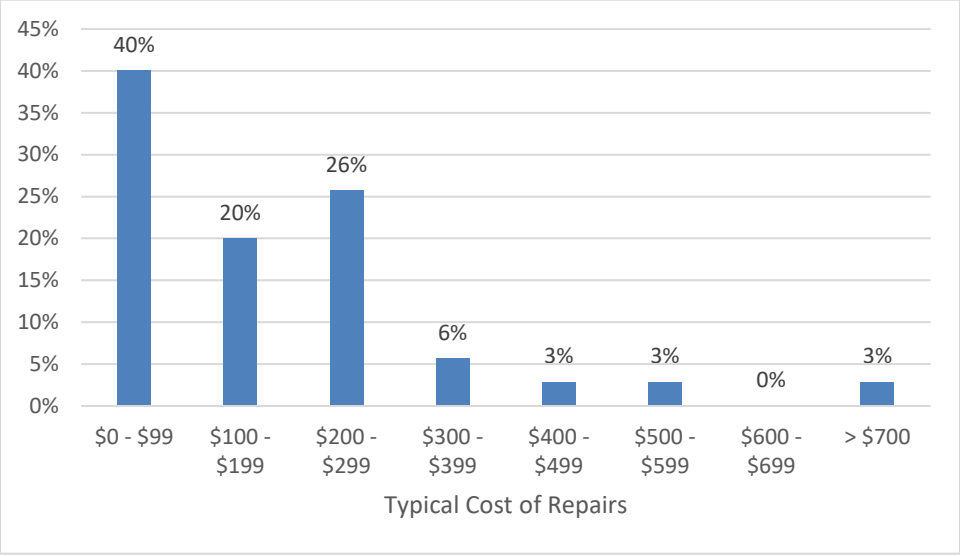


Table IV-6. Typical Repair Costs for an Emissions Test Failure—El Paso

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
$50.00	$139.00	$200.00	$162.00	35

Figure IV-4. Distribution of Typical Repair Costs for an Emissions Test Failure—El Paso



D. EMISSIONS INSPECTORS

Table IV-7 summarizes the total number of vehicle emissions inspectors employed per station, by station type, in El Paso. Most respondents reported employing one, two, or three inspectors at their stations. The highest number of inspectors a test-only station reported employing was five, while the highest number a T&R station reported was 12. Stations in El Paso employ a median of two inspectors.

Table IV-7. Number of Emissions Inspectors Currently Employed by Stations—El Paso

Number of Inspectors Employed by Station	Number of Responses	Percent of Total Responses
Test-Only		
1	3	33.3%
2	2	22.2%
3	1	11.1%
4	2	22.2%
5+	1	11.1%
Total	**9**	**100.0%**
Test-and-Repair		
1	16	37.2%
2	11	25.6%
3	7	16.3%
4	5	11.6%
5+	4	9.3%
Total	**43**	**100.0%**

Table IV-8 and Table IV-9 provide numbers of emissions inspectors per station, broken down into full-time and part-time inspectors. “Full-time inspectors” are full-time employees qualified to perform inspections. They may spend all, some, or just a little of their work time doing inspections. “Part-time inspectors” are part-time employees qualified to do inspections, who likewise may spend only some working time doing inspections. These tables show that El Paso–area stations tend to hire more full-time than part-time emissions inspectors. Nearly half of test-only stations (44.4%) and a vast majority of T&R stations (81.4%) reported zero part-time inspectors.

Table IV-8. Number of Full-Time Emissions Inspectors—El Paso

Number of Full-Time Inspectors Employed by Station	Number of Responses	Percent of Total Responses
Test-Only		
1	5	55.6%
2	2	22.2%
3	2	22.2%
Total	**9**	**100.0%**

Number of Full-Time Inspectors Employed by Station	Number of Responses	Percent of Total Responses
Test-and-Repair		
0	1	2.3%
1	19	44.2%
2	12	27.9%
3	4	9.3%
4	4	9.3%
5+	3	7.0%
Total	**43**	**100.0%**

Table IV-9. Number of Part-Time Emissions Inspectors—El Paso

Number of Part-Time Inspectors Employed by Station	Number of Responses	Percent of Total Responses
Test-Only		
0	4	44.4%
1	2	22.2%
2	3	33.3%
Total	**9**	**100.0%**
Test-and-Repair		
0	35	81.4%
1	4	9.3%
2	3	7.0%
3	1	2.3%
Total	**43**	**100.0%**

To explore the extent to which stations offering repair or non-repair services focus on activities other than emissions inspections, stations were asked how much time inspectors spend performing emissions inspections.

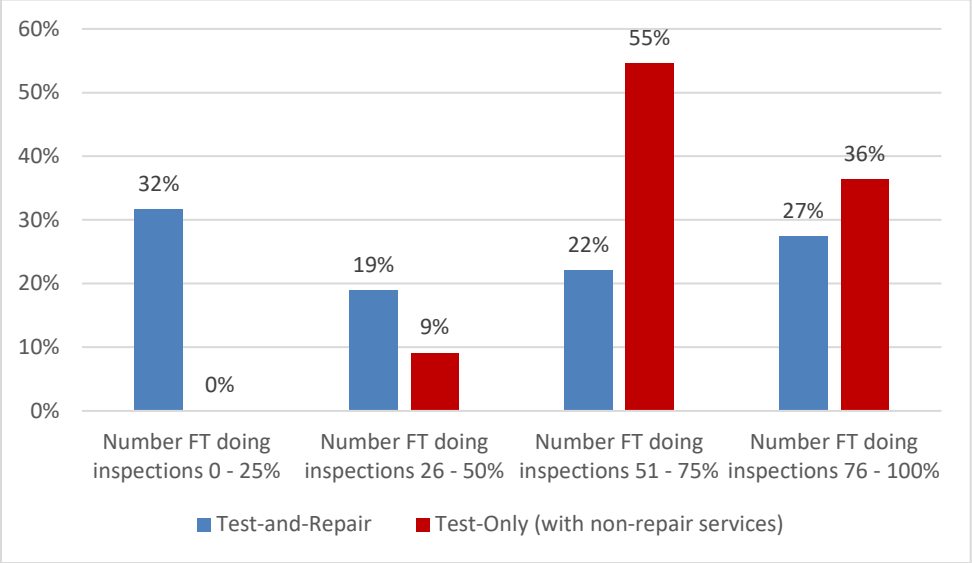
Table IV-10 shows the number of stations and total number of inspectors by services offered, as well as how many of those stations employ at least one full-time inspector spending more than half their time conducting inspections. About half of test-only stations reported offering other non-repair services, and all of those stations have at least one full-time inspector working more than half their time conducting inspections. About 60% of T&R stations offer both repair and non-repair services in addition to emissions testing. Almost two-thirds (63%) of T&R stations have at least one full-time inspector spending more than half their time on inspections.

Table IV-10. Deployment of Labor by Station Type and Services Offered—El Paso

Station Type and Services Offered	Count of All Stations	Percent of Station Type	Count of Stations Employing at Least One Full-Time Inspector Conducting Inspections at Least 51% of the Time	Percent Relative to All Stations	Full-Time Inspectors	Part-Time Inspectors
Test-Only	**9**	–	5	–	**15**	**8**
No other services	4	8%	NA	NA	4	2
Non-repair services	5	10%	5	100%	11	6
Test-and-Repair	**43**	–	**28**	**65%**	**95**	**12**
Repair services only	17	33%	11	65%	29	6
Repair and non-repair services	26	50%	17	65%	66	7
Total	**52**	**100%**	**33**	**63%**	**110**	**21**

Figure IV-5 shows the distribution of full-time inspectors by percent of time doing inspections. For T&R, the figure shows that full-time workers' labor is not spent only on inspections; therefore, ERG assumed that inspectors are doing other work when not inspecting vehicles and did not include this time in the cost model (i.e., this justifies only including inspection time).

Figure IV-5. Full-Time Inspectors by Percent of Time Spent Doing Inspections—El Paso



* Note: FT stands for full-time.

Table IV-11 summarizes average hourly wages (unloaded) paid to emissions inspectors, as well as per-test commissions paid, by station type in the El Paso program area. Median hourly wages at test-only stations ($10.00) are just slightly lower than at T&R stations ($10.50). These values are close to the $10.12 average hourly wage for level 1 auto service technicians and mechanics reported for the El Paso program area by the Foreign Labor Certification Data Center (FLC, 2022). The wage gap from the average values is higher, but this is influenced by a few significantly higher wages at T&R stations that are not representative of what most stations

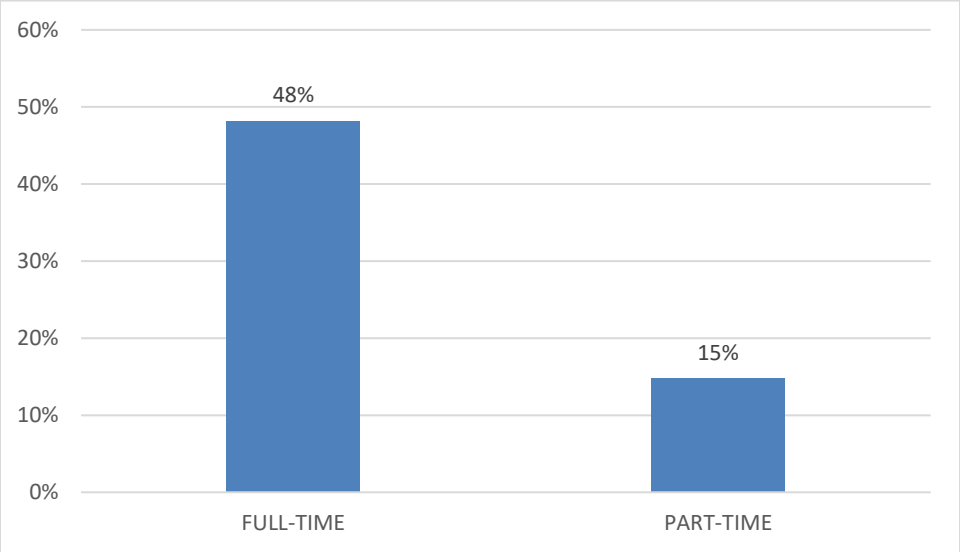
reported. The cost model uses hourly wage information directly; it does not include per-test payments since most inspectors are paid hourly or by salary (as opposed to commission).

Table IV-11. Current Wages Paid to Emissions Inspectors, Hourly ($/hr) and Per-Test—El Paso

Station Type	25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
Hourly/Salary					
Test-only	$10.00	$10.00	$11.00	$10.20	5
Test-and-repair	$10.50	$13.50	$16.50	$17.89	32
Per-Test					
Test-only	$10.00	$10.00	$10.00	$10.00	1
Test-and-repair	$3.25	$6.50	$17.25	$12.06	8

The survey also asked how many full- and part-time emissions inspectors received benefits (e.g., "health care, paid leave, etc."). Determining the number of inspectors who receive benefits allows the cost model to adjust the BLS fringe benefit rate to control for those inspectors who do receive benefits and those who do not. As Figure IV-6 shows, 48% of full-time emissions inspectors and only 15% of part-time inspectors in El Paso receive benefits.

Figure IV-6. Percent of Emissions Inspectors Receiving Benefits—El Paso



Respondents were asked if they incurred costs to train employees to conduct emissions inspections. If so, they were asked to provide dollar figures for different types of costs related to training, such as inspector training application fees, food and lodging costs, and wages paid for both on-the-job training and time spent in training courses. Table IV-12 shows that fewer than half of T&R stations in El Paso incurred training costs (37.2%) and fewer than one quarter of test-only stations incurred training costs in 2021 (22.2%).

Table IV-12. Does Your Station Incur Training Costs?—El Paso

Incur Training Costs?	Number of Responses	Percent of Total Responses
Test-Only		
Yes	2	22.2%
No	6	66.7%
Not sure	1	11.1%
Total	**9**	**100.0%**
Test-and-Repair		
Yes	16	37.2%
No	22	51.2%
Not sure	5	11.6%
Total	**43**	**100.0%**

E. EMISSIONS TESTING EQUIPMENT, BUILDING, AND OTHER COSTS

Table IV-13 shows cost data for certified emissions testing analyzers. Emissions testing equipment data are presented on a per-unit basis rather than a per-station basis because stations may have more than one certified emissions testing analyzer. Because of the per-unit basis, totals may be larger than the number of stations that responded to the survey.

The results show a median purchase price of emissions inspection equipment of $8,250—higher than the price for a single new certified OBD analyzer, which typically ranges from $6,895 to $7,450 (TCEQ, 2021). The median price reported for rented equipment is $227.50. The rental price is comparable to the published rental prices for OBD analyzers, which are between $195 and $199 before taxes.

Table IV-13. Cost of Certified Emissions Testing Analyzers by Equipment Type—El Paso

Equipment Type	25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
Owned	$5,000	$8,250	$16,000	$10,184.60	26
Rented	$217	$228	$259	$434	16

As shown in Table IV-14, less than one-third of units were cash purchases (28.8%) (i.e., paid in full versus a bank loan or lease). For the cost model, it is assumed that stations are renting emissions inspection equipment, so the cost models use the median rent price reported by stations across all program areas ($220).

Table IV-14. Financing Mechanisms for Purchasing Emissions Testing Equipment—El Paso

Paid cash	15	28.8%
Lease-to-purchase	3	5.8%
Bank loan	1	1.9%
Rented	17	32.7%
Not disclosed	16	30.8%
Total	**52***	**100.0%**

* Of the 52 respondents in the El Paso program area, zero reported more than one certified analyzer.

For the three stations that financed the purchase of analyzers, Table IV-15 shows the average and median lease-to-purchase or bank loan term is two years. Figure IV-7 shows the distribution of these loan terms for test-only and T&R stations combined. All three stations reported loan terms between one and three years.

Table IV-15. Lease-to-Purchase or Bank Loan Term (Years)—El Paso

1	2	3	2	3

Figure IV-7. Distribution of Lease-to-Purchase or Bank Loan Term (Years)—El Paso

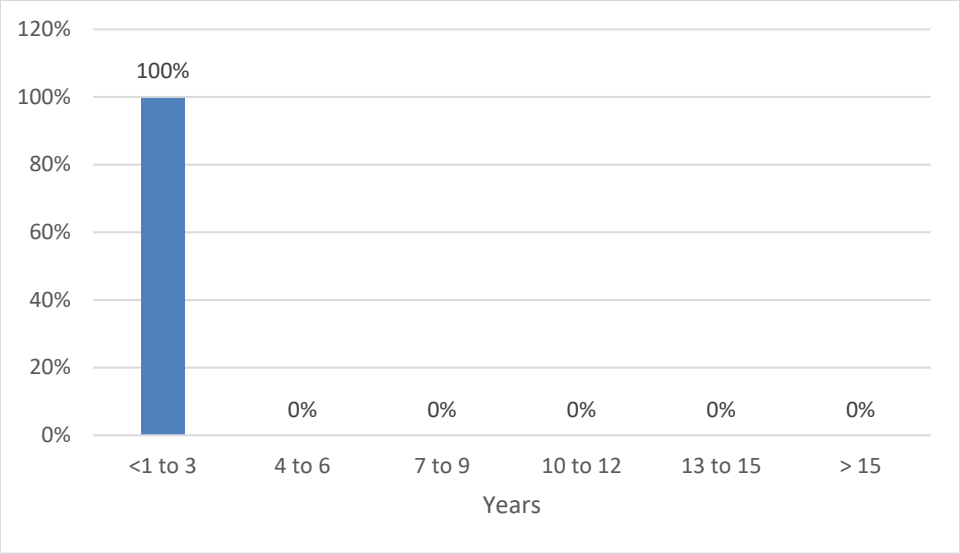
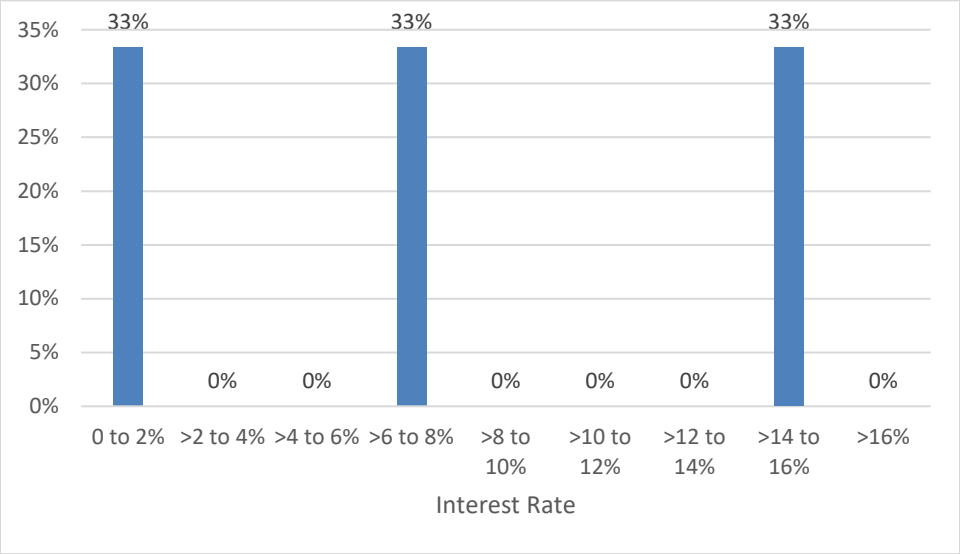


Table IV-16 shows reported lease-to-purchase or bank loan interest rates for these three stations. The average and median reported values for interest rates on financed analyzers were similar, at 8% and 7.7% respectively. Figure IV-8 shows the distribution of these loan terms for current equipment; each station reported a different rate.

Table IV-16. Interest Rates for Lease-to-Purchase or Bank Loan—El Paso

0.0%	8.0%	15.0%	7.7%	3

Figure IV-8. Distribution of the Interest Rates for Lease-to-Purchase or Bank Loan—El Paso



Upon purchasing an emissions inspection analyzer, a station can usually opt into an annual maintenance package. Of the nine test-only respondents, only one confirmed it has a maintenance package for its emissions inspection analyzer. Of the 43 T&R survey respondents, seven (16%) confirmed they have annual maintenance packages. Table IV-17 shows the breakdown of annual maintenance package costs for both test-only and T&R stations. T&R stations had a median annual maintenance package cost of $1,800, more than four times greater than the one test-only station with an annual maintenance package cost.

Table IV-17. Annual Maintenance Package Costs—El Paso

Station Type	25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
Test-only	$400	$400	$400	$400	1
Test-and-repair	$600	$1,800	$2,000	$1,631	7

Some stations also incur maintenance costs not covered by a service contract or maintenance package agreement. Table IV-18 shows the median reported value of these costs was $500 annually for test-only stations and $600 annually for T&R stations.

Table IV-18. Extra Annual Maintenance Costs for Stations with Maintenance Plans—El Paso

Station Type	25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
Test-only	$0	$500	$500	$511	9
Test-and-repair	$0	$600	$1,350	$1,046	32

Stations were also asked whether they have ever gotten rid of emissions testing equipment they no longer needed. As shown in Table IV-19 below, the majority of respondents either had not sold, paid to get rid of, or gotten rid of old equipment for free, or they were not sure if they had done so. As shown in Table IV-20, not all stations reported how they got rid of the equipment (i.e., for free, paid, or sold). In total, 14 stations got rid of emissions testing equipment, but only 11 stations provided information on how they got rid of the equipment, with one station getting rid of two analyzers. Due to the small number of responses to these questions, these results are not likely to be particularly representative of the whole industry.

Table IV-19. Stations That Got Rid of Emissions Testing Equipment—El Paso

Ever Got Rid of Equipment?	Number of Responses	Percent of Total Responses
Test-Only		
Yes	2	22.2%
No	7	77.8%
Not sure	0	0.0%
Total	**9**	**100.0%**
Test-and-Repair		
Yes	12	27.9%
No	21	48.8%
Not sure	9	20.9%
Missing	1	2.3
Total	**43**	**100.0%**

Table IV-20. How Station Got Rid of Emissions Testing Equipment—El Paso

Free, Paid, or Sold?	Number of Responses	Percent of Total Responses
I sold this	0	0.0%
I paid to get rid of this	0	0.0%
I got rid of this for free	6	50.0%
I traded this in	2	16.7%
Not disclosed	4	33.3%
Total Analyzers	**12**	**100.0%**

More information about the equipment that stations got rid of (e.g., years owned, costs or profits from getting rid of the equipment) is summarized in Table IV-21, Table IV-22, and Table IV-23. The equipment that respondents got rid of in El Paso was owned for an average of 9.3 years. No stations reported paying to get rid of decommissioned equipment or selling it.

Table IV-21. Years Owned Before Station Got Rid of Equipment—El Paso

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
5.5	10.0	12.5	9.3	12

Table IV-22. Cost to Get Rid of Equipment—El Paso

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
NA	NA	NA	NA	0

Table IV-23. Revenue from Getting Rid of Equipment—El Paso

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
NA	NA	NA	NA	0

In El Paso, 77.8% of test-only stations and 72.1% of T&R stations reported that they never added or acquired building space (i.e., bay space) to perform vehicle emissions testing. Some T&R stations were unsure. The analytical model is designed to provide results both with and without emissions testing related building costs to assess the financial health of stations that either have only equipment costs or those that have both testing-related building space costs and equipment costs. Table IV-24 provides an overview of the number of stations that purchased or rented/leased their building space. The data show that the vast majority (88.9%) of test-only stations rent/lease the building space used for vehicle emissions testing, while more than half (58.1%) of T&R stations own the building space used for emissions testing.

Table IV-24. Building Space Rented or Purchased?—El Paso

Purchase or Rent?	Number of Responses	Percent of Total Responses
Test-Only		
Purchase	1	11.1%
Rent/lease	8	88.9%
Total	**9**	**100.0%**
Test-and-Repair		
Purchase	25	58.1%
Rent/lease	16	37.2%
Missing	2	4.7%
Total	**43**	**100.0%**

Overall, few stations in El Paso reported offering free emissions inspections (other than performing free retests of vehicles that failed initial inspection at their station). None of the test-only stations and only three of the T&R stations offer free emissions tests (see Table IV-25); the latter does so for a variety of reasons, such as customers just outside the 15-day retest window or customers who failed at another station. As shown in Table IV-26 and Table IV-27, none of the stations surveyed in El Paso offer emissions inspections for a reduced fee (under $11.50).

Table IV-25. Free Emissions Tests (Except Free Retests)—El Paso

Free Tests Ever Given?	Number of Responses	Percent of Total Responses
Test-Only		
No	9	100.0%
Yes	0	0.0%
Total	**9**	**100.0%**
Test-and-Repair		
No	40	93.0%
Yes	3	7.0%
Total	**43**	**100.0%**

Table IV-26. Reduced-Fee Emissions Tests (Less than $11.50)—El Paso

Charged Less than $11.50?	Number of Responses	Percent of Total Responses
Test-Only		
No	9	100.0%
Yes	0	0.0%
Total	**9**	**100.0%**
Test-and-Repair		
No	43	100.0%
Yes	0	0.0%
Total	**43**	**100.0%**

Table IV-27. Typical Reduced Fees Charged (Less than $11.50)—El Paso

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
NA	NA	NA	NA	0

Respondents were also asked whether the fee for emissions inspections covers the associated costs. As shown in Table IV-28, the majority of respondents—88.9% of test-only stations and 88.4% of T&R stations—answered, "no, the fee does not cover costs." Though the cost model does not include this information, it is important to the overall discussion of whether fees cover costs. Chapter VII provides an overview of stations' explanations for why the fee does not cover costs.

Table IV-28. Does Fee Cover Emissions Testing Costs?—El Paso

Fee Covers Testing Costs?	Number of Responses	Percent of Total Responses
Test-Only		
No	8	88.9%
Yes	1	11.1%
Total	**9**	**100.0%**
Test-and-Repair		
No	38	88.4%
Yes	4	9.3%
Missing	1	2.3%
Total	**43**	**100.0%**

ERG compared responses to these questions on free and reduced-fee emissions tests and the adequacy of the fee to cover test-related expenses. In the El Paso program area, 20.0% of stations that indicate the $11.50 emissions test fee covers their costs say they offer free tests. This percent is higher than the 4.3% of respondents that say the fee does not cover their emissions-test-related costs, but still offer free tests. No stations in El Paso said that they offer tests for a reduced price.

V. ARR SURVEY RESULTS

This chapter describes the survey responses for test-only and T&R stations in the ARR program area (the survey instrument itself can be found in Appendix A of this report). Any survey fields that were left blank are reported as "missing." Due to rounding, the percentages in some tables do not total exactly 100%. Results are not provided for some basic questions that are not highly relevant to the analysis of the emissions inspection fee.

As noted in Chapter II, only 18 test-only stations in ARR submitted surveys, compared to 69 T&R stations. Caution should be taken in assessing the data from test-only stations due to this small sample size.

A. GENERAL STATION INFORMATION

Table V-1 summarizes the typical hours of operation for stations in ARR, the number of hours these stations are open per day, and the number of stations closed on each day of the week. This information is not directly input into the cost model, but it does provide some insight into labor usage between station types, as test-only stations are required to pay inspectors for their entire shifts regardless of whether they are conducting inspections. Overall, test-only and T&R stations have similar operating hours, although a higher percentage of T&R stations are closed on Saturdays.

Table V-1. Hours of Operation—ARR

Day	Median Open Time	Median Close Time	Median Hours Open	Number Open	Number Closed
Test-Only					
Monday	7:30 a.m.	5:30 p.m.	10	17	1
Tuesday	7:30 a.m.	5:30 p.m.	10	18	0
Wednesday	7:30 a.m.	5:30 p.m.	10	18	0
Thursday	7:30 a.m.	5:30 p.m.	10	18	0
Friday	7:30 a.m.	5:30 p.m.	10	18	0
Saturday	7:30 a.m.	3:30 p.m.	8	15	3
Sunday	–	–	–	0	18
Test-and-Repair					
Monday	7:30 a.m.	5:30 p.m.	9	69	0
Tuesday	7:30 a.m.	5:30 p.m.	9	68	1
Wednesday	7:30 a.m.	5:30 p.m.	9	66	3
Thursday	7:30 a.m.	5:30 p.m.	9	69	0
Friday	7:30 a.m.	5:30 p.m.	9	68	1
Saturday	7:30 a.m.	4:00 p.m.	8	41	28
Sunday	7:30 a.m.	–	–	2	67

Table V-2 and Table V-3 summarize the number of emissions inspection bays at each station and the uses for those bays. Table V-2 shows how many bays in the station are used exclusively for emissions testing, while Table V-3 shows the bays used for emissions testing in addition to other uses. Half of test-only stations report no bays used exclusively for testing, while over three-quarters of T&R stations have at least one bay used exclusively for testing.

Table V-2. Number of Bays Used Exclusively for Testing—ARR

Number of Bays	Number of Responses	Percent of Total Responses
Test-Only		
0	9	50.0%
1	7	38.9%
2	2	11.1%
Total	**18**	**100.0%**
Test-and-Repair		
0	13	18.8%
1	53	76.8%
2	3	4.3%
Total	**69**	**100.0%**

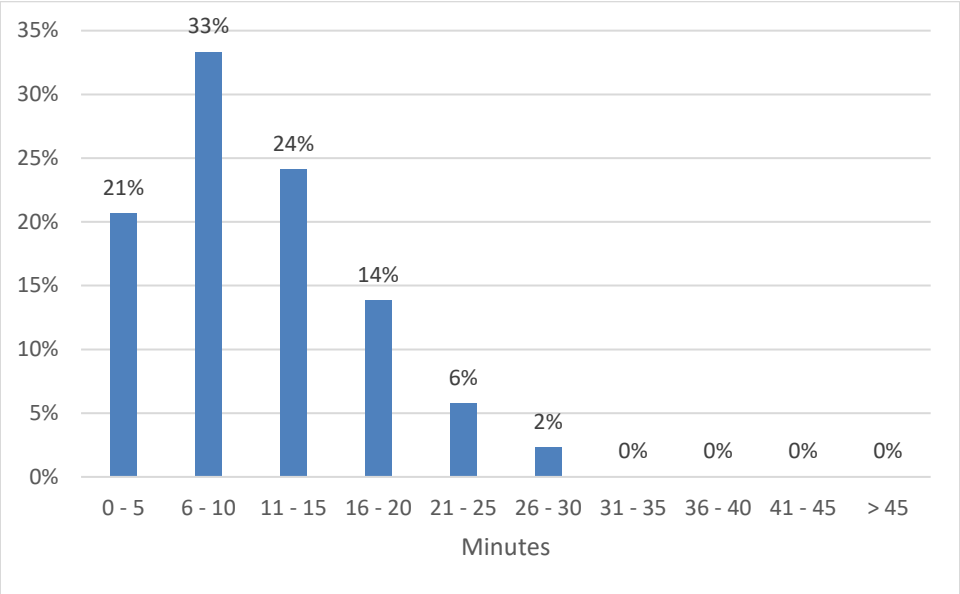
Table V-3. Number of Bays Used for Testing and Other Uses—ARR

Number of Bays	Number of Responses	Percent of Total Responses
Test-Only		
0	9	50.0%
1	7	38.9%
2	2	11.1%
Total	**18**	**100.0%**
Test-and-Repair		
0	35	50.7%
1	25	36.2%
2	5	7.2%
4	1	1.4%
5+	3	4.2%
Total	**69**	**100.00%**

B. THE EMISSIONS INSPECTION PROCESS

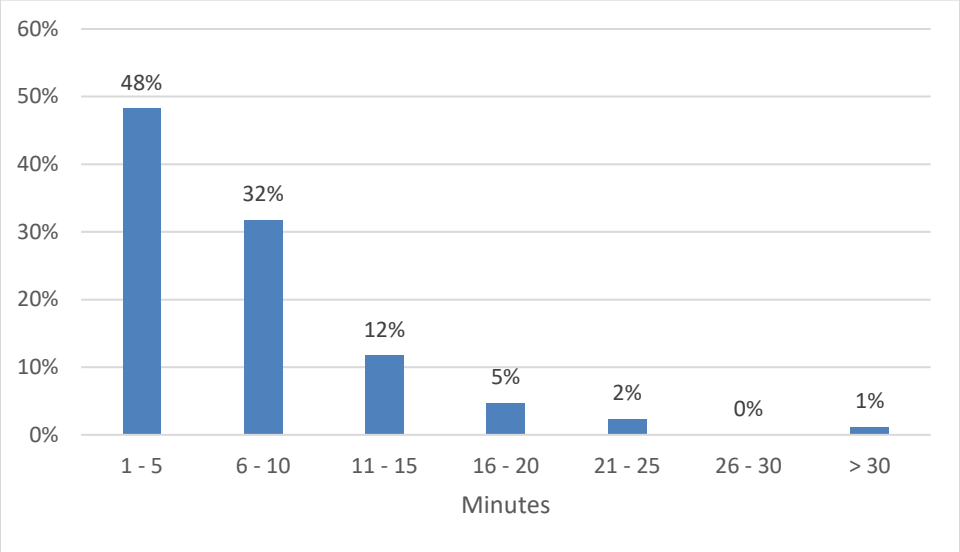
Figure V-1 shows the distribution of survey responses regarding the average time (in minutes) for OBD tests and TSI tests. No stations reported OBD testing times greater than 30 minutes. The median length of the OBD test was 10 minutes.

