COLORADO
Air Pollution Control Division
Department of Public Health & Environment

Automobile Inspection and Readjustment (AIR) Program

Annual Report

Calendar Year 2023

July 1, 2024

Table of Contents

Table of Contents 2
List of Figures 3
List of Tables 4
List of Appendices 5
Executive Summary 7
Introduction 8
Automobile Inspection and Readjustment (AIR) Program 11
On-Board Diagnostic (OBD) Inspection Program 12
Inspection and Maintenance 240 Seconds (IM240) Inspection Program 16
Two-Speed Idle (TSI) Inspection Program 20
Gas Cap Inspection Results 24
Unresolved Vehicles 25
Smoking Vehicles 25
Waivers 26
Clean Screen Program 27
Cost Effectiveness of the AIR Program 29
Emission Benefits 33
Cost-Effectiveness 34
2023 Annual Report From the Colorado Department of Revenue 35
2023 Audit Results 36
2023 Enforcement Results 39
2023 Licensing Results 42

List of Figures

Figure 1: OBD Initial Inspection Fail Rates by Model Year and Vehicle Type 13
Figure 2: OBD MIL Fail Rates by Model Year and Vehicle Type 14
Figure 3: IM240 Initial Inspection Fail Rates by Model Year and Vehicle Type 17
Figure 4: IM240 Exhaust Fail Rates by Model Year and Vehicle Type 17
Figure 5: IM240 Average Hydrocarbon Emissions by Model Year 18
Figure 6: IM240 Average Carbon Monoxide Emissions by Model Year 18
Figure 7: IM240 Average Nitrogen Oxides Emissions by Model Year 19
Figure 8: TSI Initial Inspection Fail Rate by Model Year 21
Figure 9: TSI Inspection Average Hydrocarbon by Model Year 22
Figure 10: TSI Inspection Average Carbon Monoxide by Model Year 22
Figure 11: Gas Cap Fail Rates by Model Year 25
Figure 12: Clean Screen Program Results – Average Hydrocarbon Emissions by Model Year 28
Figure 13: Clean Screen Program Results – Average Carbon Monoxide Emissions by Model Year 28
Figure 14: Clean Screen Program Results – Average Nitrogen Oxides Emissions by Model Year 29

List of Tables

Table 1: OBD Initial Inspection Results 13
Table 2: IM240 Initial Inspection Results 17
Table 3a: IM240 Passed Retest Inspection Results: Hydrocarbon (HC) Emissions 20
Table 3b: IM240 Passed Retest Inspection Results: Carbon Monoxide (CO) Emissions 20
Table 3c: IM240 Passed Retest Inspection Results: Nitrogen Oxides (NOx) Emissions 20
Table 4a: TSI Passed Retest Inspection Results: Hydrocarbon (HC) Emissions 23
Table 4b: TSI Passed Retest Inspection Results: Carbon Monoxide (CO) Emissions 23
Table 5: Gas Cap Inspection Results 24
Table 6: Overall Inspection Cost by Inspection Type 30
Table 7: Total Repair Costs by Inspection Type 31
Table 8: Overall Program Cost 33
Table 9: MOVES Emission Inventories and Program Benefit 33
Table 10: AIR Program Cost Effectiveness in Dollars per Ton 34

List of Appendices

Appendix A1 – Initial Inspection Report All Test Type A1-1

Appendix A2 – Initial OBD Inspection Report A2-1

Appendix A3 – Initial OBD Inspection Failure Report..... A3-1

Appendix A4 – Initial OBD Fail DTC Report A4-1

Appendix A5 – Initial OBD Fail Readiness Monitor Summary Report A5-1

Appendix A6 – OBD Retest Frequency Report A6-1

Appendix A7 – Initial OBD Pass DTC Report..... A7-1

Appendix A8 – Initial OBD Pass Readiness Monitor Summary Report A8-1

Appendix A9 – OBD Initial Inspection Emissions Report A9-1

Appendix A10 – Initial OBD Incomplete Inspection Report.....A10-1

Appendix A11 – OBD Retest Incomplete Inspection Report A11-1

Appendix B1 – IM240 Initial Inspection Report B1-1

Appendix B2 – IM240 Initial Failure Report B2-1

Appendix B3 – IM240 Initial Exhaust Failure Report..... B3-1

Appendix B4 – IM240 Initial Failure for Other Report B4-1

Appendix B5 – IM240 Retest Pass Reduction Report..... B5-1

Appendix B6 – IM240 Retest Frequency Report B6-1

Appendix B7 – IM240 Fleet Characterization Summary Report
– Initial Inspection Component B7-1

Appendix B8 – IM240 Fleet Characterization Summary Report
– Final Inspection Component B8-1

Appendix B9 – IM240 Fleet Characterization Summary Report
– Emissions Reduction Component B9-1

Appendix C1 – Idle Initial Inspection Report C1-1

Appendix C2 – Idle Initial Failure Report C2-1

Appendix C3 – Idle Initial Exhaust Failure Report C3-1

Appendix C4 – Idle Initial Failure for Other Report C4-1

Appendix C5 – Idle Retest Pass Reduction Report C5-1

Appendix C6 – Idle Retest Frequency Report C6-1

Appendix D1 – IM Eligible Vehicle Report, Evaluated Vehicles D1-1

Executive Summary

The State of Colorado operates a registration based motor vehicle emissions inspection and maintenance program known as the Automobile Inspection and Readjustment (AIR) Program. The area covered by the program consists of the Front Range region of Colorado, and includes all or portions of Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, Jefferson, Larimer, and Weld counties.

Air Quality

Vehicle emissions inspection programs work to improve air quality through the detection and repair of excessively emitting vehicles. In Colorado, these mobile source emissions constitute one of the largest categories of controllable emissions that contribute to summertime ozone concentrations, a serious issue for the Front Range area. They also contribute to the area's greenhouse gases, as well as to particulate and air toxics emissions, especially around busy highways. An analysis by CDPHE [1]has shown that these later particulate and air toxic emissions affect predominantly disadvantaged groups who live and work in areas subject to high vehicular traffic.

Lowering vehicle emissions by repairing high-emitting vehicles contributes to a cleaner motor vehicle fleet and improves the air quality throughout Colorado's Front Range region where the Inspection and Maintenance (IM) program is in place. Repaired vehicles also on average experience improved fuel economy that translates into reduced greenhouse gas emissions.

Motor vehicle emissions inspection programs generally are established in areas that have air quality issues that violate federal established National Ambient Air Quality Standards (NAAQS). They are required when the EPA classifies an area out of attainment and categorized as "moderate" or higher. Currently the Front Range area has violated the summertime ozone NAAQS for both the 2008 and 2015 NAAQS and is currently classified as "Severe" under the 2008 NAAQS.

Analyzed Program Elements

This analysis examined the use of the current vehicle emissions inspection procedures that are in place in the existing Front Range program. The inspection methodologies used in this program include:

1. On-Board Diagnostic (OBD): electronic query of the vehicle's computer control system for vehicles that are 11 years old and newer.
2. Inspection and Maintenance 240 Seconds (IM240): dynamometer-based emissions inspection for light-duty gasoline-powered vehicles that are model years 1982 through 12 years old.

[1] Alexander C. Bradley, et. al., "Air pollution Inequality in the Denver Metroplex and its Relationship to Historical Redlining," Environmental Science and Technology, 2024, 58, 4226-4236.

3. Two-Speed Idle (TSI): measures vehicle emissions at idle and raised idle. TSI inspections are administered to light-duty vehicles that are 1981 and older and all heavy-duty gasoline-powered vehicles regardless of model year.
4. Remote Sensing Device (RSD): on-road measurements of tailpipe emissions while a vehicle passes by a remote sensing device.

Vehicles that are inspected at an emissions testing center also undergo the following inspection procedures, depending on the vehicle's age and type of emissions test it undergoes.

- An opacity inspection that checks for visible smoke
- A visual emission control inspection to check for gas cap presence
- A gas cap pressure test (light-duty vehicles model year 1975 and newer)

Program Results

The results of this analysis indicate that over 1.1 million motor vehicles were evaluated for emissions during the past year, whether a computer OBD test, a dynamometer-based IM240 test, an idle tailpipe check, or an on-road remote sensing measurement. Of these vehicles, 357,184 vehicles underwent OBD inspection, 540,279 vehicles IM240 inspection, and 39,506 vehicles TSI inspection. Based on these tests and failure data from the program, it is observed that the OBD failure rate was 5.90%, the IM240 failure rate to be 8.25% and the TSI failure rate to be 5.63%.

For remote sensing, 216,601 unique vehicles were observed by RSD units that met Clean Screen Program requirements. Of these observed vehicles, 171,251 participated in the program, thus being able to avoid an actual inspection at an emissions testing facility.

The detection and repair of high emitting vehicles provided the Front Range area with air quality improvements. Using the Environmental Protection Agencies (EPA) vehicle emissions model, MOVES4, emissions reductions for the program were estimated at: 3.02 tons per day for total gaseous hydrocarbon (TGH) emissions, 62.25 tons per day for carbon monoxide (CO) emissions, 2.52 tons per day for oxides of nitrogen (NOx) emissions, and 6.58 tons per day for overall ozone precursors (TGH + [1/60]CO + NOx).

The cost of the program was estimated to be approximately $75.63 million. This cost includes vehicle inspection costs and associated vehicle fees, the cost of the inconvenience to motorists, and vehicle repair costs, along with fuels savings.

Introduction

The State of Colorado administers a motor vehicle emissions inspection and maintenance program known as the Automobile Inspection and Readjustment (AIR) Program. The purpose of the AIR Program is to improve air quality through the detection and repair of excessively emitting gasoline-powered vehicles. Annually, since the start of the program in 1981, the

Colorado Department of Public Health and Environment prepares a report on the previous year's program results. The results of the 2023 program are contained in this report.

Air Quality

Summertime ozone concentrations pose a serious issue for the Front Range area. Mobile source emissions constitute one of the largest categories of controllable emissions that contribute to these summertime ozone concentrations. They also contribute to the area's greenhouse gases emissions, as well as to particulate and air toxics emissions that occur especially around busy highways. An analysis by CDPHE[2] has shown that these later particulate and air toxic emissions affect predominately-disadvantaged groups who live and work in areas subject to high vehicular traffic.

Lowering vehicle emissions by repairing high-emitting vehicles contributes to a cleaner motor vehicle fleet and improves the air quality throughout Colorado's Front Range region. Repaired vehicles also on average experience improved fuel economy that translates into reduced greenhouse gas emissions. Colorado's AIR program achieves these benefits through the testing and repair of motor vehicles registered and operated within the Front Range area.

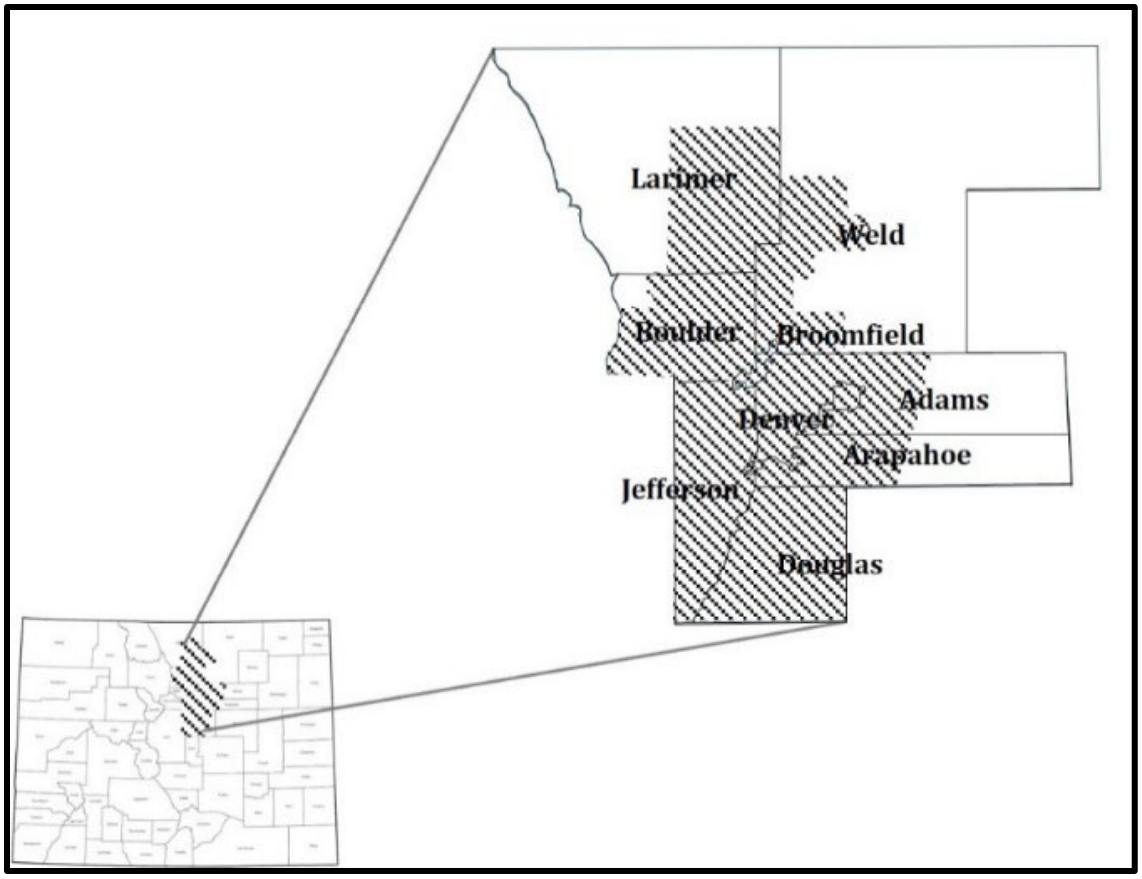
Inspection Maintenance Programs

Motor vehicle emissions inspection programs generally are implemented in areas that have air quality issues that violate federal established National Ambient Air Quality Standards (NAAQS). They are required when an area is listed in the "moderate" or higher category. Currently, the Front Range area has violated the summertime ozone NAAQS for both the 2008 and 2015 NAAQS and is currently classified as "Severe" under the 2008 NAAQS. As such, the program is included as a component in both of Colorado's Ozone State Implementation Plans (SIPs).

Program Area

The region covered by the program consists of the Front Range area of Colorado, and includes all or portions of Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, Jefferson, Larimer, and Weld counties as shown in the map below. These counties represent the region with the preponderance of the Front Range's vehicle population, travel, and greatest emissions.

[2] Alexander C. Bradley, et. al., "Air pollution Inequality in the Denver Metroplex and its Relationship to Historical Redlining," Environmental Science and Technology, 2024, 58, 4226-4236.



Program Area

Program Elements

The Automobile Inspection and Readjustment (AIR) program was authorized by HB93-1340 and began operations on January 1, 1995. It uses the following vehicle inspection methodologies in determining whether a vehicle meets the appropriate emissions standards for that specific vehicle, based upon age and type of vehicle.

1. On-Board Diagnostic (OBD): electronic query of the vehicle's computer control system for vehicles that are 11 model years old and newer.
2. Inspection and Maintenance 240 Seconds (IM240): dynamometer-based emissions inspection for light-duty gasoline-powered vehicles that are model years 1982 through 12 years old.
3. Two-Speed Idle (TSI): measures vehicle emissions at idle and raised idle. TSI inspections are administered to light-duty vehicles that are 1981 and older and all heavy-duty gasoline-powered vehicles regardless of model year.
4. Remote Sensing Device (RSD): on-road measurements of tailpipe emissions while a vehicle passes by a remote sensing device.

Vehicles that are inspected at an emissions testing center also undergo the following:

- An opacity inspection that checks for visible smoke
- A visual emission control inspection to check for gas cap presence
- A gas cap pressure test (light-duty vehicles model year 1975 and newer)

The inspection frequency is based on vehicle model year. Model year 1982 and newer vehicles are inspected biennially (every two years), while 1981 and older model year vehicles are inspected annually. The inspection cycle for new vehicles begins after a seven-model year exemption period. The exemption allows the newest and cleanest model year vehicles to forgo emissions inspections. Vehicles sold during their exemption period are also exempt from inspection as long as there are at least 12 months remaining in the exemption period.

A Clean Screen program is used to assist in motorist convenience. The Clean Screen program measures a vehicle's emissions through roadside remote sensing while simultaneously photographing the license plate, as a vehicle passes through infrared and ultraviolet beams of light. If the vehicle meets the program criteria, the vehicle owner is notified by the county clerk via a registration renewal card that is mailed to the address associated with the vehicle registration. Vehicles that meet the program criteria are not required to be inspected at an inspection facility and can continue their vehicle registration process without a traditional emissions inspection.

The contractor for the vehicle emissions inspection program is Envirotest Systems Corporation. Envirotest is an operating subsidiary of Opus Inspection. It operates and maintains all of the Air Care Colorado vehicle emissions inspection stations, the clean screen remote sensing units, and manages all related data and communication services. The Mobile Sources Program in the Air Pollution Control Division (APCD) at Colorado Department of Public Health and Environment (CDPHE) designs, administers, and evaluates the program. The Emissions Section in the Division of Motor Vehicles at the Colorado Department of Revenue (DOR) regulates the emissions inspection facilities and inspectors working in the emissions program area. The AIR Program is enforced through the denial of vehicle registration by county clerks within the program area. Vehicle owners in the program area must provide proof of a passing emissions inspection in order to renew a vehicle's registration.

Automobile Inspection and Readjustment (AIR) Program

AIR Program Network

Air Care Colorado operates 18 stations with 97 inspection lanes throughout the nine-county program area. There is one independent station that inspects vehicle year 1981 and older gasoline-powered vehicles. Additionally, there are 20 licensed vehicle fleet owners who self-inspect their own qualifying commercial and government vehicles.

The Clean Screen program consists of, on average, 13 remote sensing units deployed on weekdays and Saturdays within the program area. The units are rotated among approximately

128–locations throughout the program area, with the primary locations being highway on-ramps.

CDPHE's Air Pollution Control Division (APCD) operates six emissions technical centers throughout the AIR Program area to help both the motoring public and the repair industry.

Emissions Technical Centers

Pursuant to Colorado Revised Statutes, APCD operates six emissions technical centers throughout the program area that provide assistance to the motoring public, repair industry and the emissions testing contractor. These centers also support the Department of Revenue in assessing requirements for repair and hardship waivers. The Emissions Technical Centers are a vital part contributing to the success of the AIR Program. Technical center staff provide frontline vehicle owner support and provide valuable input that has helped shape the current emissions program.

In 2023, the Emissions Technical Centers performed approximately 5,300 vehicle evaluations. Vehicle evaluations are completed to help assist the motoring public with proper emissions related repairs and to address potential vehicle tampering problems. In addition to vehicle evaluations, Emissions Technical Centers staff received approximately 16,000 phone calls to answer questions from both the motoring public and the repair industry.

New Program Developments

Remote testing efforts were increased in 2023. New testing sites were added, more operators were hired, and 4 new remote testing units were added into the program. Additionally, select units were regularly deployed on Saturdays in an effort to test vehicles from a different traffic pattern. As a result, the percentage of emission due vehicles screened rose from 24.33% in 2022 to 27.52% in 2023. Also in 2023, an automated license plate reader was implemented, with the intended effect of shortening the processing time of the data that was collected by the remote testing units. With all of these changes, the amount of Clean Screens issued rose to 213,145 in 2023, up from 169,007 in 2022.

On-Board Diagnostic (OBD) Inspection Program

Vehicles that are newer than 12 model years old and are outside of their exemption period are subject to periodic On-Board Diagnostic (OBD) inspection. OBD inspection is both more convenient and less time consuming for the motorist than a dynamometer-based emissions test.

An OBD inspection involves a visual assessment of the MIL (a light on the dash that illuminates when there is an indication of an emissions related problem) and an electronic query of the computer control system to determine if there are emissions problems. A vehicle's OBD system commands the MIL "on" if the emissions output is elevated at least 1.5 times the Environmental Protection Agency certification levels. The inspection also includes a functional check of the gas cap and a visual inspection of the exhaust for smoke.

In making a pass/fail decision, a fail will occur if the MIL is illuminated (the MIL is commanded "on" by the OBD system), or if the MIL is not functioning (visual fail). A vehicle will also fail if the vehicle is emitting smoke or has a faulty or missing gas cap.

Model year 1996-2012 vehicles may receive an OBD inspection if the vehicle is incompatible with the IM240 dynamometer, allowing OBD fail rates to be measured for these vehicles, as elaborated on further in the IM240 section.

OBD – Initial Inspection Results

There were 357,184 initial OBD inspections conducted in 2023, of which 21,057 failed their OBD inspection and were required to undergo repairs. The 21,057 failures resulted in an OBD initial failure rate of 5.90%. Of this, a subset of 13,618 vehicles failed their initial OBD MIL inspection resulting in an OBD MIL initial failure rate of 3.81%.

Vehicles that fail the initial inspection must undergo repairs and then return to an emissions station for a post-repair emissions inspection. Table 1 shows the initial OBD inspection results by vehicle type:

Table 1: OBD Initial Inspection Results

	Total	Pass	% Pass	Fail	% Fail
Cars	126,381	118,791	93.99%	7,590	6.01%
Trucks	230,803	217,336	94.17%	13,467	5.83%
TOTAL	**357,184**	**336,127**	**94.10%**	**21,057**	**5.90%**

Figure 1 gives the initial OBD failure rates for all vehicles that received an OBD inspection in 2023. Additional information regarding initial OBD failures is available in Appendix A2: Initial OBD Inspection Report.

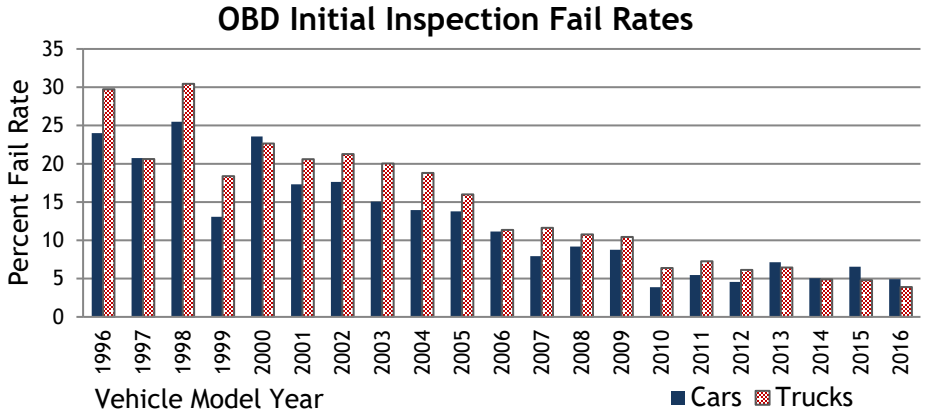


Figure 1: OBD Initial Inspection Fail Rates by Model Year and Vehicle Type

Figure 2 presents the MIL failure rates by model year and vehicle type. These MIL failures include vehicles that failed for the MIL being commanded on and/or the visual MIL inspection,

which is explained in the OBD Visual Inspection Results section. Vehicles that failed for MIL and gas cap as shown in Appendix A3: Initial OBD Inspection Failure Report.

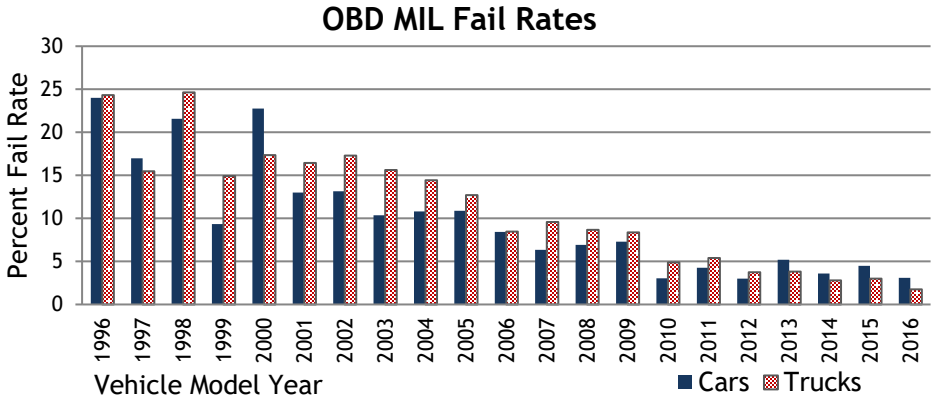


Figure 2: OBD MIL Fail Rates by Model Year and Vehicle Type

Additional information on MIL Inspection activity is available in Appendix A3: Initial OBD Inspection Failure Report.

Sometimes a vehicle's OBD system does not communicate with the inspection equipment at the testing station. If the MIL passes the visual inspection but the OBD system does not communicate, the vehicle is given an alternate IM240 inspection. The purpose of administering an alternate IM240 inspection is for customer convenience, as it helps to reduce the number of trips to the inspection station.

There were 4,376 vehicles where the OBD system did not communicate with the inspection equipment and received an alternate IM240 inspection instead. The pass/fail results and emissions rates for these inspections are included in the IM240 section of this report.

In order for a vehicle's emissions system to be properly evaluated, certain vehicle equipment parameters must be met before the diagnostic process can begin. These parameters are evaluated by the OBD system and will report the status of supported emissions systems through various "readiness monitors." A vehicle receives an OBD inspection if the supported readiness monitors are set to "Ready." If the MIL passes the visual inspection but the required readiness monitors are not set to "Ready," the vehicle is given an IM240 inspection instead.

The readiness monitor requirements vary by model year grouping, with some vehicles receiving an OBD inspection with one readiness monitor set to "Not Ready," and others with two readiness monitors set to "Not Ready." In 2023, 17,420 vehicles were initially not ready for the OBD inspection. Of those vehicles, 12,383 received an alternate IM240 inspection instead. The pass/fail results and emissions rates for these vehicles are included in the IM240 section of this report.

Some vehicles are not compatible with the IM240 inspection due to the vehicle's configuration, such as hybrids or all-wheel drive trucks with a wheelbase that exceeds the limitations of the dynamometer. If the MIL passes the visual inspection, but the OBD system is "Not Ready" or a

problem exists with the vehicle's OBD system and the vehicle is not compatible with the dynamometer, then the vehicle receives an incomplete inspection.

If a vehicle receives an incomplete inspection and the vehicle is not compatible with the IM240 inspection equipment, the vehicle owner must resolve the OBD communication issue or have the readiness monitors meet the "Ready" criteria prior to having the vehicle re-inspected. There were 5,037 (14.41%) initial incomplete inspections in 2023. Additional information regarding incomplete OBD inspections is in Appendix A10: Initial OBD Incomplete Inspection Report.

In addition to the mandatory OBD inspections performed on model year vehicles 2012 - 2015, an advisory OBD inspection was completed on all model year vehicles 1996-2011 subject to the IM240 inspection. The advisory OBD inspection includes a check of the MIL command status. These OBD inspection statistics are available in Appendix A9: OBD Initial Inspection Emissions Report.

OBD – Visual Inspection Results

Vehicles receiving an OBD inspection can fail for a visual inspection of its MIL. If the MIL does not illuminate with the key on and engine off, or if it does not turn off after the engine is started, then the visual MIL inspection fails. Visual MIL failures can be in addition to the MIL commanded-on failures. In 2023, 7,581 vehicles (2.12%) failed the visual MIL inspection.

MIL failures are included in the overall OBD initial failure section. Additional information on visual MIL inspection activity is available in Appendix A3: Initial OBD Inspection Failure Report.

OBD – Multiple Retests

Vehicles that fail an inspection are required to make repairs and undergo another inspection. Some of the vehicles that fail the initial OBD inspection fail the first post-repair inspection as well.

In 2023, 18,513 vehicles were given an OBD post-repair inspection. Of these vehicles, 2,794 failed the post-repair inspection resulting in a 15.09% OBD retest failure rate. Additional information on retest activity is available in the OBD Retest Frequency Report in Appendix A6.

A vehicle's OBD system must have the required readiness monitors set to "Ready" in order to be eligible for an OBD inspection.

In 2023, 8,013 vehicles (24.94%) that required an OBD post-repair inspection were "Not Ready" or had OBD Communication Issues and received an incomplete inspection.

When a vehicle has its battery disconnected or has its diagnostic trouble codes manually cleared, the readiness monitors will remain in a "Not Ready" status until a manufacturer-specific drive cycle is completed. The division has an extensive outreach program to educate and inform motorists and repair shops how to properly set readiness monitors after repairs are completed. The goal of this outreach is to reduce the number of vehicles that return for a post-repair inspection without having the required readiness monitors set to "Ready."

Additional information is provided in the OBD Retest Incomplete Inspection Report in Appendix A11.

OBD – Post-Repair Inspection Results

Vehicles that fail the OBD emissions inspection generally have higher emissions than vehicles that pass. The emissions reductions received from repairing these vehicles generate the program's air quality benefit. Additional information on retest activity is available in the OBD Retest Frequency Report in Appendix A6.

OBD – Tampering Identification Results

It is not uncommon for vehicle owners to tamper with the OBD system by installing an emissions defeat device, a device that interferes with or disables the emissions controls. Vehicles receiving an OBD inspection have to meet specific criteria to ensure that the OBD system has not been tampered with.

When a vehicle is identified as being tampered, it is referred to an Emissions Technical Center where the vehicle is subject to an evaluation and the vehicle owner is advised on what repairs need to be completed to obtain a passing inspection.

In 2023, 861vehicles were identified as having been tampered with and were referred to an emissions technical center. Of those 861 vehicles, 527 were evaluated, repaired and received a passing emissions inspection. The remaining have yet to complete the inspection process. It is assumed that these vehicles have been transferred out of the program area, or have been retired. There were 334 of these vehicles from calendar year 2023 that were unresolved as of March 31, 2024.

Inspection and Maintenance 240 Seconds (IM240) Inspection Program

The IM240 inspection program uses a 240-second loaded-mode transient dynamometer inspection cycle to measure exhaust emissions. This emissions inspection cycle is a derivative of the Federal Test Procedure that is used to certify new vehicles for emissions. The IM240 inspection also includes a visual and pressure test of the gas cap and a visual inspection of the exhaust for opacity (smoke).

IM240 – Initial Inspection Results

Light-duty vehicles model years 1982-2012 were required to receive IM240 inspections.

There were 540,279 initial IM240 inspections conducted in 2023. Of these, 44,563 vehicles failed the initial IM240 inspection resulting in an IM240 initial failure rate of 8.25%.

Of the 44,563 vehicles that failed, 23,316 vehicles failed for excess exhaust emissions, or an exhaust emissions failure rate of 4.32%. The remaining vehicles failed the inspection for a missing/inoperable gas cap, and/or visual opacity (smoke).

Table 2 shows the initial IM240 inspection results by vehicle type.

Table 2: IM240 Initial Inspection Results

	Total	Pass	% Pass	Fail	% Fail
Cars	217,618	201,450	92.57%	16,168	7.43%
Trucks	322,661	294,266	91.20%	28,395	8.80%
TOTAL	**540,279**	**495,716**	**91.75%**	**44,563**	**8.25%**

Figure 3 shows the overall IM240 initial failure rates by model year and vehicle type. Overall failures consist of vehicles with failures for emission control equipment (gas cap) visual and pressure, excess exhaust emissions, and/or visual opacity (smoke).

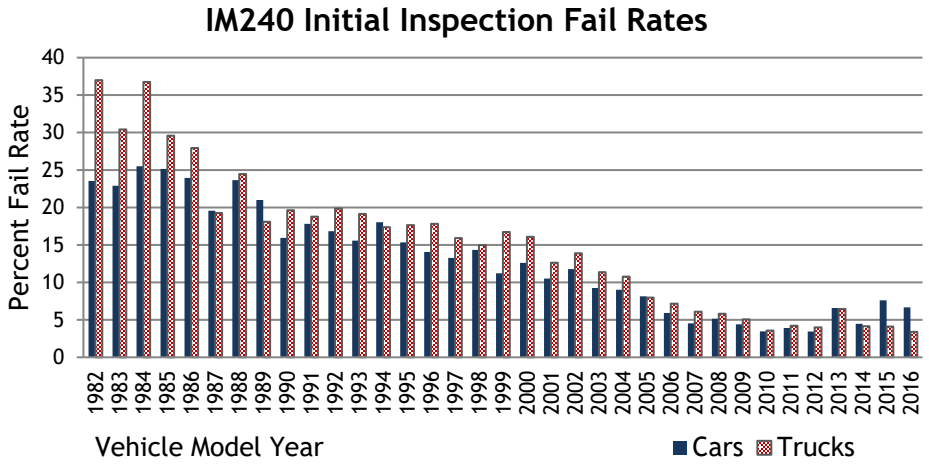


Figure 3: IM240 Initial Inspection Fail Rates by Model Year and Vehicle Type

Figure 4 shows rates of vehicles that failed for excessive exhaust emissions by model year and vehicle type.

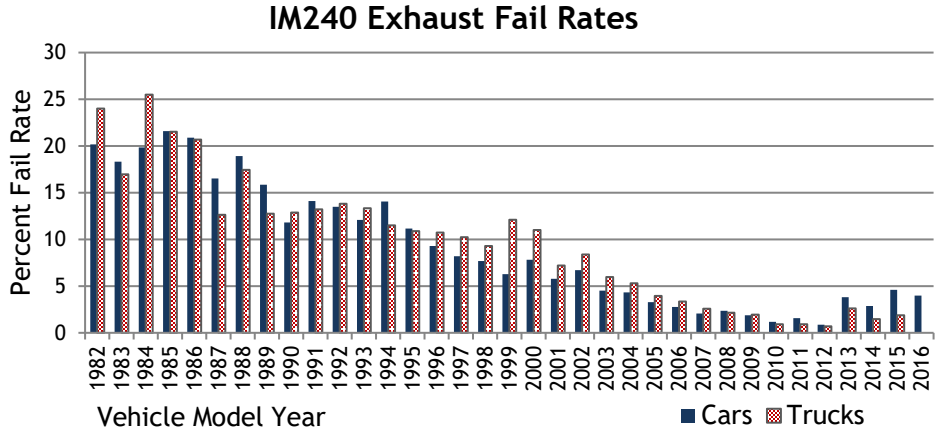


Figure 4: IM240 Exhaust Fail Rates by Model Year and Vehicle Type

Figures 5, 6, and 7 show the initial exhaust emission results for hydrocarbons (HC), carbon monoxide (CO), and nitrogen oxides (NOx), respectively.

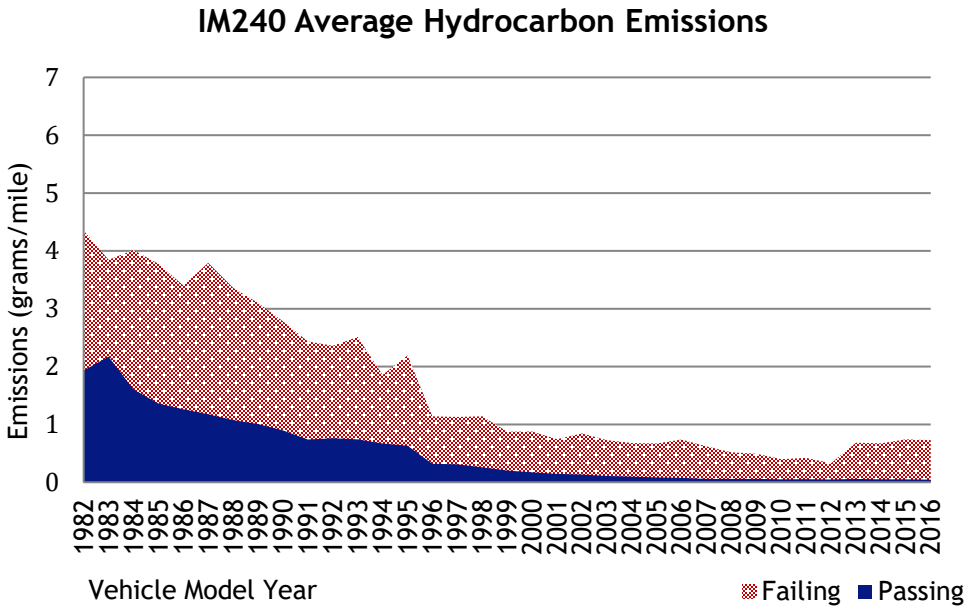


Figure 5: IM240 Average Hydrocarbon Emissions by Model Year

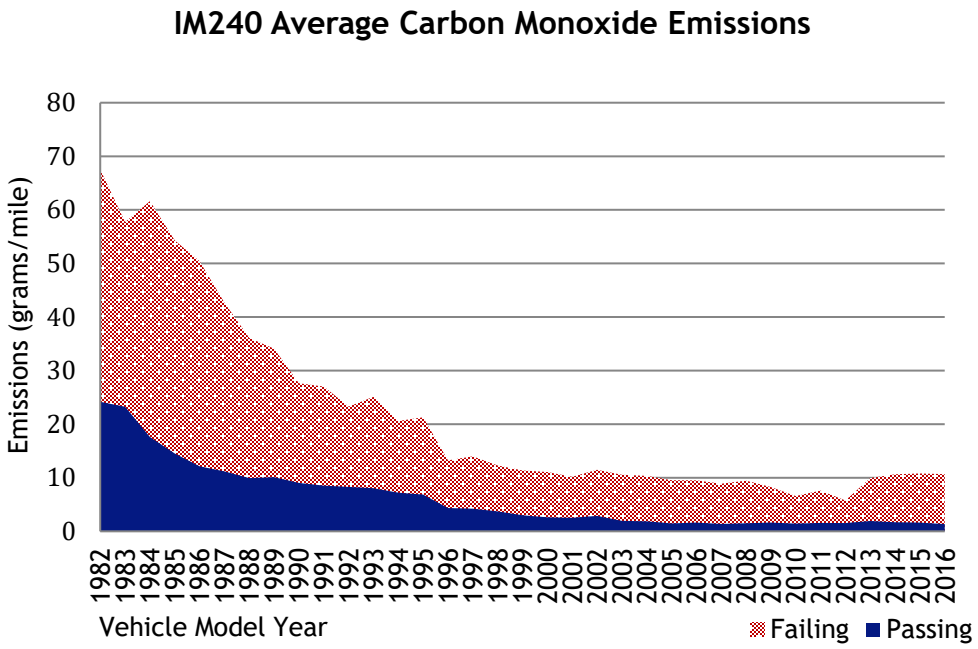


Figure 6: IM240 Average Carbon Monoxide Emissions by Model Year

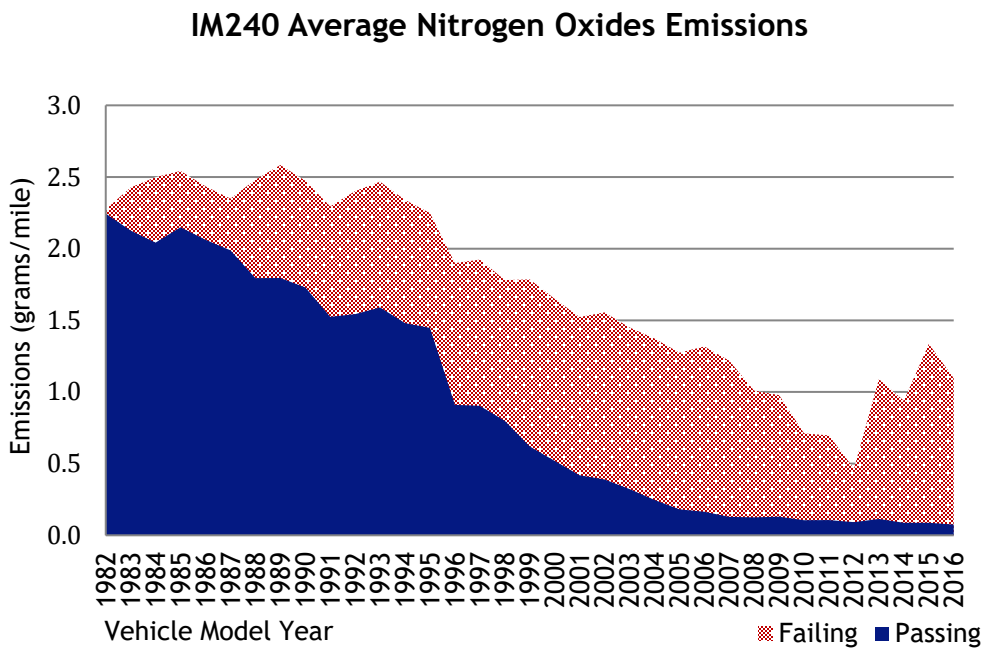


Figure 7: IM240 Average Nitrogen Oxides Emissions by Model Year

Vehicles that fail for excessive exhaust emissions could fail for one or any combination of these criteria pollutants. Emission standards that are used to fail a vehicle are set accordingly for individual model years and vehicle types. All standards are set so that well-maintained vehicles will likely pass, with an adequate buffer to prevent marginal vehicles from falsely failing the inspection.

As these figures show, HC, CO, and NOx emissions on average are highest for the oldest vehicles. As expected, average exhaust emissions drop significantly for newer vehicles regardless of whether the vehicle passes or fails the inspection.

IM240 - Visual Inspection Results

All vehicles undergoing an IM240 inspection are subjected to a visual inspection of the emissions control equipment (gas cap).

IM240 – Multiple Retests

Vehicles that fail an inspection are required to make repairs and undergo another inspection. Some of the vehicles that fail the initial IM240 inspection fail the first post-repair inspection as well.

In 2023, 39,472 vehicles were given an IM240 post-repair inspection. Of these vehicles, 11,945 failed the post-repair inspection resulting in a 30.26% IM240 retest failure rate. These vehicles are subject to further emissions re-inspection. Additional information on retest activity is available in the IM240 Retest Frequency Report in Appendix B6.

IM240 – Post-Repair Inspection Results

Vehicles that fail the IM240 emissions inspection generally have much higher emissions than vehicles that pass. The reduced emissions from repairing these vehicles generates the program's air quality benefit.

Tables 3a, 3b and 3c show the average emissions from all vehicles that failed the initial IM240 inspections and received a retest, average emissions from vehicles that passed a retest and the percent reduction by pollutant and vehicle type in grams per mile (gpm).

Table 3a: IM240 Passed Retest Inspection Results: Hydrocarbon (HC) Emissions

	Failed Initial Inspection	Passed Post Repair Inspection	% Reduction
Cars	1.14 gpm	.21 gpm	70.88 %
Trucks	1.16 gpm	.30 gpm	59.61 %
TOTAL	**1.15 gpm**	**.26 gpm**	**63.58 %**

Table 3b: IM240 Passed Retest Inspection Results: Carbon Monoxide (CO) Emissions

	Failed Initial Inspection	Passed Post Repair Inspection	% Reduction
Cars	13.21 gpm	3.17 gpm	64.76 %
Trucks	16.06 gpm	4.13 gpm	62.33 %
TOTAL	**15.07 gpm**	**3.78 gpm**	**63.10 %**

Table 3c: IM240 Passed Retest Inspection Results: Nitrogen Oxides (NOx) Emissions

	Failed Initial Inspection	Passed Post Repair Inspection	% Reduction
Cars	1.49 gpm	.47 gpm	51.71 %
Trucks	1.93 gpm	.68 gpm	46.77 %
TOTAL	**1.77 gpm**	**.60 gpm**	**48.26 %**

Two-Speed Idle (TSI) Inspection Program

The AIR Program requires non-exempt[3] model year 1981 and older gasoline-powered vehicles to undergo annual Two-Speed Idle (TSI) inspections. Fleet-owned vehicles model year 1995 and older undergo a TSI inspection annually. Fleet-owned vehicles model year 1996 and newer are OBD inspected annually (the results of those inspections are included in the OBD section). Heavy-duty gasoline-powered vehicles newer than model year 1981 undergo TSI inspections biennially (every two years).

[3] Exempt vehicles include vehicles registered as collector series, street rods, farm vehicles, or horseless carriage.

The TSI inspection measures vehicle emissions at idle and raised (2500 rpm) idle. Hydrocarbon (HC) and carbon monoxide (CO) emissions are measured with no engine load placed on the vehicle. Nitrogen oxides (NOx) emissions are not measured as part of the TSI inspection because NOx is not produced in significant amounts at idle or when the vehicle is not under load.

TSI inspections measure the HC exhaust pollutant concentration levels in parts per million and by percent for CO, rather than in mass emissions as expressed in grams per mile. The TSI inspection may fail a vehicle for emission control equipment (gas cap) visual and pressure, excess exhaust emissions, and/or visual opacity (smoke).

TSI – Initial Inspection Results

There were 39,506 initial TSI inspections conducted in 2023. Of these, 2,224 vehicles failed the initial TSI inspection, resulting in a TSI initial failure rate of 5.63%.

This includes failures for emission control equipment (gas cap) visual and pressure, excess exhaust emissions, and/or visual opacity (smoke). Of the 2,224 vehicles that failed, 1,949 vehicles failed for excess exhaust emissions, or an exhaust emissions failure rate of 4.93%.

Figures 8, 9, and 10 show failure rates by model year, along with the average emissions of passing and failing vehicles by pollutant.