Figure V-1. Average Time in Minutes to Conduct OBD Emissions Tests—ARR



Respondents were also asked how much additional time, on average, is spent with each emissions inspection customer to explain either the emissions inspection process or reasons for failure and recommended repairs. The median length of additional time spent with inspection customers in ARR was 7.5 minutes. Figure V-2 shows the distribution of responses for the average time (in minutes) that emissions inspectors spend with emissions inspection customers.

Figure V-2. Average Additional Time in Minutes Spent with Emissions Inspection Customers—ARR



C. REPAIR SERVICE REVENUE

Stations offering repair services in addition to emissions testing provided information about the revenue stream generated from repairs to vehicles that failed emissions inspections. Since the relevant questions were applicable only to T&R stations, the results shown below represent only T&R stations.

As Table V-4 shows, 65.2% of T&R stations reported that between 1% and 20% of their repair revenue resulted from work following failed emissions inspections. Another 20% of stations reported generating 0% of their repair income from failed emissions inspections.

Table V-4. Percent of Repair Revenues Resulting from Failed Emissions Inspections—ARR

Percent of Repair Revenues from Failed Inspections	Number of Responses	Percent of Total Responses
0%	14	20.3%
1–20%	45	65.2%
21–40%	8	11.6%
41–60%	2	2.9%
61–80%	0	0.0%
81–100%	0	0.0%
Missing	0	0.0%
Total	**69**	**100.0%**

Table V-5 shows that the average number of repair jobs per month from failed emissions inspections is 8.3, while the median value is five. The interquartile range is eight. Figure V-3 shows the distribution of the responses in a histogram. The average and median typical cost of such a repair is $237 and $200, respectively (see Table V-6), and Figure V-4 shows the distribution of these repair costs in a histogram. This information only gives insight into the gross revenue generated by repairs from failed inspections; it does not provide any insight to the additional profit from these repairs. Additionally, it does not feed directly into the cost model, but rather informs supplemental discussion about additional revenue from repairs.

Table V-5. Typical Number of Repair Jobs per Month Resulting from Failed Emissions Tests—ARR

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
2	5	10	8	54

Figure V-3. Distribution of Typical Number of Repair Jobs per Month Resulting from Failed Emissions Tests—ARR

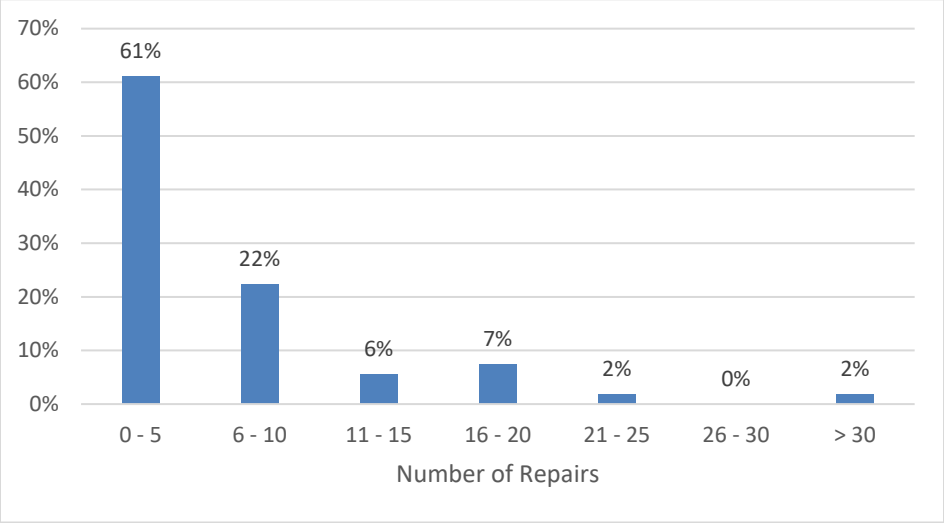
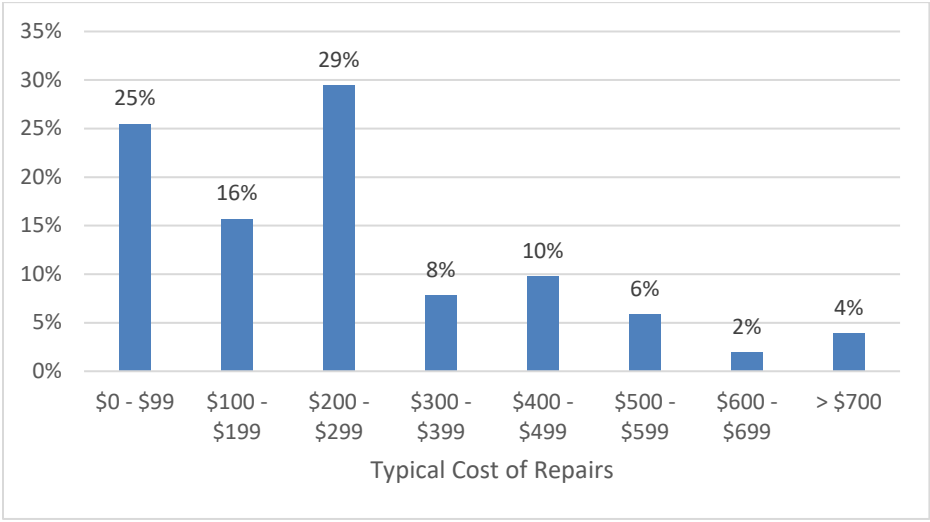


Table V-6. Typical Repair Cost for an Emissions Test Failure—ARR

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
$75	$200	$300	$237	51

Figure V-4. Distribution of Typical Repair Costs for an Emissions Test Failure—ARR



D. EMISSIONS INSPECTORS

Table V-7 summarizes the total number of vehicle emissions inspectors employed per station, by station type, for ARR. Most respondents reported employing one to four inspectors at their stations. The highest number of inspectors a test-only station reported employing was six,

while the highest number a T&R station reported was 25. Stations in ARR employ a median of two inspectors.

Table V-7. Number of Emissions Inspectors Currently Employed by the Station—ARR

Number of Inspectors Employed by Station	Number of Responses	Percent of Total Responses
Test-Only		
1	3	16.7%
2	7	38.9%
3	2	11.1%
4	3	16.7%
5+	3	16.7%
Total	**18**	**100.0%**
Test-and-Repair		
1	20	29.0%
2	17	24.6%
3	12	17.4%
4	7	10.1%
5+	13	18.8%
Total	**69**	**100.0%**

Table V-8 and Table V-9 provide numbers of emissions inspectors per station, broken down into full-time and part-time inspectors. "Full-time inspectors" are full-time employees qualified to perform inspections. They may spend all, some, or just a little of their work time doing inspections. "Part-time inspectors" are part-time employees qualified to do inspections, who likewise may spend only some working time doing inspections. These tables show that ARR program area stations tend to employ more full-time than part-time emissions inspectors. This is especially true for T&R stations: only 15.8% reported having any part-time employees. No stations in the ARR program area reported employing more than two part-time inspectors.

Table V-8. Number of Full-Time Emissions Inspectors—ARR

Number of Full-Time Inspectors Employed by Station	Number of Responses	Percent of Total Responses
Test-Only		
0	1	5.60%
1	5	27.80%
2	8	44.40%
4	1	5.60%
5+	3	16.70%
Total	**18**	**100.0%**
Test-and-Repair		
0	1	1.40%
1	24	34.80%
2	15	21.70%
3	12	17.40%
4	6	8.70%
5+	11	15.70%
Total	**69**	**100.0%**

Table V-9. Number of Part-Time Emissions Inspectors—ARR

Number of Part-Time Inspectors Employed by Station	Number of Responses	Percent of Total Responses
Test-Only		
0	11	61.1%
1	4	22.2%
2	3	16.7%
Total	**18**	**100.0%**
Test-and-Repair		
0	58	84.1%
1	9	13.0%
2	1	1.4%
4	1	1.4%
Total	**69**	**100.0%**

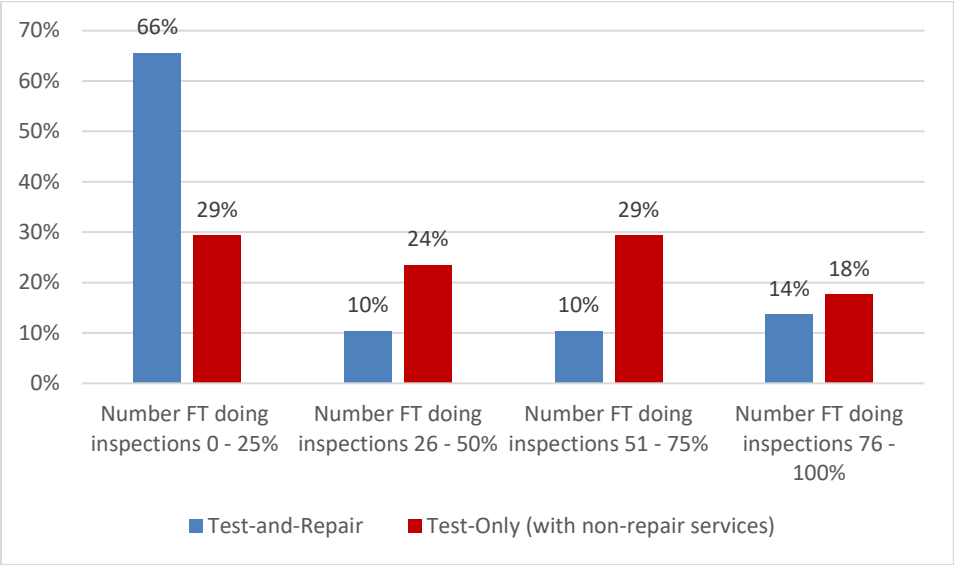
To explore the extent to which stations offering repair or non-repair services focus on activities other than emissions inspections, stations were asked how much time inspectors spend performing emissions inspections. Table V-10 shows the number of stations and total number of inspectors by services offered, as well as how many of those stations employ at least one full-time inspector spending more than half their time conducting inspections. Approximately 39% of test-only stations offer other non-repair services, and nearly three-quarters of those stations report at least one full-time inspector working more than half their time conducting inspections. Nearly three-quarters of T&R stations (72%) offer both repair and non-repair services in addition to emissions testing. About one-third of T&R stations with both repair and non-repair services have at least one full-time inspector spending at least half their time on inspections, compared to 84% of T&R stations that offer repair services only.

Table V-10. Deployment of Labor by Station Type and Services Offered—ARR

Station Type and Services Offered	Count of All Stations	Percent of Station Type	Count of Stations Employing at Least One Full-Time Inspector Conducting Inspections at Least 51% of the Time	Percent Relative to All Stations	Full-Time Inspectors	Part-Time Inspectors
Test-Only	**18**	–	5	–	**41**	**10**
No other services	11	13%	NA	NA	24	8
Non-repair services	7	8%	5	71%	17	2
Test-and-Repair	**69**	–	**32**	**46%**	**212**	**15**
Repair services only	19	22%	16	84%	35	6
Repair and non-repair services	50	57%	16	32%	177	9
Total	**87**	**100%**	**37**	**43%**	**253**	**25**

Figure V-5 shows the distribution of full-time inspectors by percent of time doing inspections. For T&R, the figure shows that full-time workers' labor is not spent only on inspections; therefore, ERG assumed that inspectors are doing other work when not inspecting vehicles and did not include this time in the cost model (i.e., this justifies only including incremental inspection time).

Figure V-5. Full-Time Inspectors by Percent of Time Spent Doing Inspections—ARR



* Note: FT stands for full-time.

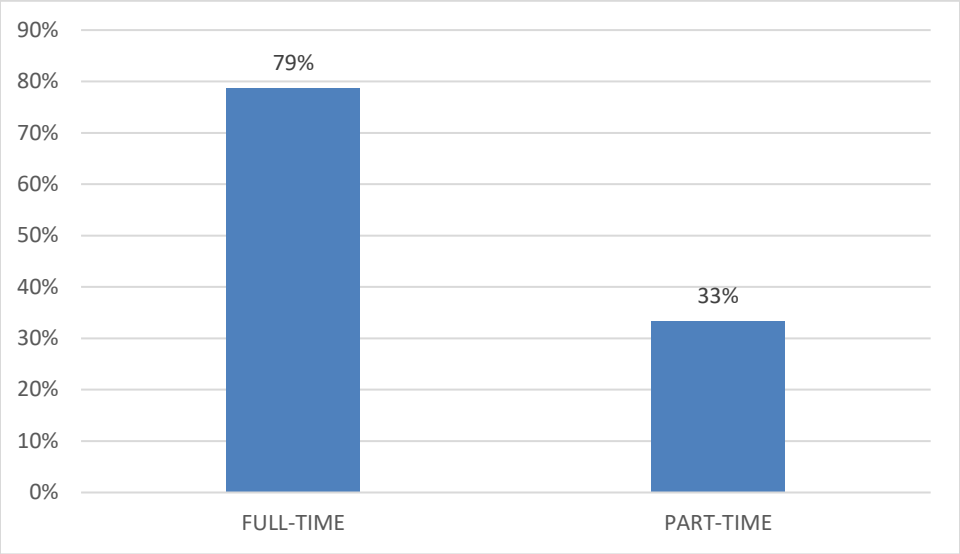
Table V-11 summarizes average hourly wages (unloaded) paid to emissions inspectors, as well as per-test commissions paid, by station type in the ARR program area. Median hourly wages are slightly higher at T&R stations ($17.17) than test-only stations ($16.00), and the interquartile ranges for these data are also narrow ($15.00 to $18.00 for test-only and $15.00 to $20.00 for T&R), indicating that the middle half of stations pay a very similar rate to inspectors. These wage figures fall just around the $16.69 average hourly wage shown for the ARR program area for level 1 auto service technicians and mechanics, as reported by the Foreign Labor Certification Data Center (FLC, 2022). The cost model uses hourly wage information directly; it does not include per-test payments, since most inspectors are paid hourly or by salary (as opposed to commission).

Table V-11. Current Wages Paid to Emissions Inspectors, Hourly ($/hr) and Per-Test—ARR

Station Type	25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
Hourly/Salary					
Test-only	$15	$16	$18	$17.41	17
Test-and-repair	$15	$17.17	$20	$27.77	54
Per-Test					
Test-only	$0.35	$1.68	$3	$1.68	2
Test-and-repair	$5	$10	$12	$9.61	14

The survey also asked how many full- and part-time emissions inspectors received benefits (e.g., “health care, paid leave, etc.”). Determining the number of inspectors who receive benefits allows the cost model to adjust the BLS fringe benefit rate to control for those inspectors who do receive benefits and those who do not. As shown in Figure V-6, 79% of full-time emissions inspectors and 33% of part-time inspectors in the ARR program area receive benefits.

Figure V-6. Percent of Emissions Inspectors Receiving Benefits—ARR



Respondents were asked if they incurred costs to train employees to conduct emissions inspections. If so, they were asked to provide dollar figures for different types of costs related to training, such as inspector training application fees, food and lodging costs, and wages paid for both on-the-job training and time spent in training courses. Table V-12 shows that T&R stations in ARR were similarly likely to incur training costs (34.8%) compared to test-only stations (38.9%).

Table V-12. Does Your Station Incur Training Costs?—ARR

Incur Training Costs?	Number of Responses	Percent of Total Responses
Test-Only		
Yes	7	38.9%
No	8	44.4%
Not sure	3	16.7%
Total	**18**	**100.0%**
Test-and-Repair		
Yes	24	34.8%
No	36	52.2%
Not sure	9	13.0%
Total	**69**	**100.0%**

E. EMISSIONS TESTING EQUIPMENT, BUILDING, AND OTHER COSTS

Table V-13 shows cost data for certified emissions testing analyzers. Emissions testing equipment data are presented on a per-unit basis rather than a per-station basis because stations may have more than one certified emissions testing analyzer. Because of the per-unit basis, totals may be larger than the number of stations that responded to the survey.

The results show a median purchase price of emissions inspection equipment of $9,000. This value is higher than the price for a single new certified OBD analyzer, which typically ranges from $6,895 to $7,450 (TCEQ, 2021). The median price reported for rented equipment is $216 per month. The rental price is comparable to the published rental prices for OBD analyzers, which are between $195 and $199 before taxes.

Table V-13. Cost of Certified Emissions Testing Analyzers by Equipment Type—ARR

Equipment Type	25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
Owned	$7,000	$9,000	$17,000	$10,747	43
Rented	$211.09	$216.00	$240.00	$239.30	37

As shown in Table V-14, 20.8% of current equipment purchases were paid for with cash (i.e., paid in full versus a bank loan or lease), 8.3% were financed with lease-to-purchase agreements, and 3.1% required bank loans. For the cost model, it is assumed that stations are renting emissions inspection equipment, so the cost models use the median rent price reported by stations across all program areas ($220).

Table V-14. Financing Mechanisms for Purchasing Emissions Testing Equipment—ARR

Finance Type	Number of Responses	Percent of Total Responses
Paid cash	20	20.8%
Lease-to-purchase	8	8.3%
Bank loan	3	3.1%
Rented	41	42.7%
Not disclosed	24	25.0%
Total	**96***	**100.0%**

* Of the 87 respondents in the ARR program area, 10% (nine stations) reported more than one certified analyzer.

Table V-15 shows the typical lease-to-purchase or bank loan terms for current equipment used by stations responding to the survey. The median term is five years; the average is 5.7 years. The interquartile range for these data is zero years. Figure V-7 more clearly illustrates this distribution of loan terms for the ARR program area.

Table V-15. Lease-to-Purchase or Bank Loan Term (Years)—ARR

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
5.0	5.0	5.0	5.7	7

Figure V-7. Distribution of Lease-to-Purchase or Bank Loan Term (Years)—ARR

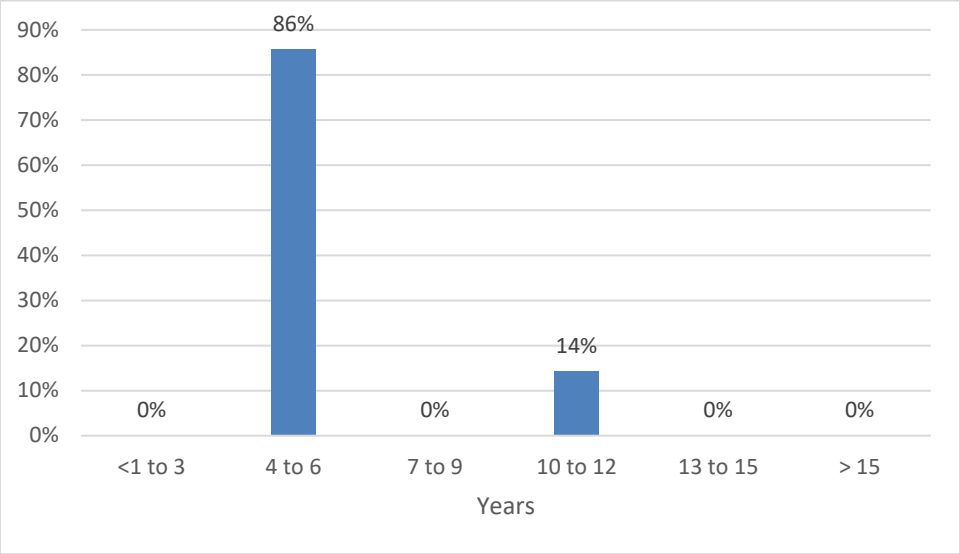
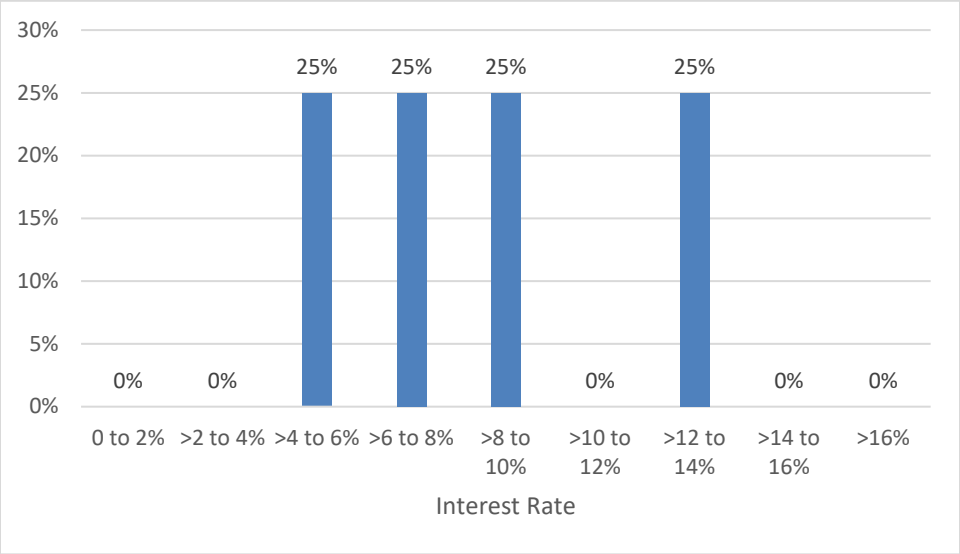


Table V-16 shows the reported lease-to-purchase or bank loan interest rates for four stations. The average and median reported values for interest rates on financed analyzers were 8.9% and 8.5%, respectively. The interquartile range (middle half of the data) is from 5.75% to 12%. Figure V-8 shows the distribution of these loan interest rates.

Table V-16. Interest Rates for Lease-to-Purchase or Bank Loan—ARR

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
5.8%	8.5%	12.0%	8.9%	4

Figure V-8. Distribution of Interest Rates for Lease-to-Purchase or Bank Loan—ARR



Upon purchasing an emissions inspection analyzer, a station can usually opt into an annual maintenance package. Table V-17 shows that only one test-only station reported having an annual maintenance package cost in 2021. At $2,400, this cost was similar to the median amount reported by T&R stations ($2,000) for maintenance packages for their emissions inspection equipment.

Table V-17. Annual Maintenance Package Costs—ARR

Station Type	25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
Test-only	$2,400	$2,400	$2,400	$2,400	1
Test-and-repair	$900	$2,000	$2,400	$1,712	9

Some stations also incur additional maintenance costs not covered by a service contract or maintenance agreement. These costs are shown in Table V-18. The median reported value of these additional annual costs was $575 for test-only stations and $0 for T&R stations.

Table V-18. Extra Maintenance Costs for Stations with Maintenance Plans—ARR

Station Type	25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
Test-only	$17	$575	$2,173	$2,378	16
Test-and-repair	$0	$0	$650	$595	54

Stations were also asked whether they have ever gotten rid of emissions testing equipment they no longer needed. As shown in Table V-19, 33% of test-only respondents and 41% of T&R stations in ARR reported having ever gotten rid of old equipment. Among stations that provided data on decommissioned analyzers, nearly half decommissioned their equipment for free, as shown in Table V-20. In total, 34 stations got rid of emissions testing equipment, but only 30 stations provided information on how they got rid of the equipment, with three stations providing details on multiple pieces of equipment. Due to the small number of

responses to the questions on equipment stations got rid of, these results are not likely to be representative of the whole industry.

Table V-19. Stations That Got Rid of Emissions Testing Equipment—ARR

Ever Got Rid of Equipment?	Number of Responses	Percent of Total Responses
Test-Only		
Yes	6	33.3%
No	11	61.1%
Not sure	1	5.6%
Total	**18**	**100.0%**
Test-and-Repair		
Yes	28	40.6%
No	25	36.2%
Not sure	15	21.7%
Missing	1	1.4%
Total	**69**	**100.0%**

Table V-20. How Stations Got Rid of Emissions Testing Equipment—ARR

Free, Paid, or Sold?	Number of Responses	Percent of Total Responses
I sold this	1	2.7%
I paid to get rid of this	14	37.8%
I got rid of this for free	18	48.6%
I traded this in	1	2.7%
Not disclosed	3	8.1%
Total Analyzers	**37**	**100.0%**

More information about the equipment that stations got rid of (e.g., years owned, costs or profits from getting rid of the equipment) is summarized in Table V-21, Table V-22, and Table V-23. The 37 decommissioned analyzers on which respondents in the ARR program area provided data were owned for an average of 9.6 years. The median price for those who paid to get rid of equipment was $50. One station reported selling an analyzer for $3,000.

Table V-21. Years Owned Before Stations Got Rid of Equipment—ARR

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
7.0	10.0	12.0	9.6	37

Table V-22. Cost to Get Rid of Equipment—ARR

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
$50	$50	$75	$1,648	12

Table V-23. Revenue from Getting Rid of Equipment—ARR

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
$3,000	$3,000	$3,000	$3,000	1

In ARR, about 93% of stations overall (38.9% of test-only stations and 89.9% of T&R stations) did not add or acquire building space (i.e., bay space) to perform vehicle emissions inspections. The analytical model is designed to provide results both with and without emissions testing related building costs to assess the financial health of stations that either have only equipment costs or those that have both testing-related building space costs and equipment costs. Table V-24 provides an overview of whether stations purchased or rented/leased their building space. The data show that slightly more test-only stations (61.1%) rent or lease their space than do T&R stations (58%).

Table V-24. Building Space Rented or Purchased?—ARR

Purchase or Rent?	Number of Responses	Percent of Total Responses
Test-Only		
Purchase	7	38.9%
Rent/lease	11	61.1%
Total	**18**	**100.0%**
Test-and-Repair		
Purchase	28	40.6%
Rent/lease	40	58.0%
Missing	1	1.4%
Total	**69**	**100.0%**

Table V-25 shows that 16.7% of test-only stations (only one station) reported providing free emissions inspections (other than free retests on vehicles that previously failed inspection), and Table V-26 shows that 5.6% of test-only stations reported having offered emissions inspections at reduced fees (under $11.50). In comparison, 26.1% of T&R stations reported having provided free tests (other than free retests after an initial failure), and 4.3% reported offering emissions inspections at reduced fees (under $11.50).

Stations reported several reasons for offering free emissions inspections, including for general customer satisfaction, for customers just outside the 15-day retest window, for customers who could not afford inspections, and to friends, family, employees, and military personnel.

Table V-25. Free Emissions Tests (Except Free Retests)—ARR

Free Tests Ever Given?	Number of Responses	Percent of Total Responses
Test-Only		
Yes	3	16.7%
No	15	83.3%
Total	**18**	**100.0%**
Test-and-Repair		
Yes	18	26.1%
No	51	73.9%
Total	**69**	**100.0%**

Table V-26. Reduced-Fee Emissions Tests (Less than $11.50)—ARR

Charged Less than $11.50?	Number of Responses	Percent of Total Responses
Test-Only		
Yes	1	5.6%
No	17	94.4%
Total	**18**	**100.0%**
Test-and-Repair		
Yes	3	4.3%
No	66	95.7%
Total	**69**	**100.0%**

Table V-27 breaks down instances when stations offered emissions inspections at a reduced fee, under $11.50. Three stations in this program area reported charging a reduced fee, though only two reported a price, for a median of $9.50. While important to ask about, this information does not feed into the cost model.

Table V-27. Typical Reduced Fees Charged (Less than $11.50)—ARR

25th Percentile	50th Percentile (Median)	75th Percentile	Average	Number of Responses
$8.50	$9.50	$10.50	$9.50	2

Respondents were also asked whether the fee for emissions inspections covers the associated costs. As illustrated in Table V-28, the majority of the respondents (83.3% of test-only and 85.5% of T&R stations) answered, “no, the fee does not cover costs.” Though the cost model does not include this information, it is important to the overall discussion of whether fees cover costs. Chapter VII provides an overview of stations’ explanations for why the fee does not cover costs.

Table V-28. Does Fee Cover Emissions Testing Costs?—ARR

Fee Covers Testing Costs?	Number of Responses	Percent of Total Responses
Test-Only		
No	15	83.3%
Yes	3	16.7%
Total	**18**	**100.0%**
Test-and-Repair		
No	59	85.5%
Yes	10	14.5%
Total	**69**	**100.0%**

ERG compared responses to these questions on free and reduced-fee emissions tests and the adequacy of the fee to cover test-related expenses. In the ARR program area, 30.8% of stations that indicate the $11.50 emissions test fee covers their costs say they offer free tests. This percent is higher than the 23.0% of respondents that say the fee does not cover their emissions-test-related costs, but still offer free tests. Similarly, 7.7% of stations that indicate the $11.50 emissions test fee covers their costs say they offer tests for reduced fees, while a slightly lower 4.1% of respondents that indicate the fee does not cover their emissions-test-related costs say they offer tests for reduced fees.

VI. COST MODEL ANALYSES

This chapter presents the results of the "model station" and "break-even" cost analyses performed for the HGB, DFW, El Paso, and ARR program areas (with HGB and DFW combined in the analysis).