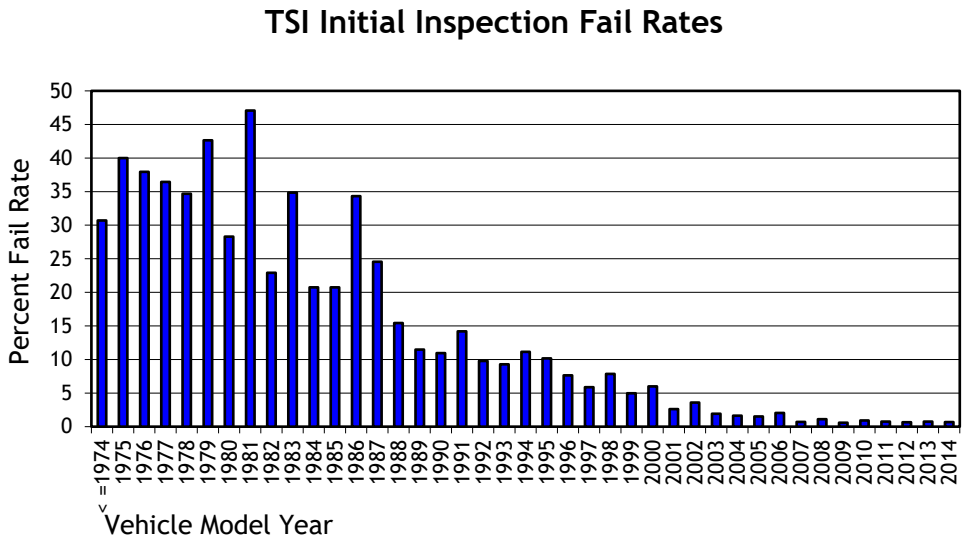


Figure 8: TSI Initial Inspection Fail Rate by Model Year

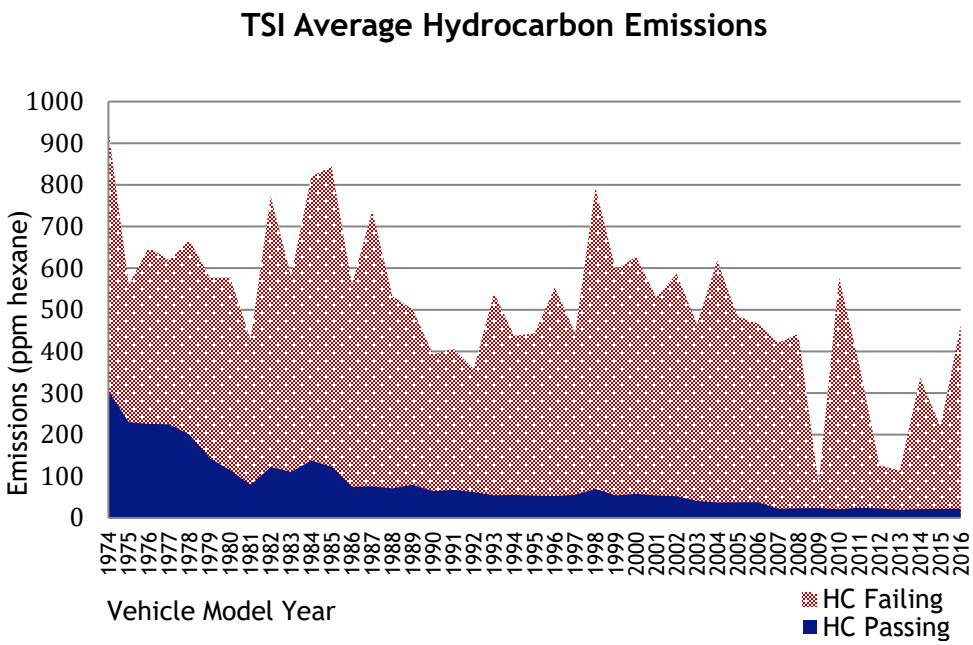


Figure 9: TSI Inspection Average Hydrocarbon by Model Year

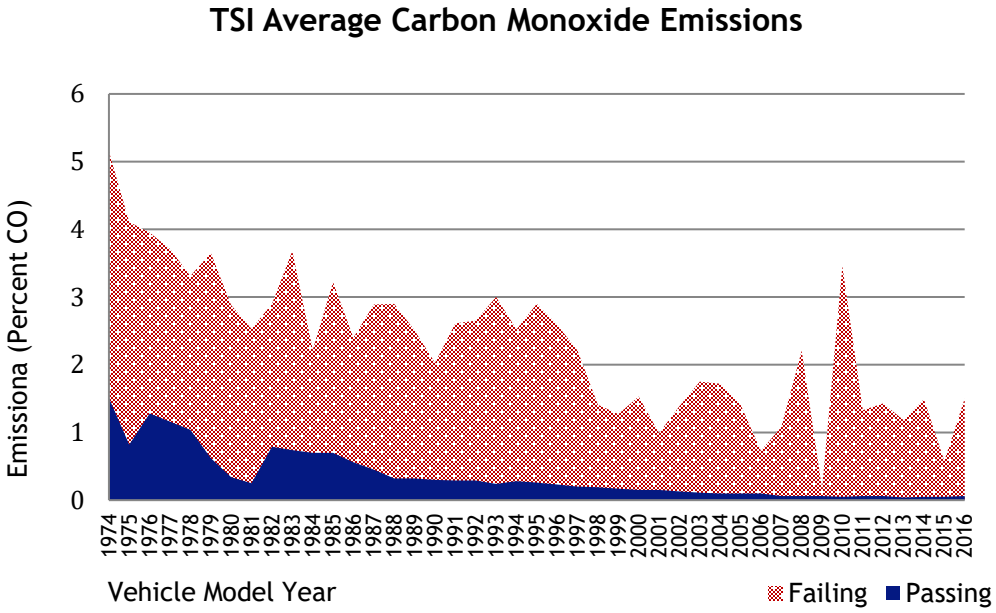


Figure 10: TSI Inspection Average Carbon Monoxide by Model Year

TSI - Visual Inspection Results

All vehicles undergoing a TSI inspection are subjected to a visual inspection of emissions control equipment (gas cap).

TSI – Multiple Retests

Vehicles that fail an inspection are required to make repairs and undergo another inspection. Some of the vehicles that fail the initial TSI inspection fail the first post-repair inspection as well.

In 2023, 1,877 vehicles were given a TSI post-repair inspection. Of these vehicles, 772 failed the post-repair inspection resulting in a 41.13% TSI retest failure rate. These vehicles are subject to further emissions re-inspection. Additional information on retest activity is available in the Idle Retest Frequency Report in Appendix C6.

TSI - Post-Repair Inspection Results

Vehicles that fail their emissions inspection generally have much higher emissions than vehicles that pass. The reduced emissions from repairing these vehicles generates the program's air quality benefit.

Tables 4a and 4b show the average emissions (in part per million and percent) at idle and raised idle (2500 rpm) from all vehicles that failed the initial TSI inspection and received a retest, average emissions from vehicles that passed a retest and the percent reduction by pollutant the percent reduction by pollutant and vehicle type.

Table 4a: TSI Passed Retest Inspection Results: Hydrocarbon (HC) Emissions

	Failed Initial Idle	Failed Initial 2500	Passed Retest Idle	Passed Retest 2500	% Reduction Idle	% Reduction 2500
Cars	672.36 ppm	531.41 ppm	149.99 ppm	144.42 ppm	71.80 %	65.51 %
Trucks	710.10 ppm	505.67 ppm	153.63 ppm	145.97 ppm	74.91 %	66.13 %
Total	**701.97 ppm**	**511.21 ppm**	**152.96 ppm**	**145.69 ppm**	**74.39 %**	**66.02 %**

Table 4b: TSI Passed Retest Inspection Results: Carbon Monoxide (CO) Emissions

	Failed Initial Idle	Failed Initial 2500	Passed Retest Idle	Passed Retest 2500	% Reduction Idle	% Reduction 2500
Cars	3.81 %	3.69 %	.66 %	1.49 %	79.40 %	52.49 %
Trucks	2.95 %	2.55 %	.84 %	1.18 %	68.16 %	47.52 %
Total	**3.14 %**	**2.80 %**	**.80 %**	**1.24 %**	**70.66 %**	**48.71 %**

Gas Cap Inspection Results

All three inspection procedures (OBD, TSI and IM240) include a visual and pressure inspection of gas caps. Inspectors first verify that a gas cap is present and if so, the gas cap is given a pressure test. To test its pressure, the gas cap is connected to a device that pressurizes the cap. The device measures the decay of pressure over time to determine if there is a fuel vapor leak. If the gas cap is missing or if the pressure decay exceeds the standard, then the gas cap fails the inspection and the customer is required to install a functional gas cap.

Replacing faulty gas caps reduces hydrocarbons venting to the atmosphere, which is a factor in ground-level ozone formation. The EPA's emissions model, MOVES, estimates that a functional gas cap program removes approximately one ton of hydrocarbons (HC) per day in Colorado.

Table 5 shows the gas cap inspection results by inspection type.

Table 5: Gas Cap Inspection Results

	Total Vehicles Inspected for Gas Cap	Total Vehicles Pass	% Pass	Total Vehicles Fail	% Fail
OBD	357,184	349,174	97.76%	8,010	2.24%
IM240	519,930	497,465	95.68%	22,465	4.32%
TSI	2,701	2,391	88.52%	310	11.48%
TOTAL	**879,815**	**849,030**	**96.50%**	**30,785**	**3.50%**

Additional information on gas cap failure rates is available in the following reports:

- Appendix A3: Initial OBD Inspection Failure Report
- Appendix B4: IM240 Initial Failure for Other Report
- Appendix C4: Idle Initial Failure for Other Report

Figure 11 shows the percentage of gas cap failures by model year.

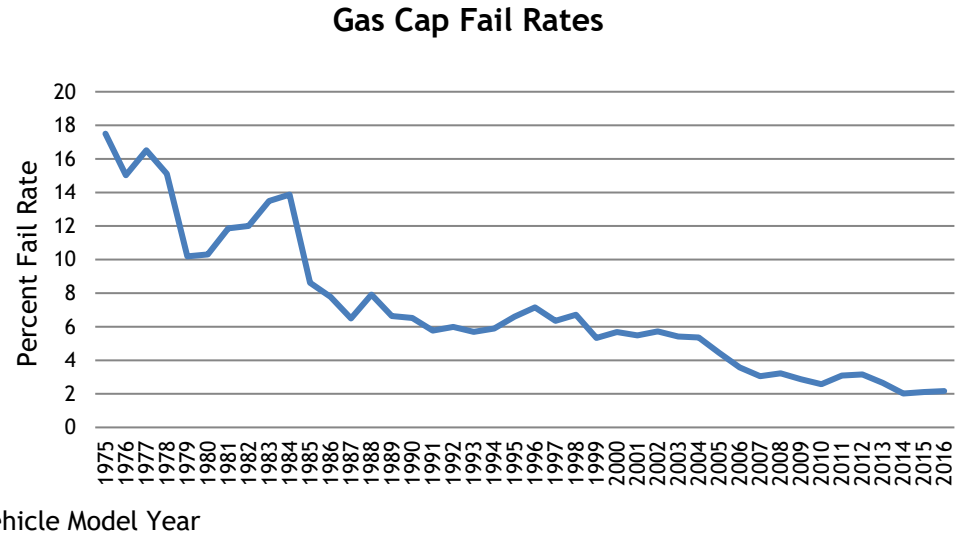


Figure 11: Gas Cap Fail Rates by Model Year

Unresolved Vehicles

Unresolved vehicles are the vehicles that fail the initial inspection, never receive a passing inspection, and disappear from the registered fleet during the time period of this report.

In 2023, out of the 67,844 initial failures, 16,881 vehicles (24.88%) did not receive a passing retest by March 31, 2024.

It is estimated that the vast majority of these vehicles are successfully repaired outside of the analysis period (calendar year 2023), move out of the program area or are retired.

Smoking Vehicles

Smoking vehicles tend to be excessive emitters. They are of concern to the state for overall air quality reasons, and to the nearby motorists and public exposed to emissions from these vehicles for public health reasons.

CDPHE operates a Smoking Vehicle Hotline for motorists to report any excessively smoking vehicles they observe. Once reported, CDPHE provides registered owners of these vehicles with a brochure informing them that if their vehicle emits any visible smoke during their next regular emissions inspection, it will fail. In 2023, CDPHE received 1,892 reports of smoking vehicles.

The brochure is designed to educate owners on the causes of visible smoke, its health effects, and potential danger, not only to other motorists but also to those in the smoking vehicle. The brochure also provides information regarding where a motorist may receive diagnostic help in determining and repairing their vehicle's problem. Although the smoking vehicle program is voluntary, the state encourages smoking vehicle owners to take advantage of diagnostic services available at state-operated emissions technical centers.

Vehicle information reported on the hotline is also transferred to Air Care Colorado lane inspectors, alerting them that the vehicle they are inspecting has been reported as a smoking vehicle. If the vehicle is smoking at the time of the inspection, then it fails the emissions inspection. In 2023, 842 vehicles failed the visible smoke portion of the emissions inspection (149 OBD inspections, 618 IM240 inspections and 75 TSI inspections).

Waivers

A Certificate of Emissions Waiver (or "waiver") is an emissions control document that satisfies the emissions inspection requirement for a vehicle for one inspection cycle, even though the vehicle was unable to meet emissions standards.

There are three types of waivers:

1. A ***repair cost waiver*** may be issued for a vehicle which fails an emissions inspection, receives emissions-related repairs that meet the minimum repair cost limit ($715 for model year 1968 and newer vehicles, and $75 for 1967 and older vehicles), and then fails a subsequent emissions inspection. In order to qualify for a repair cost waiver, repair expenses must pertain to the specific causes of the emissions failure. Documentation of this fact is required. This type of waiver is referenced in C.R.S. 42-4-306(7)(a)(II)(A) and AQCC Regulation No. 11. In 2023, there were 379 repair waivers issued by the Department of Revenue (DOR).
2. An ***economic hardship waiver*** may be issued once in each vehicle's lifetime if the vehicle owner has no other means of transportation and is receiving a recognized form of economic assistance. This type of waiver is referenced in C.R.S. 42-4-306(7)(a)(II)(C) and AQCC Regulation No. 11. In 2023, there were 308 economic hardship waivers issued by DOR.
3. A ***diagnostic waiver*** may be issued for a vehicle that fails a retest, has not met the repair cost limit, and a complete and documented physical and functional diagnosis of the vehicle (performed at one of the program's emissions technical centers) concludes that no additional emissions-related repairs would be effective or needed. This type of waiver is referenced in C.R.S. 42-4-310(1)(d)(IX). In 2023, there were 22 diagnostic waivers issued by CDPHE technical center staff.

Waivers are not issued for vehicles that missing emissions control equipment or have tampered OBD systems and/or are visibly smoking. Vehicles that fail the gas cap inspection are also not eligible to receive a waiver.

A vehicle owner can request a waiver by calling the Division of Motor Vehicles at the Department of Revenue. As part of the waiver process, a State Emissions Technical Center technician may evaluate the vehicle to both verify the aforementioned criteria and make useful repair recommendations to the vehicle owner.

Additional information on waivers is available in the Department of Revenue's section of this report.

Clean Screen Program

The state operates a roadside remote sensing based emissions testing program called the Clean Screen Program or RapidScreen. This program permits vehicles that have been seen two or more times in a year, and have met certain rigorous emissions standards, to pass a remote sensing emissions test as an alternative to the standard inspection at an emissions inspection station.

On average, 13 units were deployed Monday through Friday within the nine-county program area. These units operated a total of 19,652 hours in 2023, collecting approximately 4.5 million valid emissions records.

In 2023, the overall remote sensing evaluated fraction of testable vehicles was 27.52% (based on 880,138 total IM eligible 1982 and newer light duty vehicles in the fleet, with 242,189 unique eligible vehicles assessed by remote sensing devices). The number of unique eligible vehicles evaluated includes both vehicles that did and did not pass Clean Screen standards.

Of the 242,189 vehicles evaluated by remote sensing units, 216,601 (89.43%) were identified as passing Clean Screen standards.

To evaluate the Clean Screen program, two percent of the vehicles passing Clean Screen standards are required to be tested in the traditional manner at one of the emissions inspection stations. In 2023, 211,566 vehicles were issued a Clean Screen notice. Of those Clean Screen notices, 171,251 or 80.94% were redeemed. The redeemed numbers are calculated from each individual vehicle that passed Clean Screen requirements whose owners chose to use the passing Clean Screen results to register their vehicles in lieu of getting the traditional emissions inspections.

Clean Screen Average Vehicle Emissions Results

The Clean Screen Program measures vehicle emissions under actual operating conditions. While there is variability to these measurements, when aggregated as a group, vehicle emissions trends may be observed. The following three graphs detail the emissions results of remote sensing monitoring for each of the three pollutants measured Hydrocarbon (HC), Carbon Monoxide (CO) and Nitrogen Oxides (NOx) grouped by vehicle model year.

The fleet average emissions are shown by the green dashed line in each of the charts. It represents the average emissions for the model year 1982 and newer vehicle fleet that are evaluated through remote sensing. As defined on the charts, average fleet emissions for all three pollutants (HC, CO, and NOx) show a pronounced downward trend to the newest vehicles that are the cleanest portion of the fleet.

The blue solid line indicates the average emissions by model year for vehicles that met all the Clean Screen requirements and pass Clean Screen standards. It is noticeable that the average emission rates are much lower than the fleet as a whole, reflecting the tighter emissions standards these vehicles must meet.

The red dotted line shows the average emissions by model year for vehicles that qualified to participate in the Clean Screen Program but did not pass the Clean Screen standards.

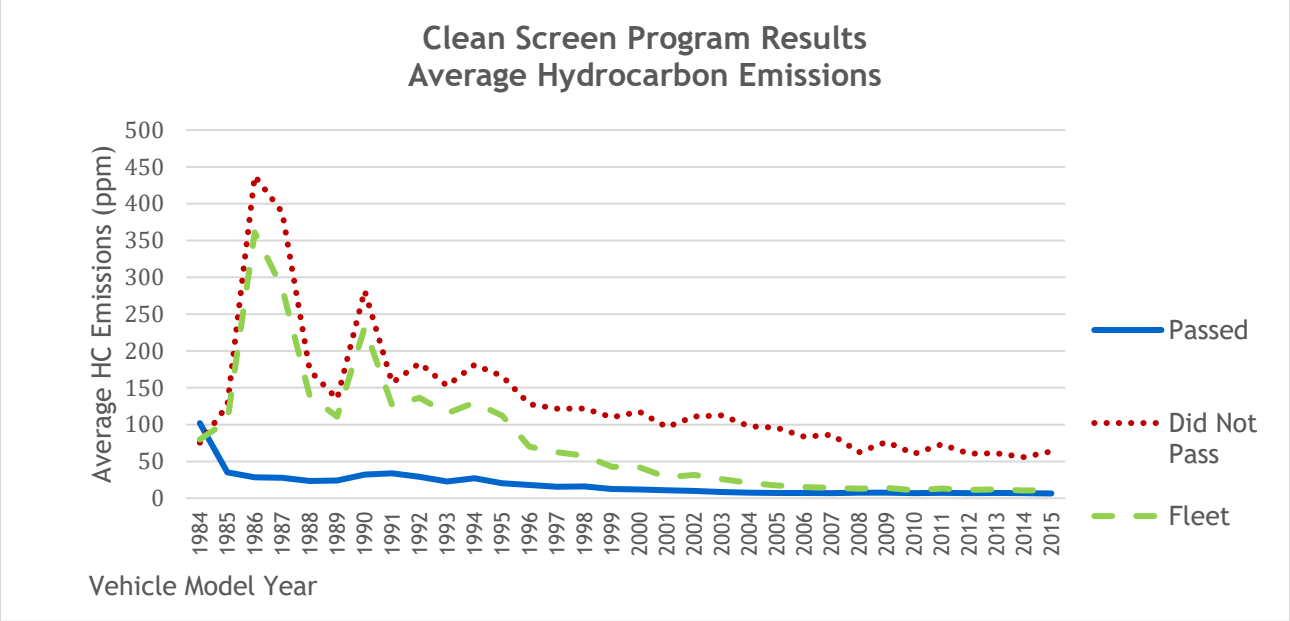


Figure 12: Clean Screen Program Results - Average Hydrocarbon Emissions by Model Year

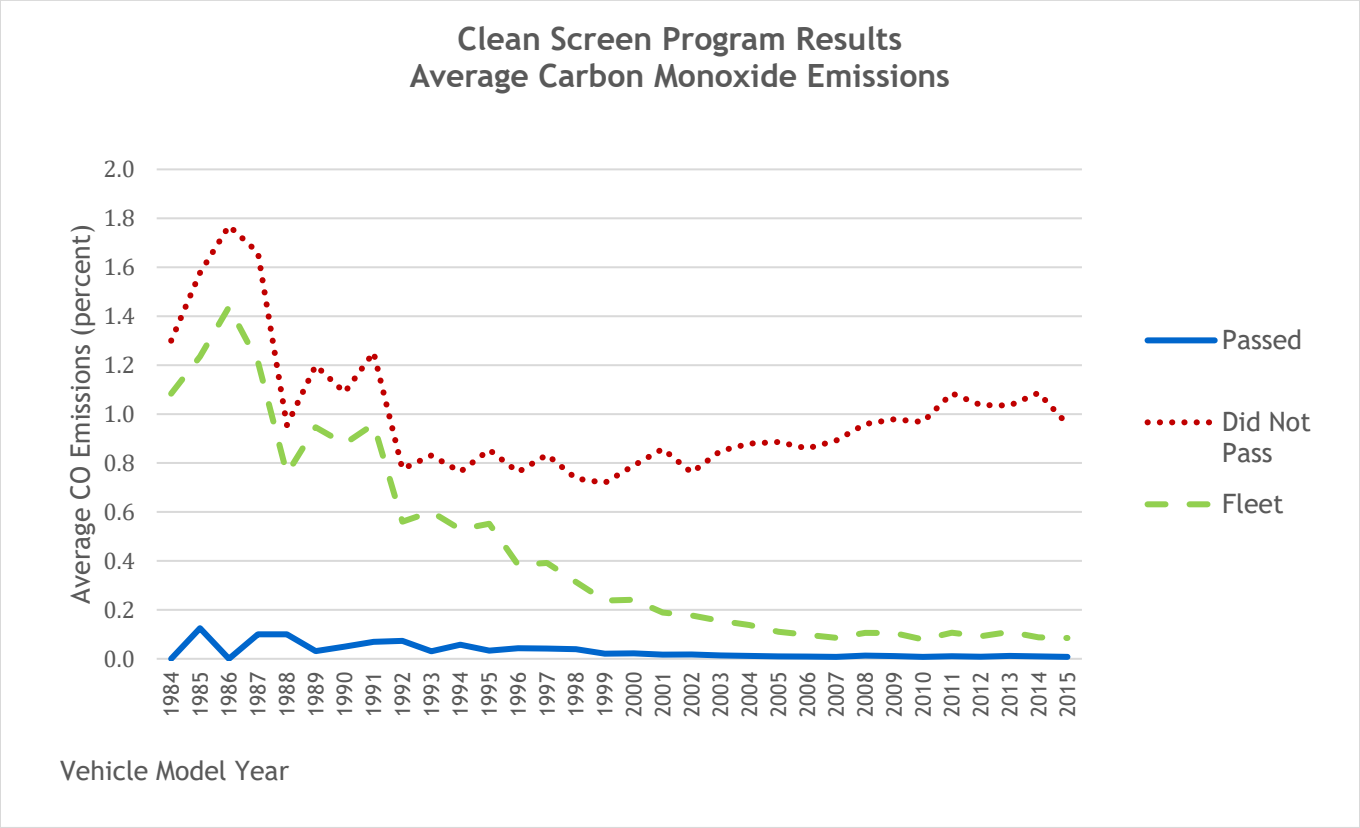


Figure 13: Clean Screen Program Results - Average Carbon Monoxide Emissions by Model Year

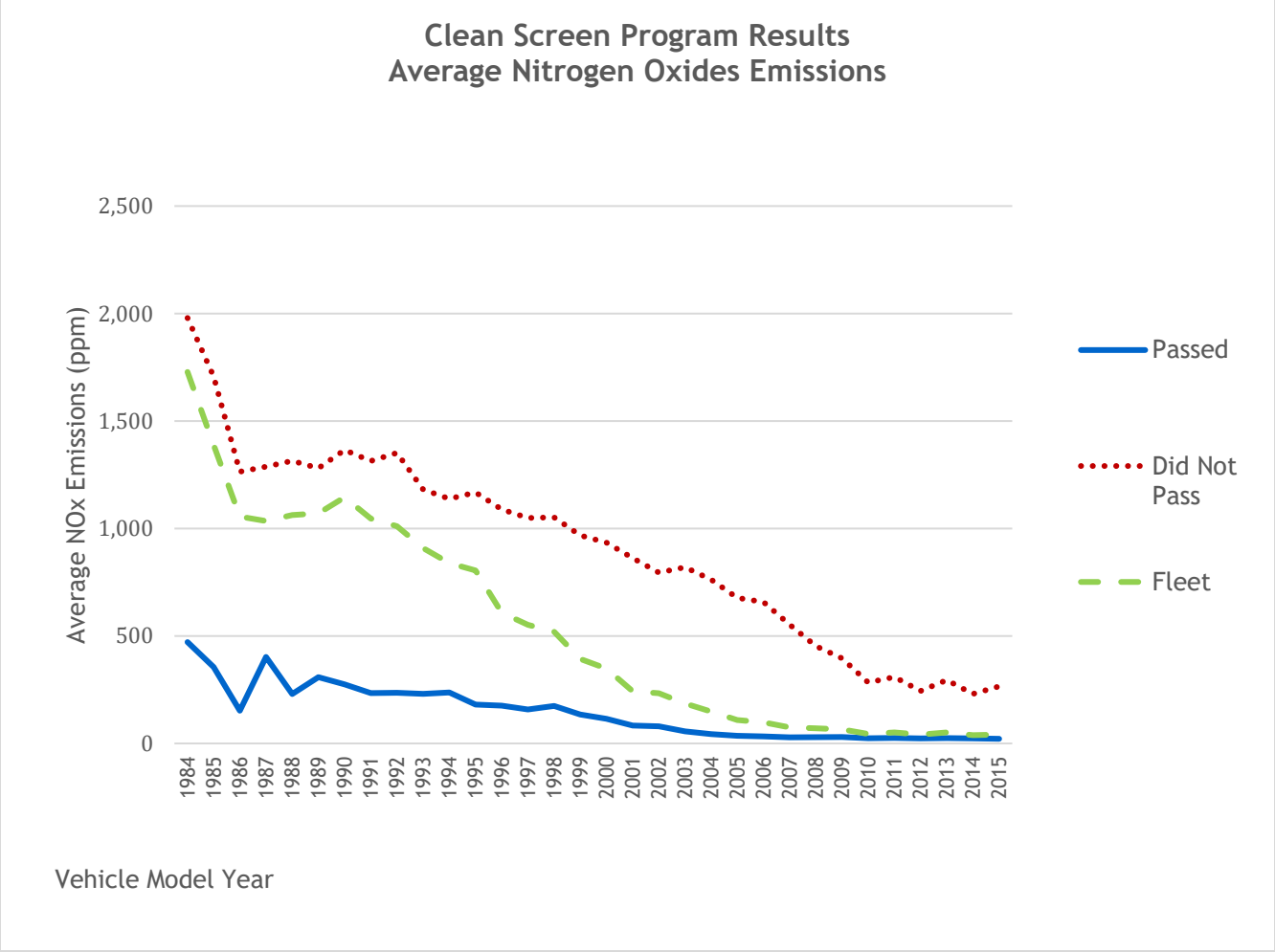


Figure 14: Clean Screen Program Results - Average Nitrogen Oxides Emissions by Model Year

Cost Effectiveness of the AIR Program

As with any public program, it is important to evaluate the value that the AIR Program provides in relation to the overall program costs. Such analysis depends on assumptions about the program design and the financial impact to the motorist.

The state looks at the program's benefit as measured in tons per day of emissions reduced and the daily program operating costs. The emissions benefit is compiled using the latest version of the EPAs' MOVES4 model. The analysis is completed using methodologies consistent with that used in the development of the State Implementation Plan.

This analysis included the inspection costs, the number of vehicles inspected, registration fees associated with the operation of the AIR Program, the average cost of repairs for vehicles undergoing repair, and the fuel economy benefit obtained from repairing excessively emitting vehicles. Motorist inconvenience costs are also included.

Cost of Inspections

The total cost of inspections is defined as the cost of inspecting an individual vehicle multiplied by the number of vehicles undergoing paid inspections. The cost of OBD, IM240, and Two Speed Idle (TSI) emissions inspections for 1982 and newer vehicles is $25.00 per inspection. Inspections for 1981 and older vehicles cost $15.00 per inspection.

Failing vehicles are entitled to a free retest within ten (10) calendar days after the initial inspection. Subsequent inspections (third, fifth, etc.) are considered to be new inspections requiring additional payment. In addition, some motorists undergo inspection after the ten-day period and must pay for a new inspection. This cost is included in the total program inspection costs.

Clean Screen inspections cost $25.00 for eligible vehicles whose owners wish to participate in this program. This fee is then added to the vehicle's registration renewal.

In 2023, there were 1,108,220 initial inspections conducted. Of these inspections, 357,184 were initial OBD inspections, 540,279 were initial IM240 inspections, and 39,506 were initial TSI inspections. In addition, there were 171,251 owners of vehicles that redeemed a Clean Screen inspection.

The state estimates that the program's inspection costs amounted to $28,060,880 in 2023. Table 6 shows overall inspection costs per type of inspection.

Table 6: Overall Inspection Cost by Inspection Type

Inspection Type	Initial Inspections	Total Paid Inspections	Cost of paid inspections
OBD	**357,184**	**359,591**	**$8,989,775**
IM240	540,279	552,560	$13,814,000
TSI	39,506 1981 and older: 2,907 1982 and newer: 36,599	40,358 1981 and older: 3,312 1982 and newer: 37,046	$975,830 1981 and older: $49,680 1982 and newer: $926,150
Clean Screen	171,251	171,251	$4,281,275
TOTAL	**1,108,220**	**1,123,760**	**$28,060,880**

Registration Fees

As part of the total vehicle registration cost, the state collects a $2.20 vehicle emissions fee from gasoline motor vehicles registered in the AIR Program area. This helps to fund AIR Program operations, program administration, motorist and repair industry assistance, outreach activities, and county registration activities. This fee is shared among county clerks that administer vehicle registration renewals and with the Colorado Department of Revenue and Colorado Department of Public Health and Environment that design, administer, evaluate, and enforce the program.

There were an estimated 3,149,626 fee-eligible gasoline-powered vehicles registered in the enhanced nine-county AIR Program area as of December 31, 2023. This equates to a total registration-fee cost of $6,929,177 for the entire program.

Repair Costs

Vehicles that failed their emissions inspections are required to undergo repair. Repair costs vary depending on the types of repairs and the shops performing them. To determine repair costs, the state collects data on the repair costs for failing vehicles.

Beginning with this 2023 program year analysis, emission repair cost data is derived from the average of the latest three-year emissions inspection lane data. Using this source of data, in 2023, the average emissions repair cost for vehicles failing the OBD inspection was $461.26 and for the IM240 inspection was $621.55. For vehicles receiving the TSI inspection, the average repair cost was $279.74 for model year 1981 and older vehicles, and $512.89 for model year 1982 and newer vehicles. For vehicles failing the gas cap portion of the inspection, the assumed replacement gas cap cost is $25 each.

Of the OBD inspected vehicles, 21,057 failed the initial OBD inspection. Of these vehicles, 13,767 failed for the MIL commanded on and/or visual MIL inspection, and/or visual smoke (opacity). There were 8,010 OBD inspected vehicles that failed the gas cap pressure inspection. Vehicles that failed both the OBD and gas cap inspection are included in both groups. Of the IM240 inspected vehicles, 44,563 failed the initial inspection. Of these vehicles, 22,098 failed for excess emissions only, or excess emissions and/or visual smoke (opacity). There were 22,465 IM240 inspected vehicles that failed the gas cap inspection. Vehicles that failed for both excess emissions and gas cap inspection are included in both groups.

Of the TSI inspected vehicles, 2,224 failed the initial inspection. Of these vehicles, 2,019 failed for excess emissions only, or excess emissions and/or visual smoke (opacity). There were 310 TSI inspected vehicles that failed the gas cap inspection. Vehicles that failed for both excess emissions and the gas cap inspection are included in both groups. Table 7 details the total repair costs by inspection type.

Table 7: Total Repair Costs by Inspection Type

	Excess Emissions/Visual/ Opacity Count	Excess Emissions/Visual /Opacity Cost	Gas Cap Count	Gas Cap Cost	TOTAL Cost
OBD	13,767	$6,350,223	8,010	$200,250	$6,550,473
IM240	22,098	$13,734,911	22,465	$561,625	$14,296,536
TSI	2,019 1981 older: 934 1982 newer: 1,085	$817,761 1981 older: $261,274 1982 newer: $556,486	310 1981 older: 232 1982 newer: 78	$7,750 1981 older: $5,800 1982 newer: $1,950	$825,511 1981 older: $267,074 1982 newer: $558,436
TOTAL	**37,884**	**$20,902,895**	**30,785**	**$769,625**	**$21,672,520**

Fuel Savings

Vehicles that received emissions-related repairs achieve better fuel economy on average. The amount of fuel economy improvement is highly dependent on the individual vehicle, the type of repair, and the effectiveness of that repair. When a vehicle receives an IM240 inspection, fuel economy is measured. Based on Colorado's IM240 testing, a fuel economy improvement of 7.12% was achieved for all vehicles failing their initial IM240 test and passing their final retest.

Using the estimated fuel savings, and assuming that these repairs prevent excessive emissions for the entire two-year emissions testing cycle, fixing exhaust and gas cap failures result in an estimated savings of 1.5 million gallons of gasoline. Using a 2023 average cost of $3.36 per gallon[4], vehicles undergoing emission repairs saved an estimated $5,236,741 on gasoline as a result of reduced fuel usage.

Motorist Inconvenience Costs

Vehicle owners incur an inconvenience cost, which generally represents the time and effort expended in order to complete the emissions test at an emissions inspection center. These costs include:

- Vehicle operation costs associated with travel to and from the emissions inspection center.
- Time spent traveling to and from an emissions inspection center.
- Time waiting for and during the emission test.

To calculate direct vehicle operation costs, an average cost of 65.5 cents per mile was assumed, representing the 2023 IRS standard business mileage rate. The average travel to an inspection center was seven miles. Based on the number of vehicles receiving inspections, average per mile cost of operation, and average travel to and from an emissions inspection center, a vehicle operation cost of $9,179,161 was calculated.

Travel to and from an emissions inspection center averaged 22.24 minutes. Assuming half the hourly consumer wage rate of $36.50 per hour[5], this equates to a motorist travel time cost of $6,771,425.

The average motorist experienced an average wait time before their vehicle was inspected of 15.37 minutes in 2023. Applying the same discounted average hourly consumer wage as above to the total wait times, produces a motorist wait time cost of $4,679,002.

For 2023, the average emissions inspection took 11.75 minutes to complete. Once again applying the discounted hourly consumer wage rate to total test time, results in a motorist test time cost of $3,578,544.

Inconvenience cost is the total of vehicle operation costs and motorist personal time costs, or a total of $24,208,131.

[4] Denver/Front Range annual average from the U.S. Energy Information Administration.
[5] Based on U.S. Bureau of Labor Statistics May 2023 state occupational employment and wage estimates for Colorado.

There are no inconvenience costs for the Clean Screen inspection. Vehicles are screened during on-road travel that incurs no inconvenience cost to the motorist. Vehicle owners are notified by the receipt of their vehicle registration renewal postcard and pay for the screening with the registration renewal payment.

Overall Program Costs

Overall program costs take all of the above mentioned costs and savings into consideration. These include inspection fees, vehicle registration fees, repair costs, and fuel economy savings, as well as motorist inconvenience costs. The overall cost of the program is stated to be the aggregate of all these individual costs and savings. Table 8 details these costs, and the overall cost of the program.

Table 8: Overall AIR Program Cost

AIR Program Component	Cost
Inspection Fees	$28,060,880
Registration Fees	$6,929,177
Repair Costs	$21,672,520
Fuel Economy Savings	-$5,236,741
Inconvenience Costs	$24,208,131
Total	**$75,633,967**

Emission Benefits

As stated previously, the detection and repair of high emitting vehicles result in reduced automotive emissions. This leads to an overall air quality benefit. Based on the EPA's MOVES4 model, Colorado's current AIR Program reduces total gaseous hydrocarbon (TGH) emissions by 3.02 tons per day (tpd), carbon monoxide (CO) emissions by 62.25 tpd, nitrogen oxides (NOx) emissions by 2.52 tpd, and overall ozone precursors (TGH + [1/60]CO + NOx) by 6.58 tpd. Table 9 details the overall emissions program benefit by pollutant developed by the EPA's MOVES model.

Table 9: MOVES Emission Inventories and Program Benefit

	TGH tpd	CO tpd	NOx tpd	TGH + (1/60)CO + NOx tpd
No IM	38.92	481.07	42.56	89.50
Current IM	35.90	418.82	40.05	82.93
TPD Benefit	3.02	62.25	2.52	6.58
%Benefit	7.76	12.94	5.92	7.35

Both total gaseous hydrocarbon (TGH) and nitrogen oxide (NOx) emissions are ozone precursors. Carbon monoxide (CO) can be a weak ozone precursor. Combining these emissions prorated on their generalized ozone forming ability gives an overall ozone precursor number. Carbon monoxide emissions are discounted due to their lower generalized ozone formation ability. The combined TGH + (1/60) CO + NOx ozone precursor reduction is equal to 6.58 tons per day. The generalized TGH + (1/60) CO + NOx formula has been in use with California and other states to quantify ozone precursor emissions from motor vehicles. For this analysis, projections assume the use of 7.8 lb. Reid Vapor Pressure gasoline with a one pound waiver for ethanol and 100% market share for ethanol-blended gasoline, the .

Greenhouse-Gas (GHG) emissions are reduced from repaired motor vehicles in terms of emissions such as methane that are reduced through better catalytic converter function, as well as carbon dioxide emissions from improved fuel economy. From the given fuel economy improvements stated in the cost section, it is estimated that 38.40 tons per day of carbon dioxide emissions are prevented from repaired vehicle through fuel economy improvements.

Cost-Effectiveness

The AIR Program's cost-effectiveness is the ratio of the program's cost to its benefits. As stated, the state calculates the entire program cost to be approximately $75.63 million in 2023. This cost includes inspection costs, repair costs, motorist inconvenience costs and registration renewal fees used to fund administrative expenses.

The State estimates the cost-effectiveness of the inspection program at $31,492 per ton of ozone precursors removed from the AIR Program area. In addition, while not a focus of this program, the AIR Program does produce a greenhouse gas benefit that has not been fully defined in this analysis. Table 10 gives the specific breakdown of cost per ton for ozone precursors that is the focus of this program.

Table 10: AIR Program Cost Effectiveness in Dollars per Ton

Emission	Cost/Benefit ($/ton)
TGH	$68,615
CO	$3,329
NOx	$82,229
TGH + (1/60) CO + NOx	$31,492

2023 Annual Report From the Colorado Department of Revenue

The Colorado Department of Revenue (DOR), in conjunction with the Colorado Department of Public Health and Environment (CHPHE), continues to operate the enhanced Colorado Vehicle Emissions Inspection and Maintenance (I/M) Program, which has been in place since 1995, designed to meet the requirements of the federal "Clean Air Act", as amended by the federal "Clean Air Act Amendments of 1990", 42 U.S.C. sec. 7401 et seq. DOR maintained quality assurance, auditing, licensing, and enforcement activities consistent with Colorado Revised Statutes (C.R.S.) and the Code of Colorado Regulations (C.C.R.) during 2023.

2023 Audit Results

Pursuant to C.R.S. 42-4-305(6)(a), DOR oversees an ongoing quality assurance program. The objective of this program is to discover, correct, and prevent fraud, as well as to ensure proper calibration of emissions test equipment and adherence to proper testing procedures.

Record Audits

Pursuant to C.R.S. 42-4-305(6)(b)(I), DOR performed 228 record audits on all contractor-operated inspection centers and inspection-only facilities. Record audits are used to identify and correct anomalies in the vehicle inspection database, as well as to prompt for additional risk-based equipment audits. The record audit process also includes an ongoing evaluation of approximately 4.7 million vehicles currently registered statewide; this ensures that county clerks maintain a reasonable level of record accuracy.

Performance Audits

Pursuant to C.R.S. 42-4-305(6)(b)(I), DOR executed overt performance audits which were conducted contemporaneously with equipment audits at the enhanced inspection centers, resulting in 582 performance audits completed. Thirty-six overt performance audits were completed at the independent inspection-only facilities and fleet testing facilities.

Equipment Audits

Pursuant to C.R.S. 42-4-305(6)(e)(I), DOR executed overt performance audits twice per year for each testing lane.

During 2023, 212 initial lane equipment audits were performed on 97 contractor-operated enhanced inspection lanes, 2 initial equipment audits performed at 1 independent inspection only stations, and 40 initial equipment audits performed at 19 operational fleet inspection stations. There were 5 occasions where a fleet testing facility was inoperable because of equipment failure. An equipment audit was unable to be conducted until repairs were completed. The facility was then returned to service.

There were 114 initial equipment audit failures (see Table 1), 22 of which resulted in the suspension of a testing lane. (Note: A lane is suspended and unable to test until its failures are mitigated.)

Table DOR-1 – Audit Failures by Equipment Category (2023)

Category	Number of violations
Emissions Analyzer	92

Category	Number of violations
Dynamometer	18
Gas Cap Analyzer	4

Covert Audits

Pursuant to C.R.S. 42-4-305(6)(c)(I), all enhanced inspection centers were subject to covert audits, using an unmarked motor vehicle, at least once per year per number of inspectors at each inspection-only facility and enhanced inspection center. All covert vehicles used in the audit process were either tampered to fail the visual emission component inspection or testing inspector procedure. Possible tampers included (but were not limited to) tamper the OBD II Connector (DLC) or and Check Engine lights (MIL).

Throughout 2023, 247 covert inspections were conducted at enhanced inspection centers, resulting in 161 tests conducted properly and 86 were deficient. In these covert tests, emissions control components were not correctly identified, resulting in 19 emission control component violations. Table 2 categorizes these violations and the number of times components were incorrectly identified. In 14 of the 93 improper tests, the failing vehicles received passing results.

Table DOR-2 – Emission Components Incorrectly Identified During Covert Audits (2023)

Emission Component Tampered	Number of Times Incorrectly Identified
Check Engine Light	15
No Tie-Down Used	32
Improper Test Performed	28
Dongle Not Removed	2
No Pre-Damage Form	12

Risk-Based Audits

Risk-based audits were prompted by suspicious emissions testing activity, data analysis, or consumer complaints.

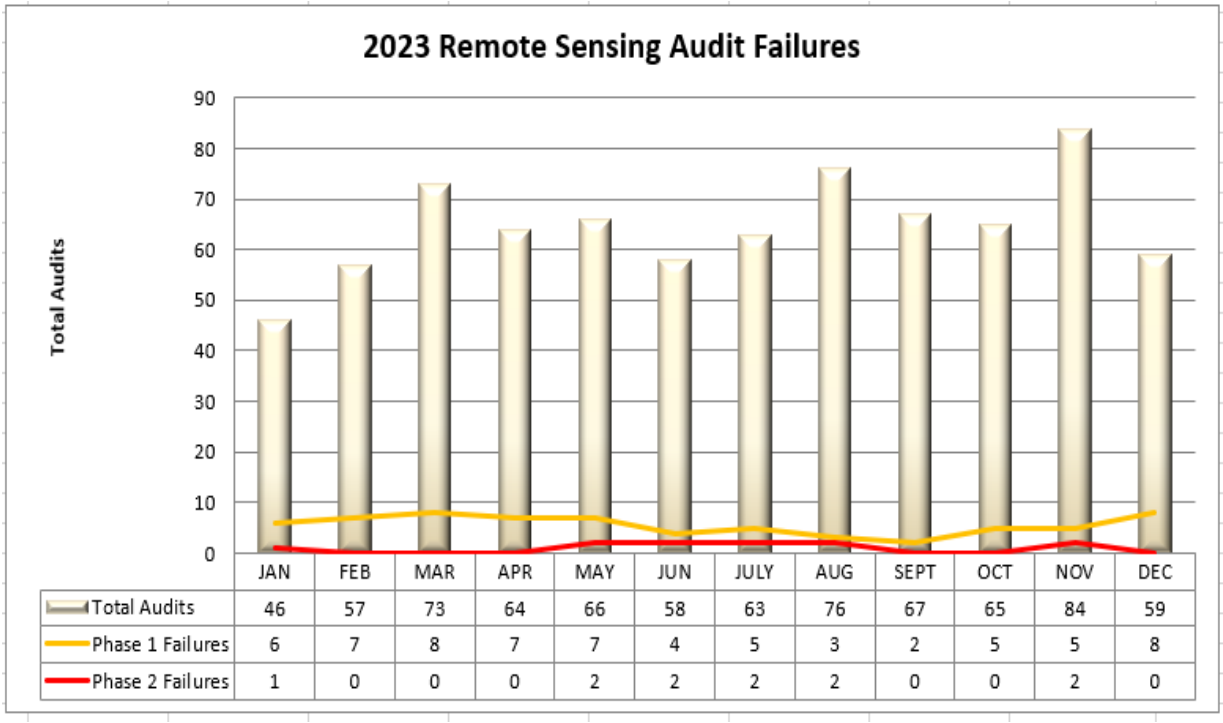
Utilizing the above-named methods of detection, DOR conducted 768 risk-based equipment audits. While there were 59 initial equipment failures, 59 issues were resolved on the retest. Three risk-based covert audits were conducted, resulting in zero violations.

Remote Sensing Audits

DOR performed Remote Sensing (i.e., Clean Screen, Rapid Screen, or RSD) mobile emissions testing equipment audits for quality assurance purposes (see Figure 1). A Phase I audit includes 9 gas readings from 3 different known gas blends. In the event that a gas reading is outside the allowable tolerance, a Phase II audit is initiated. A Phase II audit includes 6 additional gas readings from the specific gas blend that failed the Phase I audit.

DOR performed 858 audits in 2023, resulting in 74 Phase I failures, or a 8.62% initial failure rate. Of the 74 Phase I failures, 11 units failed the Phase II audit and were suspended pending repairs and/or CDPHE evaluation. Note: The overall audit result is not a failure unless a secondary audit (Phase II) also fails.