The chapter first summarizes the results of the break-even and model station analyses, then presents the applicable costs and revenues that feed into the cost models, and then provides these cost models in more detail in program-area-specific sections.

The break-even analyses show the number of inspections at which the net revenue from emissions inspections (calculated as the average number of emissions inspections performed multiplied by the average net emissions inspection fee) equals the sum of the total incremental costs (fixed and variable) attributed to emissions inspections. These analyses provide the break-even number of emissions inspections for stations that incurred equipment costs and for stations that incurred both equipment and building costs. As shown in Table VI-3, between 10% and 20.8% in each program area reported acquiring additional building space to conduct emissions inspections; thus, the equipment-only scenario could be considered more representative of the industry. Additionally, the bay space is regularly used for safety tests and is thus not a definitive incremental cost of performing vehicle emissions inspection testing. Table VI-1 summarizes the results of the break-even analyses. With building costs excluded, 86% of stations break even in the HGB/DFW program areas according to the model; the El Paso and ARR program areas are much lower, at 73% and 71%, respectively. Including building costs, the percent of stations that break even according to the model is 60% in the HGB/DFW program areas; the El Paso and ARR program areas are again much lower, at 32% and 28%, respectively.

The model station analyses include representative small, medium, and large stations solely based on actual emissions inspection throughput from January 1 to December 31, 2021, for the 5,254 stations in the TIMS database. The small station represents a station with emissions inspection throughput in the 25th percentile (1st quartile), the medium station represents a station with emissions inspection throughput in the 50th percentile (median), and the large station represents a station with emissions inspection throughput in the 75th percentile (3rd quartile). The throughput data from all of the stations in the region—not just those that answered the survey—generates the throughput for each representative station in the 25th, 50th, and 75th percentile.

The net revenues and total costs (fixed and variable) for these model stations are shown in Table VI-2, which includes both equipment and building costs.[12] For stations with lower testing volume, revenues do not exceed total costs in a few cases. These instances occur in small model stations in all program areas, as well as medium-sized stations in the El Paso and ARR program areas. All other station types across the four program areas had net revenues that exceeded costs. These models do not make a distinction between test-only and T&R stations (as the incremental emissions inspection costs are the same)—these station types are aggregated in the analyses. This section does, however, provide supplementary quantitative and qualitative analysis discussing how the generally higher throughput at test-only stations affects the cost

[12] The monthly profits presented in Table VI-2 may not equal revenue minus costs due to rounding.

models. This section also provides a qualitative analysis of how the additional income from emissions-inspection-generated repairs affects the model.

Table VI-1. Stations At/Above Break-Even Number of Inspections

	HGB/DFW	El Paso	ARR
Monthly break-even number of tests including equipment costs	34	71	78
Monthly break-even number of tests including equipment and building costs	92	199	282
Percent of stations above break-even number including equipment costs	86%	73%	71%
Percent of stations above break-even number including equipment and building costs	60%	32%	28%

Table VI-2. Total Monthly Costs and Net Revenues at Model Stations

	HGB/DFW	El Paso	ARR
Small station net revenue	$1,036	$748	$759
Small station total costs	$1,433	$1,578	$1,774
Small stations net revenue – total cost	**($397)**	**($830)**	**($1,015)**
Medium station net revenue	$2,165	$1,622	$1,794
Medium station total costs	$1,885	$1,982	$2,386
Medium station net revenue – total cost	**$279**	**($361)**	**($592)**
Large station net revenue	$4,218	$2,783	$3,565
Large station total costs	$2,708	$2,520	$3,434
Large station net revenue – total cost	**$1,510**	**$263**	**$131**

Table VI-3. Building Cost Incidence by Geographic Area/Test Type

Types of Costs Ever Incurred	HGB/DFW	El Paso	ARR
Building costs	10.0%	20.8%	14.8%

A. COSTS AND REVENUES THAT FEED INTO THE MODELS

The model station and break-even cost analyses were compiled from a combination of non-survey data (compiled from government sources, information the TCEQ provided, and previous AirCheckTexas fee studies) and median values calculated from survey data provided by respondents from the given program areas and emissions inspection types. Table VI-4 presents the values for the non-survey data used in both types of analyses, and Table VI-5 presents the median values for the survey data used in the cost models. As noted above, these are the median values for test-only and T&R stations combined. All inputs used in the cost model analyses are provided in Table VI-4 and Table VI-5.

Table VI-4. Non-Survey Data Used in Cost Model Analyses

Variable	Source	Value
All equipment: useful life	BEA, 2004; Cusick, 2012	11 years (from Bureau of Econmic Analysis [BEA] service life estimate for "Service industry machinery, other than wholesale and retail trade")
Building life: useful life	BEA, 2004; Cusick, 2012	34 years (from BEA service life estimate for "Other commercial buildings")
Electricity: monthly cost ($)	ERG, 2007	$45.53 (the TCEQ reconfirmed value in May 2018; inflated this year using FRED's Consumer Price Index for all urban consumers, electricity in U.S. city average)
Communication with VID: number of transactions per inspection	TCEQ	2 transactions per inspection
Communication with VID: cost per call ($)	TCEQ	$0.165 per call
Fringe benefits: percent of total compensation	BLS, 2022	25.55% of total compensation in 2021
Bay size	TxDPS, 2017	288 square feet (the minimum size of a bay; used to apportion the cost of the building to vehicle emissions testing)

Table VI-5. Survey Data Used in Cost Model Analyses

Variable	HGB/DFW	El Paso	ARR
Building space—median purchase price (bay-related)*	$42,624.00	$38,240.00	$13,440.00
Building space—monthly rent for bay space	$640.00	$790.40	$960.00
Testing equipment—median rental price	$220.00	$220.00	$220.00
Dedicated phone line and/or internet—median annual cost	$900.00	$960.00	$720.00
Printer paper and ink/toner—median annual cost	$400.00	$650.00	$410.58
Extra maintenance—median annual cost	$50.00	$500.00	$70.00
Inspector wage—median hourly salary	$15.00	$12.00	$17.00
Percent of employees receiving benefits	52.62%	45.80%	74.46%
Labor—median minutes per OBD test	13.5	12	10
Labor—other time with customer (minutes per test)	10	9	7.5
Loan term—median length (years)	5	2	5
Loan rate—median amount (percent)	9.0%	8.0%	8.5%
Retest rate for OBD test (percent)	4.1%	4.7%	5.4%

* Median purchase price (bay-related) was contextually informative but was not used in the cost model. Instead, for building space, monthly rent for bay space is used to estimate building costs because renting is more prevalent than purchasing. Monthly rent for bay space ends up being a higher monthly cost, for building space, than the median purchase price (bay-related) when spread over the life of the building.

ERG cross-checked the survey data in Table VI-5 with publicly available information. According to the Foreign Labor Certification Data Center (FLC, 2022), the average hourly wage for a level 1 auto service technician and mechanic is $14.30 in Houston, $14.80 in Dallas, $10.12 in El Paso, and $16.69 in ARR. These values are all consistent with the median inspector wages reported by survey respondents (shown in Table VI-5).

The survey-reported costs of the certified analyzers and their maintenance agreements are reasonably consistent with publicly available information. The cost to rent an OBD analyzer ranges from $195 to $199 per month before taxes. As shown in Table VI-5, the survey median

values for stations purchasing certified OBD analyzers across all program areas is reasonably close to the listed price of the analyzers after taxes (TCEQ, 2021).

Table VI-6 presents the net fee by program area and test type. Offering emissions inspections is incremental to offering safety inspections; therefore, the net revenue calculation only considers the net fee charged to the customer by the inspection station, excluding the safety inspection fee and costs associated with the safety inspection. The net fee thus excludes the safety portion of the fee and inspection-related fees paid directly to the state at the time of vehicle registration.

Table VI-6. Net Fees from an Emissions Inspection

HGB/DFW	El Paso	ARR
$18.50	$11.50	$11.50

B. HGB/DFW COST MODELS

Table VI-7 presents the revenues and costs associated with a station in HGB/DFW based on survey and non-survey data. These results feed into the Table VI-8 model station analysis and Table VI-9 break-even analysis.

Table VI-8 presents the HGB/DFW–program area model station analysis for all stations. It presents the total costs and total revenue for model stations[13]—hypothetical stations based on a certain throughput—that have a monthly emissions inspection volume of 56 (small-throughput station), 117 (medium-throughput station), and 228 (large-throughput station). These emissions inspection throughputs correspond to the 25th percentile, 50th percentile, and 75th percentile of monthly emissions inspections per station in the HGB/DFW program areas. As the table shows, the monthly revenues for medium and large stations exceed monthly costs by $279 and $1,510, respectively. As in 2020, small model stations in the HGB/DFW program areas do not have revenues that exceed costs. Per the cost model, HGB/DFW small model stations lose a median value of $397 per month.

Table VI-9 presents the HGB/DFW–program area break-even model analysis for all stations. This analysis calculates the number of inspections it takes for revenue to equal costs, as well as the percent of stations open for an entire year in the program area that perform at least that number of inspections in an average month. The analysis indicates that it takes 34 inspections per month to break even and 86% of stations perform enough inspections to cover costs that include only equipment (all costs in Table VI-7 except building costs); with both equipment and building costs (all costs in Table VI-7) taken into consideration, it takes 92 inspections per month to break even and 60% of stations perform enough inspections to cover costs.

[13] The monthly profits presented in Table VI-8 may not equal revenue minus costs due to rounding.

Table VI-7. Revenues and Costs—HGB/DFW

Revenues and Costs		Per OBD Test
Station Revenue per Test		**$18.50**
Variable Costs	**Total**	**Per OBD Test**
Communication with VID (cost per call)	$0.165	$0.33
Communication with VID (calls per test)	2	
Labor (wage per hour)	$15.00	$5.88
Labor (minutes per test)	14	
Labor—other time with customer (minutes per test)	10	
Fringe benefits (% of total compensation)*	13.4%	$0.91
Percent of OBD tests with free retests	4.1%	$0.29
Total Variable Costs per Test		**$7.41**
Fixed Costs	**Total**	**Monthly**
OBD analyzer (rental price)		$220.00
Other equipment (annual cost)	$400	$33.33
Additional maintenance cost (annual cost)	$50	$4.17
Dedicated phone line or internet (monthly cost)	$900	$75.00
Loan period (years)	5	
Loan interest rate (percent)	9.00%	
Building space (monthly rent for bay space)	$42,624	$640.00
Electricity (monthly cost)		$45.53
Total Fixed Costs		**$1,018.03**

* Includes paid leave, supplemental pay, insurance, retirement and savings, and legally required benefits. ERG calculates this by multiplying percent of fringe benefits compared to compensation by the percent of employees receiving benefits (from the survey).

Table VI-8. Model Station Analysis—HGB/DFW

	Small Throughput	Medium Throughput	Large Throughput
Number of inspections per month (small, medium, large)*	56	117	228
Net Revenue (Number of Tests × Revenue per Test)	**$1,036**	**$2,165**	**$4,218**
Total fixed costs	$1,018	$1,018	$1,018
Total variable costs	$415	$867	$1,690
Total Cost	**$1,433**	**$1,885**	**$2,708**
Net Revenue – Total Costs (Monthly)	**($397)**	**$279**	**$1,510**

* Values represent number of emissions inspections for 25th percentile, median, and 75th percentile stations, of all stations performing inspections in the program area.

Table VI-9. Break-Even Analysis—HGB/DFW

Item	Equipment Only	Equipment and Building Costs
Fixed cost per month	$378.03	$1,018.03
Variable cost per inspection	$7.41	$7.41
Net revenue per inspection	$18.50	$18.50
Break-Even Number of Inspections	**34**	**92**
Station At/Above Break-Even Number of Inspections	**86%**	**60%**

C. EL PASO COST MODELS

Table VI-10 presents the revenues and costs associated with a station in El Paso based on survey and non-survey data. These results feed into the Table VI-11 model station analysis and the Table VI-12 break-even analysis.

Table VI-11 presents the El Paso–program area model station analysis. It presents the total costs and total revenue for model stations[14]—hypothetical stations based on a certain throughput—that have a monthly emissions inspection volume of 65 (small-throughput station), 141 (medium-throughput station), and 242 (large-throughput station). These emissions inspection throughputs correspond to the 25th percentile, 50th percentile, and 75th percentile of monthly emissions inspections per station in the El Paso program area. As the table shows, the monthly revenues for large stations exceed monthly costs by $263. Small and medium model stations have costs that exceed revenue; costs exceed revenue by $830 per month for small model stations and $361 for medium stations in the El Paso program area.

Table VI-12 presents the El Paso–program area break-even model analysis. This analysis calculates the number of inspections it takes for revenue to equal costs, as well as the percent of stations open for an entire year in the program area that perform at least that number of inspections in an average month. The analysis indicates that it takes 71 inspections per month to break even and 73% of stations perform enough inspections to cover costs that include equipment (all costs in Table VI-10 xcept building costs); with both equipment and building costs (all costs in Table VI-10 taken into consideration, it takes 199 inspections per month to break even and 32% of stations perform enough inspections to cover costs.

Table VI-10. Revenues and Costs—El Paso

Revenues and Costs		Per OBD Test
Station Revenue per Test		**$11.50**
Variable Costs	**Total**	**Per OBD Test**
Communication with VID (cost per call)	$0.165	$0.33
Communication with VID (calls per test)	2	
Labor (wage per hour)	$12.00	$4.20
Labor (minutes per OBD test)	12	
Labor—other time with customer (minutes per test)	9	
Fringe benefits (percent of total compensation)*	11.7%	$0.56

[14] The monthly profits presented in Table VI-11 may not equal revenue minus costs due to rounding.

Revenues and Costs		Per OBD Test
Station Revenue per Test		**$11.50**
Percent of OBD tests with free retest	4.7%	$0.24
Total variable costs per test		**$5.32**
Fixed Costs	**Total**	**Monthly**
OBD analyzer (rental price)		$220.00
Other equipment (annual cost)	$650	$54.17
Additional maintenance cost (annual cost)	$500	$41.67
Dedicated phone line or internet (monthly cost)	$960	$80.00
Loan period (years)	2	
Loan interest rate (percent)	8.0%	
Building space (monthly rent for bay space)	$38,240	$790.40
Electricity (monthly cost)		$45.53
Total Monthly Fixed Costs		$1,231.76

* Includes paid leave, supplemental pay, insurance, retirement and savings, and legally required benefits. ERG calculates this by multiplying percent of fringe benefits compared to compensation by the percent of employees receiving benefits (from the survey).

Table VI-11. Model Station Analysis—El Paso

	Small Throughput	Medium Throughput	Large Throughput
Number of inspections per month (small, medium, large)*	65	141	242
Net Revenue (Number of Tests × Revenue per Test)	**$748**	**$1,622**	**$2,783**
Total fixed costs	$1,232	$1,232	$1,232
Total variable costs	$346	$751	$1,288
Total Cost	**$1,578**	**$1,982**	**$2,520**
Net Revenue – Total Costs (monthly)	**($830)**	**($361)**	**$263**

* Values represent number of emissions inspections for 25th percentile, median, and 75th percentile stations, of all stations performing inspections in the program area.

Table VI-12. Break-Even Analysis—El Paso

Item	Equipment Only	Equipment and Building Costs
Fixed cost per month	$441.36	$1,231.76
Variable cost per inspection	$5.32	$5.32
Net revenue per inspection	$11.50	$11.50
Break-Even Number of Inspections	**71**	**199**
Station At/Above Break-Even Number of Inspections	**73%**	**32%**

D. ARR COST MODELS

Table VI-13 presents the revenues and costs associated with a station in ARR based on survey and non-survey data. These results feed into the Table VI-14 model station analysis and Table VI-15 break-even analysis.

Table VI-14 presents the ARR–program area model station analysis. It presents the total costs and total revenue for model stations—hypothetical stations based on a certain throughput—that have a monthly emissions inspection volume of 66 (small-throughput station), 156 (medium-throughput station), and 310 (large-throughput station). These emissions inspection throughputs correspond to the 25th percentile, 50th percentile, and 75th percentile of monthly emissions inspections per station in the ARR area. As the table shows, the monthly revenues for large model stations exceed monthly costs by $131. As in 2020, the cost model indicates that small and medium model stations in the ARR program area do not have revenues that exceed monthly costs. Small model stations have costs that exceed revenue by $1,015 per month, while medium model stations have costs that exceed revenue by $592 per month.

Table VI-15 presents the ARR–program area break-even model analysis. This analysis calculates the number of inspections it takes for revenue to equal costs, as well as the percent of stations open for an entire year in the program area that perform at least that number of inspections in an average month. The analysis indicates that it takes 78 inspections per month to break even and 71% of stations perform enough inspections to cover costs that include equipment (all costs in Table VI-13 except building costs); with both equipment and building costs (all costs in Table VI-13) taken into consideration, it takes 282 inspections per month to break even and 28% of stations perform enough inspections to cover costs.

Table VI-13. Revenues and Costs—ARR

Revenues and Costs		Per OBD Test
Station Revenue per Test		**$11.50**
Variable Costs	**Total**	**Per OBD Test**
Communication with VID (cost per call)	$0.165	$0.33
Communication with VID (calls per test)	2	
Labor (wage per hour)	$17.00	$4.96
Labor (minutes per OBD test)	10	
Labor—other time with customer (minutes per test)	8	
Fringe benefits (percent of total compensation)*	19.0%	$1.16
Percent of OBD tests with free retest	5.4%	$0.35
Total Variable Costs per Test		**$6.80**
Fixed Costs	**Total**	**Monthly**
OBD analyzer (rental price)		$220.00
Other equipment (annual cost)	$411	$34.22
Additional maintenance cost (annual cost)	$70	$5.83
Dedicated phone line or internet (monthly cost)	$720	$60.00
Loan period (years)	5	
Loan interest rate (percent)	8.5%	
Building space (monthly rent for bay space)	$13,440	$960.00
Electricity (monthly cost)		$45.53
Total Monthly Fixed Costs		**$1,325.58**

* Includes paid leave, supplemental pay, insurance, retirement and savings, and legally required benefits. ERG calculates this by multiplying percent of fringe benefits compared to compensation by the percent of employees receiving benefits (from the survey).

Table VI-14. Model Station Analysis—ARR

	Small Throughput	Medium Throughput	Large Throughput
Number of inspections per month (small, medium, large)*	66	156	310
Net Revenue (Number of Tests × Revenue per Test)	**$759**	**$1,794**	**$3,565**
Total fixed costs	$1,326	$1,326	$1,326
Total variable costs	$449	$1,061	$2,108
Total Cost	**$1,774**	**$2,386**	**$3,434**
Net Revenue – Total Costs (monthly)	**($1,015)**	**($592)**	**$131**

* Values represent number of emissions inspections for 25th percentile, median, and 75th percentile stations, of all stations performing inspections in the program area.

Table VI-15. Break-Even Analysis—ARR

Item	Equipment Only	Equipment and Building Costs
Fixed cost per month	$365.58	$1,325.58
Variable cost per inspection	$6.80	$6.80
Net revenue per inspection	$11.50	$11.50
Break-Even Number of Inspections (monthly)	**78**	**282**
Station At/Above Break-Even Number of Inspections	**71%**	**28%**

VII. COMMENTS FROM EMISSIONS INSPECTION SURVEY RECIPIENTS

As in prior surveys, respondents were asked if they felt the emissions inspection fee covered the costs associated with offering emissions inspections at their stations. Respondents claiming an insufficient fee amount were prompted to rate their agreement with eight statements representing the most commonly cited justifications for a fee insufficiency, as garnered from prior years' survey responses.

Table VII-1 shows these agreement ratings using a 5-point Likert scale, where 1 is "strongly agree," 2 is "agree," 3 is "neither agree nor disagree," 4 is "disagree," and 5 is "strongly disagree;" those who chose "not applicable" for any item are also included. ERG calculated the mean value of responses after converting each response to its number on the Likert scale. The table is sorted by mean value from highest agreement to lowest. As it shows, the statement with which the largest number of respondents agreed or strongly agreed was "Costs associated with testing have increased over the years and now our costs exceed the revenue from the test fee." Similarly ranked was the sentiment "All the costs simply add up to more than the fee, but I decide to offer testing because it is important to my business in other ways."

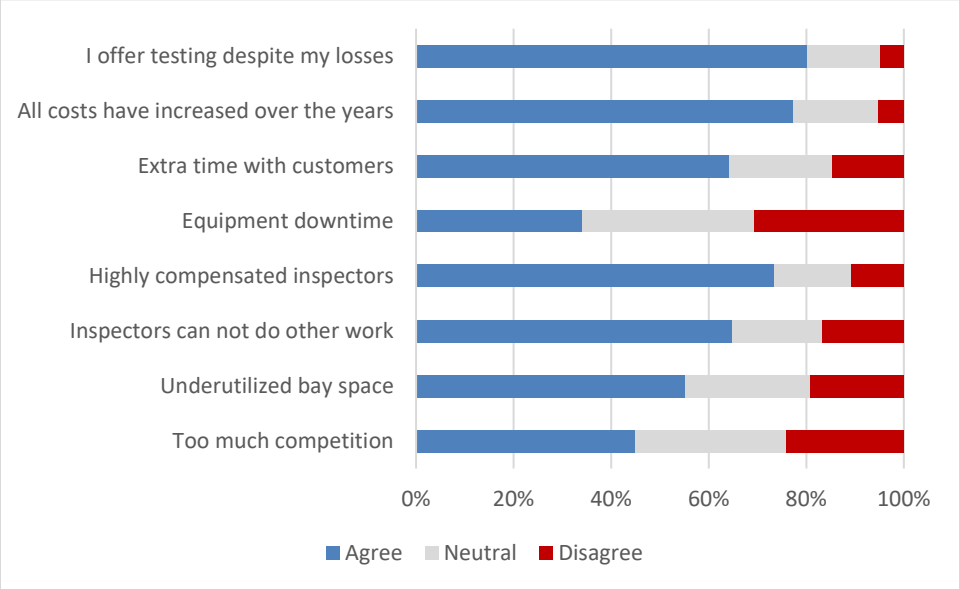
Table VII-1. Reasons the Emissions Inspection Fee Does Not Cover Costs of Testing

Reason Fee Does Not Cover Costs	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	NA	Mean Value*
All the costs simply add up to more than the fee, but I decide to offer testing because it is important to my business in other ways.	44%	36%	15%	4%	1%	2%	1.818
Costs associated with testing have increased over the years and now our costs exceed the revenue from the test fee.	47%	30%	17%	4%	2%	3%	1.823
I must pay my inspectors a high salary/rate because their primary job function is one that demands a higher salary than emissions inspectors.	43%	30%	16%	8%	2%	8%	1.965
I must pay an emissions inspector to be on site, and it is costly because it is difficult to task them with other work when they are not performing inspections.	36%	29%	18%	12%	5%	10%	2.205
The extra time I spend with customers during emissions inspections is costly.	31%	33%	21%	12%	3%	3%	2.219
I pay for emissions inspection bay/ building space, but it is underutilized for emissions testing or cannot easily be used for other purposes.	28%	27%	26%	15%	4%	13%	2.400
I do not conduct enough emissions inspections because there are too many stations performing inspections.	24%	21%	31%	14%	10%	4%	2.652
My testing equipment is frequently in need of repair, and the downtime hurts my ability to break even.	15%	20%	35%	20%	10%	7%	2.921

* Weighted average of score (1 is assigned to strongly agree, 2 is assigned to agree, 3 is assigned to neither, 4 is assigned to disagree, 5 is assigned to strongly disagree). The lower the score, the higher the level of agreement.

Figure VII-1 further illustrates the level of agreement by respondents across the various statements by comparing the percentage of those who agree or strongly agree with a statement to those who disagree or strongly disagree. While more than half of respondents agree or strongly agree with five of the eight statements, more respondents agreed than disagreed with all of the listed statements. The statement with which more respondents were likely to disagree was "My testing equipment is frequently in need of repair, and the downtime hurts my ability to break even."

Figure VII-1. Reasons Emissions Inspection Fee Does Not Cover Costs of Testing



Respondents were also invited to describe any additional reasons that the emissions inspection fee does not cover their costs. One hundred fifty-six respondents submitted supplementary answers, although the majority of them elaborated on the issues covered by the statements listed—with particular emphasis on high labor costs, rent, utilities, insurance and other business expenses, underutilized bay space, maintenance expenses, time spent with customers, and other office supply costs. Below are examples of other explanations not previously captured:

- Cost of living increased for station owners, who worry about making enough profit to cover their personal expenses (49 respondents).
- Property taxes increased for station owners (nine respondents).
- Failed inspections require more paper, which station owners view as a waste of resources (five respondents).

VIII. CONCLUSIONS AND FINDINGS

Section VIII.A presents survey responses about whether emissions inspection fees cover station costs. Section VIII.B examines how investors (current and potential station owners) view the market based on the net flow of stations into the vehicle emissions inspection market, while Section VIII.C delves into the adequacy of the fee from the point of cost models based on survey and non-survey data. Sections VIII.D and VIII.F present two further considerations: revenue streams from failed inspections and emissions inspection cost-model differences between T&R and test-only stations. Section VIII.D is an overall assessment of the adequacy of the fee. Section VIII.E presents additional considerations about number of tests to break even based on additional repair revenue for T&R stations. Section VIII.F similarly provides additional context based on higher throughput at test-only stations. Finally, Section VIII.G recommends possible changes to the survey for future data collection efforts.

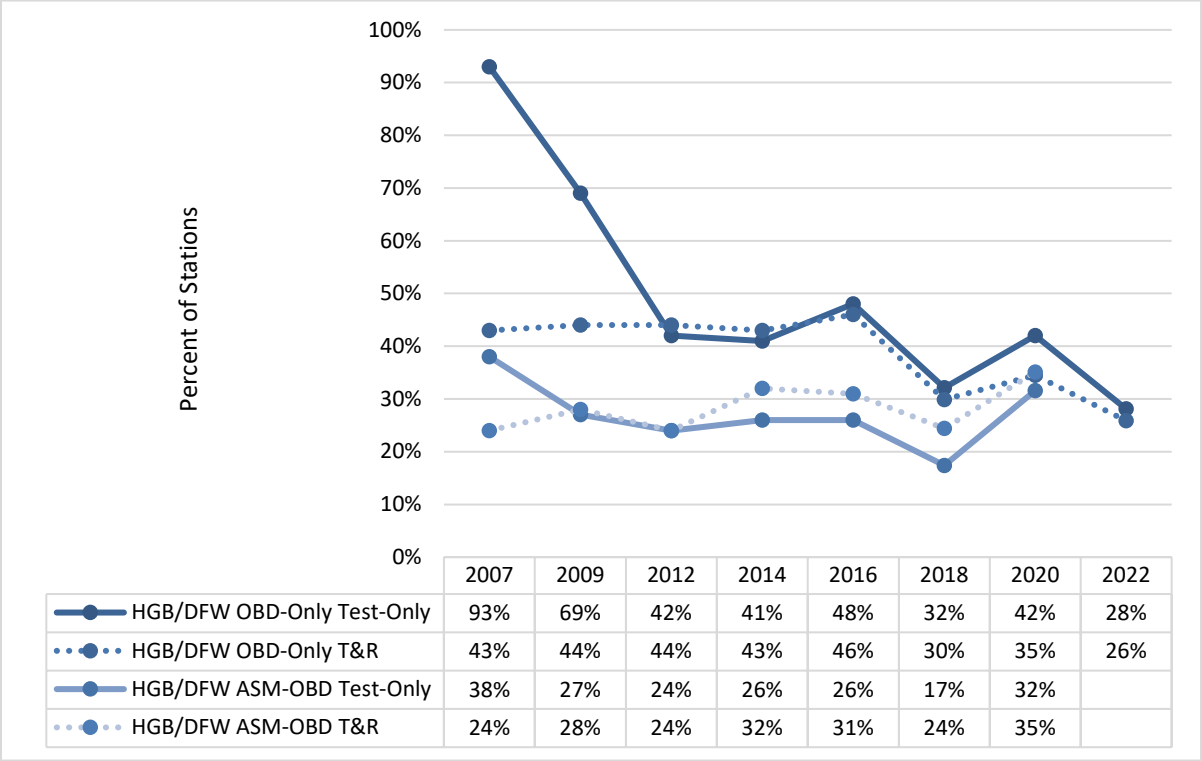
A. ADEQUACY OF THE FEE: WHAT THE RESPONDENTS SAY

The final survey question asked whether the emissions inspection fee cap covered the costs of offering emissions inspections at respondents' stations. Figure VIII-1 and Figure VIII-2 provide the responses by program area, station type, and test type.

As shown in Figure VIII-1, among test-only and T&R respondents in HGB/DFW, between 26% and 28% of stations reported the fee covered their costs. This represents a large decrease from 2020.

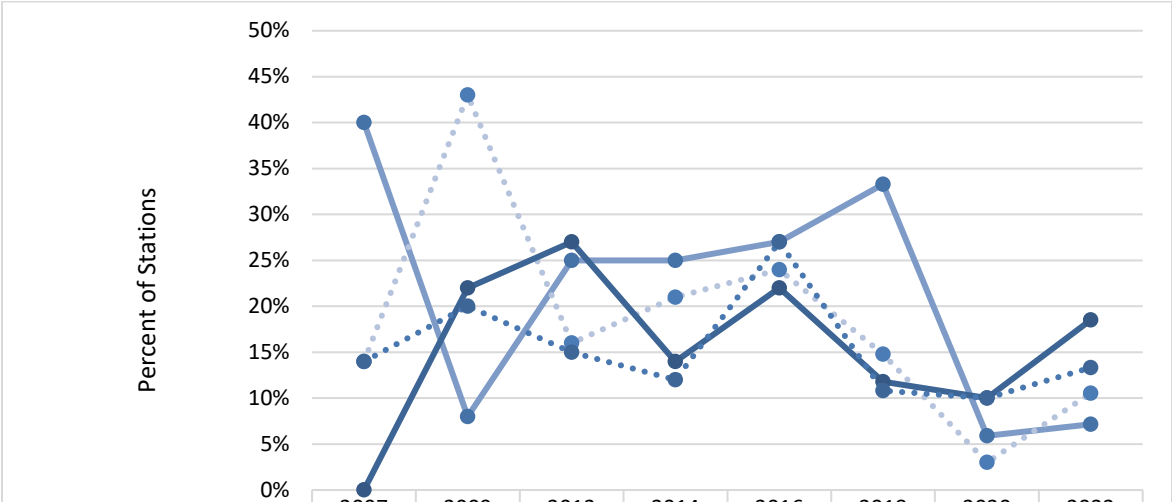
As shown in Figure VIII-2, among test-only and T&R stations in El Paso, between 7% and 11% of stations reported the fee covered their costs. This represents a moderate increase from 2020. Among test-only and T&R stations in ARR, between 13% and 19% of stations reported their fees cover the costs of emissions inspections. This represents a fairly large increase for test-only stations, but only a moderate increase for T&R stations, from 2020.

Figure VIII-1. Respondents Reporting Test Fees Cover Their Costs: HGB/DFW



	2007	2009	2012	2014	2016	2018	2020	2022
HGB/DFW OBD-Only Test-Only	93%	69%	42%	41%	48%	32%	42%	28%
HGB/DFW OBD-Only T&R	43%	44%	44%	43%	46%	30%	35%	26%
HGB/DFW ASM-OBD Test-Only	38%	27%	24%	26%	26%	17%	32%	
HGB/DFW ASM-OBD T&R	24%	28%	24%	32%	31%	24%	35%	

Figure VIII-2. Respondents Reporting Test Fees Cover Their Costs: El Paso and ARR



	2007	2009	2012	2014	2016	2018	2020	2022
El Paso Test-Only	40%	8%	25%	25%	27%	33%	6%	7%
El Paso T&R	14%	43%	16%	21%	24%	15%	3%	11%
ARR Test-Only	0%	22%	27%	14%	22%	12%	10%	19%
ARR T&R	14%	20%	15%	12%	27%	11%	10%	13%

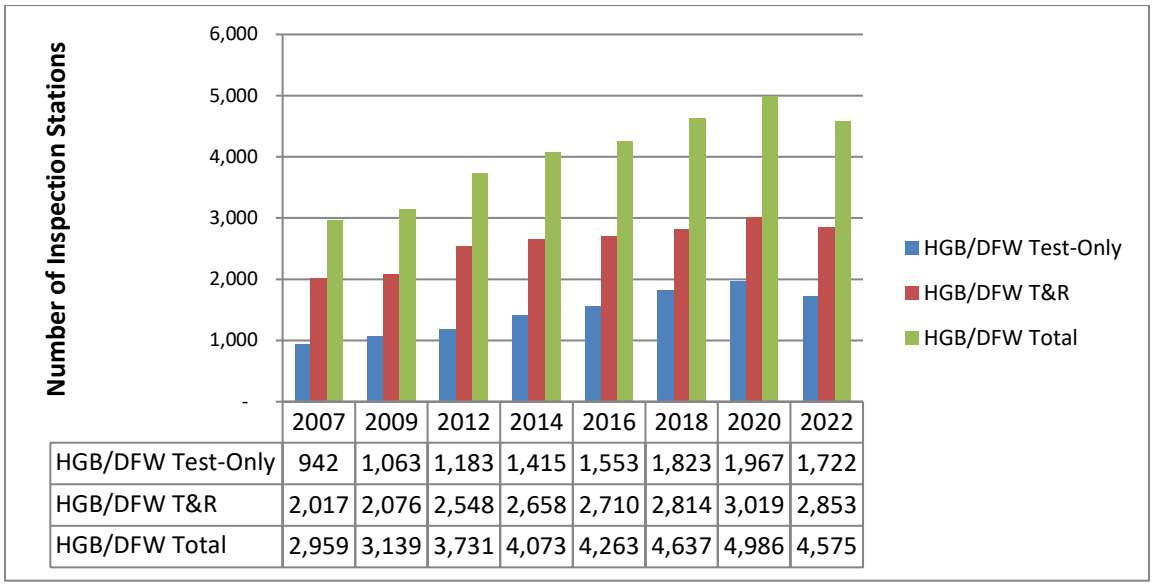
B. ADEQUACY OF THE FEE: HOW INVESTORS VIEW MARKET

The number of stations joining or leaving the I/M program is a good indicator of the expected profitability of a station in the market. Each station owner or prospective station owner makes a business decision about whether they should enter the market (in the case of a prospective owner) or whether they should remain in or leave the market (in the case of a current owner). A net decrease in the number of stations may indicate that existing stations are finding that fees are not sufficient to cover their variable costs; thus, existing station owners would tend to leave the market and prospective owners would avoid joining the market.

An increasing number of inspection stations may indicate that prospective and existing owners estimate that fees cover costs; thus, the existing owners would generally stay in the market and more prospective station owners would enter the market. Stations may also find further benefits from performing emissions inspections (e.g., more repair revenue and more customer volume into their shops) that offset their net losses from performing inspections. These data alone, however, do not definitively determine whether the fee is adequate: some potential investors likely have imperfect information, and some stations could be making decisions based on poor cost and revenue estimates or dated information. However, these data are certainly an important indicator and do provide good insight into how investors see the market. The counts from prior years' analyses (ERG, 2005, 2007, 2012, 2014, 2016, 2018, 2020; Pechan, 2009) and the counts made in March 2020 for this study were used to develop the following comparisons.

Figure VIII-3 summarizes the station counts for the HGB/DFW program areas from the TCEQ VID in 2007, 2009, 2012, 2014, 2016, 2018, 2020, and 2022. This figure shows an 8% decrease in the number of stations between the 2020 and 2022 counts. Table VIII-4 summarizes average monthly throughput per station for 2008, 2011, 2013, 2015, 2017, 2019, and 2021. The monthly throughput data for one year correspond with the station counts for the year after (i.e., 2021 throughput data match with the 2022 station count). As shown in this table, the throughput per station increased from 2019 to 2021 after decreasing from 2017 to 2019. In 2022, the overall testing volume in the HGB/DFW program areas increased by 4% compared to 2020. The number of stations decreased by 8% in 2022. With increased throughput and decreased station count, average station throughput increased by 15%. The decrease in the number of stations may indicate that the $18.50 fee is not high enough for stations to remain in the market within the HGB/DFW program areas.

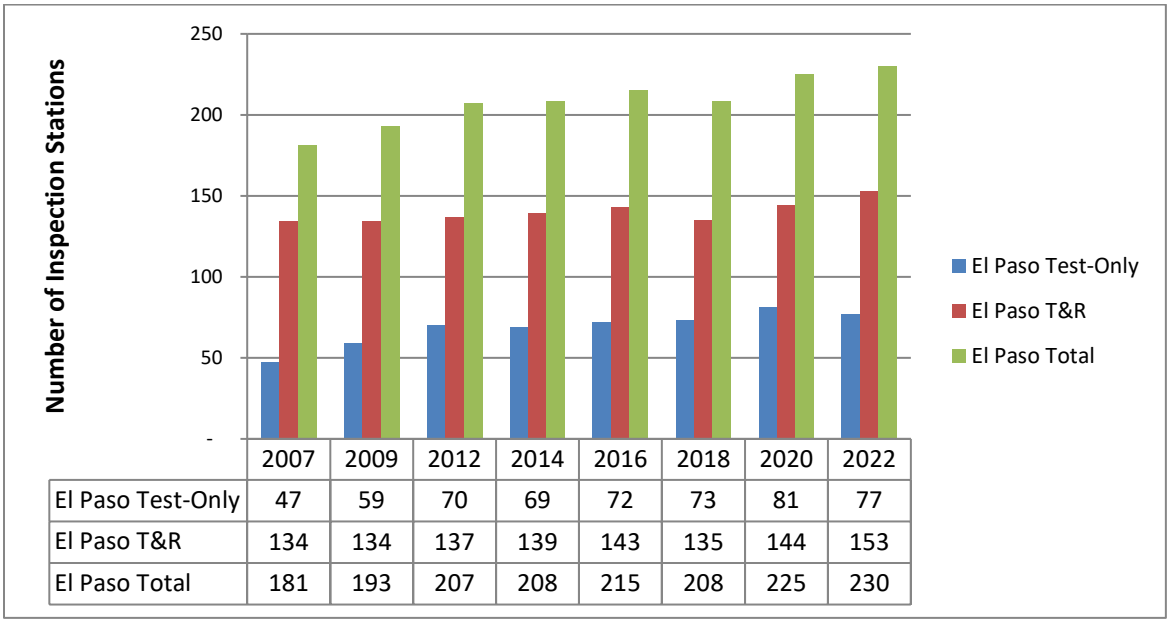
Figure VIII-3. Number of Inspection Stations in HGB/DFW Program Areas, 2007 to 2022



	2007	2009	2012	2014	2016	2018	2020	2022
HGB/DFW Test-Only	942	1,063	1,183	1,415	1,553	1,823	1,967	1,722
HGB/DFW T&R	2,017	2,076	2,548	2,658	2,710	2,814	3,019	2,853
HGB/DFW Total	2,959	3,139	3,731	4,073	4,263	4,637	4,986	4,575

Figure VIII-4 summarizes the station counts for the El Paso program area for 2007, 2009, 2012, 2014, 2016, 2018, 2020, and 2022. This figure shows an increase of five stations from 2020 to 2022 compared to a greater increase of 17 stations between 2018 and 2020. In 2022, the overall testing volume in the El Paso program area increased by 2% compared to 2020. Throughput per station (as seen in Table VIII-4) decreased from 2020 to 2022. This was the result of a slightly greater increase in the number of stations in the market than total throughput in the program area. The total increase in stations from 2020 to 2022 indicates that more station owners chose to enter the market than to exit it. This is an indicator that the fee being charged could be adequate, with market entrants viewing that fee as worth incurring the costs to get started in the industry. However, it is important to consider other indicators: the number of stations has been relatively stable between 2012 and 2022 (between 207 and 230), which is not a definitive indicator of the fee being adequate.

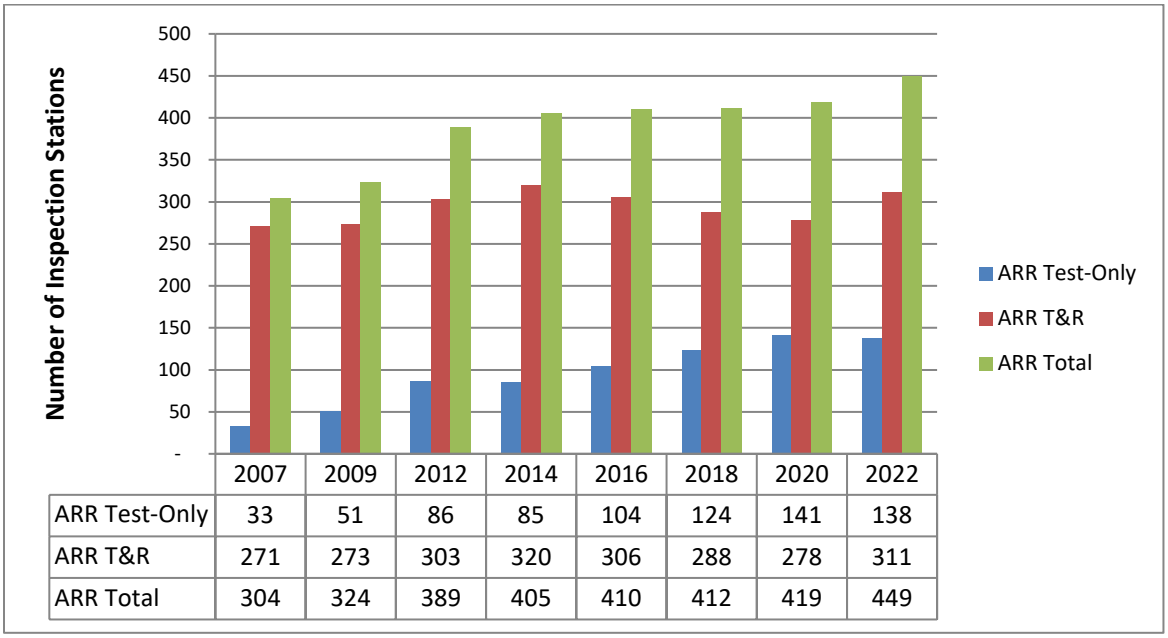
Figure VIII-4. Number of Inspection Stations in El Paso Program Area, 2007 to 2022



	2007	2009	2012	2014	2016	2018	2020	2022
El Paso Test-Only	47	59	70	69	72	73	81	77
El Paso T&R	134	134	137	139	143	135	144	153
El Paso Total	181	193	207	208	215	208	225	230

Figure VIII-5 summarizes the station counts for the ARR program area for 2007, 2009, 2012, 2014, 2016, 2018, 2020, and 2022. This figure shows an increase of 44 stations between 2014 and 2022, compared to an increase of 101 stations between 2007 and 2014. Between 2020 and 2022, the total number of stations offering emissions inspections increased by 30, from 419 to 449. The number of test-only stations decreased slightly (by three), while the number of T&R stations increased by 12%, from 278 stations in 2020 to 311 stations in 2022. In 2022, the overall testing volume in the ARR program area increased by 3% compared to 2020. As a result, the throughput per station remained fairly constant from 2020 to 2022 (see Table VIII-4). Since the total number of stations in ARR increased, this is an indicator that the fee is adequate, although it does not definitively determine the adequacy of the fee. Investors often make decisions on imperfect information. Therefore, it is also important to consider whether the cost models provide a clearer picture on the adequacy of the fee.

Figure VIII-5. Number of Inspection Stations in ARR Program Area, 2007 to 2022



	2007	2009	2012	2014	2016	2018	2020	2022
ARR Test-Only	33	51	86	85	104	124	141	138
ARR T&R	271	273	303	320	306	288	278	311
ARR Total	304	324	389	405	410	412	419	449

C. ADEQUACY OF THE FEE: WHAT THE COST MODEL INDICATES

As Chapter VI discusses in more detail, ERG developed both break-even and model station cost models for the HGB/DFW, El Paso, and ARR program areas.

In the break-even cost model, summarized in Table VIII-1, 86% of stations (excluding building costs) in HGB/DFW are shown to have sufficient throughput to generate emissions inspection revenues that meet or exceed variable and fixed costs. In El Paso and ARR, 71% to 73% of stations (excluding building costs) have sufficient throughput to generate emissions inspection revenues that meet or exceed variable and fixed costs. As discussed in previous sections, some stations did not incur incremental building costs to be able to offer testing, so the analyses are done with and without building costs included.

Table VIII-1. Stations At/Above Break-Even Number of Inspections

	HGB/DFW	El Paso	ARR
Monthly break-even number of tests including equipment costs	34	71	78
Monthly break-even number of tests including equipment and building costs	92	199	282
Percent of stations above break-even number including equipment costs	86%	73%	71%
Percent of stations above break-even number including equipment and building costs	60%	32%	28%

The summary of the percent of stations breaking even since 2012, shown below in Table VIII-2, compares 2022 percentages to past ones. More stations in the HGB/DFW program had a break-even number of tests than in prior years (28 to 34). The increase in break-even tests for stations in the HGB/DFW programs areas is driven largely by the increase in the median hourly wage of

emissions inspectors ($15.00 in 2022 compared to $12.50 in 2020). The El Paso program area saw a decrease in the number of tests to break even (80 to 71) and a drop in the percent of stations breaking even (78% to 73%). The decrease in the number of tests to break even is because fixed costs decreased across the El Paso program area, largely as a result of renting analyzers. While the analyzer itself costs more on a monthly basis to rent than to purchase, maintenance costs are significantly lower when renting. Fixed costs (which include the rent price for analyzers, maintenance costs, and other business expenses like electricity and dedicated phone line) decreased from approximately $534 in 2020 to $441 in 2022. The ARR program area also experienced a decrease in the number of break-even tests (99 to 78), but the percent of break-even stations increased slightly (69% to 71%). This change is also due to the much lower maintenance costs attributable to renting analyzers instead of purchasing them. Fixed costs decreased from $509 to $366 between 2020 and 2022.

Table VIII-2. Summary of Break-Even Number of Inspections from 2012 to 2022 in All Program Areas, Excluding Building Costs

	HGB/DFW	El Paso	ARR
Break-even tests (2012)	27	70	80
Break-even tests (2014)	26	73	76
Break-even tests (2016)	26	70	79
Break-even tests (2018)	26	70	82
Break-even tests (2020)	28	80	99
Break-even tests (2022)	34	71	78
Percent of stations breaking even (2012)	86%	80%	74%
Percent of stations breaking even (2014)	87%	81%	73%
Percent of stations breaking even (2016)	87%	80%	74%
Percent of stations breaking even (2018)	89%	84%	77%
Percent of stations breaking even (2020)	89%	78%	69%
Percent of stations breaking even (2022)	86%	73%	71%

The model station analysis reveals similar findings. This analysis created area-specific small-, medium-, and large-throughput stations representative of stations in the 25th, 50th (median), and 75th percentiles, respectively, based on emissions inspection throughput. Table VIII-3 shows whether small-, medium-, and large-throughput model stations in HGB/DFW, El Paso, and ARR generate enough revenue from emissions inspections to recoup costs. As in 2020, some station types have revenues that do not exceed total costs.[15] These instances occur in small model stations in all program areas, as well as medium model stations in the El Paso and ARR program areas. All other model station types across the four program areas had net revenues that exceeded costs.

[15] The monthly profits presented in Table VIII-3 may not equal revenue minus costs due to rounding.

Table VIII-3. Total Monthly Costs and Net Revenues at Model Stations (2022)

	HGB/DFW	El Paso	ARR
Small station net revenue	$1,036	$748	$759
Small station total costs	$1,433	$1,578	$1,774
Small stations net revenue – total cost	**($397)**	**($830)**	**($1,015)**
Medium station net revenue	$2,165	$1,622	$1,794
Medium station total costs	$1,885	$1,982	$2,386
Medium station net revenue – total cost	**$279**	**($361)**	**($592)**
Large station net revenue	$4,218	$2,783	$3,565
Large station total costs	$2,708	$2,520	$3,434
Large station net revenue – total cost	**$1,510**	**$263**	**$131**

Table VIII-4 (average testing throughput per station)[16] and Table VIII-5 (total testing throughput by program area) provide some additional insight, as throughput is a major driver of generating enough revenue to break even. Across all program areas, the total testing throughput has increased every year since 2015. The average monthly throughput per station has increased substantially in all program areas as well.

Table VIII-4. Average Monthly Throughput per Station from Calendar Year 2008 to 2021

Program Area	2008	2011	2013	2015*	2017	2019	2021
HGB/DFW	184	165	148	137	156	153	177
El Paso	194	188	179	181	217	208	194
ARR	222	195	184	178	225	239	238
Average	187	169	153	143	164	162	183

* March 1, 2015, through February 29, 2016.

Table VIII-5. Initial Calendar Year Testing Throughput from 2013 to 2021 in All Program Areas

Program Area	2013 Annual Throughput	2015 Annual Throughput*	2017 Annual Throughput	2019 Annual Throughput	2021 Annual Throughput
HGB/DFW	7,240,815	7,027,333	8,666,394	9,169,664	9,535,177
El Paso	446,991	467,653	541,250	561,384	571,810
ARR	894,648	877,146	1,114,352	1,200,711	1,236,295
Total	**8,582,454**	**8,372,132**	**10,321,996**	**10,931,759**	**11,343,282**

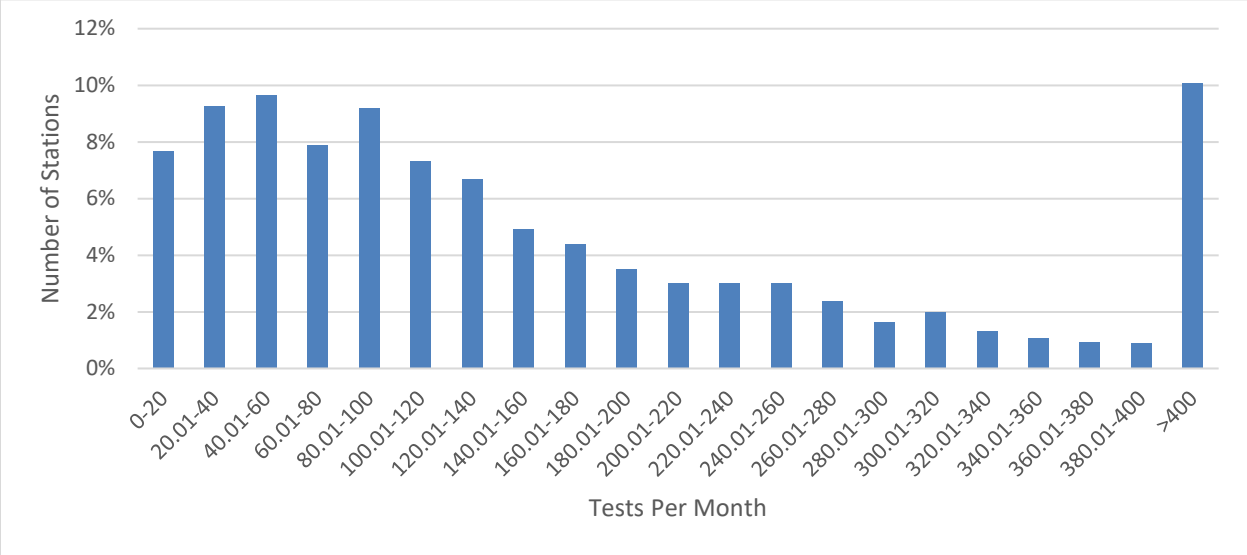
* March 1, 2015, through February 29, 2016.

Figure VIII-6 (HGB/DFW), Figure VIII-7 (El Paso), and Figure VIII-8 (ARR) show the distribution of station testing throughput for stations open the entire year. The following analysis provides context about the percent of stations that could start to break even if conditions improve or no longer break even if conditions worsen.

[16] These throughput per month calculations were typically done using throughput from calendar years (i.e., 2008, 2011, 2013, 2015, 2017, 2019, and 2021) and the number of active stations the following March (March 2009, 2012, 2014, 2016, 2018, 2020, and 2022).

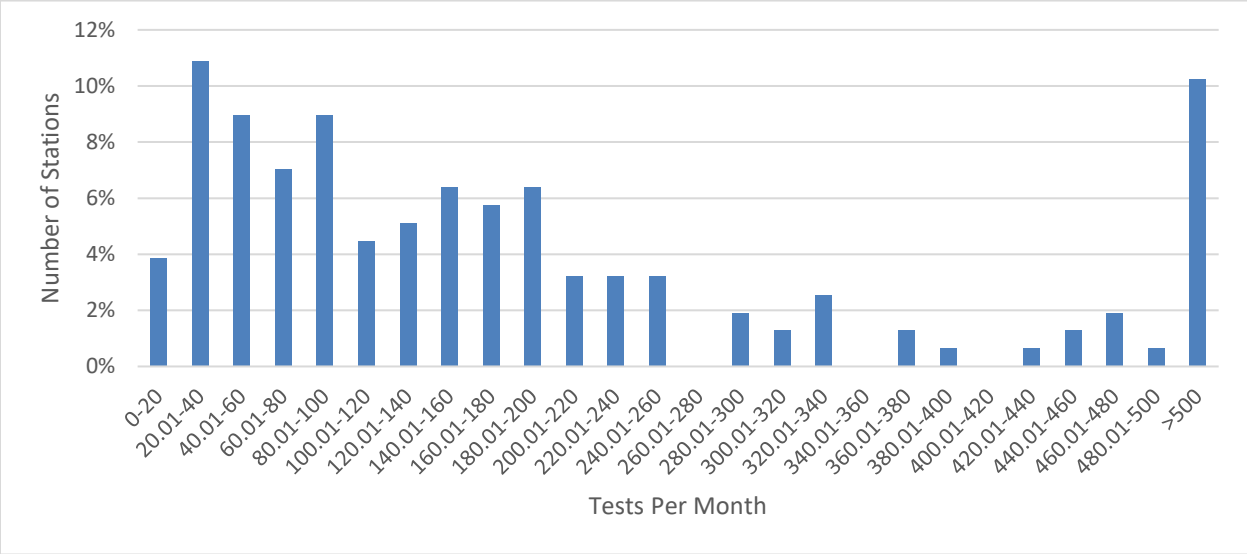
For HGB/DFW, the break-even analysis showed it took about 34 tests per month for a station to break even (see Table VIII-2). As shown in Figure VIII-6, about 4% of stations had a monthly throughput between 30 and 40 (barely breaking even). About 5% of stations had a monthly throughput between 20 and 30 tests (not quite breaking even), which provides insight about the number of stations that could start to break even if conditions improve. Almost 5% of stations had a monthly throughput between 40 and 50 tests and risk no longer breaking even if conditions worsen.

Figure VIII-6. Monthly Testing Throughput for HGB/DFW Stations



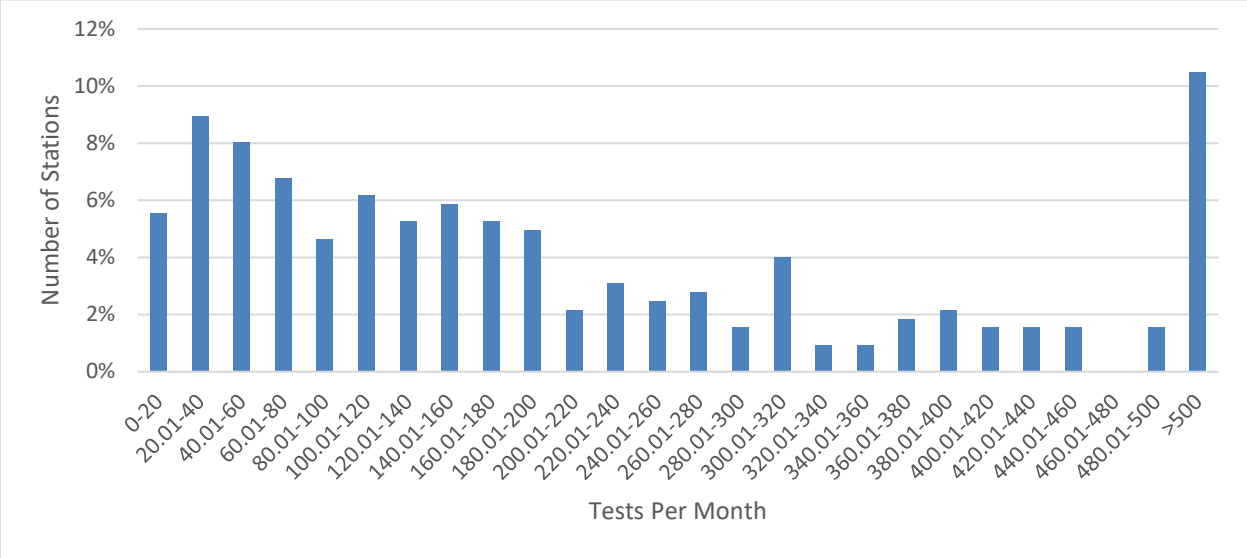
In El Paso, the break-even analysis showed, it took 71 tests per month for a station to break even (see Table VIII-2). As shown in Figure VIII-7, approximately 4% of stations performed 70 to 80 tests a month (barely breaking even), over 3% of stations performed 60 to 70 tests per month (and could break even if situations improve), and 3% of stations perform 80 to 90 tests per month (and are at risk to stop breaking even if conditions worsen).

Figure VIII-7. Monthly Testing Throughput for El Paso Stations



In ARR, the break-even analysis showed it took about 78 tests per month for a station to break even (see Table VIII-2). As shown in Figure VIII-8, about 7% of stations performed 60 to 80 tests a month (barely breaking even, and could break even if situations improve) and 5% of stations perform 80 to 100 tests per month (and are at risk to stop breaking even if conditions worsen).

Figure VIII-8. Monthly Testing Throughput for ARR Stations



D. OVERALL FINDINGS ON THE ADEQUACY OF THE FEE

The cost model analyses show over 86% of stations (excluding building costs) in the HGB/DFW program areas with total revenue covering costs, which is a moderate decrease compared to 2020 (89%). The number of stations in the market decreased by 8% since 2020, which seems to indicate that the fee of $18.50 is not sufficient in these program areas.

In the El Paso program area, 73% of stations (excluding building costs) are estimated to break even, while only 32% of stations break-even when building costs are included. The number of stations in El Paso increased by about 2% since 2020. Only 5% of stations that responded to the question on whether the station offers free tests aside from retests reported doing so. Given the decrease in the percentage of stations breaking even, the low percentage of stations breaking even when accounting for building costs on top of equipment costs, and a very low percentage of stations stating that they offer free tests, this suggests that stations may be having a difficult time covering their costs with revenue and the $11.50 price should be increased.

In the ARR program area, the percentage of stations breaking even (excluding building costs) according to the cost model analyses is 71%, a slight increase from 2020. At the same time, the percentage of stations breaking even when considering building costs decreased to just 28%. While the number of stations in the program area increased by about 7% compared to 2020, the break-even rate when considering building costs is low enough to indicate that the fee may need to be increased.

To gain inspection station owners' perspective on a reasonable OBD inspection fee, ERG asked station owners what they think their customers would be willing to pay and what fee price would cover costs of offering emissions testing. Table VIII-6 and Table VIII-7 summarize the responses to these questions.

Table VIII-6. What Are Customers Willing to Pay?

	HGB/DFW	El Paso	ARR	All Areas
Count of Stations	666	48	81	795
25th percentile	$22.99	$18.00	$16.00	$20.00
50th percentile (median)	$25.50	$20.00	$24.75	$25.00
75th percentile	$35.00	$25.00	$28.88	$35.00
Average	$29.51	$21.82	$24.38	$28.52

Table VIII-7. What Revenue Covers Costs?