Figure DOR-1 – Remote Sensing Audit Failures (2023)



	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC
Total Audits	46	57	73	64	66	58	63	76	67	65	84	59
Phase 1 Failures	6	7	8	7	7	4	5	3	2	5	5	8
Phase 2 Failures	1	0	0	0	2	2	2	2	0	0	2	0

2023 Enforcement Results

Hearings and Fines

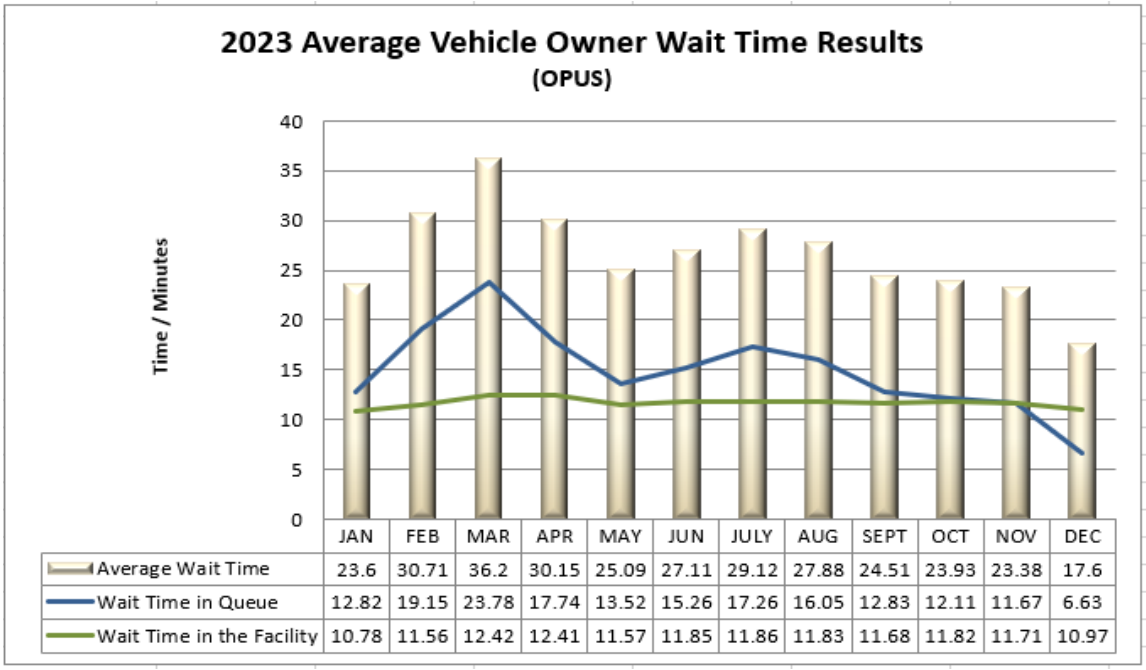
In 2023, 105 hearings were scheduled as a result of improper vehicle emission inspections. Hearing proceedings resulted in 13 inspectors losing employment, with no inspector licenses revoked. Total fines assessed $42,900 as a result of improper vehicle inspections.

Additionally, 6$4,190,575 was assessed as a result of wait-time violations. These violations occurred when motorist wait times at contractor inspection centers exceeded 15 minutes when averaged over a two-hour period. The wait-time calculation includes time spent in the queue and test time, whichever is greater. The fines assessed were consistent with C.R.S. and the terms of the contract held with OPUS. The total of all fines assessed in 2023 was $4,233,475.

Figure 2 shows the average total motorist wait time in relation to the amount of time spent in the queue and within the facility.

Figure DOR-2 – Average Vehicle Owner Wait Time Results (2023, OPUS only)

[6] As a result of COVID-19 impacts on available staffing levels to preform testing, some wait-time relief was extended to the Contractor for 2023 in the amount of $2,887,975.



	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT	OCT	NOV	DEC
Average Wait Time	23.6	30.71	36.2	30.15	25.09	27.11	29.12	27.88	24.51	23.93	23.38	17.6
Wait Time in Queue	12.82	19.15	23.78	17.74	13.52	15.26	17.26	16.05	12.83	12.11	11.67	6.63
Wait Time in the Facility	10.78	11.56	12.42	12.41	11.57	11.85	11.86	11.83	11.68	11.82	11.71	10.97

Complaints

A total of 267 Vehicle Damage, Procedural and Statutory Non-Compliance complaints were opened against inspection stations operated by OPUS. DOR involvement in the complaint mitigation process resulted in $89,846.79 in refunds to consumers. DOR responded to 28 emissions-related complaints against auto dealerships. A total of $94,749.87 was refunded to consumers from those proceedings. Table 3 shows the 295 total complaints by category. Vehicle damage may occur when a consumer's vehicle was damaged through the negligence or omission of the contractor's agents. A Procedural Claim may occur when a consumer's vehicle was not properly inspected as directed by statute or regulation. A Statutory Non-Compliance claim may occur when a consumer experienced a violation of Title 42 (42-4-309 (6)(a)(b)(c)) of the Colorado Revised Statutes as it pertains to purchasing a vehicle without a passing emissions test or emission equipment that is required, missing, or tampered.

Table DOR-3 – Complaints Opened, by Category (2023)

Complaint Category	Number of complaints
Vehicle Damage	253
Procedural Claims	18
Statutory Non-Compliance	24

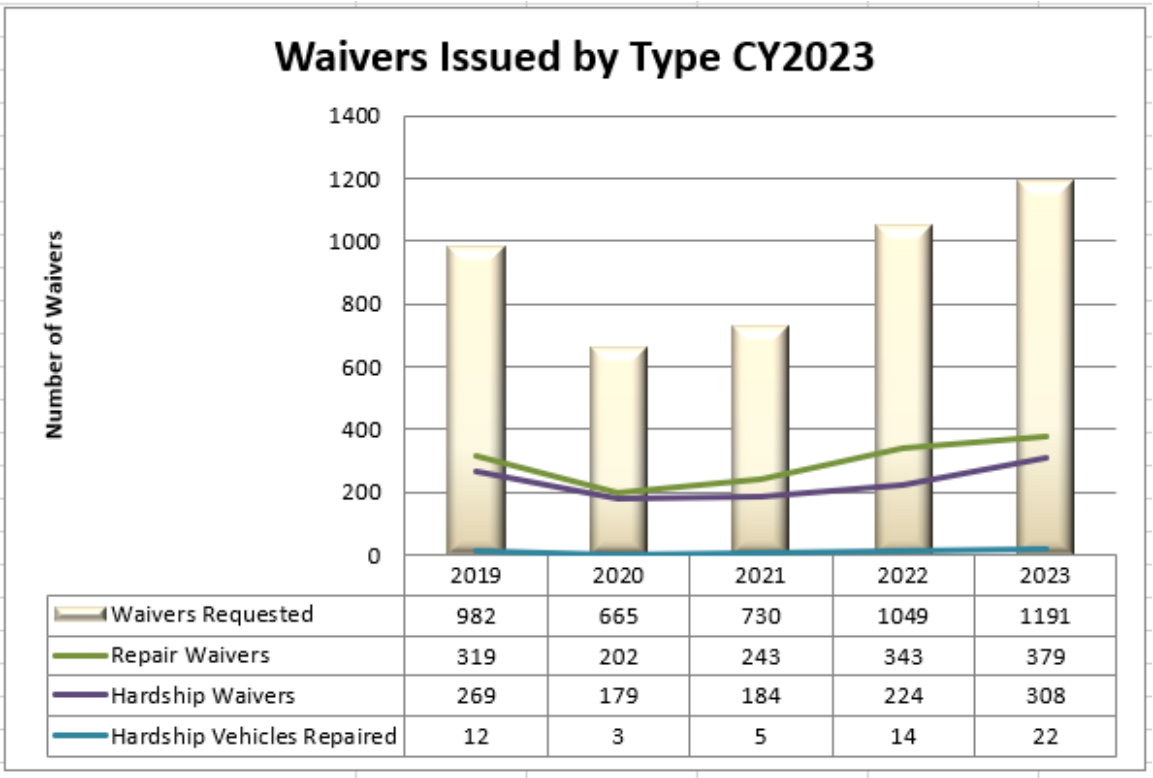
Waivers

In 2023, 1191 waiver applications were submitted to and processed by DOR. Of the 1191 applications, 32% resulted in the issuance of Repair Waivers and 26% resulted in the issuance of Economic Hardship Waivers. The remaining 42% were not issued waivers.

In 2023, the Colorado Department of Public Health and Environment, Colorado Department of Revenue, and Regional Air Quality Council (RAQC) continued to operate a Repair Assistance Program. This program provides emissions related repairs to gasoline-powered vehicles registered through counties in the Denver Metropolitan Area (Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, and Jefferson) that qualify for an Economic Hardship Waiver. As a result of this program, emissions related repairs were performed on 22 vehicles (1.85%) that otherwise would have been issued a hardship waiver.

Figure 3 shows the total amount of emission waivers requested and issued by waiver type over a five-year period.

Figure DOR-3 – Waivers Issued by Type (2019 – 2023)



	2019	2020	2021	2022	2023
Waivers Requested	982	665	730	1049	1191
Repair Waivers	319	202	243	343	379
Hardship Waivers	269	179	184	224	308
Hardship Vehicles Repaired	12	3	5	14	22

The following were the most common reasons a waiver was not issued:

- **8.39% of Waiver requests were not pursued** - after completing the waiver application, the vehicle owner withdrew the request or did not respond to requests for information or availability.
- **2.77% of Waiver requests passed inspection -** after requesting a waiver, additional repairs were made resulting in a passing emissions test. Vehicle owners are encouraged to use CDPHE's Emissions Technical Centers for a free diagnosis of their vehicle. CDPHE

technicians are often able to assist the owner and recommend minor repairs that allow the vehicle to pass the emissions inspection.

- **4.45% of Waiver requests had improper repairs to the vehicle** - repairs were performed that did not address the cause of the emissions failure. C.R.S 42-4-306(7)(b)(I)
- **13.09% of Waiver requests were tampered or emitting smoke -** when presented for a waiver, the vehicle was not equipped with the manufacturer's required emission control equipment or was emitting visible smoke above 5% opacity. C.R.S 42-4-306(7)(b)(I)
- **5.46% of Waiver requests did not meet minimum waiver limits for dollars spent to repair the vehicle -** vehicle owner had not incurred the minimum $715 in repair costs to bring the vehicle into compliance. C.R.S 42-4-310(1)(d)(VI)
- **1.85% of Waiver request vehicles were repaired through CDPHEs Repair Assistance Program for vehicles otherwise eligible for Hardship Waivers.**
- **0.0% of Waiver requests had not yet been resolved at the completion of the calendar year.**

2023 Licensing Results

Pursuant to C.R.S. 42-4-305, DOR is responsible for issuing biennial inspection licenses to independent, fleet, and contractor emissions inspection stations, as well as to inspectors that are employed by the inspection facilities.

All Rapid Screen testing sites are authorized annually in conjunction with the Colorado Department of Transportation (CDOT), as testing sites require frequent review due to road or traffic configuration changes.

Table 4 shows the number of initial, renewed, and active licenses by license type for 2023.

Table DOR-4 – Licenses Issued and Renewed, by Type (2023)

License Type	Number of Initial Licenses	Number of Licenses Renewed	Total Active Licenses
Fleet Inspector	18	32	52
Independent Inspector	0	0	1
Contractor Employed Inspectors	192	93	285
Independent Station	0	0	1
Fleet Station	0	19	20
Total	**210**	**144**	**359**

Authorized RSD Sites	129

Appendix A1

Initial Inspection Report All Test Types

Date Range
Between 1/1/2023 and 1/1/2024

Initial Inspection Report All Test Types (V 1.02)

			OBD						IM240						Two Speed Idle					
Model Year	Type	Overall Total	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%
1974	HDGV	39	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	39	100.00	36	92.31	3	7.69
	LDGT1	113	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	113	100.00	84	74.34	29	25.66
	LDGT2	66	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	66	100.00	55	83.33	11	16.67
	LDGV	264	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	264	100.00	159	60.23	105	39.77
1974 Total		482	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	482	100.00	334	69.29	148	30.71
1975	HDGV	10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	10	100.00	7	70.00	3	30.00
	LDGT1	11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	11	100.00	6	54.55	5	45.45
	LDGT2	13	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	13	100.00	7	53.85	6	46.15
	LDGV	16	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16	100.00	10	62.50	6	37.50
1975 Total		50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	50	100.00	30	60.00	20	40.00
1976	HDGV	35	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	35	100.00	27	77.14	8	22.86
	LDGT1	49	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	49	100.00	24	48.98	25	51.02
	LDGT2	126	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	126	100.00	87	69.05	39	30.95
	LDGV	130	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	130	100.00	73	56.15	57	43.85
1976 Total		340	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	340	100.00	211	62.06	129	37.94
1977	HDGV	63	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	63	100.00	50	79.37	13	20.63
	LDGT1	54	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	54	100.00	31	57.41	23	42.59
	LDGT2	184	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	184	100.00	114	61.96	70	38.04
	LDGV	160	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	160	100.00	98	61.25	62	38.75
1977 Total		461	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	461	100.00	293	63.56	168	36.44
1978	HDGV	40	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	40	100.00	32	80.00	8	20.00
	LDGT1	73	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	73	100.00	32	43.84	41	56.16
	LDGT2	220	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	220	100.00	155	70.45	65	29.55
	LDGV	183	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	183	100.00	118	64.48	65	35.52
1978 Total		516	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	516	100.00	337	65.31	179	34.69
1979	HDGV	54	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	54	100.00	41	75.93	13	24.07
	LDGT1	101	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	101	100.00	58	57.43	43	42.57
	LDGT2	141	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	141	100.00	75	53.19	66	46.81
	LDGV	213	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	213	100.00	118	55.40	95	44.60
1979 Total		509	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	509	100.00	292	57.37	217	42.63
1980	HDGV	27	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	27	100.00	22	81.48	5	18.52
	LDGT1	74	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	74	100.00	51	68.92	23	31.08

			OBD						IM240						Two Speed Idle					
Model Year	Type	Overall Total	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%
	LDGT2	37	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	37	100.00	25	67.57	12	32.43
	LDGV	120	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	120	100.00	87	72.50	33	27.50
1980 Total		258	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	258	100.00	185	71.71	73	28.29
1981	HDGV	47	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	47	100.00	31	65.96	16	34.04
	LDGT1	100	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	100	100.00	40	40.00	60	60.00
	LDGT2	38	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	38	100.00	19	50.00	19	50.00
	LDGV	106	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	106	100.00	64	60.38	42	39.62
1981 Total		291	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	291	100.00	154	52.92	137	47.08
1982	HDGV	46	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	46	100.00	37	80.43	9	19.57
	LDGT1	83	0	0.00	0	0.00	0	0.00	83	100.00	52	62.65	31	37.35	0	0.00	0	0.00	0	0.00
	LDGT2	18	0	0.00	0	0.00	0	0.00	17	94.44	11	64.71	6	35.29	1	5.56	0	0.00	1	100.00
	LDGV	120	0	0.00	0	0.00	0	0.00	119	99.17	91	76.47	28	23.53	1	0.83	0	0.00	1	100.00
1982 Total		267	0	0.00	0	0.00	0	0.00	219	82.02	154	70.32	65	29.68	48	17.98	37	77.08	11	22.92
1983	HDGV	57	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	57	100.00	37	64.91	20	35.09
	LDGT1	125	0	0.00	0	0.00	0	0.00	124	99.20	93	75.00	31	25.00	1	0.80	1	100.00	0	0.00
	LDGT2	47	0	0.00	0	0.00	0	0.00	47	100.00	26	55.32	21	44.68	0	0.00	0	0.00	0	0.00
	LDGV	139	0	0.00	0	0.00	0	0.00	131	94.24	101	77.10	30	22.90	8	5.76	5	62.50	3	37.50
1983 Total		368	0	0.00	0	0.00	0	0.00	302	82.07	220	72.85	82	27.15	66	17.93	43	65.15	23	34.85
1984	HDGV	99	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	99	100.00	83	83.84	16	16.16
	LDGT1	231	0	0.00	0	0.00	0	0.00	228	98.70	154	67.54	74	32.46	3	1.30	0	0.00	3	100.00
	LDGT2	75	0	0.00	0	0.00	0	0.00	74	98.67	37	50.00	37	50.00	1	1.33	0	0.00	1	100.00
	LDGV	250	0	0.00	0	0.00	0	0.00	247	98.80	184	74.49	63	25.51	3	1.20	1	33.33	2	66.67
1984 Total		655	0	0.00	0	0.00	0	0.00	549	83.82	375	68.31	174	31.69	106	16.18	84	79.25	22	20.75
1985	HDGV	96	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	96	100.00	80	83.33	16	16.67
	LDGT1	334	0	0.00	0	0.00	0	0.00	330	98.80	247	74.85	83	25.15	4	1.20	0	0.00	4	100.00
	LDGT2	80	0	0.00	0	0.00	0	0.00	79	98.75	41	51.90	38	48.10	1	1.25	0	0.00	1	100.00
	LDGV	343	0	0.00	0	0.00	0	0.00	338	98.54	253	74.85	85	25.15	5	1.46	4	80.00	1	20.00
1985 Total		853	0	0.00	0	0.00	0	0.00	747	87.57	541	72.42	206	27.58	106	12.43	84	79.25	22	20.75
1986	HDGV	90	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	90	100.00	56	62.22	34	37.78
	LDGT1	465	0	0.00	0	0.00	0	0.00	463	99.57	351	75.81	112	24.19	2	0.43	2	100.00	0	0.00
	LDGT2	118	0	0.00	0	0.00	0	0.00	117	99.15	67	57.26	50	42.74	1	0.85	1	100.00	0	0.00
	LDGV	435	0	0.00	0	0.00	0	0.00	426	97.93	324	76.06	102	23.94	9	2.07	8	88.89	1	11.11
1986 Total		1,108	0	0.00	0	0.00	0	0.00	1,006	90.79	742	73.76	264	26.24	102	9.21	67	65.69	35	34.31
1987	HDGV	103	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	103	100.00	78	75.73	25	24.27
	LDGT1	507	0	0.00	0	0.00	0	0.00	505	99.61	408	80.79	97	19.21	2	0.39	0	0.00	2	100.00
	LDGT2	144	0	0.00	0	0.00	0	0.00	144	100.00	116	80.56	28	19.44	0	0.00	0	0.00	0	0.00

			OBD						IM240						Two Speed Idle					
Model Year	Type	Overall Total	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%
	LDGV	465	0	0.00	0	0.00	0	0.00	460	98.92	370	80.43	90	19.57	5	1.08	5	100.00	0	0.00
1987 Total		1,219	0	0.00	0	0.00	0	0.00	1,109	90.98	894	80.61	215	19.39	110	9.02	83	75.45	27	24.55
1988	HDGV	141	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	141	100.00	121	85.82	20	14.18
	LDGT1	578	0	0.00	0	0.00	0	0.00	576	99.65	433	75.17	143	24.83	2	0.35	1	50.00	1	50.00
	LDGT2	213	0	0.00	0	0.00	0	0.00	209	98.12	160	76.56	49	23.44	4	1.88	4	100.00	0	0.00
	LDGV	467	0	0.00	0	0.00	0	0.00	465	99.57	355	76.34	110	23.66	2	0.43	0	0.00	2	100.00
1988 Total		1,399	0	0.00	0	0.00	0	0.00	1,250	89.35	948	75.84	302	24.16	149	10.65	126	84.56	23	15.44
1989	HDGV	259	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	259	100.00	235	90.73	24	9.27
	LDGT1	867	0	0.00	0	0.00	0	0.00	865	99.77	702	81.16	163	18.84	2	0.23	1	50.00	1	50.00
	LDGT2	297	0	0.00	0	0.00	0	0.00	296	99.66	249	84.12	47	15.88	1	0.34	1	100.00	0	0.00
	LDGV	679	0	0.00	0	0.00	0	0.00	662	97.50	523	79.00	139	21.00	17	2.50	10	58.82	7	41.18
1989 Total		2,102	0	0.00	0	0.00	0	0.00	1,823	86.73	1,474	80.86	349	19.14	279	13.27	247	88.53	32	11.47
1990	HDGV	245	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	245	100.00	223	91.02	22	8.98
	LDGT1	790	0	0.00	0	0.00	0	0.00	785	99.37	632	80.51	153	19.49	5	0.63	4	80.00	1	20.00
	LDGT2	328	0	0.00	0	0.00	0	0.00	326	99.39	261	80.06	65	19.94	2	0.61	1	50.00	1	50.00
	LDGV	860	0	0.00	0	0.00	0	0.00	847	98.49	712	84.06	135	15.94	13	1.51	8	61.54	5	38.46
1990 Total		2,223	0	0.00	0	0.00	0	0.00	1,958	88.08	1,605	81.97	353	18.03	265	11.92	236	89.06	29	10.94
1991	HDGV	266	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	266	100.00	231	86.84	35	13.16
	LDGT1	1,207	0	0.00	0	0.00	0	0.00	1,201	99.50	1,007	83.85	194	16.15	6	0.50	4	66.67	2	33.33
	LDGT2	400	0	0.00	0	0.00	0	0.00	396	99.00	290	73.23	106	26.77	4	1.00	2	50.00	2	50.00
	LDGV	1,289	0	0.00	0	0.00	0	0.00	1,269	98.45	1,043	82.19	226	17.81	20	1.55	17	85.00	3	15.00
1991 Total		3,162	0	0.00	0	0.00	0	0.00	2,866	90.64	2,340	81.65	526	18.35	296	9.36	254	85.81	42	14.19
1992	HDGV	355	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	355	100.00	322	90.70	33	9.30
	LDGT1	1,033	0	0.00	0	0.00	0	0.00	1,030	99.71	857	83.20	173	16.80	3	0.29	3	100.00	0	0.00
	LDGT2	616	0	0.00	0	0.00	0	0.00	613	99.51	460	75.04	153	24.96	3	0.49	2	66.67	1	33.33
	LDGV	1,178	0	0.00	0	0.00	0	0.00	1,171	99.41	974	83.18	197	16.82	7	0.59	5	71.43	2	28.57
1992 Total		3,182	0	0.00	0	0.00	0	0.00	2,814	88.43	2,291	81.41	523	18.59	368	11.57	332	90.22	36	9.78
1993	HDGV	401	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	401	100.00	365	91.02	36	8.98
	LDGT1	1,688	0	0.00	0	0.00	0	0.00	1,685	99.82	1,429	84.81	256	15.19	3	0.18	3	100.00	0	0.00
	LDGT2	766	0	0.00	0	0.00	0	0.00	761	99.35	549	72.14	212	27.86	5	0.65	4	80.00	1	20.00
	LDGV	1,526	0	0.00	0	0.00	0	0.00	1,515	99.28	1,279	84.42	236	15.58	11	0.72	9	81.82	2	18.18
1993 Total		4,381	0	0.00	0	0.00	0	0.00	3,961	90.41	3,257	82.23	704	17.77	420	9.59	381	90.71	39	9.29
1994	HDGV	498	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	498	100.00	447	89.76	51	10.24
	LDGT1	1,992	0	0.00	0	0.00	0	0.00	1,982	99.50	1,680	84.76	302	15.24	10	0.50	9	90.00	1	10.00
	LDGT2	1,334	0	0.00	0	0.00	0	0.00	1,313	98.43	1,043	79.44	270	20.56	21	1.57	17	80.95	4	19.05
	LDGV	1,692	0	0.00	0	0.00	0	0.00	1,664	98.35	1,364	81.97	300	18.03	28	1.65	22	78.57	6	21.43