	HGB/DFW	El Paso	ARR	All Areas
Count of Stations	652	49	78	779
25th percentile	$23.00	$18.00	$18.00	$22.00
50th percentile (median)	$30.00	$25.00	$25.00	$28.00
75th percentile	$39.25	$30.00	$30.00	$35.00
Average	$30.93	$24.43	$26.39	$30.05

Across all program areas, survey respondents indicated that, on average, a fee of $30.05 would allow revenue to cover costs, while customers would be willing to pay about $28.52. The median response for both questions across all regions was very also similar: station owners thought customers would be willing to pay a median of $25.00, while the average amount that stations could cover costs was a $28.00 fee. With a $25.00 fee (the median price stations owners believe customers would be willing to pay) between 73% and 76% of stations across all four program areas could cover both equipment and building costs. Similar percentages of

stations (between 76% and 79%) across program areas would be able to cover equipment and building costs if the price were $28.00.

E. ADDITIONAL CONSIDERATIONS: REPAIR REVENUE FROM FAILED INSPECTIONS

As noted in the Chapter VI cost model analysis, there was no differentiation between test-only and T&R stations (because the incremental costs of emissions inspections are the same for both station types), and repair revenue generated from failed emissions inspections was excluded from the Chapter VI analysis. The survey asked T&R stations to estimate the number of repairs from failed inspections and average repair revenue generated from failed inspections over the past month. This is summarized in Table VIII-8, along with the total monthly revenue generated from failed inspections.

Table VIII-8. Monthly Revenue Generated from Failed Inspections

	HGB/DFW	El Paso	ARR
Number of repairs per month (median)	4	8	4
Repair revenue from each failed emissions inspection (median)	$166.00	$137.50	$200.00
Estimated monthly repair revenue generated from failed inspections	$664.00	$1,100.00	$800.00
Percent net revenue per dollar of repair work	4.9%	4.9%	4.9%
Estimated net revenue attributed to emissions inspection repairs	$32.54	$53.90	$39.20
Reduction in number of tests to break even	3	9	9

The table above shows that a typical T&R station generates about $664 to $1,100 per month in additional gross revenue, depending on the program area, from repairs associated with failed emissions inspections. Stations will have an assortment of costs associated with repairs (labor, parts, etc.); thus, the net revenue to the station attributable to the repairs from failed emissions inspections will be some relatively small fraction, about 4.9% of the total revenue generated (IRS, 2016).[17] This is the equivalent impact of reducing a station's break-even number of tests by between three (HGB/DFW) and nine (El Paso and ARR) per month. Additionally, this is an opportunity for stations to build a relationship with potential clients. Based on the comments from respondents and answers to current and past survey questions, repair revenue from failed emissions inspections plays an important part in the business decision to offer emissions inspections.

F. ADDITIONAL CONSIDERATIONS: HIGHER THROUGHPUT AT TEST-ONLY STATIONS

The cost model analyses in Chapter VI use throughput figures for all stations to generate representative small, medium, and large stations based on throughput. As discussed above in Section VIII.E, T&R stations have an additional revenue stream from repairs from failed inspections; accordingly, they could be expected to remain in business with a lower emissions inspection throughput than test-only stations, whose viability in the market is much more dependent (solely dependent, for stations that do not offer non-repair services) on revenue

[17] Based on a net income of $3,659,508,000 divided by business receipts of $74,577,213,000 for the entire "automotive repair and maintenance" minor industry in 2012.

from emissions inspections. Table VIII-9 shows the 25th percentile, 50th percentile (median), and 75th percentile emissions inspection throughput by program area for test-only stations, T&R stations, and both aggregated. As expected, test-only stations had higher inspection throughput than T&R stations across all program areas and test types, with much larger disparities in throughput for HGB/DFW and El Paso.

Table VIII-9. Initial Testing Throughput by Program Area and Station Type (Excluding Building Costs)

Program Area	Station Type	25th Percentile ("Small")	50th Percentile (Median) ("Medium")	75th Percentile ("Large")	Break-Even Tests (No Building)	Break-Even Tests (with Building)
HGB/DFW	Test-only	65	141	270	34	92
	Test-and-repair	53	107	200	34	92
	Both types	56	117	228	34	92
El Paso	Test-only	125	207	468	71	199
	Test-and-repair	56	111	185	71	199
	Both types	65	141	242	71	199
ARR	Test-only	66	161	318	78	282
	Test-and-repair	69	154	301	78	282
	Both types	66	156	310	78	282

Table VIII-9 also shows the break-even number of emissions inspections—the number needed for revenue to equal the costs associated with emissions inspections in each program area. Before building costs are factored in, both small T&R and test-only stations in the ARR program area and small T&R stations in El Paso do not meet the break-even test numbers for their program areas.

G. RECOMMENDATIONS FOR FUTURE SURVEY EFFORTS

ERG recommends that the TCEQ consider the following changes for future survey efforts:

- Consider revisions or additional instruction regarding total square footage estimates. Stations continue to report area estimates that are smaller than anticipated for inspection stations.
- Revise questions asking about monthly costs for certified analyzers and associated maintenance packages.
- Remove the question about decommissioned equipment.
- Continue offering a Spanish language version of the survey.
- Consider adding a question for stations to provide what they consider a reasonable profit margin to be on emissions tests.
- Add a question to confirm with stations whether they are a test-only or T&R station. This question could use DPS's designation test-only or T&R as a reference point.
- Provide an option for stations to respond "Don't know" to the question asking when stations first began offering emissions tests.
- Provide an option for stations to respond "Don't know" regarding building costs.

IX. REFERENCES

BEA (Bureau of Economic Analysis, U.S. Department of Commerce). 2004. "Fixed Assets and Consumer Durable Goods in the United States, 1925-97." Washington, DC: U.S. Government Printing Office, M-29–M-33. September 2003.

BLS (Bureau of Labor Statistics, U.S. Department of Commerce). 2022. Series ID: CMU2038100000000P. Accessed from: http://download.bls.gov/pub/time.series/cm/cm.data.1.AllData, March 18, 2022.

Cusick, M. 2012. Personal communication between Michael Cusick, U.S. Department of Commerce, and Anita Singh, ERG, April 10, 2012. (Confirmed 2003 values were current and emailed a copy of "BEA Depreciation Estimates," Bureau of Labor Statistics, U.S. Department of Commerce, fall 2010.)

ERG (Eastern Research Group, Inc.). 2005. "Fee Analysis for AirCheckTexas Vehicle Emissions Inspection Program: Houston-Galveston and Dallas/Fort Worth Nonattainment Areas." Prepared for the Texas Commission on Environmental Quality. August 31, 2005.

ERG. 2007. "Fee Analysis for AirCheckTexas Vehicle Emissions Inspection Program: Austin, El Paso, Houston-Galveston-Brazoria, and Dallas/Fort Worth Nonattainment Areas." Prepared for the Texas Commission on Environmental Quality. August 31, 2007.

ERG. 2012. "Vehicle Emissions Inspection Program Test Fee Analysis for AirCheckTexas Program." Prepared for the Texas Commission on Environmental Quality. July 20, 2012.

ERG. 2014. "Vehicle Emissions Inspection Program Test Fee Analysis for AirCheckTexas Program." Prepared for the Texas Commission on Environmental Quality. July 18, 2014.

ERG. 2016. "Vehicle Emissions Inspection Program Test Fee Analysis for AirCheckTexas Program." Prepared for the Texas Commission on Environmental Quality. June 30, 2016.

ERG. 2018. "Vehicle Emissions Inspection Program Test Fee Analysis for AirCheckTexas Program." Prepared for the Texas Commission on Environmental Quality. June 26, 2018.

ERG. 2020. "Vehicle Emissions Inspection Program Test Fee Analysis for AirCheckTexas Program." Prepared for the Texas Commission on Environmental Quality. June 26, 2020.

FLC (Foreign Labor Certification Data Center). 2022. "Online Wage Library." Accessed from: http://www.flcdatacenter.com/OesWizardStep2.aspx?stateName=Texas, May 11, 2022.

IRS (Internal Revenue Service). 2016. "SOI Tax Stats-Returns of Active Corporations—Table 1." Accessed from: https://www.irs.gov/uac/soi-tax-stats-returns-of-active-corporations-table-1, May 16, 2016.

Pechan (E.H. Pechan & Associates, Inc.). 2009. "Vehicle Emission Inspection Program Test Fee Analysis for AirCheckTexas Program." Prepared for the Texas Commission on Environmental Quality. July 31, 2009.

TCEQ (Texas Commission on Environmental Quality). 2021. "Vehicle Emissions Inspection Types and Certified Analyzers." Accessed from: https://www.tceq.texas.gov/airquality/mobilesource/vim/testing.html, May 11, 2022.

TxDPS (Texas Department of Public Safety). 2017. "Vehicle Inspection Operations & Training Manual for Official Vehicle Inspection Stations (Vehicle Emissions Inspection)." Accessed from: https://www.dps.texas.gov/Internetforms/Forms/VI-87A.pdf, June 1, 2022.

APPENDIX A. SURVEY INSTRUMENTS

This appendix includes the program-area-specific survey instruments that were sent to stations. The electronic survey was a single survey using the same questions, programmed to ask the program-area-specific questions based on the responding station's location (e.g., if a station was from the El Paso or ARR program area, a value of $11.50 would appear for questions 25 and 26). ERG programmed skip logic into the survey, so stations would not see questions that did not apply to them (e.g., if a test-only respondent replied "no other services" in question 9, the electronic survey would automatically skip them to question 13 as outlined in the paper survey).

The surveys in this appendix have been slightly reformatted from the mailed versions to improve their accessibility.

HGB/DFW English Survey

{STATION ID}_____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

2022 Vehicle Emissions Inspection Program Fee Survey

Conducted by Eastern Research Group, Inc.

The Texas Commission on Environmental Quality (TCEQ) is required by state statute to review the fee established for inspecting motor vehicle emissions every two years. The TCEQ has contracted with Eastern Research Group, Inc. (ERG) to conduct a survey to evaluate the costs associated with vehicle emissions inspections.

The purpose of this survey is to collect data regarding costs and revenues in the Texas inspection and maintenance (I/M) program. The information collected will be used to make improvements to the I/M program and establish a fee that provides a reasonable rate of return on an investment for inspection station owners and the lowest necessary cost of inspection for motorists.

You can help improve Texas air quality and support testing stations like yours by sharing your experiences with the AirCheckTexas Vehicle Emissions Inspection Program. Your participation is crucial to the success of this survey. The more surveys returned, the more information that will be available for ERG to develop an accurate assessment. Please do your part and complete and return the survey in the enclosed stamped envelope as soon as possible.

This survey is voluntary. It should take about 10 to 15 minutes to complete.

Please do not write your name on the survey. Responses will be compiled by ERG, a TCEQ contractor. Any published results of this survey will be summarized in a manner that does not allow identification of individual stations, such as a percentage or an average.

If you own or operate more than one station that offers motor vehicle emissions inspections, please answer the questions only for the station to which the survey was sent.

If you have any questions or comments about this study, we would be happy to talk with you. You can email ERG at fee-survey@erg.com or call us toll free at 1-888-983-8118.

Please return your completed survey in the postage-paid envelope provided. If the envelope has been misplaced, please mail the form to:

Eastern Research Group, Inc.
Attn: TCEQ Fee Survey
110 Hartwell Avenue
Lexington, MA 02421

You can also complete the survey online at: www.tceqsurvey2022.com

Need help or have questions about completing this survey? → Please email ERG at fee-survey@erg.com or call 1-888-983-8118.

This page is intentionally left blank

{STATION ID}_____

SURVEY INSTRUCTIONS

If you own or operate more than one station that offers motor vehicle emissions inspections, answer the questions below only for the station to which the survey was sent. Please complete one survey for each physical location.

If you do not know the answer to a particular question, please consult with other members of your organization.

If you have any questions while completing the survey, please contact the survey helpline at fee-survey@erg.com or 1-888-983-8118.

Please use blue or black ink. Use an X inside the box or color the box fully to mark your selections.

PART I – GENERAL STATION INFORMATION

1 Does this station offer motor vehicle emissions inspections? ***Mark X ONE box only***.

☐ Yes - *Go to* **2**

☐ No - *You have completed the survey. Please mail the questionnaire to us in the enclosed pre-paid envelope. Thank you.*

2 In what year did this station first offer motor vehicle emissions inspection testing? ☐

NOTE: The current emissions inspection program started in Houston-Galveston-Brazoria and Dallas-Fort Worth in 2002 or 2003 (varies by county).

3 In calendar year 2021, did this station have more than one station ID?

☐ Yes – *Please list other station IDs used at this location*: ☐

☐ No

4 What are the typical operating hours for performing emissions inspections at this station? Circle AM or PM. Please indicate any days that the station is closed.

Day	Time Open		Time Closed	Circle if Closed
Monday	☐ am / pm	to	☐ am / pm	Closed
Tuesday	☐ am / pm		☐ am / pm	Closed
Wednesday	☐ am / pm		☐ am / pm	Closed
Thursday	☐ am / pm		☐ am / pm	Closed
Friday	☐ am / pm		☐ am / pm	Closed
Saturday	☐ am / pm		☐ am / pm	Closed
Sunday	☐ am / pm		☐ am / pm	Closed

5 What is the approximate **total** square footage of the **entire** inspection station? ☐ sq. ft.

6 How many emissions inspection bays do you currently have at this station? If zero, please enter 0.

☐ Bays used **EXCLUSIVELY** for **emissions testing ONLY**

☐ Bays used for **emissions testing AND OTHER USES (safety testing, repairs, etc.) (If > 0, please answer 6b)**

6b For emissions inspection bays also used for other purposes, on average, what percent of their use is for emissions testing?

☐ percent (%) of time that emissions bays with other uses are used for emissions testing

PART II - THE EMISSIONS INSPECTION PROCESS

7 On average, how long does it take to perform an On-Board Diagnostics (OBD) ***emissions*** test (exclude safety test time)?

☐ minutes to perform an OBD emissions test

8 On average, how much additional time is spent with each inspection customer (for example, explaining the emissions inspection process, reasons for failure and/or recommended repairs)?

☐ additional minutes spent with emissions inspection customer

{STATION ID}_____

PART III – OTHER STATION SERVICES

9 In addition to emissions and safety testing, check the box that best describes other services offered at your station.
Mark X ONE box only.

- ☐ No other services – *Go to* **13**
- ☐ Repair services only – *Go to* **10**
- ☐ Non-repair services only – *Continue to* **9b then skip to 13**
- ☐ Repair services and non-repair services – *Continue to* **9b**

9b Which non-repair services do you offer at your station? ***Mark X ALL that apply***.

- ☐ Regular maintenance (oil, transmission, AC, brakes, exhaust, etc.)
- ☐ Gas service station
- ☐ Tire sales and service
- ☐ Glass repair/replacement
- ☐ Paint or body work
- ☐ Car wash or auto detailing
- ☐ Car sales (new or used)
- ☐ Auto, truck, or trailer rentals
- ☐ Auto parts & accessories sales or installation
- ☐ Towing & emergency services
- ☐ Food, drink, or convenience store
- ☐ Other *If other, please describe services other than those selected above*

PART IV - REPAIR SERVICE REVENUE: [If this station does not offer repair services, go to Question 13.]

10 What proportion of the repair revenues for this station result directly from failed emissions tests? ***Mark X ONE box only***.

- ☐ 0%- *Go to* **13**
- ☐ 1-20%
- ☐ 21-40%
- ☐ 41-60%
- ☐ 61-80%
- ☐ 81-100%

11 In any given month, what is the typical number of repair jobs from failed emissions tests?
☐☐☐ repair jobs

12 What is a typical repair cost for an emissions test failure?
$☐ **,** ☐☐☐ **.00** per repair for a failed emissions test

PART V - YOUR EMISSIONS INSPECTORS

13 How many <u>emissions inspectors</u> currently work at this station? Please do NOT include employees who <u>do not</u> conduct emissions inspections.

- ☐☐ Full-time emissions inspectors (Inspectors working 40 hours or more per week should be considered full-time.)
- ☐☐ Part-time emissions inspectors **(If > 0, please answer 13b)**

13b On average, about how many hours per week does each part-time emissions inspector work? Include both time conducting inspections and time spent on all other activities. ☐☐ hours/week

14 Of the number of emissions inspectors that work **FULL TIME**, how many spend...?

- 76-100% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 51-75% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 26-50% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 0-25% of their time performing emissions inspections:..... ☐☐ emissions inspectors

15 Of the number of emissions inspectors that work **PART TIME**, how many spend...?

- 76-100% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 51-75% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 26-50% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 0-25% of their time performing emissions inspections:..... ☐☐ emissions inspectors

16 How do you typically pay your emissions inspectors? What is the current average hourly wage and/or per-test amount paid?

- ☐ Hourly wage or salary ⟶ $☐☐☐.☐☐ per hour
- ☐ Per emissions test ⟶ $☐☐☐.☐☐ per test
- ☐ Hourly wage or salary + per emissions test *(Please enter dollar amounts in the corresponding spaces above.)*

17 How many emissions inspectors receive benefits (e.g., health care, paid leave, etc.)?

- ☐ Full-time emissions inspectors
- ☐ Part-time emissions inspectors

18 Does this station incur costs specifically for training employees to conduct emissions inspections?

- ☐ Yes – *Go to* **18b**
- ☐ No – *Go to* **19**
- ☐ Not sure – *Go to* **18b**

18b For calendar year 2021, please tell us the total dollar amount your station spent on:

Certified Vehicle Emissions Inspector training application fees and renewal fees	$☐,☐☐☐.00
Food, lodging, and travel costs for employees attending inspector training courses	$☐.☐☐☐.00
Wages paid to employees for their time attending inspector training courses	$☐,☐☐☐.00
Wages paid to employees for their time on-the-job training specific to emissions testing	$☐,☐☐☐.00
Other emissions training costs (continuing education, training materials, etc.)	$☐,☐☐☐.00

If appropriate, please provide a brief description of your OTHER training expenses:

PART VI - EMISSIONS TESTING EQUIPMENT, BUILDING AND OTHER COSTS

19a Please tell us about the certified emissions testing analyzers that you currently **OWN** at this station. For each analyzer, enter the number of years that you have owned the analyzer and provide your best estimate of the total cost, including installation. Please also identify the option that best describes how the purchase was financed.

Number of Years Owned	Enter total cost, including installation	Select how you financed the purchase and total cost	If lease or loan… Lease/Loan term (years)	If lease or loan… Interest rate (%)	Do you have a maintenance package for this emissions testing analyzer?	Cost of maintenance package (Select time frame)
☐ years	$☐☐,☐☐☐.00	☐ Paid cash ☐ Lease-to-purchase ☐ Loan from bank	☐	☐ %	☐ Yes ☐ No	$☐ .00 per month / quarter / year
☐ years	$☐☐,☐☐☐.00	☐ Paid cash ☐ Lease-to-purchase ☐ Loan from bank	☐	☐ %	☐ Yes ☐ No	$☐ .00 per month / quarter / year
☐ years	$☐☐,☐☐☐.00	☐ Paid cash ☐ Lease-to-purchase ☐ Loan from bank	☐	☐ %	☐ Yes ☐ No	$☐ .00 per month / quarter / year

19b Please tell us about the certified emissions testing analyzers that you currently **RENT** at this station. For each analyzer, enter your current total monthly rental cost.

Enter total monthly rental cost
$☐☐,☐☐☐.00
$☐☐,☐☐☐.00
$☐☐,☐☐☐.00

PLEASE CONTINUE ON NEXT PAGE →

20 [If you own your analyzer(s)] In calendar year 2021, how much did you spend on repairs to your emissions testing equipment (e.g., barcode scanner, printer, internal analyzer components) that were not covered by a service contract or maintenance package? You will be asked about your costs for consumable goods such as paper, toner, and gas cap testers in the next question.

$☐☐,☐☐☐.00

21 Other than maintenance or repairs to emissions testing equipment you entered in the previous question, please tell us about other costs you have specific to vehicle emissions inspections.

Item	Cost	Frequency of expense (circle one)
a. Dedicated phone line or internet	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time
b. Gas cap tester kits	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time
c. Printer paper	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time
d. Ink/toner cartridges	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time
e. Other *Please describe:*	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time

22 Have you ever gotten rid of emissions testing equipment that you no longer needed?

☐ Yes. - *Go to* **22b**
☐ No. - *Go to* **23**
☐ Not sure. - *Go to* **23**

22b Please tell us about any OBD certified emissions testing analyzers you have gotten rid of that you no longer needed. For each one, please indicate the number of years the equipment was owned and how you got rid of it. Please also indicate the revenue from its sale AND/OR the cost to dispose of it.

Type	# of Years Owned	Select one	If you **SOLD** or **TRADED IN** this analyzer, please indicate **YOUR REVENUE OR TRADE-IN VALUE**	If you **PAID** to get rid of this analyzer, please indicate **YOUR COST**
OBD	☐	☐ I sold this ☐ I traded it in ☐ I got rid of it for free ☐ I paid to get rid of it	**$☐☐,☐☐☐.00**	**$☐☐,☐☐☐.00**
OBD	☐	☐ I sold this ☐ I traded it in ☐ I got rid of it for free ☐ I paid to get rid of it	**$☐☐,☐☐☐.00**	**$☐☐,☐☐☐.00**

23 Did you ever add or acquire building space (i.e., bay space) in order to perform vehicle emissions testing at this station?

☐ Yes.
☐ No.
☐ Not sure.

24 Did you purchase or do you rent/lease the building space for this station?

☐ Purchase. What was the approximate purchase price? **$☐,☐☐☐,☐☐☐.00**

☐ Rent/Lease. What is the approximate monthly rent? **$☐,☐☐☐,☐☐☐.00**

{STATION ID}_____

PART VII – ADDITIONAL INFORMATION

25 **Other than free retests on vehicles that failed previously at your station**, do you ever offer emissions tests at no charge **OR** charge less than $18.50 for an emissions test? ***Mark X ALL that apply***.

- ☐ No - *Go to* **26**
- ☐ Yes, we sometimes offer emissions tests for **FREE**. - *If selected, please answer* **25b**
- ☐ Yes, we sometimes offer emissions tests for **less than $18.50**. – *If selected, please answer* **25c**

25b This station offers emissions tests at no charge for: ***Mark X ALL that apply***.

- ☐ Friends and Family.
- ☐ Employees.
- ☐ Active or Veteran Military personnel.
- ☐ Members of our customer loyalty program.
- ☐ Customers getting retests just outside 15 days of their initial failed inspection.
- ☐ Customers who failed an emissions test at another station and had repairs performed at THIS station.
- ☐ Customers who cannot afford an inspection.
- ☐ General customer satisfaction at owner's or manager's discretion.
- ☐ Other reasons – please describe.

25c What is the lowest fee that you charge for an emissions test?

$☐☐.☐☐

26 In your opinion, does the $18.50 fee cover your costs of offering emissions testing at this station?

- ☐ Yes. - *Go to* **27**
- ☐ No. - *Go to* **26b**

26b Please tell us the extent to which you agree or disagree with the following statements?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	N/A
I do not conduct enough emissions inspections because there are too many stations performing inspections.	O	O	O	O	O	O
I pay for emissions inspection bay/building space, but it is underutilized for emissions testing or cannot easily be used for other purposes.	O	O	O	O	O	O
I must pay an emissions inspector to be on site, and it is costly because it is difficult to task them with other work when they are not performing inspections.	O	O	O	O	O	O
I must pay my inspectors a high salary/rate because their primary job function is one that demands a higher salary than emissions inspectors.	O	O	O	O	O	O
My testing equipment is frequently in need of repair, and the downtime hurts my ability to break even.	O	O	O	O	O	O
The extra time I spend with customers during emissions inspections is costly.	O	O	O	O	O	O
Costs associated with testing have increased over the years and now our costs exceed the revenue from the test fee.	O	O	O	O	O	O
All the costs simply add up to more than the fee, but I decide to offer testing because it is important to my business in other ways.	O	O	O	O	O	O

Please describe any other reasons that the emissions inspection fee does not cover your costs.

27 We value your expertise! Thinking about the emissions inspection fee separate from the $7.00 safety inspection fee, please answer the following questions. Remember, your recommendation should NOT include the $7.00 safety portion of the inspection.

a What vehicle emissions inspection fee do you think your customers would be willing to pay? $☐☐.☐☐

b What vehicle emissions inspection fee would allow your revenue to cover your costs? $☐☐.☐☐

END

Thank you for completing this survey.
We are interested in your feedback! If you have suggestions for improving this survey, please note them below.

Please make a photocopy of this form for your records.
Please return the completed original questionnaire in the postage-paid envelope provided.
If the envelope has been misplaced, please mail the form to:
Eastern Research Group, Inc., Attn: TCEQ Fee Survey, 110 Hartwell Avenue, Lexington, MA 02421.

HGB/DFW Spanish Survey

{STATION ID}_____

COMISIÓN DE CALIDAD AMBIENTAL DEL ESTADO DE TEXAS

Encuesta sobre los cargos del Programa de Inspección de Emisiones Vehiculares 2022

Realizada por Eastern Research Group, Inc.

En virtud de los estatutos estatales, la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) tiene la obligación de reevaluar el cargo establecido para inspeccionar emisiones de vehículos motorizados cada dos años. La TCEQ ha contratado a Eastern Research Group, Inc. (ERG) para que realice una encuesta para evaluar los costos asociados a las inspecciones de emisiones vehiculares.

El propósito de esta encuesta es recopilar datos sobre costos y ganancias en el programa de inspección y mantenimiento (I/M) de Texas. La información recopilada se usará para mejorar el programa I/M y establecer un cargo que genere una tasa de rentabilidad razonable en una inversión para los propietarios de estaciones de inspección y el costo necesario más bajo de inspección para los conductores.

Usted puede ayudar a mejorar la calidad del aire de Texas y apoyar a estaciones de prueba como la suya compartiendo sus experiencias con el Programa de Inspección de Emisiones Vehiculares AirCheckTexas. Su participación es crucial para el éxito de esta encuesta. Cuantas más encuestas se completen, más información tendrá ERG a su disposición para desarrollar una evaluación rigurosa. Por favor llene la encuesta que le enviamos. Adjunto va un sobre con estampilla para que lo regrese lo más pronto posible.

Esta encuesta es voluntaria. Completarla solamente le tomará de 10 a 15 minutos.

No escriba su nombre en la encuesta. ERG, un contratista de TCEQ, se encargará de compilar las respuestas. Todos los resultados de esta encuesta que se publiquen se resumirán de una manera en que no se pueda identificar a estaciones particulares, como en un porcentaje o un promedio.

Si usted es propietario u opera más de una estación que ofrece inspecciones de vehículos motorizados, responda las preguntas solamente relacionadas con la estación por la que se envió la encuesta.

Si tiene alguna pregunta o comentario sobre este estudio, con gusto le atenderemos. Puede enviar un correo electrónico a ERG a fee-survey@erg.com o llamarnos sin cargo al 1-888-983-8118.

Devuelva su encuesta completada en el sobre proporcionado. No necesita ponor estampilla. Si no encuentra el sobre, envíe la encuesta por correo a:

Eastern Research Group, Inc.
Attn: TCEQ Fee Survey
110 Hartwell Avenue
Lexington, MA 02421

También puede completar la encuesta en línea en: www.tceqsurvey2022.com

¿Necesita ayuda o tiene alguna pregunta sobre como completar esta encuesta?

→ Envíe un correo electrónico a ERG a fee-survey@erg.com o llámenos sin cargo al 1-888-983-8118.

Esta página se deja en blanco deliberadamente

{STATION ID}_____

INSTRUCCIONES DE LA ENCUESTA

Si usted es propietario u opera más de una estación que ofrece inspecciones de vehículos motorizados, responda las preguntas de abajo solamente relacionadas con la estación por la que se envió la encuesta. Complete una encuesta por cada ubicación física.

Si no sabe la respuesta a una pregunta en particular, consulte a otros integrantes de su organización.

Si tiene alguna duda mientras está completando la encuesta, póngase en contacto con la línea de ayuda con encuestas a la dirección fee-survey@erg.com o por teléfono al 1-888-983-8118.

Le pedimos que use tinta azul o negra. Use una X dentro de la casilla o coloree la casilla por completo para marcar las opciones que elija.

PARTE I - INFORMACIÓN GENERAL SOBRE LA ESTACIÓN

1 ¿En esta estación se hacen inspecciones de emisiones de vehículos motorizados? ***Marque con una X SOLO una casilla***.

☐ Sí - *Avance a* **2**

☐ No - *Ha completado la encuesta. Envíenos el cuestionario por correo en el sobre prepagado incluido. Gracias.*

2 ¿En qué año se empezaron a ofrecer inspecciones de emisiones de vehículos motorizados en esta estación? ☐

NOTA: el programa de inspección de emisiones vehiculares actual comenzó en Houston-Galveston-Brazoria y Dallas-Fort Worth en 2002 o 2003 (varía según el condado).

3 En el año calendario 2021, ¿esta estación tenía más de una identificación de estación?

☐ Sí – *Ingrese las otras identificaciones de estación usadas en esta ubicación*: ☐

☐ No

4 ¿Cuál es el horario de atención normal para hacer inspecciones de emisiones en esta estación? Dibuje un círculo alrededor de a. m. o p. m. Indique en qué días la estación permanece cerrada.

Día	Hora de apertura	Hora de cierre	Encerrar en un círculo si corresponde
Lunes	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado
Martes	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado
Miércoles	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado
Jueves	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado
Viernes	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado
Sábado	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado
Domingo	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado

5 ¿Cuál es la superficie **<u>total</u>** aproximada en pies cuadrados de **<u>toda</u>** la estación de inspección? ☐ ft^2

6 ¿Cuántas plataformas de inspección de emisiones tiene actualmente en esta estación? Si no hay ninguna, ingrese 0.

☐ plataformas usadas **EXCLUSIVAMENTE** para **SOLO para pruebas de emisiones**

☐ plataformas usadas para **pruebas de emisiones Y OTROS USOS (pruebas de seguridad, reparaciones, etc.)**

(Si la respuesta es > 0, responda 6b)

6b Para las plataformas de inspección de emisiones que también se usan para otros fines, en promedio, ¿qué porcentaje de su uso es para pruebas de emisiones?

☐ por ciento (%) del tiempo que las plataformas con otros usos se usan para pruebas de emisiones

PARTE II - EL PROCESO DE INSPECCIÓN DE EMISIONES

7 En promedio, ¿cuánto tiempo lleva hacer una prueba de ***emisiones*** con el sistema de diagnóstico a bordo (OBD) [sin incluir el tiempo usado en pruebas de seguridad]?

☐ minutos para ejecutar una prueba de emisiones con OBD

8 En promedio, ¿cuánto tiempo adicional se pasa con cada cliente de inspección (por ejemplo, explicando el proceso de inspección de emisiones, motivos de fallas y/o reparaciones recomendadas)?

☐ minutos adicionales que se pasan con cliente de inspección de emisiones

CONTINÚE EN LA PÁGINA SIGUIENTE →

PARTE III – OTROS SERVICIOS DE LA ESTACIÓN

9 Además de pruebas de seguridad y emisiones, marque la casilla que mejor describe otros servicios que se ofrecen en su estación. ***Marque con una X solo UNA casilla***.

- ☐ Ningún otro servicio – *Avance a* **13**
- ☐ Solo servicios de reparación – *Avance a* **10**
- ☐ Solo servicios que no tienen que ver con reparaciones – *Avance a* **9b y luego a 13**
- ☐ Servicios de reparación y otros servicios que no tienen que ver con reparaciones – *Avance a* **9b**

9b ¿Qué servicios que no tienen que ver con reparaciones se ofrecen en su estación? ***Marque con una X TODAS las opciones que correspondan***.

- ☐ Mantenimiento regular (aceite, transmisión, aire acondicionado, frenos, escape, etc.)
- ☐ Estación de servicio de combustible
- ☐ Ventas y servicio de neumáticos
- ☐ Reparación/cambio de vidrios
- ☐ Pintura o reparación de carrocería
- ☐ Lavado o limpieza a fondo
- ☐ Venta de vehículos (nuevos o usados)
- ☐ Alquiler de automóviles, camionetas o tráileres
- ☐ Ventas o instalación de accesorios y repuestos
- ☐ Servicios de emergencia y remolque
- ☐ Comida, bebidas o tienda de conveniencia
- ☐ Otros — *Si elige la opción Otros, describa los servicios que no corresponden a los seleccionados arriba.*

PARTE IV - INGRESOS POR SERVICIOS DE REPARACIÓN: [Si esta estación no ofrece servicios de reparación, avance a la Pregunta 13].

10 ¿Qué proporción de los ingresos por reparaciones de esta estación son el resultado directo de pruebas de emisiones no aprobadas? ***Marque con una X solo UNA casilla***.

- ☐ 0%- *Avance a* **13**
- ☐ 1-20%
- ☐ 21-40%
- ☐ 41-60%
- ☐ 61-80%
- ☐ 81-100%

11 En cualquier mes dado, ¿cuál es la cantidad típica de trabajos de reparación por pruebas de emisiones no aprobadas?

☐☐☐ trabajos de reparación por pruebas de emisiones no aprobadas

12 ¿Cuál es el costo de reparación típico por no aprobar una prueba de emisiones?

$☐ **,** ☐☐☐ **.00** por reparación por una prueba de emisiones no aprobada

PARTE V - SUS INSPECTORES DE EMISIONES

13 ¿Cuántos inspectores de emisiones trabajan actualmente en esta estación? NO incluya empleados que no realizan inspecciones de emisiones.

- ☐☐ Inspectores de emisiones de tiempo completo (los inspectores de emisiones que trabajan 40 horas o más por semana deben considerarse de tiempo completo).
- ☐☐ Inspectores de emisiones de medio tiempo **(si > 0, responda 13b)**

13b En promedio, ¿cuántas horas por semana trabaja cada inspector de emisiones de medio tiempo? Incluya tanto el tiempo que dedica a hacer inspecciones como el tiempo que dedica a todas las demás actividades ☐☐ horas/semana

14 De la cantidad de inspectores de emisiones que trabajan **TIEMPO COMPLETO**, ¿cuántos pasan...?

- 76-100% de su tiempo haciendo inspecciones de emisiones:..... ☐☐ inspectores de emisiones
- 51-75% de su tiempo haciendo inspecciones de emisiones:..... ☐☐ inspectores de emisiones
- 26-50% de su tiempo haciendo inspecciones de emisiones:..... ☐☐ inspectores de emisiones
- 0-25% de su tiempo haciendo inspecciones de emisiones:..... ☐☐ inspectores de emisiones

15 De la cantidad de inspectores de emisiones que trabajan **MEDIO TIEMPO**, ¿cuántos pasan...?

- 76-100% de su tiempo haciendo inspecciones de emisiones:..... ☐☐ inspectores de emisiones
- 51-75% de su tiempo haciendo inspecciones de emisiones:..... ☐☐ inspectores de emisiones
- 26-50% de su tiempo haciendo inspecciones de emisiones:..... ☐☐ inspectores de emisiones
- 0-25% de su tiempo haciendo inspecciones de emisiones:..... ☐☐ inspectores de emisiones

16 ¿Cómo suele pagar a sus inspectores de emisiones? ¿Cuál es el salario por hora promedio y/o monto que paga por prueba actualmente?

- ☐ Paga o salario por hora ⟶ $☐☐☐.☐☐ por hora
- ☐ Por prueba de emisiones ⟶ $☐☐☐.☐☐ por prueba
- ☐ Paga o salario por hora + por prueba de emisiones *(Ingrese montos en dólares en los espacios correspondientes arriba).*

17 ¿Cuántos inspectores de emisiones reciben prestaciones (por ejemplo, seguro médico, licencia con goce de sueldo, etc.)?

- ☐ Inspectores de emisiones de tiempo completo
- ☐ Inspectores de emisiones de medio tiempo

18 ¿Esta estación incurre en costos específicamente por capacitar a empleados para hacer inspecciones de emisiones?

- ☐ Sí – *Avance a* **18b**
- ☐ No – *Avance a* **19**
- ☐ No sé con certeza – *Avance a* **18b**

18b Para el año calendario 2021, indíquenos la cantidad total en dólares que su estación gastó en:

Cargos por renovación y cargos por solicitud de capacitación para inspector de emisiones vehiculares certificado	$☐,☐☐☐.00
Comida, alojamiento y costos de viaje para empleados que asisten a cursos de capacitación para inspectores	$☐.☐☐☐.00
Salario pagado a empleados por su tiempo al asistir a cursos de capacitación para inspectores	$☐,☐☐☐.00
Salario pagado a empleados por su tiempo abocado a capacitaciones prácticas específicas para pruebas de emisiones	$☐,☐☐☐.00
Otros costos de capacitación en emisiones (educación continua, materiales de capacitación, etc.)	$☐,☐☐☐.00

Si corresponde, ingrese una descripción breve de sus OTROS gastos por capacitación:

PARTE VI - EQUIPOS DE PRUEBAS DE EMISIONES, EDIFICIO Y OTROS COSTOS

19a Cuéntenos sobre los analizadores de emisiones certificados que **POSEE** actualmente en esta estación. Para cada analizador, ingrese desde hace cuántos años posee el analizador y su mejor estimación del costo total, incluyendo instalación. También identifique la opción que mejor describa cómo se financió la compra.

Cantidad de años de propiedad	Ingrese el costo total, incluyendo instalación	Seleccione cómo financió la compra y costo total	Si usó un arrendamiento o préstamo...		¿Tiene un paquete de mantenimiento para este analizador de emisiones?	Costo del paquete de mantenimiento (seleccione el plazo)
			Plazo de arrendamiento/ préstamo (años)	Tasa de interés (%)		
☐ años	$☐☐,☐☐☐.00	☐ Pago en efectivo ☐ Arrendamiento con opción de compra ☐ Préstamo bancario	☐	☐ %	☐ Sí ☐ No	$☐ .00 por mes / trimestre / año
☐ años	$☐☐,☐☐☐.00	☐ Pago en efectivo ☐ Arrendamiento con opción de compra ☐ Préstamo bancario	☐	☐ %	☐ Sí ☐ No	$☐ .00 por mes / trimestre / año
☐ años	$☐☐,☐☐☐.00	☐ Pago en efectivo ☐ Arrendamiento con opción de compra ☐ Préstamo bancario	☐	☐ %	☐ Sí ☐ No	$☐ .00 por mes / trimestre / año

19b Cuéntenos sobre los analizadores de emisiones certificados que **ALQUILA** actualmente en esta estación. Para cada analizador, ingrese el costo total de alquiler mensual.

Ingrese el costo total de alquiler mensual
$☐☐,☐☐☐.00
$☐☐,☐☐☐.00
$☐☐,☐☐☐.00

CONTINÚE EN LA PÁGINA SIGUIENTE →

20 [Si posee un analizador(es)] En el año calendario 2021, ¿cuánto gastó en reparaciones a sus equipos de prueba de emisiones (por ejemplo, escáner de código de barras, impresora, componentes internos) que no estaban cubiertas por un contrato de servicio o paquete de mantenimiento? Se le preguntará sobre sus costos por insumos como papel, tóner y probadores de tapa de tanque de combustible en la siguiente pregunta.

$☐☐,☐☐☐.00

21 Aparte de mantenimiento o reparaciones a equipos de prueba de emisiones que ingresó en la pregunta anterior, coméntenos qué otros costos tiene que correspondan específicamente a emisiones vehiculares.

Artículo	**Costo**	**Frecuencia del gasto (encierre una en un círculo)**
a. Línea telefónica exclusiva o Internet	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez
b. Kits de probadores de tapa de tanque de combustible	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez
c. Papel para impresora	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez
d. Cartuchos de tinta/tóner	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez
e. Otros *Ingrese una descripción:*	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez

22 ¿Alguna vez se deshizo de equipos de pruebas de emisiones que ya no necesitaba más?

☐ Sí - *Avance a* **22b**
☐ No - *Avance a* **23**
☐ No sé con certeza – *Avance a* **23**

22b Cuéntenos sobre todo analizador de pruebas de emisiones certificado OBD de los que se deshizo por no necesitarlos más. Para cada uno, indique la cantidad de años que tuvo el equipo y cómo se deshizo de este. Indique los ingresos por su venta Y/O costo para deshacerse del equipo.

Tipo	**Cant. de años que lo tuvo**	Seleccione una	Si **VENDIÓ** o **CANJEÓ** este analizador, indique **LO QUE GANÓ O VALOR DE CANJE**	Si **PAGÓ** por deshacerse de este analizador, indique **SU COSTO**
OBD	☐	☐ Lo vendí ☐ Lo canjeé ☐ Me deshice del equipo sin costo ☐ Pagué para deshacerme del equipo	**$☐☐,☐☐☐.00**	**$☐☐,☐☐☐.00**
OBD	☐	☐ Lo vendí ☐ Lo canjeé ☐ Me deshice del equipo sin costo ☐ Pagué para deshacerme del equipo	**$☐☐,☐☐☐.00**	**$☐☐,☐☐☐.00**

23 ¿Alguna vez añadió o adquirió espacio edificable (por ejemplo, plataformas) para hacer pruebas de emisiones vehiculares en esta estación?

☐ Sí.
☐ No.
☐ No sé con certeza.

24 ¿Compró o alquila/arrienda el edificio para esta estación?

☐ Compra. ¿Cuál fue el precio aproximado de compra? **$☐,☐☐☐,☐☐☐.00**

☐ Alquiler/arrendamiento. ¿Cuál es la renta mensual aproximada? **$☐,☐☐☐,☐☐☐.00**

CONTINÚE EN LA PÁGINA SIGUIENTE →

{STATION ID}_____

PARTE VII – INFORMACIÓN ADICIONAL

25 **Aparte de repeticiones de pruebas no aprobadas anteriormente en su estación**, ¿alguna vez ofrece pruebas de emisiones sin cargo **O** cobra menos de $18.50 por una prueba de emisiones? ***Marque con una X TODAS las opciones que correspondan***.

- ☐ No – *Avance a* **26**
- ☐ Sí, a veces ofrecemos pruebas de emisiones **GRATIS**. - *Si selecciona esta opción, responda* **25b**
- ☐ Sí, a veces ofrecemos pruebas de emisiones por **menos de $18.50**. – *Si selecciona esta opción, responda* **25c**

25b En esta estación se ofrecen pruebas de emisiones sin cargo para: ***Marque con una X TODAS las opciones que correspondan***.

- ☐ Amigos y familiares.
- ☐ Empleados.
- ☐ Personal militar activo o veteranos.
- ☐ Miembros de nuestro programa de lealtad para clientes.
- ☐ Clientes que vuelven a hacer la prueba pasados los 15 días de su inspección fallida inicial.
- ☐ Clientes que no pasaron una prueba de emisiones en otra estación e hicieron reparaciones en ESTA estación.
- ☐ Clientes que no pueden costear una inspección.
- ☐ Para satisfacción del cliente en general a criterio del propietario o gerente.
- ☐ Otros motivos – Ingrese una descripción. _____

25c ¿Cuál es el cargo más bajo que cobra por una prueba de emisiones?

$☐☐.☐☐

26 En su opinión, ¿el cargo de $18.50 cubre sus costos de ofrecer pruebas de emisiones en esta estación?

- ☐ Sí - *Avance a* **27**
- ☐ No - *Avance a* **26b**

26b Indíquenos en qué medida está de acuerdo o en desacuerdo con las siguientes afirmaciones.

	Totalmente de acuerdo	De acuerdo	No estoy de acuerdo ni en desacuerdo	En desacuerdo	Totalmente en desacuerdo	N/A
No hago suficientes inspecciones de emisiones porque hay demasiadas estaciones que hacen inspecciones.	O	O	O	O	O	O
Pago por espacio de edificio/plataforma para inspecciones de emisiones, pero está infrautilizado para pruebas de emisiones y no se puede usar fácilmente para otros fines.	O	O	O	O	O	O
Debo pagar a un inspector de emisiones para que esté en las instalaciones, pero es costoso porque es difícil asignarle otras tareas cuando no está haciendo inspecciones.	O	O	O	O	O	O
Debo pagar una tarifa/salario elevado a mis inspectores porque su función principal exige una paga más alta que la de inspectores de emisiones.	O	O	O	O	O	O
Mis equipos de prueba necesitan reparaciones con frecuencia y el tiempo de inactividad no me permite cubrir las pérdidas.	O	O	O	O	O	O
El tiempo adicional que paso con clientes durante inspecciones de emisiones es costoso.	O	O	O	O	O	O
Los costos asociados a las pruebas aumentaron en los últimos años y ahora nuestros costos exceden las ganancias del cargo que se cobra por la prueba.	O	O	O	O	O	O
Todos los costos simplemente son mucho más que lo que se cobra, pero elijo ofrecer pruebas porque es importante para mi negocio de otras maneras.	O	O	O	O	O	O

Describa cualquier otro motivo por el que el cargo de inspección de emisiones no cubre sus costos.

_____

27 ¡Su experiencia es muy importante! Pensando en el cargo de inspección de emisiones aparte del cargo de inspección de seguridad de $7.00, responda las siguientes preguntas. Recuerde que su recomendación NO debe incluir el cargo de $7.00 por la parte de seguridad de la inspección.

a ¿Qué cargo de inspección de emisiones vehiculares cree que sus clientes estarían dispuestos a pagar? **$**☐☐.☐☐

b ¿Qué cargo de inspección de emisiones vehiculares le permitiría cubrir los costos? **$**☐☐.☐☐

FIN

Gracias por completar esta encuesta.
¡Su opinión es muy valiosa! Si tiene alguna sugerencia para mejorar esta encuesta, inclúyala abajo.

Haga una fotocopia de este formulario para poder guardarlo.
Devuelva el cuestionario original completado en el sobre con franqueo pagado que se incluye.
Si no encuentra el sobre, envíe el formulario por correo a:
Eastern Research Group, Inc., Attn: TCEQ Fee Survey, 110 Hartwell Avenue, Lexington, MA 02421.

Esta encuesta está disponible en inglés y español. Use la casilla desplegable de selección de idioma a la derecha para seleccionar el idioma que prefiere.

Puede detenerse en cualquier momento y retomar la encuesta donde se quedó. Ingrese a www.tceqsurvey2022.com desde cualquier computadora y vuelva a iniciar sesión con su identificación de estación. Sus respuestas se guardan cada vez que hace clic para pasar a otra página.

La encuesta está completa. Está orientada a estaciones que hacen pruebas de emisiones activamente. Gracias por su tiempo.

¡Gracias! Sus respuestas se registraron el:
Puede ver informes de encuestas anteriores sobre los cargos del programa I/M en:

El Paso English Survey

{STATION ID}_____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

2022 Vehicle Emissions Inspection Program Fee Survey

Conducted by Eastern Research Group, Inc.

The Texas Commission on Environmental Quality (TCEQ) is required by state statute to review the fee established for inspecting motor vehicle emissions every two years. The TCEQ has contracted with Eastern Research Group, Inc. (ERG) to conduct a survey to evaluate the costs associated with vehicle emissions inspections.

The purpose of this survey is to collect data regarding costs and revenues in the Texas inspection and maintenance (I/M) program. The information collected will be used to make improvements to the I/M program and establish a fee that provides a reasonable rate of return on an investment for inspection station owners and the lowest necessary cost of inspection for motorists.

You can help improve Texas air quality and support testing stations like yours by sharing your experiences with the AirCheckTexas Vehicle Emissions Inspection Program. Your participation is crucial to the success of this survey. The more surveys returned, the more information that will be available for ERG to develop an accurate assessment. Please do your part and complete and return the survey in the enclosed stamped envelope as soon as possible.

This survey is voluntary. It should take about 10 to 15 minutes to complete.

Please do not write your name on the survey. Responses will be compiled by ERG, a TCEQ contractor. Any published results of this survey will be summarized in a manner that does not allow identification of individual stations, such as a percentage or an average.

If you own or operate more than one station that offers motor vehicle emissions inspections, please answer the questions only for the station to which the survey was sent.

If you have any questions or comments about this study, we would be happy to talk with you. You can email ERG at fee-survey@erg.com or call us toll free at 1-888-983-8118.

Please return your completed survey in the postage-paid envelope provided. If the envelope has been misplaced, please mail the form to:

Eastern Research Group, Inc.
Attn: TCEQ Fee Survey
110 Hartwell Avenue
Lexington, MA 02421

You can also complete the survey online at: www.tceqsurvey2022.com

Need help or have questions about completing this survey? → Please email ERG at fee-survey@erg.com or call 1-888-983-8118.

This page is intentionally left blank

{STATION ID}_____

SURVEY INSTRUCTIONS

If you own or operate more than one station that offers motor vehicle emissions inspections, answer the questions below only for the station to which the survey was sent. Please complete one survey for each physical location.

If you do not know the answer to a particular question, please consult with other members of your organization.

If you have any questions while completing the survey, please contact the survey helpline at fee-survey@erg.com or 1-888-983-8118.

Please use blue or black ink. Use an X inside the box or color the box fully to mark your selections.

PART I – GENERAL STATION INFORMATION

1 Does this station offer motor vehicle emissions inspections? ***Mark X ONE box only***.

☐ Yes - *Go to* **2**

☐ No - *You have completed the survey. Please mail the questionnaire to us in the enclosed pre-paid envelope. Thank you.*

2 In what year did this station first offer motor vehicle emissions inspection testing? ☐

NOTE: The current emissions inspection program started in El Paso County in 2007.

3 In calendar year 2021, did this station have more than one station ID?

☐ Yes – *Please list other station IDs used at this location*: ☐

☐ No

4 What are the typical operating hours for performing emissions inspections at this station? Circle AM or PM. Please indicate any days that the station is closed.

Day	Time Open		Time Closed	Circle if Closed
Monday	☐ am / pm	to	☐ am / pm	Closed
Tuesday	☐ am / pm		☐ am / pm	Closed
Wednesday	☐ am / pm		☐ am / pm	Closed
Thursday	☐ am / pm		☐ am / pm	Closed
Friday	☐ am / pm		☐ am / pm	Closed
Saturday	☐ am / pm		☐ am / pm	Closed
Sunday	☐ am / pm		☐ am / pm	Closed

5 What is the approximate **total** square footage of the **entire** inspection station? ☐ sq. ft.

6 How many emissions inspection bays do you currently have at this station? If zero, please enter 0.

☐ Bays used **EXCLUSIVELY** for **emissions testing ONLY**

☐ Bays used for **emissions testing AND OTHER USES (safety testing, repairs, etc.) (If > 0, please answer 6b)**

6b For emissions inspection bays also used for other purposes, on average, what percent of their use is for emissions testing?

☐ percent (%) of time that emissions bays with other uses are used for emissions testing

PART II - THE EMISSIONS INSPECTION PROCESS

7 On average, how long does it take to perform an On-Board Diagnostics (OBD) ***emissions*** test (exclude safety test time)?

☐ minutes to perform an OBD emissions test

8 On average, how much additional time is spent with each inspection customer (for example, explaining the emissions inspection process, reasons for failure and/or recommended repairs)?

☐ additional minutes spent with emissions inspection customer

PLEASE CONTINUE ON NEXT PAGE →

PART III – OTHER STATION SERVICES

9 In addition to emissions and safety testing, check the box that best describes other services offered at your station.
Mark X ONE box only.

- ☐ No other services – *Go to* **13**
- ☐ Repair services only – *Go to* **10**
- ☐ Non-repair services only – *Continue to* **9b then skip to 13**
- ☐ Repair services and non-repair services – *Continue to* **9b**

9b Which non-repair services do you offer at your station? ***Mark X ALL that apply***.

- ☐ Regular maintenance (oil, transmission, AC, brakes, exhaust, etc.)
- ☐ Gas service station
- ☐ Tire sales and service
- ☐ Glass repair/replacement
- ☐ Paint or body work
- ☐ Car wash or auto detailing
- ☐ Car sales (new or used)
- ☐ Auto, truck, or trailer rentals
- ☐ Auto parts & accessories sales or installation
- ☐ Towing & emergency services
- ☐ Food, drink, or convenience store
- ☐ Other *If other, please describe services other than those selected above*

PART IV - REPAIR SERVICE REVENUE: [If this station does not offer repair services, go to Question 13.]

10 What proportion of the repair revenues for this station result directly from failed emissions tests? ***Mark X ONE box only***.

- ☐ 0%- *Go to* **13**
- ☐ 1-20%
- ☐ 21-40%
- ☐ 41-60%
- ☐ 61-80%
- ☐ 81-100%

11 In any given month, what is the typical number of repair jobs from failed emissions tests?
☐☐☐ repair jobs

12 What is a typical repair cost for an emissions test failure?
$☐ **,** ☐☐☐ **.00** per repair for a failed emissions test

PART V - YOUR EMISSIONS INSPECTORS

13 How many <u>emissions inspectors</u> currently work at this station? Please do NOT include employees who <u>do not</u> conduct emissions inspections.

- ☐☐ Full-time emissions inspectors (Inspectors working 40 hours or more per week should be considered full-time.)
- ☐☐ Part-time emissions inspectors **(If > 0, please answer 13b)**

13b On average, about how many hours per week does each part-time emissions inspector work? Include both time conducting inspections and time spent on all other activities. ☐☐ hours/week

14 Of the number of emissions inspectors that work **FULL TIME**, how many spend...?

- 76-100% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 51-75% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 26-50% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 0-25% of their time performing emissions inspections:..... ☐☐ emissions inspectors

15 Of the number of emissions inspectors that work **PART TIME**, how many spend...?

- 76-100% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 51-75% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 26-50% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 0-25% of their time performing emissions inspections:..... ☐☐ emissions inspectors

16 How do you typically pay your emissions inspectors? What is the current average hourly wage and/or per-test amount paid?

- ☐ Hourly wage or salary ⟶ $☐☐☐.☐☐ per hour
- ☐ Per emissions test ⟶ $☐☐☐.☐☐ per test
- ☐ Hourly wage or salary + per emissions test *(Please enter dollar amounts in the corresponding spaces above.)*

17 How many emissions inspectors receive benefits (e.g., health care, paid leave, etc.)?

- ☐ Full-time emissions inspectors
- ☐ Part-time emissions inspectors

18 Does this station incur costs specifically for training employees to conduct emissions inspections?

- ☐ Yes – *Go to* **18b**
- ☐ No – *Go to* **19**
- ☐ Not sure – *Go to* **18b**

18b For calendar year 2021, please tell us the total dollar amount your station spent on:

Certified Vehicle Emissions Inspector training application fees and renewal fees	$☐,☐☐☐.00
Food, lodging, and travel costs for employees attending inspector training courses	$☐.☐☐☐.00
Wages paid to employees for their time attending inspector training courses	$☐,☐☐☐.00
Wages paid to employees for their time on-the-job training specific to emissions testing	$☐,☐☐☐.00
Other emissions training costs (continuing education, training materials, etc.)	$☐,☐☐☐.00

If appropriate, please provide a brief description of your OTHER training expenses:

PART VI - EMISSIONS TESTING EQUIPMENT, BUILDING AND OTHER COSTS

19a Please tell us about the certified emissions testing analyzers that you currently **OWN** at this station. For each analyzer, enter the number of years that you have owned the analyzer and provide your best estimate of the total cost, including installation. Please also identify the option that best describes how the purchase was financed.

Number of Years Owned	Enter total cost, including installation	Select how you financed the purchase and total cost	If lease or loan… Lease/Loan term (years)	If lease or loan… Interest rate (%)	Do you have a maintenance package for this emissions testing analyzer?	Cost of maintenance package (Select time frame)
☐ years	$☐☐,☐☐☐.00	☐ Paid cash ☐ Lease-to-purchase ☐ Loan from bank	☐	☐ %	☐ Yes ☐ No	$☐ .00 per month / quarter / year
☐ years	$☐☐,☐☐☐.00	☐ Paid cash ☐ Lease-to-purchase ☐ Loan from bank	☐	☐ %	☐ Yes ☐ No	$☐ .00 per month / quarter / year
☐ years	$☐☐,☐☐☐.00	☐ Paid cash ☐ Lease-to-purchase ☐ Loan from bank	☐	☐ %	☐ Yes ☐ No	$☐ .00 per month / quarter / year

19b Please tell us about the certified emissions testing analyzers that you currently **RENT** at this station. For each analyzer, enter your current total monthly rental cost.

Enter total monthly rental cost
$☐☐,☐☐☐.00
$☐☐,☐☐☐.00
$☐☐,☐☐☐.00

PLEASE CONTINUE ON NEXT PAGE →

20 [If you own your analyzer(s)] In calendar year 2021, how much did you spend on repairs to your emissions testing equipment (e.g., barcode scanner, printer, internal analyzer components) that were not covered by a service contract or maintenance package? You will be asked about your costs for consumable goods such as paper, toner, and gas cap testers in the next question.

$☐☐,☐☐☐.00

21 Other than maintenance or repairs to emissions testing equipment you entered in the previous question, please tell us about other costs you have specific to vehicle emissions inspections.

Item	Cost	Frequency of expense (circle one)
a. Dedicated phone line or internet	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time
b. Gas cap tester kits	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time
c. Printer paper	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time
d. Ink/toner cartridges	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time
e. Other *Please describe:*	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time

22 Have you ever gotten rid of emissions testing equipment that you no longer needed?

☐ Yes. - *Go to* **22b**
☐ No. - *Go to* **23**
☐ Not sure. - *Go to* **23**

22b Please tell us about any OBD certified emissions testing analyzers you have gotten rid of that you no longer needed. For each one, please indicate the number of years the equipment was owned and how you got rid of it. Please also indicate the revenue from its sale AND/OR the cost to dispose of it.

Type	# of Years Owned	Select one	If you **SOLD** or **TRADED IN** this analyzer, please indicate **YOUR REVENUE OR TRADE-IN VALUE**	If you **PAID** to get rid of this analyzer, please indicate **YOUR COST**
OBD	☐	☐ I sold this ☐ I traded it in ☐ I got rid of it for free ☐ I paid to get rid of it	**$☐☐,☐☐☐.00**	**$☐☐,☐☐☐.00**
OBD	☐	☐ I sold this ☐ I traded it in ☐ I got rid of it for free ☐ I paid to get rid of it	**$☐☐,☐☐☐.00**	**$☐☐,☐☐☐.00**

23 Did you ever add or acquire building space (i.e., bay space) in order to perform vehicle emissions testing at this station?

☐ Yes.
☐ No.
☐ Not sure.

24 Did you purchase or do you rent/lease the building space for this station?

☐ Purchase. What was the approximate purchase price? **$☐,☐☐☐,☐☐☐.00**

☐ Rent/Lease. What is the approximate monthly rent? **$☐,☐☐☐,☐☐☐.00**

PART VII – ADDITIONAL INFORMATION

25 **Other than free retests on vehicles that failed previously at your station**, do you ever offer emissions tests at no charge **OR** charge less than $11.50 for an emissions test? ***Mark X ALL that apply***.

- ☐ No - *Go to* **26**
- ☐ Yes, we sometimes offer emissions tests for **FREE**. - *If selected, please answer* **25b**
- ☐ Yes, we sometimes offer emissions tests for **less than $11.50**. – *If selected, please answer* **25c**

25b This station offers emissions tests at no charge for: ***Mark X ALL that apply***.

- ☐ Friends and Family.
- ☐ Employees.
- ☐ Active or Veteran Military personnel.
- ☐ Members of our customer loyalty program.
- ☐ Customers getting retests just outside 15 days of their initial failed inspection.
- ☐ Customers who failed an emissions test at another station and had repairs performed at THIS station.
- ☐ Customers who cannot afford an inspection.
- ☐ General customer satisfaction at owner's or manager's discretion.
- ☐ Other reasons – please describe.

25c What is the lowest fee that you charge for an emissions test?