			OBD						IM240						Two Speed Idle					
Model Year	Type	Overall Total	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%
1994 Total		5,516	0	0.00	0	0.00	0	0.00	4,959	89.90	4,087	82.42	872	17.58	557	10.10	495	88.87	62	11.13
1995	HDGV	726	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	726	100.00	654	90.08	72	9.92
	LDGT1	2,432	0	0.00	0	0.00	0	0.00	2,426	99.75	2,069	85.28	357	14.72	6	0.25	3	50.00	3	50.00
	LDGT2	1,905	0	0.00	0	0.00	0	0.00	1,892	99.32	1,487	78.59	405	21.41	13	0.68	13	100.00	0	0.00
	LDGV	2,506	0	0.00	0	0.00	0	0.00	2,483	99.08	2,102	84.66	381	15.34	23	0.92	20	86.96	3	13.04
1995 Total		7,569	0	0.00	0	0.00	0	0.00	6,801	89.85	5,658	83.19	1,143	16.81	768	10.15	690	89.84	78	10.16
1996	HDGV	732	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	732	100.00	679	92.76	53	7.24
	LDGT1	2,601	14	0.54	9	64.29	5	35.71	2,583	99.31	2,163	83.74	420	16.26	4	0.15	2	50.00	2	50.00
	LDGT2	1,649	23	1.39	17	73.91	6	26.09	1,622	98.36	1,293	79.72	329	20.28	4	0.24	4	100.00	0	0.00
	LDGV	2,619	50	1.91	38	76.00	12	24.00	2,562	97.82	2,202	85.95	360	14.05	7	0.27	5	71.43	2	28.57
1996 Total		7,601	87	1.14	64	73.56	23	26.44	6,767	89.03	5,658	83.61	1,109	16.39	747	9.83	690	92.37	57	7.63
1997	HDGV	986	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	986	100.00	931	94.42	55	5.58
	LDGT1	4,690	41	0.87	35	85.37	6	14.63	4,646	99.06	3,936	84.72	710	15.28	3	0.06	2	66.67	1	33.33
	LDGT2	2,180	56	2.57	42	75.00	14	25.00	2,118	97.16	1,752	82.72	366	17.28	6	0.28	6	100.00	0	0.00
	LDGV	3,844	53	1.38	42	79.25	11	20.75	3,784	98.44	3,282	86.73	502	13.27	7	0.18	4	57.14	3	42.86
1997 Total		11,700	150	1.28	119	79.33	31	20.67	10,548	90.15	8,970	85.04	1,578	14.96	1,002	8.56	943	94.11	59	5.89
1998	HDGV	703	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	703	100.00	651	92.60	52	7.40
	LDGT1	5,355	41	0.77	33	80.49	8	19.51	5,309	99.14	4,554	85.78	755	14.22	5	0.09	3	60.00	2	40.00
	LDGT2	2,217	28	1.26	15	53.57	13	46.43	2,187	98.65	1,819	83.17	368	16.83	2	0.09	0	0.00	2	100.00
	LDGV	4,453	51	1.15	38	74.51	13	25.49	4,398	98.76	3,768	85.68	630	14.32	4	0.09	4	100.00	0	0.00
1998 Total		12,728	120	0.94	86	71.67	34	28.33	11,894	93.45	10,141	85.26	1,753	14.74	714	5.61	658	92.16	56	7.84
1999	HDGV	1,501	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,501	100.00	1,426	95.00	75	5.00
	LDGT1	6,758	57	0.84	44	77.19	13	22.81	6,698	99.11	5,668	84.62	1,030	15.38	3	0.04	3	100.00	0	0.00
	LDGT2	4,098	634	15.47	520	82.02	114	17.98	3,461	84.46	2,792	80.67	669	19.33	3	0.07	3	100.00	0	0.00
	LDGV	6,150	107	1.74	93	86.92	14	13.08	6,039	98.20	5,362	88.79	677	11.21	4	0.07	4	100.00	0	0.00
1999 Total		18,507	798	4.31	657	82.33	141	17.67	16,198	87.52	13,822	85.33	2,376	14.67	1,511	8.16	1,436	95.04	75	4.96
2000	HDGV	1,468	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,468	100.00	1,381	94.07	87	5.93
	LDGT1	7,493	164	2.19	126	76.83	38	23.17	7,322	97.72	6,158	84.10	1,164	15.90	7	0.09	6	85.71	1	14.29
	LDGT2	4,284	896	20.92	694	77.46	202	22.54	3,385	79.01	2,827	83.52	558	16.48	3	0.07	3	100.00	0	0.00
	LDGV	7,208	123	1.71	94	76.42	29	23.58	7,080	98.22	6,187	87.39	893	12.61	5	0.07	4	80.00	1	20.00
2000 Total		20,453	1,183	5.78	914	77.26	269	22.74	17,787	86.97	15,172	85.30	2,615	14.70	1,483	7.25	1,394	94.00	89	6.00
2001	HDGV	1,798	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,798	100.00	1,751	97.39	47	2.61
	LDGT1	9,063	248	2.74	205	82.66	43	17.34	8,812	97.23	7,801	88.53	1,011	11.47	3	0.03	3	100.00	0	0.00
	LDGT2	5,834	1,164	19.95	916	78.69	248	21.31	4,670	80.05	3,978	85.18	692	14.82	0	0.00	0	0.00	0	0.00
	LDGV	9,236	277	3.00	229	82.67	48	17.33	8,957	96.98	8,015	89.48	942	10.52	2	0.02	2	100.00	0	0.00
2001 Total		25,931	1,689	6.51	1,350	79.93	339	20.07	22,439	86.53	19,794	88.21	2,645	11.79	1,803	6.95	1,756	97.39	47	2.61

			OBD						IM240						Two Speed Idle					
Model Year	Type	Overall Total	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%
2002	HDGV	1,500	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,500	100.00	1,448	96.53	52	3.47
	LDGT1	9,594	123	1.28	102	82.93	21	17.07	9,466	98.67	8,257	87.23	1,209	12.77	5	0.05	4	80.00	1	20.00
	LDGT2	5,649	1,415	25.05	1,109	78.37	306	21.63	4,233	74.93	3,541	83.65	692	16.35	1	0.02	1	100.00	0	0.00
	LDGV	9,852	312	3.17	257	82.37	55	17.63	9,537	96.80	8,414	88.22	1,123	11.78	3	0.03	2	66.67	1	33.33
2002 Total		26,595	1,850	6.96	1,468	79.35	382	20.65	23,236	87.37	20,212	86.99	3,024	13.01	1,509	5.67	1,455	96.42	54	3.58
2003	HDGV	1,797	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,797	100.00	1,762	98.05	35	1.95
	LDGT1	12,241	70	0.57	60	85.71	10	14.29	12,161	99.35	10,815	88.93	1,346	11.07	10	0.08	10	100.00	0	0.00
	LDGT2	7,252	1,781	24.56	1,420	79.73	361	20.27	5,465	75.36	4,807	87.96	658	12.04	6	0.08	6	100.00	0	0.00
	LDGV	12,313	425	3.45	361	84.94	64	15.06	11,883	96.51	10,783	90.74	1,100	9.26	5	0.04	5	100.00	0	0.00
2003 Total		33,603	2,276	6.77	1,841	80.89	435	19.11	29,509	87.82	26,405	89.48	3,104	10.52	1,818	5.41	1,783	98.07	35	1.93
2004	HDGV	1,625	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,625	100.00	1,599	98.40	26	1.60
	LDGT1	13,202	119	0.90	98	82.35	21	17.65	13,075	99.04	11,719	89.63	1,356	10.37	8	0.06	7	87.50	1	12.50
	LDGT2	7,761	1,662	21.41	1,348	81.11	314	18.89	6,096	78.55	5,387	88.37	709	11.63	3	0.04	3	100.00	0	0.00
	LDGV	12,077	666	5.51	573	86.04	93	13.96	11,407	94.45	10,378	90.98	1,029	9.02	4	0.03	4	100.00	0	0.00
2004 Total		34,665	2,447	7.06	2,019	82.51	428	17.49	30,578	88.21	27,484	89.88	3,094	10.12	1,640	4.73	1,613	98.35	27	1.65
2005	HDGV	1,565	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,565	100.00	1,544	98.66	21	1.34
	LDGT1	17,178	217	1.26	186	85.71	31	14.29	16,948	98.66	15,756	92.97	1,192	7.03	13	0.08	13	100.00	0	0.00
	LDGT2	7,615	1,727	22.68	1,447	83.79	280	16.21	5,883	77.26	5,255	89.33	628	10.67	5	0.07	5	100.00	0	0.00
	LDGV	16,842	1,241	7.37	1,070	86.22	171	13.78	15,593	92.58	14,322	91.85	1,271	8.15	8	0.05	5	62.50	3	37.50
2005 Total		43,200	3,185	7.37	2,703	84.87	482	15.13	38,424	88.94	35,333	91.96	3,091	8.04	1,591	3.68	1,567	98.49	24	1.51
2006	HDGV	1,706	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,706	100.00	1,675	98.18	31	1.82
	LDGT1	15,829	1,345	8.50	1,261	93.75	84	6.25	14,478	91.47	13,578	93.78	900	6.22	6	0.04	4	66.67	2	33.33
	LDGT2	7,749	1,408	18.17	1,179	83.74	229	16.26	6,338	81.79	5,746	90.66	592	9.34	3	0.04	1	33.33	2	66.67
	LDGV	16,627	1,364	8.20	1,212	88.86	152	11.14	15,259	91.77	14,357	94.09	902	5.91	4	0.02	4	100.00	0	0.00
2006 Total		41,911	4,117	9.82	3,652	88.71	465	11.29	36,075	86.08	33,681	93.36	2,394	6.64	1,719	4.10	1,684	97.96	35	2.04
2007	HDGV	1,508	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,508	100.00	1,498	99.34	10	0.66
	LDGT1	20,662	1,286	6.22	1,202	93.47	84	6.53	19,359	93.69	18,276	94.41	1,083	5.59	17	0.08	16	94.12	1	5.88
	LDGT2	10,614	3,365	31.70	2,908	86.42	457	13.58	7,243	68.24	6,708	92.61	535	7.39	6	0.06	6	100.00	0	0.00
	LDGV	21,162	2,471	11.68	2,275	92.07	196	7.93	18,686	88.30	17,840	95.47	846	4.53	5	0.02	5	100.00	0	0.00
2007 Total		53,946	7,122	13.20	6,385	89.65	737	10.35	45,288	83.95	42,824	94.56	2,464	5.44	1,536	2.85	1,525	99.28	11	0.72
2008	HDGV	1,519	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,519	100.00	1,503	98.95	16	1.05
	LDGT1	18,941	1,608	8.49	1,519	94.47	89	5.53	17,324	91.46	16,478	95.12	846	4.88	9	0.05	9	100.00	0	0.00
	LDGT2	9,677	3,073	31.76	2,658	86.50	415	13.50	6,596	68.16	6,054	91.78	542	8.22	8	0.08	8	100.00	0	0.00
	LDGV	18,490	2,427	13.13	2,204	90.81	223	9.19	16,060	86.86	15,234	94.86	826	5.14	3	0.02	2	66.67	1	33.33
2008 Total		48,627	7,108	14.62	6,381	89.77	727	10.23	39,980	82.22	37,766	94.46	2,214	5.54	1,539	3.16	1,522	98.90	17	1.10
2009	HDGV	842	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	842	100.00	837	99.41	5	0.59

			OBD						IM240						Two Speed Idle					
Model Year	Type	Overall Total	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%
	LDGT1	10,543	804	7.63	766	95.27	38	4.73	9,735	92.34	9,317	95.71	418	4.29	4	0.04	4	100.00	0	0.00
	LDGT2	5,107	1,272	24.91	1,093	85.93	179	14.07	3,832	75.03	3,563	92.98	269	7.02	3	0.06	3	100.00	0	0.00
	LDGV	14,176	1,549	10.93	1,413	91.22	136	8.78	12,621	89.03	12,064	95.59	557	4.41	6	0.04	6	100.00	0	0.00
2009 Total		30,668	3,625	11.82	3,272	90.26	353	9.74	26,188	85.39	24,944	95.25	1,244	4.75	855	2.79	850	99.42	5	0.58
2010	HDGV	836	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	836	100.00	828	99.04	8	0.96
	LDGT1	19,923	1,639	8.23	1,577	96.22	62	3.78	18,276	91.73	17,718	96.95	558	3.05	8	0.04	8	100.00	0	0.00
	LDGT2	9,291	2,136	22.99	1,957	91.62	179	8.38	7,142	76.87	6,795	95.14	347	4.86	13	0.14	13	100.00	0	0.00
	LDGV	21,078	3,424	16.24	3,291	96.12	133	3.88	17,646	83.72	17,035	96.54	611	3.46	8	0.04	8	100.00	0	0.00
2010 Total		51,128	7,199	14.08	6,825	94.80	374	5.20	43,064	84.23	41,548	96.48	1,516	3.52	865	1.69	857	99.08	8	0.92
2011	HDGV	1,314	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,314	100.00	1,304	99.24	10	0.76
	LDGT1	16,946	974	5.75	932	95.69	42	4.31	15,963	94.20	15,482	96.99	481	3.01	9	0.05	9	100.00	0	0.00
	LDGT2	9,173	1,970	21.48	1,798	91.27	172	8.73	7,201	78.50	6,705	93.11	496	6.89	2	0.02	2	100.00	0	0.00
	LDGV	15,433	2,068	13.40	1,955	94.54	113	5.46	13,362	86.58	12,838	96.08	524	3.92	3	0.02	3	100.00	0	0.00
2011 Total		42,866	5,012	11.69	4,685	93.48	327	6.52	36,526	85.21	35,025	95.89	1,501	4.11	1,328	3.10	1,318	99.25	10	0.75
2012	HDGV	1,765	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,765	100.00	1,753	99.32	12	0.68
	LDGT1	24,738	1,667	6.74	1,567	94.00	100	6.00	23,059	93.21	22,411	97.19	648	2.81	12	0.05	12	100.00	0	0.00
	LDGT2	12,828	2,543	19.82	2,385	93.79	158	6.21	10,274	80.09	9,590	93.34	684	6.66	11	0.09	11	100.00	0	0.00
	LDGV	28,210	4,572	16.21	4,363	95.43	209	4.57	23,632	83.77	22,821	96.57	811	3.43	6	0.02	6	100.00	0	0.00
2012 Total		67,541	8,782	13.00	8,315	94.68	467	5.32	56,965	84.34	54,822	96.24	2,143	3.76	1,794	2.66	1,782	99.33	12	0.67
2013	HDGV	1,316	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,316	100.00	1,307	99.32	9	0.68
	LDGT1	20,052	18,778	93.65	17,893	95.29	885	4.71	1,273	6.35	1,218	95.68	55	4.32	1	0.00	1	100.00	0	0.00
	LDGT2	10,338	9,359	90.53	8,428	90.05	931	9.95	977	9.45	887	90.79	90	9.21	2	0.02	1	50.00	1	50.00
	LDGV	23,423	21,481	91.71	19,946	92.85	1,535	7.15	1,942	8.29	1,814	93.41	128	6.59	0	0.00	0	0.00	0	0.00
2013 Total		55,129	49,618	90.00	46,267	93.25	3,351	6.75	4,192	7.60	3,919	93.49	273	6.51	1,319	2.39	1,309	99.24	10	0.76
2014	HDGV	1,867	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,867	100.00	1,854	99.30	13	0.70
	LDGT1	36,226	34,547	95.37	33,409	96.71	1,138	3.29	1,676	4.63	1,629	97.20	47	2.80	3	0.01	3	100.00	0	0.00
	LDGT2	19,787	18,467	93.33	17,004	92.08	1,463	7.92	1,317	6.66	1,240	94.15	77	5.85	3	0.02	3	100.00	0	0.00
	LDGV	30,847	28,962	93.89	27,502	94.96	1,460	5.04	1,881	6.10	1,797	95.53	84	4.47	4	0.01	4	100.00	0	0.00
2014 Total		88,727	81,976	92.39	77,915	95.05	4,061	4.95	4,874	5.49	4,666	95.73	208	4.27	1,877	2.12	1,864	99.31	13	0.69
2015	HDGV	1,909	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,909	100.00	1,897	99.37	12	0.63
	LDGT1	21,301	20,054	94.15	19,296	96.22	758	3.78	1,245	5.84	1,193	95.82	52	4.18	2	0.01	2	100.00	0	0.00
	LDGT2	10,015	9,332	93.18	8,682	93.03	650	6.97	680	6.79	653	96.03	27	3.97	3	0.03	3	100.00	0	0.00
	LDGV	18,075	16,772	92.79	15,673	93.45	1,099	6.55	1,302	7.20	1,203	92.40	99	7.60	1	0.01	1	100.00	0	0.00
2015 Total		51,300	46,158	89.98	43,651	94.57	2,507	5.43	3,227	6.29	3,049	94.48	178	5.52	1,915	3.73	1,903	99.37	12	0.63
2016	HDGV	3,291	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3,291	100.00	3,280	99.67	11	0.33
	LDGT1	56,344	54,142	96.09	52,165	96.35	1,977	3.65	2,195	3.90	2,126	96.86	69	3.14	7	0.01	7	100.00	0	0.00

			OBD						IM240						Two Speed Idle					
Model Year	Type	Overall Total	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%
	LDGT2	19,869	18,835	94.80	17,960	95.35	875	4.65	1,032	5.19	991	96.03	41	3.97	2	0.01	2	100.00	0	0.00
	LDGV	32,976	31,264	94.81	29,723	95.07	1,541	4.93	1,709	5.18	1,595	93.33	114	6.67	3	0.01	2	66.67	1	33.33
2016 Total		112,480	104,241	92.68	99,848	95.79	4,393	4.21	4,936	4.39	4,712	95.46	224	4.54	3,303	2.94	3,291	99.64	12	0.36
2017	HDGV	554	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	554	100.00	553	99.82	1	0.18
	LDGT1	5,436	5,108	93.97	4,909	96.10	199	3.90	327	6.02	318	97.25	9	2.75	1	0.02	1	100.00	0	0.00
	LDGT2	2,448	2,246	91.75	2,130	94.84	116	5.16	202	8.25	197	97.52	5	2.48	0	0.00	0	0.00	0	0.00
	LDGV	4,155	3,796	91.36	3,618	95.31	178	4.69	359	8.64	347	96.66	12	3.34	0	0.00	0	0.00	0	0.00
2017 Total		12,593	11,150	88.54	10,657	95.58	493	4.42	888	7.05	862	97.07	26	2.93	555	4.41	554	99.82	1	0.18
2018	HDGV	225	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	225	100.00	223	99.11	2	0.89
	LDGT1	1,915	1,817	94.88	1,769	97.36	48	2.64	98	5.12	96	97.96	2	2.04	0	0.00	0	0.00	0	0.00
	LDGT2	759	712	93.81	674	94.66	38	5.34	47	6.19	45	95.74	2	4.26	0	0.00	0	0.00	0	0.00
	LDGV	1,242	1,181	95.09	1,131	95.77	50	4.23	61	4.91	58	95.08	3	4.92	0	0.00	0	0.00	0	0.00
2018 Total		4,141	3,710	89.59	3,574	96.33	136	3.67	206	4.97	199	96.60	7	3.40	225	5.43	223	99.11	2	0.89
2019	HDGV	164	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	164	100.00	164	100.00	0	0.00
	LDGT1	948	911	96.10	887	97.37	24	2.63	37	3.90	35	94.59	2	5.41	0	0.00	0	0.00	0	0.00
	LDGT2	360	353	98.06	342	96.88	11	3.12	7	1.94	7	100.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	710	684	96.34	654	95.61	30	4.39	26	3.66	25	96.15	1	3.85	0	0.00	0	0.00	0	0.00
2019 Total		2,182	1,948	89.28	1,883	96.66	65	3.34	70	3.21	67	95.71	3	4.29	164	7.52	164	100.00	0	0.00
2020	HDGV	56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	56	100.00	55	98.21	1	1.79
	LDGT1	137	131	95.62	128	97.71	3	2.29	6	4.38	6	100.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	121	117	96.69	112	95.73	5	4.27	4	3.31	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	498	480	96.39	465	96.88	15	3.13	17	3.41	16	94.12	1	5.88	1	0.20	1	100.00	0	0.00
2020 Total		812	728	89.66	705	96.84	23	3.16	27	3.33	26	96.30	1	3.70	57	7.02	56	98.25	1	1.75
2021	HDGV	44	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	44	100.00	44	100.00	0	0.00
	LDGT1	105	100	95.24	100	100.00	0	0.00	5	4.76	5	100.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	81	80	98.77	79	98.75	1	1.25	1	1.23	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	341	328	96.19	320	97.56	8	2.44	13	3.81	13	100.00	0	0.00	0	0.00	0	0.00	0	0.00
2021 Total		571	508	88.97	499	98.23	9	1.77	19	3.33	19	100.00	0	0.00	44	7.71	44	100.00	0	0.00
2022	HDGV	34	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	34	100.00	34	100.00	0	0.00
	LDGT1	72	70	97.22	68	97.14	2	2.86	2	2.78	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	38	37	97.37	36	97.30	1	2.70	1	2.63	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	175	171	97.71	169	98.83	2	1.17	4	2.29	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00
2022 Total		319	278	87.15	273	98.20	5	1.80	7	2.19	7	100.00	0	0.00	34	10.66	34	100.00	0	0.00
2023	HDGV	11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	11	100.00	11	100.00	0	0.00
	LDGT1	22	22	100.00	22	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	16	13	81.25	13	100.00	0	0.00	2	12.50	2	100.00	0	0.00	1	6.25	1	100.00	0	0.00

			OBD						IM240						Two Speed Idle					
Model Year	Type	Overall Total	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%
	LDGV	74	74	100.00	74	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2023 Total		123	109	88.62	109	100.00	0	0.00	2	1.63	2	100.00	0	0.00	12	9.76	12	100.00	0	0.00
2024	LDGT1	2	2	100.00	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	9	8	88.89	8	100.00	0	0.00	1	11.11	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00
2024 Total		11	10	90.91	10	100.00	0	0.00	1	9.09	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00
Grand Total		**936,969**	**357,184**	**38.12**	**336,127**	**94.10**	**21,057**	**5.90**	**540,279**	**57.66**	**495,716**	**91.75**	**44,563**	**8.25**	**39,506**	**4.22**	**37,282**	**94.37**	**2,224**	**5.63**

Initial Inspection Report All Test Types - Summary by Veh (V 1.02)

		OBD						IM240						Two Speed Idle					
Type	Overall Total	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%	Total	% of Overall Total	Pass	%	Fail	%
HDGV	36,333	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	36,333	100.00	35,207	96.90	1,126	3.10
LDGT1	371,224	146,099	39.36	140,370	96.08	5,729	3.92	224,361	60.44	206,829	92.19	17,532	7.81	764	0.21	486	63.61	278	36.39
LDGT2	183,976	84,704	46.04	76,966	90.86	7,738	9.14	98,300	53.43	87,437	88.95	10,863	11.05	972	0.53	667	68.62	305	31.38
LDGV	345,436	126,381	36.59	118,791	93.99	7,590	6.01	217,618	63.00	201,450	92.57	16,168	7.43	1,437	0.42	922	64.16	515	35.84
Grand Total	**936,969**	**357,184**	**38.12**	**336,127**	**94.10**	**21,057**	**5.90**	**540,279**	**57.66**	**495,716**	**91.75**	**44,563**	**8.25**	**39,506**	**4.22**	**37,282**	**94.37**	**2,224**	**5.63**

Appendix A2

Initial OBD Inspection Report

Date Range
Between 1/1/2023 and 1/1/2024

Initial OBD Inspection Report (V 1.03)

					Pass		Fail	
Model Year	**Type**	**OBD Total All**	**OBD Total Pass/Fail**	**OBD Total Pass/Fail %**	**Count**	**%**	**Count**	**%**
1996	LDGT1	33	14	42.42	9	64.29	5	35.71
	LDGT2	49	23	46.94	17	73.91	6	26.09
	LDGV	99	50	50.51	38	76.00	12	24.00
1996 Total		181	87	48.07	64	73.56	23	26.44
1997	LDGT1	75	41	54.67	35	85.37	6	14.63
	LDGT2	85	56	65.88	42	75.00	14	25.00
	LDGV	107	53	49.53	42	79.25	11	20.75
1997 Total		267	150	56.18	119	79.33	31	20.67
1998	LDGT1	89	41	46.07	33	80.49	8	19.51
	LDGT2	47	28	59.57	15	53.57	13	46.43
	LDGV	87	51	58.62	38	74.51	13	25.49
1998 Total		223	120	53.81	86	71.67	34	28.33
1999	LDGT1	102	57	55.88	44	77.19	13	22.81
	LDGT2	879	634	72.13	520	82.02	114	17.98
	LDGV	162	107	66.05	93	86.92	14	13.08
1999 Total		1,143	798	69.82	657	82.33	141	17.67
2000	LDGT1	273	164	60.07	126	76.83	38	23.17
	LDGT2	1,251	896	71.62	694	77.46	202	22.54
	LDGV	173	123	71.10	94	76.42	29	23.58
2000 Total		1,697	1,183	69.71	914	77.26	269	22.74
2001	LDGT1	339	248	73.16	205	82.66	43	17.34
	LDGT2	1,538	1,164	75.68	916	78.69	248	21.31
	LDGV	405	277	68.40	229	82.67	48	17.33
2001 Total		2,282	1,689	74.01	1,350	79.93	339	20.07
2002	LDGT1	171	123	71.93	102	82.93	21	17.07
	LDGT2	1,915	1,415	73.89	1,109	78.37	306	21.63
	LDGV	435	312	71.72	257	82.37	55	17.63
2002 Total		2,521	1,850	73.38	1,468	79.35	382	20.65
2003	LDGT1	79	70	88.61	60	85.71	10	14.29
	LDGT2	2,249	1,781	79.19	1,420	79.73	361	20.27
	LDGV	593	425	71.67	361	84.94	64	15.06
2003 Total		2,921	2,276	77.92	1,841	80.89	435	19.11
2004	LDGT1	160	119	74.38	98	82.35	21	17.65
	LDGT2	2,290	1,662	72.58	1,348	81.11	314	18.89
	LDGV	837	666	79.57	573	86.04	93	13.96
2004 Total		3,287	2,447	74.44	2,019	82.51	428	17.49
2005	LDGT1	288	217	75.35	186	85.71	31	14.29
	LDGT2	2,249	1,727	76.79	1,447	83.79	280	16.21
	LDGV	1,523	1,241	81.48	1,070	86.22	171	13.78
2005 Total		4,060	3,185	78.45	2,703	84.87	482	15.13
2006	LDGT1	1,556	1,345	86.44	1,261	93.75	84	6.25
	LDGT2	1,765	1,408	79.77	1,179	83.74	229	16.26

					Pass		Fail	
Model Year	Type	OBD Total All	OBD Total Pass/Fail	OBD Total Pass/Fail %	Count	%	Count	%
	LDGV	1,645	1,364	82.92	1,212	88.86	152	11.14
2006 Total		4,966	4,117	82.90	3,652	88.71	465	11.29
2007	LDGT1	1,477	1,286	87.07	1,202	93.47	84	6.53
	LDGT2	4,053	3,365	83.02	2,908	86.42	457	13.58
	LDGV	2,901	2,471	85.18	2,275	92.07	196	7.93
2007 Total		8,431	7,122	84.47	6,385	89.65	737	10.35
2008	LDGT1	1,839	1,608	87.44	1,519	94.47	89	5.53
	LDGT2	3,784	3,073	81.21	2,658	86.50	415	13.50
	LDGV	2,821	2,427	86.03	2,204	90.81	223	9.19
2008 Total		8,444	7,108	84.18	6,381	89.77	727	10.23
2009	LDGT1	884	804	90.95	766	95.27	38	4.73
	LDGT2	1,617	1,272	78.66	1,093	85.93	179	14.07
	LDGV	1,822	1,549	85.02	1,413	91.22	136	8.78
2009 Total		4,323	3,625	83.85	3,272	90.26	353	9.74
2010	LDGT1	1,873	1,639	87.51	1,577	96.22	62	3.78
	LDGT2	2,548	2,136	83.83	1,957	91.62	179	8.38
	LDGV	3,787	3,424	90.41	3,291	96.12	133	3.88
2010 Total		8,208	7,199	87.71	6,825	94.80	374	5.20
2011	LDGT1	1,123	974	86.73	932	95.69	42	4.31
	LDGT2	2,443	1,970	80.64	1,798	91.27	172	8.73
	LDGV	2,306	2,068	89.68	1,955	94.54	113	5.46
2011 Total		5,872	5,012	85.35	4,685	93.48	327	6.52
2012	LDGT1	1,848	1,667	90.21	1,567	94.00	100	6.00
	LDGT2	2,932	2,543	86.73	2,385	93.79	158	6.21
	LDGV	4,938	4,572	92.59	4,363	95.43	209	4.57
2012 Total		9,718	8,782	90.37	8,315	94.68	467	5.32
2013	LDGT1	19,003	18,778	98.82	17,893	95.29	885	4.71
	LDGT2	9,783	9,359	95.67	8,428	90.05	931	9.95
	LDGV	21,991	21,481	97.68	19,946	92.85	1,535	7.15
2013 Total		50,777	49,618	97.72	46,267	93.25	3,351	6.75
2014	LDGT1	34,756	34,547	99.40	33,409	96.71	1,138	3.29
	LDGT2	19,284	18,467	95.76	17,004	92.08	1,463	7.92
	LDGV	29,447	28,962	98.35	27,502	94.96	1,460	5.04
2014 Total		83,487	81,976	98.19	77,915	95.05	4,061	4.95
2015	LDGT1	20,246	20,054	99.05	19,296	96.22	758	3.78
	LDGT2	9,788	9,332	95.34	8,682	93.03	650	6.97
	LDGV	17,219	16,772	97.40	15,673	93.45	1,099	6.55
2015 Total		47,253	46,158	97.68	43,651	94.57	2,507	5.43
2016	LDGT1	54,421	54,142	99.49	52,165	96.35	1,977	3.65
	LDGT2	19,352	18,835	97.33	17,960	95.35	875	4.65
	LDGV	31,862	31,264	98.12	29,723	95.07	1,541	4.93
2016 Total		105,635	104,241	98.68	99,848	95.79	4,393	4.21
2017	LDGT1	5,175	5,108	98.71	4,909	96.10	199	3.90
	LDGT2	2,370	2,246	94.77	2,130	94.84	116	5.16
	LDGV	3,942	3,796	96.30	3,618	95.31	178	4.69
2017 Total		11,487	11,150	97.07	10,657	95.58	493	4.42

					Pass		Fail	
Model Year	Type	OBD Total All	OBD Total Pass/Fail	OBD Total Pass/Fail %	Count	%	Count	%
2018	LDGT1	1,845	1,817	98.48	1,769	97.36	48	2.64
	LDGT2	740	712	96.22	674	94.66	38	5.34
	LDGV	1,198	1,181	98.58	1,131	95.77	50	4.23
2018 Total		3,783	3,710	98.07	3,574	96.33	136	3.67
2019	LDGT1	915	911	99.56	887	97.37	24	2.63
	LDGT2	358	353	98.60	342	96.88	11	3.12
	LDGV	700	684	97.71	654	95.61	30	4.39
2019 Total		1,973	1,948	98.73	1,883	96.66	65	3.34
2020	LDGT1	133	131	98.50	128	97.71	3	2.29
	LDGT2	122	117	95.90	112	95.73	5	4.27
	LDGV	486	480	98.77	465	96.88	15	3.13
2020 Total		741	728	98.25	705	96.84	23	3.16
2021	LDGT1	102	100	98.04	100	100.00	0	0.00
	LDGT2	83	80	96.39	79	98.75	1	1.25
	LDGV	332	328	98.80	320	97.56	8	2.44
2021 Total		517	508	98.26	499	98.23	9	1.77
2022	LDGT1	72	70	97.22	68	97.14	2	2.86
	LDGT2	41	37	90.24	36	97.30	1	2.70
	LDGV	173	171	98.84	169	98.83	2	1.17
2022 Total		286	278	97.20	273	98.20	5	1.80
2023	LDGT1	22	22	100.00	22	100.00	0	0.00
	LDGT2	13	13	100.00	13	100.00	0	0.00
	LDGV	76	74	97.37	74	100.00	0	0.00
2023 Total		111	109	98.20	109	100.00	0	0.00
2024	LDGT1	2	2	100.00	2	100.00	0	0.00
	LDGT2	0	0		0	0.00	0	0.00
	LDGV	8	8	100.00	8	100.00	0	0.00
2024 Total		10	10	100.00	10	100.00	0	0.00
Grand Total		**374,604**	**357,184**	**95.35**	**336,127**	**94.10**	**21,057**	**5.90**

Initial OBD Inspection Report - Summary by Veh (V 1.03)

				Pass		Fail	
Type	OBD Total All	OBD Total Pass/Fail	OBD Total Pass/Fail %	Count	%	Count	%
LDGT1	148,901	146,099	98.12	140,370	96.08	5,729	3.92
LDGT2	93,628	84,704	90.47	76,966	90.86	7,738	9.14
LDGV	132,075	126,381	95.69	118,791	93.99	7,590	6.01
Grand Total	**374,604**	**357,184**	**95.35**	**336,127**	**94.10**	**21,057**	**5.90**

Appendix A3

Initial OBD Inspection Failure Report

Date Range
Between 1/1/2023 and 1/1/2024

Initial OBD Inspection Failure Report (V 1.03)

			Failed OBD Only						Failed Both OBD and Gas Cap						Failed Gas Cap Only		Failed Opacity	
Model Year	Type	Total Fail	MIL Commanded on Count	MIL Commanded on %	Visual MIL Count	Visual MIL %	Both MIL Count	Both MIL %	Gas Cap and MIL on Count	Gas Cap and MIL on %	Gas Cap and Visual MIL Count	Gas Cap and Visual MIL %	Both MIL and Gas Cap Count	Both MIL and Gas Cap %	Count	%	Count	%
1996	LDGT1	5	1	20.00	0	0.00	3	60.00	0	0.00	0	0.00	0	0.00	1	20.00	0	0.00
	LDGT2	6	5	83.33	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	16.67	0	0.00
	LDGV	12	7	58.33	3	25.00	2	16.67	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1996 Total		23	13	56.52	3	13.04	5	21.74	0	0.00	0	0.00	0	0.00	2	8.70	0	0.00
1997	LDGT1	6	3	50.00	0	0.00	3	50.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	14	5	35.71	2	14.29	1	7.14	1	7.14	0	0.00	0	0.00	5	35.71	0	0.00
	LDGV	11	4	36.36	1	9.09	2	18.18	0	0.00	1	9.09	1	9.09	2	18.18	0	0.00
1997 Total		31	12	38.71	3	9.68	6	19.35	1	3.23	1	3.23	1	3.23	7	22.58	0	0.00
1998	LDGT1	8	4	50.00	0	0.00	1	12.50	1	12.50	0	0.00	0	0.00	2	25.00	1	12.50
	LDGT2	13	5	38.46	1	7.69	3	23.08	1	7.69	0	0.00	1	7.69	2	15.38	0	0.00
	LDGV	13	2	15.38	1	7.69	6	46.15	1	7.69	0	0.00	1	7.69	2	15.38	0	0.00
1998 Total		34	11	32.35	2	5.88	10	29.41	3	8.82	0	0.00	2	5.88	6	17.65	1	2.94
1999	LDGT1	13	5	38.46	0	0.00	1	7.69	2	15.38	0	0.00	0	0.00	5	38.46	0	0.00
	LDGT2	114	44	38.60	6	5.26	39	34.21	1	0.88	1	0.88	4	3.51	19	16.67	0	0.00
	LDGV	14	4	28.57	1	7.14	5	35.71	0	0.00	0	0.00	0	0.00	3	21.43	1	7.14
1999 Total		141	53	37.59	7	4.96	45	31.91	3	2.13	1	0.71	4	2.84	27	19.15	1	0.71
2000	LDGT1	38	6	15.79	0	0.00	8	21.05	1	2.63	1	2.63	0	0.00	22	57.89	0	0.00
	LDGT2	202	70	34.65	21	10.40	65	32.18	2	0.99	5	2.48	5	2.48	33	16.34	2	0.99
	LDGV	29	12	41.38	2	6.90	13	44.83	1	3.45	0	0.00	0	0.00	1	3.45	1	3.45
2000 Total		269	88	32.71	23	8.55	86	31.97	4	1.49	6	2.23	5	1.86	56	20.82	3	1.12
2001	LDGT1	43	9	20.93	3	6.98	21	48.84	1	2.33	0	0.00	1	2.33	8	18.60	0	0.00
	LDGT2	248	85	34.27	19	7.66	83	33.47	2	0.81	3	1.21	5	2.02	47	18.95	7	2.82
	LDGV	48	12	25.00	6	12.50	14	29.17	1	2.08	0	0.00	3	6.25	12	25.00	0	0.00
2001 Total		339	106	31.27	28	8.26	118	34.81	4	1.18	3	0.88	9	2.65	67	19.76	7	2.06
2002	LDGT1	21	8	38.10	0	0.00	5	23.81	1	4.76	0	0.00	0	0.00	7	33.33	0	0.00
	LDGT2	306	77	25.16	27	8.82	124	40.52	4	1.31	6	1.96	14	4.58	51	16.67	4	1.31
	LDGV	55	17	30.91	3	5.45	17	30.91	0	0.00	0	0.00	4	7.27	14	25.45	0	0.00
2002 Total		382	102	26.70	30	7.85	146	38.22	5	1.31	6	1.57	18	4.71	72	18.85	4	1.05
2003	LDGT1	10	3	30.00	0	0.00	2	20.00	0	0.00	0	0.00	0	0.00	5	50.00	0	0.00
	LDGT2	361	100	27.70	26	7.20	133	36.84	6	1.66	6	1.66	13	3.60	75	20.78	4	1.11
	LDGV	64	19	29.69	2	3.13	19	29.69	0	0.00	0	0.00	4	6.25	19	29.69	1	1.56
2003 Total		435	122	28.05	28	6.44	154	35.40	6	1.38	6	1.38	17	3.91	99	22.76	5	1.15
2004	LDGT1	21	5	23.81	0	0.00	5	23.81	1	4.76	0	0.00	0	0.00	10	47.62	0	0.00

			Failed OBD Only						Failed Both OBD and Gas Cap						Failed Gas Cap Only		Failed Opacity	
Model Year	Type	Total Fail	MIL Commanded on Count	MIL Commanded on %	Visual MIL Count	Visual MIL %	Both MIL Count	Both MIL %	Gas Cap and MIL on Count	Gas Cap and MIL on %	Gas Cap and Visual MIL Count	Gas Cap and Visual MIL %	Both MIL and Gas Cap Count	Both MIL and Gas Cap %	Count	%	Count	%
	LDGT2	314	77	24.52	29	9.24	120	38.22	9	2.87	3	0.96	8	2.55	68	21.66	2	0.64
	LDGV	93	26	27.96	5	5.38	34	36.56	3	3.23	0	0.00	4	4.30	20	21.51	2	2.15
2004 Total		428	108	25.23	34	7.94	159	37.15	13	3.04	3	0.70	12	2.80	98	22.90	4	0.93
2005	LDGT1	31	12	38.71	1	3.23	7	22.58	1	3.23	0	0.00	1	3.23	9	29.03	0	0.00
	LDGT2	280	67	23.93	33	11.79	110	39.29	5	1.79	1	0.36	9	3.21	50	17.86	8	2.86
	LDGV	171	52	30.41	9	5.26	65	38.01	5	2.92	0	0.00	4	2.34	36	21.05	0	0.00
2005 Total		482	131	27.18	43	8.92	182	37.76	11	2.28	1	0.21	14	2.90	95	19.71	8	1.66
2006	LDGT1	84	30	35.71	2	2.38	31	36.90	2	2.38	0	0.00	1	1.19	17	20.24	1	1.19
	LDGT2	229	49	21.40	15	6.55	94	41.05	3	1.31	0	0.00	6	2.62	60	26.20	2	0.87
	LDGV	152	40	26.32	8	5.26	60	39.47	2	1.32	2	1.32	3	1.97	36	23.68	1	0.66
2006 Total		465	119	25.59	25	5.38	185	39.78	7	1.51	2	0.43	10	2.15	113	24.30	4	0.86
2007	LDGT1	84	16	19.05	6	7.14	34	40.48	1	1.19	0	0.00	2	2.38	24	28.57	2	2.38
	LDGT2	457	126	27.57	12	2.63	228	49.89	5	1.09	2	0.44	14	3.06	69	15.10	1	0.22
	LDGV	196	54	27.55	8	4.08	87	44.39	4	2.04	0	0.00	4	2.04	39	19.90	1	0.51
2007 Total		737	196	26.59	26	3.53	349	47.35	10	1.36	2	0.27	20	2.71	132	17.91	4	0.54
2008	LDGT1	89	18	20.22	5	5.62	39	43.82	0	0.00	1	1.12	3	3.37	22	24.72	1	1.12
	LDGT2	415	108	26.02	8	1.93	203	48.92	6	1.45	2	0.48	13	3.13	73	17.59	3	0.72
	LDGV	223	65	29.15	6	2.69	93	41.70	3	1.35	0	0.00	1	0.45	54	24.22	2	0.90
2008 Total		727	191	26.27	19	2.61	335	46.08	9	1.24	3	0.41	17	2.34	149	20.50	6	0.83
2009	LDGT1	38	5	13.16	0	0.00	17	44.74	2	5.26	0	0.00	1	2.63	13	34.21	0	0.00
	LDGT2	179	40	22.35	4	2.23	98	54.75	2	1.12	0	0.00	5	2.79	30	16.76	0	0.00
	LDGV	136	48	35.29	4	2.94	57	41.91	0	0.00	0	0.00	4	2.94	22	16.18	1	0.74
2009 Total		353	93	26.35	8	2.27	172	48.73	4	1.13	0	0.00	10	2.83	65	18.41	1	0.28
2010	LDGT1	62	20	32.26	3	4.84	23	37.10	1	1.61	0	0.00	0	0.00	14	22.58	1	1.61
	LDGT2	179	47	26.26	2	1.12	82	45.81	2	1.12	0	0.00	4	2.23	41	22.91	1	0.56
	LDGV	133	42	31.58	0	0.00	60	45.11	1	0.75	0	0.00	1	0.75	25	18.80	4	3.01
2010 Total		374	109	29.14	5	1.34	165	44.12	4	1.07	0	0.00	5	1.34	80	21.39	6	1.60
2011	LDGT1	42	8	19.05	0	0.00	10	23.81	0	0.00	1	2.38	2	4.76	21	50.00	0	0.00
	LDGT2	172	49	28.49	4	2.33	78	45.35	2	1.16	0	0.00	5	2.91	34	19.77	0	0.00
	LDGV	113	32	28.32	3	2.65	48	42.48	1	0.88	0	0.00	4	3.54	25	22.12	0	0.00
2011 Total		327	89	27.22	7	2.14	136	41.59	3	0.92	1	0.31	11	3.36	80	24.46	0	0.00
2012	LDGT1	100	20	20.00	3	3.00	16	16.00	0	0.00	0	0.00	3	3.00	58	58.00	0	0.00
	LDGT2	158	45	28.48	5	3.16	65	41.14	1	0.63	0	0.00	0	0.00	41	25.95	2	1.27
	LDGV	209	64	30.62	5	2.39	67	32.06	0	0.00	0	0.00	1	0.48	72	34.45	0	0.00
2012 Total		467	129	27.62	13	2.78	148	31.69	1	0.21	0	0.00	4	0.86	171	36.62	2	0.43
2013	LDGT1	885	218	24.63	20	2.26	317	35.82	7	0.79	0	0.00	10	1.13	306	34.58	9	1.02
	LDGT2	931	145	15.57	13	1.40	291	31.26	13	1.40	3	0.32	37	3.97	426	45.76	4	0.43

			Failed OBD Only						Failed Both OBD and Gas Cap						Failed Gas Cap Only		Failed Opacity	
Model Year	Type	Total Fail	MIL Commanded on Count	MIL Commanded on %	Visual MIL Count	Visual MIL %	Both MIL Count	Both MIL %	Gas Cap and MIL on Count	Gas Cap and MIL on %	Gas Cap and Visual MIL Count	Gas Cap and Visual MIL %	Both MIL and Gas Cap Count	Both MIL and Gas Cap %	Count	%	Count	%
	LDGV	1,535	485	31.60	26	1.69	557	36.29	13	0.85	1	0.07	33	2.15	413	26.91	8	0.52
2013 Total		3,351	848	25.31	59	1.76	1,165	34.77	33	0.98	4	0.12	80	2.39	1,145	34.17	21	0.63
2014	LDGT1	1,138	254	22.32	16	1.41	319	28.03	13	1.14	1	0.09	13	1.14	512	44.99	10	0.88
	LDGT2	1,463	333	22.76	13	0.89	480	32.81	12	0.82	0	0.00	29	1.98	590	40.33	6	0.41
	LDGV	1,460	417	28.56	25	1.71	569	38.97	12	0.82	0	0.00	16	1.10	416	28.49	5	0.34
2014 Total		4,061	1,004	24.72	54	1.33	1,368	33.69	37	0.91	1	0.02	58	1.43	1,518	37.38	21	0.52
2015	LDGT1	758	208	27.44	6	0.79	222	29.29	11	1.45	0	0.00	10	1.32	296	39.05	5	0.66
	LDGT2	650	165	25.38	9	1.38	218	33.54	13	2.00	1	0.15	21	3.23	220	33.85	3	0.46
	LDGV	1,099	360	32.76	12	1.09	349	31.76	8	0.73	0	0.00	23	2.09	342	31.12	6	0.55
2015 Total		2,507	733	29.24	27	1.08	789	31.47	32	1.28	1	0.04	54	2.15	858	34.22	14	0.56
2016	LDGT1	1,977	344	17.40	17	0.86	425	21.50	9	0.46	0	0.00	14	0.71	1,149	58.12	19	0.96
	LDGT2	875	183	20.91	11	1.26	250	28.57	7	0.80	2	0.23	21	2.40	396	45.26	6	0.69
	LDGV	1,541	446	28.94	22	1.43	448	29.07	19	1.23	2	0.13	28	1.82	572	37.12	5	0.32
2016 Total		4,393	973	22.15	50	1.14	1,123	25.56	35	0.80	4	0.09	63	1.43	2,117	48.19	30	0.68
2017	LDGT1	199	31	15.58	2	1.01	44	22.11	2	1.01	0	0.00	1	0.50	118	59.30	1	0.50
	LDGT2	116	28	24.14	0	0.00	36	31.03	0	0.00	0	0.00	1	0.86	49	42.24	2	1.72
	LDGV	178	40	22.47	4	2.25	46	25.84	1	0.56	0	0.00	2	1.12	85	47.75	0	0.00
2017 Total		493	99	20.08	6	1.22	126	25.56	3	0.61	0	0.00	4	0.81	252	51.12	3	0.61
2018	LDGT1	48	5	10.42	1	2.08	13	27.08	0	0.00	0	0.00	1	2.08	27	56.25	1	2.08
	LDGT2	38	8	21.05	1	2.63	10	26.32	0	0.00	0	0.00	0	0.00	19	50.00	0	0.00
	LDGV	50	17	34.00	1	2.00	11	22.00	0	0.00	1	2.00	0	0.00	19	38.00	1	2.00
2018 Total		136	30	22.06	3	2.21	34	25.00	0	0.00	1	0.74	1	0.74	65	47.79	2	1.47
2019	LDGT1	24	6	25.00	0	0.00	3	12.50	0	0.00	0	0.00	0	0.00	15	62.50	0	0.00
	LDGT2	11	1	9.09	0	0.00	2	18.18	0	0.00	0	0.00	0	0.00	8	72.73	0	0.00
	LDGV	30	13	43.33	3	10.00	7	23.33	0	0.00	0	0.00	0	0.00	7	23.33	0	0.00
2019 Total		65	20	30.77	3	4.62	12	18.46	0	0.00	0	0.00	0	0.00	30	46.15	0	0.00
2020	LDGT1	3	1	33.33	0	0.00	1	33.33	0	0.00	0	0.00	0	0.00	1	33.33	0	0.00
	LDGT2	5	0	0.00	0	0.00	2	40.00	0	0.00	0	0.00	0	0.00	3	60.00	0	0.00
	LDGV	15	3	20.00	1	6.67	3	20.00	0	0.00	0	0.00	0	0.00	6	40.00	2	13.33
2020 Total		23	4	17.39	1	4.35	6	26.09	0	0.00	0	0.00	0	0.00	10	43.48	2	8.70
2021	LDGT2	1	0	0.00	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	8	6	75.00	0	0.00	1	12.50	0	0.00	0	0.00	0	0.00	1	12.50	0	0.00
2021 Total		9	6	66.67	0	0.00	2	22.22	0	0.00	0	0.00	0	0.00	1	11.11	0	0.00
2022	LDGT1	2	0	0.00	0	0.00	1	50.00	0	0.00	0	0.00	0	0.00	1	50.00	0	0.00
	LDGT2	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	2	0	0.00	1	50.00	0	0.00	0	0.00	0	0.00	0	0.00	1	50.00	0	0.00
2022 Total		5	1	20.00	1	20.00	1	20.00	0	0.00	0	0.00	0	0.00	2	40.00	0	0.00

			Failed OBD Only						Failed Both OBD and Gas Cap						Failed Gas Cap Only		Failed Opacity	
Model Year	Type	Total Fail	MIL Commanded on Count	MIL Commanded on %	Visual MIL Count	Visual MIL %	Both MIL Count	Both MIL %	Gas Cap and MIL on Count	Gas Cap and MIL on %	Gas Cap and Visual MIL Count	Gas Cap and Visual MIL %	Both MIL and Gas Cap Count	Both MIL and Gas Cap %	Count	%	Count	%
Grand Total		**21,057**	**5,390**	**25.60**	**508**	**2.41**	**7,027**	**33.37**	**228**	**1.08**	**46**	**0.22**	**419**	**1.99**	**7,317**	**34.75**	**149**	**0.71**

Initial OBD Inspection Failure Report - Summary by Veh (V 1.03)

		Failed OBD Only						Failed Both OBD and Gas Cap						Failed Gas Cap Only		Failed Opacity	
Type	Total Fail	MIL Commanded on Count	MIL Commanded on %	Visual MIL Count	Visual MIL %	Both MIL Count	Both MIL %	Gas Cap and MIL on Count	Gas Cap and MIL on %	Gas Cap and Visual MIL Count	Gas Cap and Visual MIL %	Both MIL and Gas Cap Count	Both MIL and Gas Cap %	Count	%	Count	%
LDGT1	5,729	1,240	21.64	85	1.48	1,571	27.42	56	0.98	4	0.07	63	1.10	2,663	46.48	51	0.89
LDGT2	7,738	1,863	24.08	261	3.37	2,816	36.39	97	1.25	35	0.45	215	2.78	2,410	31.14	57	0.74
LDGV	7,590	2,287	30.13	162	2.13	2,640	34.78	75	0.99	7	0.09	141	1.86	2,244	29.57	41	0.54
Grand Total	**21,057**	**5,390**	**25.60**	**508**	**2.41**	**7,027**	**33.37**	**228**	**1.08**	**46**	**0.22**	**419**	**1.99**	**7,317**	**34.75**	**149**	**0.71**

Appendix A4

Initial OBD Fail DTC Report

Date Range
Between 1/1/2023 and 1/1/2024

Initial OBD Fail DTC Report (V 1.03)

			Count of Tests by Number of DTC Present												No DTCs Available	
Model Year	Type	Total Fail	0 Count	0 %	1 Count	1 %	2 Count	2 %	3 Count	3 %	4 Count	4 %	>= 5 Count	>= 5 %	Count	%
1996	LDGT1	4	0	0.00	1	25.00	1	25.00	0	0.00	0	0.00	2	50.00	0	0.00
	LDGT2	5	0	0.00	2	40.00	1	20.00	0	0.00	1	20.00	1	20.00	0	0.00
	LDGV	12	3	25.00	2	16.67	2	16.67	3	25.00	0	0.00	1	8.33	1	8.33
1996 Total		21	3	14.29	5	23.81	4	19.05	3	14.29	1	4.76	4	19.05	1	4.76
1997	LDGT1	6	0	0.00	1	16.67	1	16.67	0	0.00	1	16.67	3	50.00	0	0.00
	LDGT2	9	2	22.22	2	22.22	1	11.11	0	0.00	2	22.22	2	22.22	0	0.00
	LDGV	9	1	11.11	1	11.11	4	44.44	1	11.11	1	11.11	0	0.00	1	11.11
1997 Total		24	3	12.50	4	16.67	6	25.00	1	4.17	4	16.67	5	20.83	1	4.17
1998	LDGT1	6	0	0.00	4	66.67	1	16.67	0	0.00	1	16.67	0	0.00	0	0.00
	LDGT2	11	0	0.00	6	54.55	1	9.09	0	0.00	2	18.18	1	9.09	1	9.09
	LDGV	11	1	9.09	3	27.27	3	27.27	1	9.09	0	0.00	3	27.27	0	0.00
1998 Total		28	1	3.57	13	46.43	5	17.86	1	3.57	3	10.71	4	14.29	1	3.57
1999	LDGT1	8	0	0.00	1	12.50	4	50.00	2	25.00	0	0.00	1	12.50	0	0.00
	LDGT2	95	6	6.32	39	41.05	21	22.11	8	8.42	8	8.42	11	11.58	2	2.11
	LDGV	10	0	0.00	5	50.00	2	20.00	0	0.00	1	10.00	1	10.00	1	10.00
1999 Total		113	6	5.31	45	39.82	27	23.89	10	8.85	9	7.96	13	11.50	3	2.65
2000	LDGT1	16	0	0.00	7	43.75	2	12.50	3	18.75	0	0.00	3	18.75	1	6.25
	LDGT2	168	13	7.74	59	35.12	46	27.38	18	10.71	9	5.36	11	6.55	12	7.14
	LDGV	28	2	7.14	7	25.00	10	35.71	4	14.29	1	3.57	3	10.71	1	3.57
2000 Total		212	15	7.08	73	34.43	58	27.36	25	11.79	10	4.72	17	8.02	14	6.60
2001	LDGT1	35	0	0.00	15	42.86	6	17.14	5	14.29	3	8.57	3	8.57	3	8.57
	LDGT2	197	12	6.09	76	38.58	53	26.90	16	8.12	16	8.12	10	5.08	14	7.11
	LDGV	36	2	5.56	13	36.11	10	27.78	3	8.33	1	2.78	1	2.78	6	16.67
2001 Total		268	14	5.22	104	38.81	69	25.75	24	8.96	20	7.46	14	5.22	23	8.58
2002	LDGT1	14	0	0.00	6	42.86	3	21.43	3	21.43	0	0.00	2	14.29	0	0.00
	LDGT2	252	17	6.75	117	46.43	54	21.43	23	9.13	9	3.57	15	5.95	17	6.75
	LDGV	41	2	4.88	13	31.71	10	24.39	6	14.63	3	7.32	4	9.76	3	7.32
2002 Total		307	19	6.19	136	44.30	67	21.82	32	10.42	12	3.91	21	6.84	20	6.51
2003	LDGT1	5	1	20.00	3	60.00	0	0.00	0	0.00	0	0.00	1	20.00	0	0.00
	LDGT2	284	12	4.23	113	39.79	72	25.35	26	9.15	17	5.99	23	8.10	21	7.39
	LDGV	44	5	11.36	12	27.27	9	20.45	4	9.09	3	6.82	9	20.45	2	4.55
2003 Total		333	18	5.41	128	38.44	81	24.32	30	9.01	20	6.01	33	9.91	23	6.91

			Count of Tests by Number of DTC Present												No DTCs Available	
Model Year	Type	Total Fail	0 Count	0 %	1 Count	1 %	2 Count	2 %	3 Count	3 %	4 Count	4 %	>= 5 Count	>= 5 %	Count	%
2004	LDGT1	11	0	0.00	6	54.55	3	27.27	1	9.09	0	0.00	1	9.09	0	0.00
	LDGT2	246	12	4.88	103	41.87	53	21.54	23	9.35	18	7.32	19	7.72	18	7.32
	LDGV	72	5	6.94	26	36.11	17	23.61	10	13.89	5	6.94	7	9.72	2	2.78
2004 Total		329	17	5.17	135	41.03	73	22.19	34	10.33	23	6.99	27	8.21	20	6.08
2005	LDGT1	22	3	13.64	10	45.45	7	31.82	1	4.55	0	0.00	1	4.55	0	0.00
	LDGT2	225	10	4.44	89	39.56	55	24.44	25	11.11	7	3.11	20	8.89	19	8.44
	LDGV	135	7	5.19	58	42.96	29	21.48	18	13.33	8	5.93	9	6.67	6	4.44
2005 Total		382	20	5.24	157	41.10	91	23.82	44	11.52	15	3.93	30	7.85	25	6.54
2006	LDGT1	66	1	1.52	21	31.82	22	33.33	7	10.61	5	7.58	9	13.64	1	1.52
	LDGT2	167	4	2.40	52	31.14	40	23.95	22	13.17	9	5.39	28	16.77	12	7.19
	LDGV	115	5	4.35	51	44.35	34	29.57	14	12.17	2	1.74	5	4.35	4	3.48
2006 Total		348	10	2.87	124	35.63	96	27.59	43	12.36	16	4.60	42	12.07	17	4.89
2007	LDGT1	59	5	8.47	28	47.46	12	20.34	7	11.86	2	3.39	4	6.78	1	1.69
	LDGT2	387	8	2.07	189	48.84	83	21.45	30	7.75	22	5.68	48	12.40	7	1.81
	LDGV	157	5	3.18	70	44.59	37	23.57	16	10.19	10	6.37	14	8.92	5	3.18
2007 Total		603	18	2.99	287	47.60	132	21.89	53	8.79	34	5.64	66	10.95	13	2.16
2008	LDGT1	66	5	7.58	35	53.03	17	25.76	5	7.58	1	1.52	1	1.52	2	3.03
	LDGT2	340	5	1.47	160	47.06	75	22.06	37	10.88	18	5.29	39	11.47	6	1.76
	LDGV	168	8	4.76	92	54.76	33	19.64	16	9.52	5	2.98	11	6.55	3	1.79
2008 Total		574	18	3.14	287	50.00	125	21.78	58	10.10	24	4.18	51	8.89	11	1.92
2009	LDGT1	25	1	4.00	11	44.00	7	28.00	0	0.00	4	16.00	2	8.00	0	0.00
	LDGT2	149	2	1.34	54	36.24	44	29.53	19	12.75	12	8.05	14	9.40	4	2.68
	LDGV	113	2	1.77	58	51.33	20	17.70	16	14.16	5	4.42	11	9.73	1	0.88
2009 Total		287	5	1.74	123	42.86	71	24.74	35	12.20	21	7.32	27	9.41	5	1.74
2010	LDGT1	47	0	0.00	26	55.32	6	12.77	6	12.77	2	4.26	4	8.51	3	6.38
	LDGT2	137	1	0.73	79	57.66	29	21.17	11	8.03	6	4.38	10	7.30	1	0.73
	LDGV	104	5	4.81	58	55.77	19	18.27	7	6.73	7	6.73	8	7.69	0	0.00
2010 Total		288	6	2.08	163	56.60	54	18.75	24	8.33	15	5.21	22	7.64	4	1.39
2011	LDGT1	21	1	4.76	11	52.38	7	33.33	2	9.52	0	0.00	0	0.00	0	0.00
	LDGT2	138	2	1.45	67	48.55	41	29.71	11	7.97	7	5.07	9	6.52	1	0.72
	LDGV	88	6	6.82	37	42.05	24	27.27	8	9.09	5	5.68	5	5.68	3	3.41
2011 Total		247	9	3.64	115	46.56	72	29.15	21	8.50	12	4.86	14	5.67	4	1.62
2012	LDGT1	42	2	4.76	23	54.76	9	21.43	3	7.14	2	4.76	1	2.38	2	4.76
	LDGT2	116	4	3.45	47	40.52	29	25.00	16	13.79	9	7.76	8	6.90	3	2.59
	LDGV	137	10	7.30	56	40.88	36	26.28	12	8.76	8	5.84	11	8.03	4	2.92
2012 Total		295	16	5.42	126	42.71	74	25.08	31	10.51	19	6.44	20	6.78	9	3.05

			Count of Tests by Number of DTC Present												No DTCs Available	
Model Year	Type	Total Fail	0 Count	0 %	1 Count	1 %	2 Count	2 %	3 Count	3 %	4 Count	4 %	>= 5 Count	>= 5 %	Count	%
2013	LDGT1	572	22	3.85	354	61.89	114	19.93	42	7.34	18	3.15	18	3.15	4	0.70
	LDGT2	502	6	1.20	254	50.60	110	21.91	66	13.15	24	4.78	32	6.37	10	1.99
	LDGV	1,115	146	13.09	536	48.07	212	19.01	91	8.16	48	4.30	73	6.55	9	0.81
2013 Total		2,189	174	7.95	1,144	52.26	436	19.92	199	9.09	90	4.11	123	5.62	23	1.05
2014	LDGT1	616	36	5.84	359	58.28	125	20.29	49	7.95	20	3.25	20	3.25	7	1.14
	LDGT2	867	58	6.69	416	47.98	212	24.45	85	9.80	52	6.00	37	4.27	7	0.81
	LDGV	1,039	87	8.37	506	48.70	242	23.29	80	7.70	38	3.66	76	7.31	10	0.96
2014 Total		2,522	181	7.18	1,281	50.79	579	22.96	214	8.49	110	4.36	133	5.27	24	0.95
2015	LDGT1	457	14	3.06	270	59.08	111	24.29	32	7.00	14	3.06	15	3.28	1	0.22
	LDGT2	427	8	1.87	216	50.59	119	27.87	40	9.37	22	5.15	16	3.75	6	1.41
	LDGV	752	110	14.63	364	48.40	150	19.95	58	7.71	28	3.72	38	5.05	4	0.53
2015 Total		1,636	132	8.07	850	51.96	380	23.23	130	7.95	64	3.91	69	4.22	11	0.67
2016	LDGT1	809	87	10.75	503	62.18	121	14.96	39	4.82	30	3.71	24	2.97	5	0.62
	LDGT2	474	33	6.96	261	55.06	110	23.21	25	5.27	22	4.64	14	2.95	9	1.90
	LDGV	965	172	17.82	472	48.91	154	15.96	70	7.25	53	5.49	32	3.32	12	1.24
2016 Total		2,248	292	12.99	1,236	54.98	385	17.13	134	5.96	105	4.67	70	3.11	26	1.16
2017	LDGT1	80	14	17.50	48	60.00	8	10.00	4	5.00	1	1.25	5	6.25	0	0.00
	LDGT2	65	2	3.08	38	58.46	13	20.00	4	6.15	3	4.62	5	7.69	0	0.00
	LDGV	93	10	10.75	52	55.91	11	11.83	9	9.68	2	2.15	7	7.53	2	2.15
2017 Total		238	26	10.92	138	57.98	32	13.45	17	7.14	6	2.52	17	7.14	2	0.84
2018	LDGT1	20	2	10.00	14	70.00	2	10.00	2	10.00	0	0.00	0	0.00	0	0.00
	LDGT2	19	2	10.53	10	52.63	4	21.05	1	5.26	0	0.00	1	5.26	1	5.26
	LDGV	30	10	33.33	12	40.00	5	16.67	0	0.00	1	3.33	2	6.67	0	0.00
2018 Total		69	14	20.29	36	52.17	11	15.94	3	4.35	1	1.45	3	4.35	1	1.45
2019	LDGT1	9	1	11.11	7	77.78	1	11.11	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	3	1	33.33	1	33.33	1	33.33	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	23	10	43.48	4	17.39	6	26.09	2	8.70	0	0.00	0	0.00	1	4.35
2019 Total		35	12	34.29	12	34.29	8	22.86	2	5.71	0	0.00	0	0.00	1	2.86
2020	LDGT1	2	1	50.00	1	50.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	2	0	0.00	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	7	1	14.29	5	71.43	0	0.00	0	0.00	0	0.00	1	14.29	0	0.00
2020 Total		11	2	18.18	8	72.73	0	0.00	0	0.00	0	0.00	1	9.09	0	0.00
2021	LDGT2	1	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	7	3	42.86	4	57.14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2021 Total		8	3	37.50	5	62.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2022	LDGT1	1	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00

			Count of Tests by Number of DTC Present												No DTCs Available	
Model Year	Type	Total Fail	0 Count	0 %	1 Count	1 %	2 Count	2 %	3 Count	3 %	4 Count	4 %	>= 5 Count	>= 5 %	Count	%
	LDGT2	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2022 Total		3	2	66.67	1	33.33	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Grand Total		**13,618**	**1,036**	**7.61**	**6,736**	**49.46**	**2,936**	**21.56**	**1,168**	**8.58**	**634**	**4.66**	**826**	**6.07**	**282**	**2.07**

Initial OBD Fail DTC Report - Summary by Veh (V 1.03)

		Count of Tests by Number of DTC Present												No DTCs Available	
Type	Total Fail	0 Count	0 %	1 Count	1 %	2 Count	2 %	3 Count	3 %	4 Count	4 %	>= 5 Count	>= 5 %	Count	%
LDGT1	3,019	196	6.49	1,766	58.50	590	19.54	213	7.06	104	3.44	120	3.97	30	0.99
LDGT2	5,287	221	4.18	2,453	46.40	1,267	23.96	506	9.57	295	5.58	374	7.07	171	3.23
LDGV	5,312	619	11.65	2,517	47.38	1,079	20.31	449	8.45	235	4.42	332	6.25	81	1.52
Grand Total	**13,618**	**1,036**	**7.61**	**6,736**	**49.46**	**2,936**	**21.56**	**1,168**	**8.58**	**634**	**4.66**	**826**	**6.07**	**282**	**2.07**

Appendix A5

Initial OBD Fail Readiness Monitor Summary Report

Date Range
Between 1/1/2023 and 1/1/2024

Initial OBD Fail Readiness Monitor Summary Report (V 1.04)

					CAT				EVAP				SAIR				O2				HO2				EGR			
Model Year	Type	Total OBD Fail	% of Total Fail with Unset Readiness Monitors	Total OBD Fail W/ Ready Info	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%
1996	LDGV	12	66.67	11	10	90.91	4	40.00	7	63.64	3	42.86	3	27.27	3	100.00	11	100.00	7	63.64	11	100.00	9	81.82	8	72.73	6	75.00
	LDGT1	4	50.00	4	4	100.00	2	50.00	1	25.00	1	100.00	0	0.00	0	0.00	4	100.00	4	100.00	4	100.00	4	100.00	2	50.00	2	100.00
	LDGT2	5	80.00	5	5	100.00	1	20.00	0	0.00	0	0.00	0	0.00	0	0.00	5	100.00	5	100.00	5	100.00	5	100.00	5	100.00	5	100.00
1996 Total		21	66.67	20	19	95.00	7	36.84	8	40.00	4	50.00	3	15.00	3	100.00	20	100.00	16	80.00	20	100.00	18	90.00	15	75.00	13	86.67
1997	LDGV	9	44.44	8	8	100.00	4	50.00	5	62.50	3	60.00	1	12.50	1	100.00	8	100.00	4	50.00	8	100.00	8	100.00	3	37.50	2	66.67
	LDGT1	6	66.67	6	6	100.00	3	50.00	4	66.67	3	75.00	0	0.00	0	0.00	6	100.00	3	50.00	6	100.00	4	66.67	3	50.00	3	100.00
	LDGT2	9	77.78	9	8	88.89	1	12.50	2	22.22	2	100.00	0	0.00	0	0.00	9	100.00	6	66.67	9	100.00	6	66.67	4	44.44	4	100.00
1997 Total		24	62.50	23	22	95.65	8	36.36	11	47.83	8	72.73	1	4.35	1	100.00	23	100.00	13	56.52	23	100.00	18	78.26	10	43.48	9	90.00
1998	LDGV	11	54.55	11	11	100.00	6	54.55	10	90.91	4	40.00	1	9.09	1	100.00	11	100.00	6	54.55	11	100.00	11	100.00	3	27.27	3	100.00
	LDGT1	6	83.33	6	6	100.00	2	33.33	4	66.67	3	75.00	0	0.00	0	0.00	6	100.00	5	83.33	6	100.00	3	50.00	3	50.00	2	66.67
	LDGT2	11	63.64	10	10	100.00	5	50.00	8	80.00	4	50.00	0	0.00	0	0.00	10	100.00	9	90.00	10	100.00	7	70.00	8	80.00	7	87.50
1998 Total		28	64.29	27	27	100.00	13	48.15	22	81.48	11	50.00	1	3.70	1	100.00	27	100.00	20	74.07	27	100.00	21	77.78	14	51.85	12	85.71
1999	LDGV	10	40.00	9	9	100.00	6	66.67	9	100.00	7	77.78	4	44.44	4	100.00	9	100.00	8	88.89	9	100.00	9	100.00	1	11.11	1	100.00
	LDGT1	8	87.50	8	8	100.00	3	37.50	6	75.00	1	16.67	0	0.00	0	0.00	8	100.00	4	50.00	8	100.00	5	62.50	3	37.50	2	66.67
	LDGT2	95	66.32	93	92	98.92	49	53.26	92	98.92	37	40.22	3	3.23	3	100.00	93	100.00	75	80.65	93	100.00	71	76.34	93	100.00	73	78.49
1999 Total		113	65.49	110	109	99.09	58	53.21	107	97.27	45	42.06	7	6.36	7	100.00	110	100.00	87	79.09	110	100.00	85	77.27	97	88.18	76	78.35
2000	LDGV	28	53.57	27	26	96.30	14	53.85	26	96.30	14	53.85	4	14.81	3	75.00	26	96.30	14	53.85	26	96.30	24	92.31	15	55.56	9	60.00
	LDGT1	16	50.00	15	15	100.00	9	60.00	14	93.33	10	71.43	0	0.00	0	0.00	15	100.00	11	73.33	15	100.00	12	80.00	3	20.00	3	100.00
	LDGT2	168	53.57	156	153	98.08	100	65.36	151	96.79	75	49.67	4	2.56	3	75.00	156	100.00	144	92.31	156	100.00	131	83.97	153	98.08	144	94.12
2000 Total		212	53.30	198	194	97.98	123	63.40	191	96.46	99	51.83	8	4.04	6	75.00	197	99.49	169	85.79	197	99.49	167	84.77	171	86.36	156	91.23
2001	LDGV	36	55.56	30	28	93.33	18	64.29	28	93.33	15	53.57	10	33.33	3	30.00	29	96.67	19	65.52	28	93.33	27	96.43	7	23.33	4	57.14
	LDGT1	35	31.43	31	31	100.00	23	74.19	31	100.00	21	67.74	0	0.00	0	0.00	31	100.00	24	77.42	31	100.00	25	80.65	1	3.23	1	100.00
	LDGT2	197	46.19	183	177	96.72	120	67.80	177	96.72	112	63.28	4	2.19	2	50.00	183	100.00	156	85.25	177	96.72	157	88.70	160	87.43	143	89.38
2001 