$☐☐.☐☐

26 In your opinion, does the $11.50 fee cover your costs of offering emissions testing at this station?

- ☐ Yes. - *Go to* **27**
- ☐ No. - *Go to* **26b**

26b Please tell us the extent to which you agree or disagree with the following statements?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	N/A
I do not conduct enough emissions inspections because there are too many stations performing inspections.	O	O	O	O	O	O
I pay for emissions inspection bay/building space, but it is underutilized for emissions testing or cannot easily be used for other purposes.	O	O	O	O	O	O
I must pay an emissions inspector to be on site, and it is costly because it is difficult to task them with other work when they are not performing inspections.	O	O	O	O	O	O
I must pay my inspectors a high salary/rate because their primary job function is one that demands a higher salary than emissions inspectors.	O	O	O	O	O	O
My testing equipment is frequently in need of repair, and the downtime hurts my ability to break even.	O	O	O	O	O	O
The extra time I spend with customers during emissions inspections is costly.	O	O	O	O	O	O
Costs associated with testing have increased over the years and now our costs exceed the revenue from the test fee.	O	O	O	O	O	O
All the costs simply add up to more than the fee, but I decide to offer testing because it is important to my business in other ways.	O	O	O	O	O	O

Please describe any other reasons that the emissions inspection fee does not cover your costs.

27 We value your expertise! Thinking about the emissions inspection fee separate from the $7.00 safety inspection fee, please answer the following questions. Remember, your recommendation should NOT include the $7.00 safety portion of the inspection.

a What vehicle emissions inspection fee do you think your customers would be willing to pay? $☐☐.☐☐

b What vehicle emissions inspection fee would allow your revenue to cover your costs? $☐☐.☐☐

Thank you for completing this survey.
We are interested in your feedback! If you have suggestions for improving this survey, please note them below.

Please make a photocopy of this form for your records.
Please return the completed original questionnaire in the postage-paid envelope provided.
If the envelope has been misplaced, please mail the form to:
Eastern Research Group, Inc., Attn: TCEQ Fee Survey, 110 Hartwell Avenue, Lexington, MA 02421.

El Paso Spanish Survey

{STATION ID}_____

COMISIÓN DE CALIDAD AMBIENTAL DEL ESTADO DE TEXAS

Encuesta sobre los cargos del Programa de Inspección de Emisiones Vehiculares 2022

Realizada por Eastern Research Group, Inc.

En virtud de los estatutos estatales, la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) tiene la obligación de reevaluar el cargo establecido para inspeccionar emisiones de vehículos motorizados cada dos años. La TCEQ ha contratado a Eastern Research Group, Inc. (ERG) para que realice una encuesta para evaluar los costos asociados a las inspecciones de emisiones vehiculares.

El propósito de esta encuesta es recopilar datos sobre costos y ganancias en el programa de inspección y mantenimiento (I/M) de Texas. La información recopilada se usará para mejorar el programa I/M y establecer un cargo que genere una tasa de rentabilidad razonable en una inversión para los propietarios de estaciones de inspección y el costo necesario más bajo de inspección para los conductores.

Usted puede ayudar a mejorar la calidad del aire de Texas y apoyar a estaciones de prueba como la suya compartiendo sus experiencias con el Programa de Inspección de Emisiones Vehiculares AirCheckTexas. Su participación es crucial para el éxito de esta encuesta. Cuantas más encuestas se completen, más información tendrá ERG a su disposición para desarrollar una evaluación rigurosa. Por favor llene la encuesta que le enviamos. Adjunto va un sobre con estampilla para que lo regrese lo más pronto posible.

Esta encuesta es voluntaria. Completarla solamente le tomará de 10 a 15 minutos.

No escriba su nombre en la encuesta. ERG, un contratista de TCEQ, se encargará de compilar las respuestas. Todos los resultados de esta encuesta que se publiquen se resumirán de una manera en que no se pueda identificar a estaciones particulares, como en un porcentaje o un promedio.

Si usted es propietario u opera más de una estación que ofrece inspecciones de vehículos motorizados, responda las preguntas solamente relacionadas con la estación por la que se envió la encuesta.

Si tiene alguna pregunta o comentario sobre este estudio, con gusto le atenderemos. Puede enviar un correo electrónico a ERG a fee-survey@erg.com o llamarnos sin cargo al 1-888-983-8118.

Devuelva su encuesta completada en el sobre proporcionado. No necesita ponor estampilla. Si no encuentra el sobre, envíe la encuesta por correo a:

Eastern Research Group, Inc.
Attn: TCEQ Fee Survey
110 Hartwell Avenue
Lexington, MA 02421

También puede completar la encuesta en línea en: www.tceqsurvey2022.com

¿Necesita ayuda o tiene alguna pregunta sobre como completar esta encuesta?

→ Envíe un correo electrónico a ERG a fee-survey@erg.com o llámenos sin cargo al 1-888-983-8118.

Esta página se deja en blanco deliberadamente

{STATION ID}_____

INSTRUCCIONES DE LA ENCUESTA

Si usted es propietario u opera más de una estación que ofrece inspecciones de vehículos motorizados, responda las preguntas de abajo solamente relacionadas con la estación por la que se envió la encuesta. Complete una encuesta por cada ubicación física.

Si no sabe la respuesta a una pregunta en particular, consulte a otros integrantes de su organización.

Si tiene alguna duda mientras está completando la encuesta, póngase en contacto con la línea de ayuda con encuestas a la dirección fee-survey@erg.com o por teléfono al 1-888-983-8118.

Le pedimos que use tinta azul o negra. Use una X dentro de la casilla o coloree la casilla por completo para marcar las opciones que elija.

PARTE I - INFORMACIÓN GENERAL SOBRE LA ESTACIÓN

1 ¿En esta estación se hacen inspecciones de emisiones de vehículos motorizados? ***Marque con una X SOLO una casilla***.

☐ Sí - *Avance a* **2**

☐ No - *Ha completado la encuesta. Envíenos el cuestionario por correo en el sobre prepagado incluido. Gracias.*

2 ¿En qué año se empezaron a ofrecer inspecciones de emisiones de vehículos motorizados en esta estación? ☐

NOTA: el programa de inspección de emisiones vehiculares actual comenzó en el Condado de El Paso en 2007.

3 En el año calendario 2021, ¿esta estación tenía más de una identificación de estación?

☐ Sí – *Ingrese las otras identificaciones de estación usadas en esta ubicación*: ☐

☐ No

4 ¿Cuál es el horario de atención normal para hacer inspecciones de emisiones en esta estación? Dibuje un círculo alrededor de a. m. o p. m. Indique en qué días la estación permanece cerrada.

Día	Hora de apertura	Hora de cierre	Encerrar en un círculo si corresponde
Lunes	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado
Martes	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado
Miércoles	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado
Jueves	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado
Viernes	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado
Sábado	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado
Domingo	☐ a. m. / p. m.	☐ a. m. / p. m.	Cerrado

5 ¿Cuál es la superficie **<u>total</u>** aproximada en pies cuadrados de **<u>toda</u>** la estación de inspección? ☐ ft^2

6 ¿Cuántas plataformas de inspección de emisiones tiene actualmente en esta estación? Si no hay ninguna, ingrese 0.

☐ plataformas usadas **EXCLUSIVAMENTE** para **SOLO para pruebas de emisiones**

☐ plataformas usadas para **pruebas de emisiones Y OTROS USOS (pruebas de seguridad, reparaciones, etc.)**

(Si la respuesta es > 0, responda 6b)

6b Para las plataformas de inspección de emisiones que también se usan para otros fines, en promedio, ¿qué porcentaje de su uso es para pruebas de emisiones?

☐ por ciento (%) del tiempo que las plataformas con otros usos se usan para pruebas de emisiones

PARTE II - EL PROCESO DE INSPECCIÓN DE EMISIONES

7 En promedio, ¿cuánto tiempo lleva hacer una prueba de ***emisiones*** con el sistema de diagnóstico a bordo (OBD) [sin incluir el tiempo usado en pruebas de seguridad]?

☐ minutos para ejecutar una prueba de emisiones con OBD

8 En promedio, ¿cuánto tiempo adicional se pasa con cada cliente de inspección (por ejemplo, explicando el proceso de inspección de emisiones, motivos de fallas y/o reparaciones recomendadas)?

☐ minutos adicionales que se pasan con cliente de inspección de emisiones

CONTINÚE EN LA PÁGINA SIGUIENTE →

PARTE III – OTROS SERVICIOS DE LA ESTACIÓN

9 Además de pruebas de seguridad y emisiones, marque la casilla que mejor describe otros servicios que se ofrecen en su estación. ***Marque con una X solo UNA casilla***.

- ☐ Ningún otro servicio – *Avance a* **13**
- ☐ Solo servicios de reparación – *Avance a* **10**
- ☐ Solo servicios que no tienen que ver con reparaciones – *Avance a* **9b y luego a 13**
- ☐ Servicios de reparación y otros servicios que no tienen que ver con reparaciones – *Avance a* **9b**

9b ¿Qué servicios que no tienen que ver con reparaciones se ofrecen en su estación? ***Marque con una X TODAS las opciones que correspondan***.

- ☐ Mantenimiento regular (aceite, transmisión, aire acondicionado, frenos, escape, etc.)
- ☐ Estación de servicio de combustible
- ☐ Ventas y servicio de neumáticos
- ☐ Reparación/cambio de vidrios
- ☐ Pintura o reparación de carrocería
- ☐ Lavado o limpieza a fondo
- ☐ Venta de vehículos (nuevos o usados)
- ☐ Alquiler de automóviles, camionetas o tráileres
- ☐ Ventas o instalación de accesorios y repuestos
- ☐ Servicios de emergencia y remolque
- ☐ Comida, bebidas o tienda de conveniencia
- ☐ Otros — *Si elige la opción Otros, describa los servicios que no corresponden a los seleccionados arriba.*

PARTE IV - INGRESOS POR SERVICIOS DE REPARACIÓN: [Si esta estación no ofrece servicios de reparación, avance a la Pregunta 13].

10 ¿Qué proporción de los ingresos por reparaciones de esta estación son el resultado directo de pruebas de emisiones no aprobadas? ***Marque con una X solo UNA casilla***.

- ☐ 0%- *Avance a* **13**
- ☐ 1-20%
- ☐ 21-40%
- ☐ 41-60%
- ☐ 61-80%
- ☐ 81-100%

11 En cualquier mes dado, ¿cuál es la cantidad típica de trabajos de reparación por pruebas de emisiones no aprobadas?

☐☐☐ trabajos de reparación por pruebas de emisiones no aprobadas

12 ¿Cuál es el costo de reparación típico por no aprobar una prueba de emisiones?

$☐ **,** ☐☐☐ **.00** por reparación por una prueba de emisiones no aprobada

PARTE V - SUS INSPECTORES DE EMISIONES

13 ¿Cuántos inspectores de emisiones trabajan actualmente en esta estación? NO incluya empleados que no realizan inspecciones de emisiones.

- ☐☐☐ Inspectores de emisiones de tiempo completo (los inspectores de emisiones que trabajan 40 horas o más por semana deben considerarse de tiempo completo).
- ☐☐☐ Inspectores de emisiones de medio tiempo **(si > 0, responda 13b)**

13b En promedio, ¿cuántas horas por semana trabaja cada inspector de emisiones de medio tiempo? Incluya tanto el tiempo que dedica a hacer inspecciones como el tiempo que dedica a todas las demás actividades ☐☐☐ horas/semana

14 De la cantidad de inspectores de emisiones que trabajan **TIEMPO COMPLETO**, ¿cuántos pasan...?

- 76-100% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones
- 51-75% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones
- 26-50% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones
- 0-25% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones

15 De la cantidad de inspectores de emisiones que trabajan **MEDIO TIEMPO**, ¿cuántos pasan...?

- 76-100% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones
- 51-75% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones
- 26-50% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones
- 0-25% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones

16 ¿Cómo suele pagar a sus inspectores de emisiones? ¿Cuál es el salario por hora promedio y/o monto que paga por prueba actualmente?

- ☐ Paga o salario por hora ⟶ $☐☐☐.☐☐ por hora
- ☐ Por prueba de emisiones ⟶ $☐☐☐.☐☐ por prueba
- ☐ Paga o salario por hora + por prueba de emisiones *(Ingrese montos en dólares en los espacios correspondientes arriba).*

17 ¿Cuántos inspectores de emisiones reciben prestaciones (por ejemplo, seguro médico, licencia con goce de sueldo, etc.)?

- ☐ Inspectores de emisiones de tiempo completo
- ☐ Inspectores de emisiones de medio tiempo

18 ¿Esta estación incurre en costos específicamente por capacitar a empleados para hacer inspecciones de emisiones?

- ☐ Sí – *Avance a* **18b**
- ☐ No – *Avance a* **19**
- ☐ No sé con certeza – *Avance a* **18b**

18b Para el año calendario 2021, indíquenos la cantidad total en dólares que su estación gastó en:

Cargos por renovación y cargos por solicitud de capacitación para inspector de emisiones vehiculares certificado	$☐,☐☐☐.00
Comida, alojamiento y costos de viaje para empleados que asisten a cursos de capacitación para inspectores	$☐.☐☐☐.00
Salario pagado a empleados por su tiempo al asistir a cursos de capacitación para inspectores	$☐,☐☐☐.00
Salario pagado a empleados por su tiempo abocado a capacitaciones prácticas específicas para pruebas de emisiones	$☐,☐☐☐.00
Otros costos de capacitación en emisiones (educación continua, materiales de capacitación, etc.)	$☐,☐☐☐.00

Si corresponde, ingrese una descripción breve de sus OTROS gastos por capacitación:

PARTE VI - EQUIPOS DE PRUEBAS DE EMISIONES, EDIFICIO Y OTROS COSTOS

19a Cuéntenos sobre los analizadores de emisiones certificados que **POSEE** actualmente en esta estación. Para cada analizador, ingrese desde hace cuántos años posee el analizador y su mejor estimación del costo total, incluyendo instalación. También identifique la opción que mejor describa cómo se financió la compra.

Cantidad de años de propiedad	Ingrese el costo total, incluyendo instalación	Seleccione cómo financió la compra y costo total	Si usó un arrendamiento o préstamo...		¿Tiene un paquete de mantenimiento para este analizador de emisiones?	Costo del paquete de mantenimiento (seleccione el plazo)
			Plazo de arrendamiento/ préstamo (años)	Tasa de interés (%)		
☐ años	$☐☐,☐☐☐.00	☐ Pago en efectivo ☐ Arrendamiento con opción de compra ☐ Préstamo bancario	☐	☐ %	☐ Sí ☐ No	$☐ .00 por mes / trimestre / año
☐ años	$☐☐,☐☐☐.00	☐ Pago en efectivo ☐ Arrendamiento con opción de compra ☐ Préstamo bancario	☐	☐ %	☐ Sí ☐ No	$☐ .00 por mes / trimestre / año
☐ años	$☐☐,☐☐☐.00	☐ Pago en efectivo ☐ Arrendamiento con opción de compra ☐ Préstamo bancario	☐	☐ %	☐ Sí ☐ No	$☐ .00 por mes / trimestre / año

19b Cuéntenos sobre los analizadores de emisiones certificados que **ALQUILA** actualmente en esta estación. Para cada analizador, ingrese el costo total de alquiler mensual.

Ingrese el costo total de alquiler mensual
$☐☐,☐☐☐.00
$☐☐,☐☐☐.00
$☐☐,☐☐☐.00

CONTINÚE EN LA PÁGINA SIGUIENTE →

20 [Si posee un analizador(es)] En el año calendario 2021, ¿cuánto gastó en reparaciones a sus equipos de prueba de emisiones (por ejemplo, escáner de código de barras, impresora, componentes internos) que no estaban cubiertas por un contrato de servicio o paquete de mantenimiento? Se le preguntará sobre sus costos por insumos como papel, tóner y probadores de tapa de tanque de combustible en la siguiente pregunta.

$☐☐,☐☐☐.00

21 Aparte de mantenimiento o reparaciones a equipos de prueba de emisiones que ingresó en la pregunta anterior, coméntenos qué otros costos tiene que correspondan específicamente a emisiones vehiculares.

Artículo	**Costo**	**Frecuencia del gasto (encierre una en un círculo)**
a. Línea telefónica exclusiva o Internet	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez
b. Kits de probadores de tapa de tanque de combustible	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez
c. Papel para impresora	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez
d. Cartuchos de tinta/tóner	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez
e. Otros *Ingrese una descripción:*	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez

22 ¿Alguna vez se deshizo de equipos de pruebas de emisiones que ya no necesitaba más?

☐ Sí - *Avance a* **22b**
☐ No - *Avance a* **23**
☐ No sé con certeza – *Avance a* **23**

22b Cuéntenos sobre todo analizador de pruebas de emisiones certificado OBD de los que se deshizo por no necesitarlos más. Para cada uno, indique la cantidad de años que tuvo el equipo y cómo se deshizo de este. Indique los ingresos por su venta Y/O costo para deshacerse del equipo.

Tipo	**Cant. de años que lo tuvo**	Seleccione una	Si **VENDIÓ** o **CANJEÓ** este analizador, indique **LO QUE GANÓ O VALOR DE CANJE**	Si **PAGÓ** por deshacerse de este analizador, indique **SU COSTO**
OBD	☐☐	☐ Lo vendí ☐ Lo canjeé ☐ Me deshice del equipo sin costo ☐ Pagué para deshacerme del equipo	**$☐☐,☐☐☐.00**	**$☐☐,☐☐☐.00**
OBD	☐☐	☐ Lo vendí ☐ Lo canjeé ☐ Me deshice del equipo sin costo ☐ Pagué para deshacerme del equipo	**$☐☐,☐☐☐.00**	**$☐☐,☐☐☐.00**

23 ¿Alguna vez añadió o adquirió espacio edificable (por ejemplo, plataformas) para hacer pruebas de emisiones vehiculares en esta estación?

☐ Sí.
☐ No.
☐ No sé con certeza.

24 ¿Compró o alquila/arrienda el edificio para esta estación?

☐ Compra. ¿Cuál fue el precio aproximado de compra? **$☐,☐☐☐,☐☐☐.00**

☐ Alquiler/arrendamiento. ¿Cuál es la renta mensual aproximada? **$☐,☐☐☐,☐☐☐.00**

CONTINÚE EN LA PÁGINA SIGUIENTE →

PARTE VII – INFORMACIÓN ADICIONAL

25 **Aparte de repeticiones de pruebas no aprobadas anteriormente en su estación**, ¿alguna vez ofrece pruebas de emisiones sin cargo **O** cobra menos de $11.50 por una prueba de emisiones? ***Marque con una X TODAS las opciones que correspondan***.

- ☐ No – *Avance a* **26**
- ☐ Sí, a veces ofrecemos pruebas de emisiones **GRATIS**. - *Si selecciona esta opción, responda* **25b**
- ☐ Sí, a veces ofrecemos pruebas de emisiones por **menos de $11.50**. – *Si selecciona esta opción, responda* **25c**

25b En esta estación se ofrecen pruebas de emisiones sin cargo para: ***Marque con una X TODAS las opciones que correspondan***.

- ☐ Amigos y familiares.
- ☐ Empleados.
- ☐ Personal militar activo o veteranos.
- ☐ Miembros de nuestro programa de lealtad para clientes.
- ☐ Clientes que vuelven a hacer la prueba pasados los 15 días de su inspección fallida inicial.
- ☐ Clientes que no pasaron una prueba de emisiones en otra estación e hicieron reparaciones en ESTA estación.
- ☐ Clientes que no pueden costear una inspección.
- ☐ Para satisfacción del cliente en general a criterio del propietario o gerente.
- ☐ Otros motivos – Ingrese una descripción. _____

25c ¿Cuál es el cargo más bajo que cobra por una prueba de emisiones?

$☐☐.☐☐

26 En su opinión, ¿el cargo de $11.50 cubre sus costos de ofrecer pruebas de emisiones en esta estación?

- ☐ Sí - *Avance a* **27**
- ☐ No - *Avance a* **26b**

26b Indíquenos en qué medida está de acuerdo o en desacuerdo con las siguientes afirmaciones.

	Totalmente de acuerdo	De acuerdo	No estoy de acuerdo ni en desacuerdo	En desacuerdo	Totalmente en desacuerdo	N/A
No hago suficientes inspecciones de emisiones porque hay demasiadas estaciones que hacen inspecciones.	O	O	O	O	O	O
Pago por espacio de edificio/plataforma para inspecciones de emisiones, pero está infrautilizado para pruebas de emisiones y no se puede usar fácilmente para otros fines.	O	O	O	O	O	O
Debo pagar a un inspector de emisiones para que esté en las instalaciones, pero es costoso porque es difícil asignarle otras tareas cuando no está haciendo inspecciones.	O	O	O	O	O	O
Debo pagar una tarifa/salario elevado a mis inspectores porque su función principal exige una paga más alta que la de inspectores de emisiones.	O	O	O	O	O	O
Mis equipos de prueba necesitan reparaciones con frecuencia y el tiempo de inactividad no me permite cubrir las pérdidas.	O	O	O	O	O	O
El tiempo adicional que paso con clientes durante inspecciones de emisiones es costoso.	O	O	O	O	O	O
Los costos asociados a las pruebas aumentaron en los últimos años y ahora nuestros costos exceden las ganancias del cargo que se cobra por la prueba.	O	O	O	O	O	O
Todos los costos simplemente son mucho más que lo que se cobra, pero elijo ofrecer pruebas porque es importante para mi negocio de otras maneras.	O	O	O	O	O	O

Describa cualquier otro motivo por el que el cargo de inspección de emisiones no cubre sus costos.

_____

27 ¡Su experiencia es muy importante! Pensando en el cargo de inspección de emisiones aparte del cargo de inspección de seguridad de $7.00, responda las siguientes preguntas. Recuerde que su recomendación NO debe incluir el cargo de $7.00 por la parte de seguridad de la inspección.

a ¿Qué cargo de inspección de emisiones vehiculares cree que sus clientes estarían dispuestos a pagar? **$**☐☐.☐☐

b ¿Qué cargo de inspección de emisiones vehiculares le permitiría cubrir los costos? **$**☐☐.☐☐

Gracias por completar esta encuesta.
¡Su opinión es muy valiosa! Si tiene alguna sugerencia para mejorar esta encuesta, inclúyala abajo.

Haga una fotocopia de este formulario para poder guardarlo.
Devuelva el cuestionario original completado en el sobre con franqueo pagado que se incluye.
Si no encuentra el sobre, envíe el formulario por correo a:
Eastern Research Group, Inc., Attn: TCEQ Fee Survey, 110 Hartwell Avenue, Lexington, MA 02421.

Esta encuesta está disponible en inglés y español. Use la casilla desplegable de selección de idioma a la derecha para seleccionar el idioma que prefiere.

Puede detenerse en cualquier momento y retomar la encuesta donde se quedó. Ingrese a www.tceqsurvey2022.com desde cualquier computadora y vuelva a iniciar sesión con su identificación de estación. Sus respuestas se guardan cada vez que hace clic para pasar a otra página.

La encuesta está completa. Está orientada a estaciones que hacen pruebas de emisiones activamente. Gracias por su tiempo.

¡Gracias! Sus respuestas se registraron el:
Puede ver informes de encuestas anteriores sobre los cargos del programa I/M en:

ARR English Survey

{STATION ID}_____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

2022 Vehicle Emissions Inspection Program Fee Survey

Conducted by Eastern Research Group, Inc.

The Texas Commission on Environmental Quality (TCEQ) is required by state statute to review the fee established for inspecting motor vehicle emissions every two years. The TCEQ has contracted with Eastern Research Group, Inc. (ERG) to conduct a survey to evaluate the costs associated with vehicle emissions inspections.

The purpose of this survey is to collect data regarding costs and revenues in the Texas inspection and maintenance (I/M) program. The information collected will be used to make improvements to the I/M program and establish a fee that provides a reasonable rate of return on an investment for inspection station owners and the lowest necessary cost of inspection for motorists.

You can help improve Texas air quality and support testing stations like yours by sharing your experiences with the AirCheckTexas Vehicle Emissions Inspection Program. Your participation is crucial to the success of this survey. The more surveys returned, the more information that will be available for ERG to develop an accurate assessment. Please do your part and complete and return the survey in the enclosed stamped envelope as soon as possible.

This survey is voluntary. It should take about 10 to 15 minutes to complete.

Please do not write your name on the survey. Responses will be compiled by ERG, a TCEQ contractor. Any published results of this survey will be summarized in a manner that does not allow identification of individual stations, such as a percentage or an average.

If you own or operate more than one station that offers motor vehicle emissions inspections, please answer the questions only for the station to which the survey was sent.

If you have any questions or comments about this study, we would be happy to talk with you. You can email ERG at fee-survey@erg.com or call us toll free at 1-888-983-8118.

Please return your completed survey in the postage-paid envelope provided. If the envelope has been misplaced, please mail the form to:

Eastern Research Group, Inc.
Attn: TCEQ Fee Survey
110 Hartwell Avenue
Lexington, MA 02421

You can also complete the survey online at: www.tceqsurvey2022.com

Need help or have questions about completing this survey? → Please email ERG at fee-survey@erg.com or call 1-888-983-8118.

This page is intentionally left blank

{STATION ID}_____

SURVEY INSTRUCTIONS

If you own or operate more than one station that offers motor vehicle emissions inspections, answer the questions below only for the station to which the survey was sent. Please complete one survey for each physical location.

If you do not know the answer to a particular question, please consult with other members of your organization.

If you have any questions while completing the survey, please contact the survey helpline at fee-survey@erg.com or 1-888-983-8118.

Please use blue or black ink. Use an X inside the box or color the box fully to mark your selections.

PART I – GENERAL STATION INFORMATION

1 Does this station offer motor vehicle emissions inspections? ***Mark X ONE box only***.

☐ Yes - *Go to* **2**

☐ No - *You have completed the survey. Please mail the questionnaire to us in the enclosed pre-paid envelope. Thank you.*

2 In what year did this station first offer motor vehicle emissions inspection testing? ☐

NOTE: The current emissions inspection program started in Austin-Round Rock in 2005.

3 In calendar year 2021, did this station have more than one station ID?

☐ Yes – *Please list other station IDs used at this location*: ☐

☐ No

4 What are the typical operating hours for performing emissions inspections at this station? Circle AM or PM. Please indicate any days that the station is closed.

Day	Time Open		Time Closed	Circle if Closed
Monday	☐ am / pm	to	☐ am / pm	Closed
Tuesday	☐ am / pm		☐ am / pm	Closed
Wednesday	☐ am / pm		☐ am / pm	Closed
Thursday	☐ am / pm		☐ am / pm	Closed
Friday	☐ am / pm		☐ am / pm	Closed
Saturday	☐ am / pm		☐ am / pm	Closed
Sunday	☐ am / pm		☐ am / pm	Closed

5 What is the approximate **total** square footage of the **entire** inspection station? ☐ sq. ft.

6 How many emissions inspection bays do you currently have at this station? If zero, please enter 0.

☐ Bays used **EXCLUSIVELY** for **emissions testing ONLY**

☐ Bays used for **emissions testing AND OTHER USES (safety testing, repairs, etc.) (If > 0, please answer 6b)**

6b For emissions inspection bays also used for other purposes, on average, what percent of their use is for emissions testing?

☐ percent (%) of time that emissions bays with other uses are used for emissions testing

PART II - THE EMISSIONS INSPECTION PROCESS

7 On average, how long does it take to perform an On-Board Diagnostics (OBD) ***emissions*** test (exclude safety test time)?

☐ minutes to perform an OBD emissions test

8 On average, how much additional time is spent with each inspection customer (for example, explaining the emissions inspection process, reasons for failure and/or recommended repairs)?

☐ additional minutes spent with emissions inspection customer

PART III – OTHER STATION SERVICES

9 In addition to emissions and safety testing, check the box that best describes other services offered at your station.
Mark X ONE box only.

- ☐ No other services – *Go to* **13**
- ☐ Repair services only – *Go to* **10**
- ☐ Non-repair services only – *Continue to* **9b then skip to 13**
- ☐ Repair services and non-repair services – *Continue to* **9b**

9b Which non-repair services do you offer at your station? ***Mark X ALL that apply***.

- ☐ Regular maintenance (oil, transmission, AC, brakes, exhaust, etc.)
- ☐ Gas service station
- ☐ Tire sales and service
- ☐ Glass repair/replacement
- ☐ Paint or body work
- ☐ Car wash or auto detailing
- ☐ Car sales (new or used)
- ☐ Auto, truck, or trailer rentals
- ☐ Auto parts & accessories sales or installation
- ☐ Towing & emergency services
- ☐ Food, drink, or convenience store
- ☐ Other — *If other, please describe services other than those selected above*

PART IV - REPAIR SERVICE REVENUE: [If this station does not offer repair services, go to Question 13.]

10 What proportion of the repair revenues for this station result directly from failed emissions tests? ***Mark X ONE box only***.

- ☐ 0%- *Go to* **13**
- ☐ 1-20%
- ☐ 21-40%
- ☐ 41-60%
- ☐ 61-80%
- ☐ 81-100%

11 In any given month, what is the typical number of repair jobs from failed emissions tests?
☐☐☐ repair jobs

12 What is a typical repair cost for an emissions test failure?
$☐ **,** ☐☐☐ **.00** per repair for a failed emissions test

PART V - YOUR EMISSIONS INSPECTORS

13 How many <u>emissions inspectors</u> currently work at this station? Please do NOT include employees who <u>do not</u> conduct emissions inspections.

- ☐☐ Full-time emissions inspectors (Inspectors working 40 hours or more per week should be considered full-time.)
- ☐☐ Part-time emissions inspectors **(If > 0, please answer 13b)**

13b On average, about how many hours per week does each part-time emissions inspector work? Include both time conducting inspections and time spent on all other activities. ☐☐ hours/week

14 Of the number of emissions inspectors that work **FULL TIME**, how many spend...?

- 76-100% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 51-75% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 26-50% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 0-25% of their time performing emissions inspections:..... ☐☐ emissions inspectors

15 Of the number of emissions inspectors that work **PART TIME**, how many spend...?

- 76-100% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 51-75% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 26-50% of their time performing emissions inspections:..... ☐☐ emissions inspectors
- 0-25% of their time performing emissions inspections:..... ☐☐ emissions inspectors

16 How do you typically pay your emissions inspectors? What is the current average hourly wage and/or per-test amount paid?

- ☐ Hourly wage or salary → $☐☐☐.☐☐ per hour
- ☐ Per emissions test → $☐☐☐.☐☐ per test
- ☐ Hourly wage or salary + per emissions test *(Please enter dollar amounts in the corresponding spaces above.)*

17 How many emissions inspectors receive benefits (e.g., health care, paid leave, etc.)?

- ☐ Full-time emissions inspectors
- ☐ Part-time emissions inspectors

18 Does this station incur costs specifically for training employees to conduct emissions inspections?

- ☐ Yes – *Go to* **18b**
- ☐ No – *Go to* **19**
- ☐ Not sure – *Go to* **18b**

18b For calendar year 2021, please tell us the total dollar amount your station spent on:

Certified Vehicle Emissions Inspector training application fees and renewal fees	$☐,☐☐☐.00
Food, lodging, and travel costs for employees attending inspector training courses	$☐.☐☐☐.00
Wages paid to employees for their time attending inspector training courses	$☐,☐☐☐.00
Wages paid to employees for their time on-the-job training specific to emissions testing	$☐,☐☐☐.00
Other emissions training costs (continuing education, training materials, etc.)	$☐,☐☐☐.00

If appropriate, please provide a brief description of your OTHER training expenses:

PART VI - EMISSIONS TESTING EQUIPMENT, BUILDING AND OTHER COSTS

19a Please tell us about the certified emissions testing analyzers that you currently **OWN** at this station. For each analyzer, enter the number of years that you have owned the analyzer and provide your best estimate of the total cost, including installation. Please also identify the option that best describes how the purchase was financed.

Number of Years Owned	Enter total cost, including installation	Select how you financed the purchase and total cost	If lease or loan… Lease/Loan term (years)	If lease or loan… Interest rate (%)	Do you have a maintenance package for this emissions testing analyzer?	Cost of maintenance package (Select time frame)
☐ years	$☐☐,☐☐☐.00	☐ Paid cash ☐ Lease-to-purchase ☐ Loan from bank	☐	☐ %	☐ Yes ☐ No	$☐ .00 per month / quarter / year
☐ years	$☐☐,☐☐☐.00	☐ Paid cash ☐ Lease-to-purchase ☐ Loan from bank	☐	☐ %	☐ Yes ☐ No	$☐ .00 per month / quarter / year
☐ years	$☐☐,☐☐☐.00	☐ Paid cash ☐ Lease-to-purchase ☐ Loan from bank	☐	☐ %	☐ Yes ☐ No	$☐ .00 per month / quarter / year

19b Please tell us about the certified emissions testing analyzers that you currently **RENT** at this station. For each analyzer, enter your current total monthly rental cost.

Enter total monthly rental cost
$☐☐,☐☐☐.00
$☐☐,☐☐☐.00
$☐☐,☐☐☐.00

PLEASE CONTINUE ON NEXT PAGE →

20 [If you own your analyzer(s)] In calendar year 2021, how much did you spend on repairs to your emissions testing equipment (e.g., barcode scanner, printer, internal analyzer components) that were not covered by a service contract or maintenance package? You will be asked about your costs for consumable goods such as paper, toner, and gas cap testers in the next question.

$☐☐,☐☐☐.00

21 Other than maintenance or repairs to emissions testing equipment you entered in the previous question, please tell us about other costs you have specific to vehicle emissions inspections.

Item	Cost	Frequency of expense (circle one)
a. Dedicated phone line or internet	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time
b. Gas cap tester kits	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time
c. Printer paper	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time
d. Ink/toner cartridges	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time
e. Other *Please describe:*	**$☐☐☐,☐☐☐.00**	Monthly / Annually / One-time

22 Have you ever gotten rid of emissions testing equipment that you no longer needed?

☐ Yes. - *Go to* **22b**
☐ No. - *Go to* **23**
☐ Not sure. - *Go to* **23**

22b Please tell us about any OBD certified emissions testing analyzers you have gotten rid of that you no longer needed. For each one, please indicate the number of years the equipment was owned and how you got rid of it. Please also indicate the revenue from its sale AND/OR the cost to dispose of it.

Type	# of Years Owned	Select one	If you **SOLD** or **TRADED IN** this analyzer, please indicate **YOUR REVENUE OR TRADE-IN VALUE**	If you **PAID** to get rid of this analyzer, please indicate **YOUR COST**
OBD	☐	☐ I sold this ☐ I traded it in ☐ I got rid of it for free ☐ I paid to get rid of it	**$☐☐,☐☐☐.00**	**$☐☐,☐☐☐.00**
OBD	☐	☐ I sold this ☐ I traded it in ☐ I got rid of it for free ☐ I paid to get rid of it	**$☐☐,☐☐☐.00**	**$☐☐,☐☐☐.00**

23 Did you ever add or acquire building space (i.e., bay space) in order to perform vehicle emissions testing at this station?

☐ Yes.
☐ No.
☐ Not sure.

24 Did you purchase or do you rent/lease the building space for this station?

☐ Purchase. What was the approximate purchase price? **$☐,☐☐☐,☐☐☐.00**

☐ Rent/Lease. What is the approximate monthly rent? **$☐,☐☐☐,☐☐☐.00**

PART VII – ADDITIONAL INFORMATION

25 **Other than free retests on vehicles that failed previously at your station**, do you ever offer emissions tests at no charge **OR** charge less than $11.50 for an emissions test? ***Mark X ALL that apply***.

- ☐ No - *Go to* **26**
- ☐ Yes, we sometimes offer emissions tests for **FREE**. - *If selected, please answer* **25b**
- ☐ Yes, we sometimes offer emissions tests for **less than $11.50**. – *If selected, please answer* **25c**

25b This station offers emissions tests at no charge for: ***Mark X ALL that apply***.

- ☐ Friends and Family.
- ☐ Employees.
- ☐ Active or Veteran Military personnel.
- ☐ Members of our customer loyalty program.
- ☐ Customers getting retests just outside 15 days of their initial failed inspection.
- ☐ Customers who failed an emissions test at another station and had repairs performed at THIS station.
- ☐ Customers who cannot afford an inspection.
- ☐ General customer satisfaction at owner's or manager's discretion.
- ☐ Other reasons – please describe.

25c What is the lowest fee that you charge for an emissions test?

$☐☐.☐☐

26 In your opinion, does the $11.50 fee cover your costs of offering emissions testing at this station?

- ☐ Yes. - *Go to* **27**
- ☐ No. - *Go to* **26b**

26b Please tell us the extent to which you agree or disagree with the following statements?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	N/A
I do not conduct enough emissions inspections because there are too many stations performing inspections.	O	O	O	O	O	O
I pay for emissions inspection bay/building space, but it is underutilized for emissions testing or cannot easily be used for other purposes.	O	O	O	O	O	O
I must pay an emissions inspector to be on site, and it is costly because it is difficult to task them with other work when they are not performing inspections.	O	O	O	O	O	O
I must pay my inspectors a high salary/rate because their primary job function is one that demands a higher salary than emissions inspectors.	O	O	O	O	O	O
My testing equipment is frequently in need of repair, and the downtime hurts my ability to break even.	O	O	O	O	O	O
The extra time I spend with customers during emissions inspections is costly.	O	O	O	O	O	O
Costs associated with testing have increased over the years and now our costs exceed the revenue from the test fee.	O	O	O	O	O	O
All the costs simply add up to more than the fee, but I decide to offer testing because it is important to my business in other ways.	O	O	O	O	O	O

Please describe any other reasons that the emissions inspection fee does not cover your costs.

27 We value your expertise! Thinking about the emissions inspection fee separate from the $7.00 safety inspection fee, please answer the following questions. Remember, your recommendation should NOT include the $7.00 safety portion of the inspection.

a What vehicle emissions inspection fee do you think your customers would be willing to pay? $☐☐.☐☐

b What vehicle emissions inspection fee would allow your revenue to cover your costs? $☐☐.☐☐

Thank you for completing this survey.
We are interested in your feedback! If you have suggestions for improving this survey, please note them below.

Please make a photocopy of this form for your records.
Please return the completed original questionnaire in the postage-paid envelope provided.
If the envelope has been misplaced, please mail the form to:
Eastern Research Group, Inc., Attn: TCEQ Fee Survey, 110 Hartwell Avenue, Lexington, MA 02421.

ARR Spanish Survey

{STATION ID}_____

COMISIÓN DE CALIDAD AMBIENTAL DEL ESTADO DE TEXAS

Encuesta sobre los cargos del Programa de Inspección de Emisiones Vehiculares 2022

Realizada por Eastern Research Group, Inc.

En virtud de los estatutos estatales, la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) tiene la obligación de reevaluar el cargo establecido para inspeccionar emisiones de vehículos motorizados cada dos años. La TCEQ ha contratado a Eastern Research Group, Inc. (ERG) para que realice una encuesta para evaluar los costos asociados a las inspecciones de emisiones vehiculares.

El propósito de esta encuesta es recopilar datos sobre costos y ganancias en el programa de inspección y mantenimiento (I/M) de Texas. La información recopilada se usará para mejorar el programa I/M y establecer un cargo que genere una tasa de rentabilidad razonable en una inversión para los propietarios de estaciones de inspección y el costo necesario más bajo de inspección para los conductores.

Usted puede ayudar a mejorar la calidad del aire de Texas y apoyar a estaciones de prueba como la suya compartiendo sus experiencias con el Programa de Inspección de Emisiones Vehiculares AirCheckTexas. Su participación es crucial para el éxito de esta encuesta. Cuantas más encuestas se completen, más información tendrá ERG a su disposición para desarrollar una evaluación rigurosa. Por favor llene la encuesta que le enviamos. Adjunto va un sobre con estampilla para que lo regrese lo más pronto posible.

Esta encuesta es voluntaria. Completarla solamente le tomará de 10 a 15 minutos.

No escriba su nombre en la encuesta. ERG, un contratista de TCEQ, se encargará de compilar las respuestas. Todos los resultados de esta encuesta que se publiquen se resumirán de una manera en que no se pueda identificar a estaciones particulares, como en un porcentaje o un promedio.

Si usted es propietario u opera más de una estación que ofrece inspecciones de vehículos motorizados, responda las preguntas solamente relacionadas con la estación por la que se envió la encuesta.

Si tiene alguna pregunta o comentario sobre este estudio, con gusto le atenderemos. Puede enviar un correo electrónico a ERG a fee-survey@erg.com o llamarnos sin cargo al 1-888-983-8118.

Devuelva su encuesta completada en el sobre proporcionado. No necesita ponor estampilla. Si no encuentra el sobre, envíe la encuesta por correo a:

Eastern Research Group, Inc.
Attn: TCEQ Fee Survey
110 Hartwell Avenue
Lexington, MA 02421

También puede completar la encuesta en línea en: www.tceqsurvey2022.com

¿Necesita ayuda o tiene alguna pregunta sobre como completar esta encuesta?

→ Envíe un correo electrónico a ERG a fee-survey@erg.com o llámenos sin cargo al 1-888-983-8118.

Esta página se deja en blanco deliberadamente

{STATION ID}_____

INSTRUCCIONES DE LA ENCUESTA

Si usted es propietario u opera más de una estación que ofrece inspecciones de vehículos motorizados, responda las preguntas de abajo solamente relacionadas con la estación por la que se envió la encuesta. Complete una encuesta por cada ubicación física.

Si no sabe la respuesta a una pregunta en particular, consulte a otros integrantes de su organización.

Si tiene alguna duda mientras está completando la encuesta, póngase en contacto con la línea de ayuda con encuestas a la dirección fee-survey@erg.com o por teléfono al 1-888-983-8118.

Le pedimos que use tinta azul o negra. Use una X dentro de la casilla o coloree la casilla por completo para marcar las opciones que elija.

PARTE I - INFORMACIÓN GENERAL SOBRE LA ESTACIÓN

1 ¿En esta estación se hacen inspecciones de emisiones de vehículos motorizados? ***Marque con una X SOLO una casilla***.

☐ Sí - *Avance a* **2**

☐ No - *Ha completado la encuesta. Envíenos el cuestionario por correo en el sobre prepagado incluido. Gracias.*

2 ¿En qué año se empezaron a ofrecer inspecciones de emisiones de vehículos motorizados en esta estación? ☐☐☐☐

NOTA: el programa de inspección de emisiones vehiculares actual comenzó en Austin-Round Rock en 2005.

3 En el año calendario 2021, ¿esta estación tenía más de una identificación de estación?

☐ Sí – *Ingrese las otras identificaciones de estación usadas en esta ubicación*: ☐☐☐☐☐☐☐☐☐☐

☐ No

4 ¿Cuál es el horario de atención normal para hacer inspecciones de emisiones en esta estación? Dibuje un círculo alrededor de a. m. o p. m. Indique en qué días la estación permanece cerrada.

Día	Hora de apertura	Hora de cierre	Encerrar en un círculo si corresponde
Lunes	☐☐ a. m. / p. m.	☐☐ a. m. / p. m.	Cerrado
Martes	☐☐ a. m. / p. m.	☐☐ a. m. / p. m.	Cerrado
Miércoles	☐☐ a. m. / p. m.	☐☐ a. m. / p. m.	Cerrado
Jueves	☐☐ a. m. / p. m.	☐☐ a. m. / p. m.	Cerrado
Viernes	☐☐ a. m. / p. m.	☐☐ a. m. / p. m.	Cerrado
Sábado	☐☐ a. m. / p. m.	☐☐ a. m. / p. m.	Cerrado
Domingo	☐☐ a. m. / p. m.	☐☐ a. m. / p. m.	Cerrado

5 ¿Cuál es la superficie **<u>total</u>** aproximada en pies cuadrados de **<u>toda</u>** la estación de inspección? ☐☐☐☐☐ ft^2

6 ¿Cuántas plataformas de inspección de emisiones tiene actualmente en esta estación? Si no hay ninguna, ingrese 0.

☐☐ plataformas usadas **EXCLUSIVAMENTE** para **SOLO para pruebas de emisiones**

☐☐ plataformas usadas para **pruebas de emisiones Y OTROS USOS (pruebas de seguridad, reparaciones, etc.)**

(Si la respuesta es > 0, responda 6b)

6b Para las plataformas de inspección de emisiones que también se usan para otros fines, en promedio, ¿qué porcentaje de su uso es para pruebas de emisiones?

☐☐ por ciento (%) del tiempo que las plataformas con otros usos se usan para pruebas de emisiones

PARTE II - EL PROCESO DE INSPECCIÓN DE EMISIONES

7 En promedio, ¿cuánto tiempo lleva hacer una prueba de ***emisiones*** con el sistema de diagnóstico a bordo (OBD) [sin incluir el tiempo usado en pruebas de seguridad]?

☐☐ minutos para ejecutar una prueba de emisiones con OBD

8 En promedio, ¿cuánto tiempo adicional se pasa con cada cliente de inspección (por ejemplo, explicando el proceso de inspección de emisiones, motivos de fallas y/o reparaciones recomendadas)?

☐☐ minutos adicionales que se pasan con cliente de inspección de emisiones

CONTINÚE EN LA PÁGINA SIGUIENTE →

PARTE III – OTROS SERVICIOS DE LA ESTACIÓN

9 Además de pruebas de seguridad y emisiones, marque la casilla que mejor describe otros servicios que se ofrecen en su estación. ***Marque con una X solo UNA casilla***.

- ☐ Ningún otro servicio – *Avance a* **13**
- ☐ Solo servicios de reparación – *Avance a* **10**
- ☐ Solo servicios que no tienen que ver con reparaciones – *Avance a* **9b y luego a 13**
- ☐ Servicios de reparación y otros servicios que no tienen que ver con reparaciones – *Avance a* **9b**

9b ¿Qué servicios que no tienen que ver con reparaciones se ofrecen en su estación? ***Marque con una X TODAS las opciones que correspondan***.

- ☐ Mantenimiento regular (aceite, transmisión, aire acondicionado, frenos, escape, etc.)
- ☐ Estación de servicio de combustible
- ☐ Ventas y servicio de neumáticos
- ☐ Reparación/cambio de vidrios
- ☐ Pintura o reparación de carrocería
- ☐ Lavado o limpieza a fondo
- ☐ Venta de vehículos (nuevos o usados)
- ☐ Alquiler de automóviles, camionetas o tráileres
- ☐ Ventas o instalación de accesorios y repuestos
- ☐ Servicios de emergencia y remolque
- ☐ Comida, bebidas o tienda de conveniencia
- ☐ Otros — *Si elige la opción Otros, describa los servicios que no corresponden a los seleccionados arriba.*

PARTE IV - INGRESOS POR SERVICIOS DE REPARACIÓN: [Si esta estación no ofrece servicios de reparación, avance a la Pregunta 13].

10 ¿Qué proporción de los ingresos por reparaciones de esta estación son el resultado directo de pruebas de emisiones no aprobadas? ***Marque con una X solo UNA casilla***.

- ☐ 0%- *Avance a* **13**
- ☐ 1-20%
- ☐ 21-40%
- ☐ 41-60%
- ☐ 61-80%
- ☐ 81-100%

11 En cualquier mes dado, ¿cuál es la cantidad típica de trabajos de reparación por pruebas de emisiones no aprobadas?

☐☐☐ trabajos de reparación por pruebas de emisiones no aprobadas

12 ¿Cuál es el costo de reparación típico por no aprobar una prueba de emisiones?

$☐ **,** ☐☐☐ **.00** por reparación por una prueba de emisiones no aprobada

PARTE V - SUS INSPECTORES DE EMISIONES

13 ¿Cuántos inspectores de emisiones trabajan actualmente en esta estación? NO incluya empleados que no realizan inspecciones de emisiones.

- ☐☐☐ Inspectores de emisiones de tiempo completo (los inspectores de emisiones que trabajan 40 horas o más por semana deben considerarse de tiempo completo).
- ☐☐☐ Inspectores de emisiones de medio tiempo **(si > 0, responda 13b)**

13b En promedio, ¿cuántas horas por semana trabaja cada inspector de emisiones de medio tiempo? Incluya tanto el tiempo que dedica a hacer inspecciones como el tiempo que dedica a todas las demás actividades ☐☐☐ horas/semana

14 De la cantidad de inspectores de emisiones que trabajan **TIEMPO COMPLETO**, ¿cuántos pasan...?

- 76-100% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones
- 51-75% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones
- 26-50% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones
- 0-25% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones

15 De la cantidad de inspectores de emisiones que trabajan **MEDIO TIEMPO**, ¿cuántos pasan...?

- 76-100% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones
- 51-75% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones
- 26-50% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones
- 0-25% de su tiempo haciendo inspecciones de emisiones:..... ☐☐☐ inspectores de emisiones

16 ¿Cómo suele pagar a sus inspectores de emisiones? ¿Cuál es el salario por hora promedio y/o monto que paga por prueba actualmente?

- ☐ Paga o salario por hora ⟶ $☐☐☐.☐☐ por hora
- ☐ Por prueba de emisiones ⟶ $☐☐☐.☐☐ por prueba
- ☐ Paga o salario por hora + por prueba de emisiones *(Ingrese montos en dólares en los espacios correspondientes arriba).*

17 ¿Cuántos inspectores de emisiones reciben prestaciones (por ejemplo, seguro médico, licencia con goce de sueldo, etc.)?

- ☐ Inspectores de emisiones de tiempo completo
- ☐ Inspectores de emisiones de medio tiempo

18 ¿Esta estación incurre en costos específicamente por capacitar a empleados para hacer inspecciones de emisiones?

- ☐ Sí – *Avance a* **18b**
- ☐ No – *Avance a* **19**
- ☐ No sé con certeza – *Avance a* **18b**

18b Para el año calendario 2021, indíquenos la cantidad total en dólares que su estación gastó en:

Cargos por renovación y cargos por solicitud de capacitación para inspector de emisiones vehiculares certificado	$☐,☐☐☐.00
Comida, alojamiento y costos de viaje para empleados que asisten a cursos de capacitación para inspectores	$☐.☐☐☐.00
Salario pagado a empleados por su tiempo al asistir a cursos de capacitación para inspectores	$☐,☐☐☐.00
Salario pagado a empleados por su tiempo abocado a capacitaciones prácticas específicas para pruebas de emisiones	$☐,☐☐☐.00
Otros costos de capacitación en emisiones (educación continua, materiales de capacitación, etc.)	$☐,☐☐☐.00

Si corresponde, ingrese una descripción breve de sus OTROS gastos por capacitación:

PARTE VI - EQUIPOS DE PRUEBAS DE EMISIONES, EDIFICIO Y OTROS COSTOS

19a Cuéntenos sobre los analizadores de emisiones certificados que **POSEE** actualmente en esta estación. Para cada analizador, ingrese desde hace cuántos años posee el analizador y su mejor estimación del costo total, incluyendo instalación. También identifique la opción que mejor describa cómo se financió la compra.

Cantidad de años de propiedad	Ingrese el costo total, incluyendo instalación	Seleccione cómo financió la compra y costo total	Si usó un arrendamiento o préstamo...		¿Tiene un paquete de mantenimiento para este analizador de emisiones?	Costo del paquete de mantenimiento (seleccione el plazo)
			Plazo de arrendamiento/ préstamo (años)	Tasa de interés (%)		
☐ años	$☐☐,☐☐☐.00	☐ Pago en efectivo ☐ Arrendamiento con opción de compra ☐ Préstamo bancario	☐	☐ %	☐ Sí ☐ No	$☐ .00 por mes / trimestre / año
☐ años	$☐☐,☐☐☐.00	☐ Pago en efectivo ☐ Arrendamiento con opción de compra ☐ Préstamo bancario	☐	☐ %	☐ Sí ☐ No	$☐ .00 por mes / trimestre / año
☐ años	$☐☐,☐☐☐.00	☐ Pago en efectivo ☐ Arrendamiento con opción de compra ☐ Préstamo bancario	☐	☐ %	☐ Sí ☐ No	$☐ .00 por mes / trimestre / año

19b Cuéntenos sobre los analizadores de emisiones certificados que **ALQUILA** actualmente en esta estación. Para cada analizador, ingrese el costo total de alquiler mensual.

Ingrese el costo total de alquiler mensual
$☐☐,☐☐☐.00
$☐☐,☐☐☐.00
$☐☐,☐☐☐.00

CONTINÚE EN LA PÁGINA SIGUIENTE →

20 [Si posee un analizador(es)] En el año calendario 2021, ¿cuánto gastó en reparaciones a sus equipos de prueba de emisiones (por ejemplo, escáner de código de barras, impresora, componentes internos) que no estaban cubiertas por un contrato de servicio o paquete de mantenimiento? Se le preguntará sobre sus costos por insumos como papel, tóner y probadores de tapa de tanque de combustible en la siguiente pregunta.

$☐☐,☐☐☐.00

21 Aparte de mantenimiento o reparaciones a equipos de prueba de emisiones que ingresó en la pregunta anterior, coméntenos qué otros costos tiene que correspondan específicamente a emisiones vehiculares.

Artículo	**Costo**	**Frecuencia del gasto (encierre una en un círculo)**
a. Línea telefónica exclusiva o Internet	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez
b. Kits de probadores de tapa de tanque de combustible	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez
c. Papel para impresora	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez
d. Cartuchos de tinta/tóner	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez
e. Otros *Ingrese una descripción:*	**$☐☐☐,☐☐☐.00**	Al mes/al año/única vez

22 ¿Alguna vez se deshizo de equipos de pruebas de emisiones que ya no necesitaba más?

☐ Sí - *Avance a* **22b**
☐ No - *Avance a* **23**
☐ No sé con certeza – *Avance a* **23**

22b Cuéntenos sobre todo analizador de pruebas de emisiones certificado OBD de los que se deshizo por no necesitarlos más. Para cada uno, indique la cantidad de años que tuvo el equipo y cómo se deshizo de este. Indique los ingresos por su venta Y/O costo para deshacerse del equipo.

Tipo	**Cant. de años que lo tuvo**	Seleccione una	Si **VENDIÓ** o **CANJEÓ** este analizador, indique **LO QUE GANÓ O VALOR DE CANJE**	Si **PAGÓ** por deshacerse de este analizador, indique **SU COSTO**
OBD	☐	☐ Lo vendí ☐ Lo canjeé ☐ Me deshice del equipo sin costo ☐ Pagué para deshacerme del equipo	**$☐☐,☐☐☐.00**	**$☐☐,☐☐☐.00**
OBD	☐	☐ Lo vendí ☐ Lo canjeé ☐ Me deshice del equipo sin costo ☐ Pagué para deshacerme del equipo	**$☐☐,☐☐☐.00**	**$☐☐,☐☐☐.00**

23 ¿Alguna vez añadió o adquirió espacio edificable (por ejemplo, plataformas) para hacer pruebas de emisiones vehiculares en esta estación?

☐ Sí.
☐ No.
☐ No sé con certeza.

24 ¿Compró o alquila/arrienda el edificio para esta estación?

☐ Compra. ¿Cuál fue el precio aproximado de compra? **$☐,☐☐☐,☐☐☐.00**

☐ Alquiler/arrendamiento. ¿Cuál es la renta mensual aproximada? **$☐,☐☐☐,☐☐☐.00**

CONTINÚE EN LA PÁGINA SIGUIENTE →

PARTE VII – INFORMACIÓN ADICIONAL

25 **Aparte de repeticiones de pruebas no aprobadas anteriormente en su estación**, ¿alguna vez ofrece pruebas de emisiones sin cargo **O** cobra menos de $11.50 por una prueba de emisiones? ***Marque con una X TODAS las opciones que correspondan***.

- ☐ No – *Avance a* **26**
- ☐ Sí, a veces ofrecemos pruebas de emisiones **GRATIS**. - *Si selecciona esta opción, responda* **25b**
- ☐ Sí, a veces ofrecemos pruebas de emisiones por **menos de $11.50**. – *Si selecciona esta opción, responda* **25c**

25b En esta estación se ofrecen pruebas de emisiones sin cargo para: ***Marque con una X TODAS las opciones que correspondan***.

- ☐ Amigos y familiares.
- ☐ Empleados.
- ☐ Personal militar activo o veteranos.
- ☐ Miembros de nuestro programa de lealtad para clientes.
- ☐ Clientes que vuelven a hacer la prueba pasados los 15 días de su inspección fallida inicial.
- ☐ Clientes que no pasaron una prueba de emisiones en otra estación e hicieron reparaciones en ESTA estación.
- ☐ Clientes que no pueden costear una inspección.
- ☐ Para satisfacción del cliente en general a criterio del propietario o gerente.
- ☐ Otros motivos – Ingrese una descripción. _____

25c ¿Cuál es el cargo más bajo que cobra por una prueba de emisiones?

$☐☐.☐☐

26 En su opinión, ¿el cargo de $11.50 cubre sus costos de ofrecer pruebas de emisiones en esta estación?

- ☐ Sí - *Avance a* **27**
- ☐ No - *Avance a* **26b**

26b Indíquenos en qué medida está de acuerdo o en desacuerdo con las siguientes afirmaciones.

	Totalmente de acuerdo	De acuerdo	No estoy de acuerdo ni en desacuerdo	En desacuerdo	Totalmente en desacuerdo	N/A
No hago suficientes inspecciones de emisiones porque hay demasiadas estaciones que hacen inspecciones.	O	O	O	O	O	O
Pago por espacio de edificio/plataforma para inspecciones de emisiones, pero está infrautilizado para pruebas de emisiones y no se puede usar fácilmente para otros fines.	O	O	O	O	O	O
Debo pagar a un inspector de emisiones para que esté en las instalaciones, pero es costoso porque es difícil asignarle otras tareas cuando no está haciendo inspecciones.	O	O	O	O	O	O
Debo pagar una tarifa/salario elevado a mis inspectores porque su función principal exige una paga más alta que la de inspectores de emisiones.	O	O	O	O	O	O
Mis equipos de prueba necesitan reparaciones con frecuencia y el tiempo de inactividad no me permite cubrir las pérdidas.	O	O	O	O	O	O
El tiempo adicional que paso con clientes durante inspecciones de emisiones es costoso.	O	O	O	O	O	O
Los costos asociados a las pruebas aumentaron en los últimos años y ahora nuestros costos exceden las ganancias del cargo que se cobra por la prueba.	O	O	O	O	O	O
Todos los costos simplemente son mucho más que lo que se cobra, pero elijo ofrecer pruebas porque es importante para mi negocio de otras maneras.	O	O	O	O	O	O

Describa cualquier otro motivo por el que el cargo de inspección de emisiones no cubre sus costos.

_____

27 ¡Su experiencia es muy importante! Pensando en el cargo de inspección de emisiones aparte del cargo de inspección de seguridad de $7.00, responda las siguientes preguntas. Recuerde que su recomendación NO debe incluir el cargo de $7.00 por la parte de seguridad de la inspección.

a ¿Qué cargo de inspección de emisiones vehiculares cree que sus clientes estarían dispuestos a pagar? **$**☐☐.☐☐

b ¿Qué cargo de inspección de emisiones vehiculares le permitiría cubrir los costos? **$**☐☐.☐☐

Gracias por completar esta encuesta.
¡Su opinión es muy valiosa! Si tiene alguna sugerencia para mejorar esta encuesta, inclúyala abajo.

Haga una fotocopia de este formulario para poder guardarlo.
Devuelva el cuestionario original completado en el sobre con franqueo pagado que se incluye.
Si no encuentra el sobre, envíe el formulario por correo a:
Eastern Research Group, Inc., Attn: TCEQ Fee Survey, 110 Hartwell Avenue, Lexington, MA 02421.

Esta encuesta está disponible en inglés y español. Use la casilla desplegable de selección de idioma a la derecha para seleccionar el idioma que prefiere.

Puede detenerse en cualquier momento y retomar la encuesta donde se quedó. Ingrese a www.tceqsurvey2022.com desde cualquier computadora y vuelva a iniciar sesión con su identificación de estación. Sus respuestas se guardan cada vez que hace clic para pasar a otra página.

La encuesta está completa. Está orientada a estaciones que hacen pruebas de emisiones activamente. Gracias por su tiempo.

¡Gracias! Sus respuestas se registraron el:
Puede ver informes de encuestas anteriores sobre los cargos del programa I/M en: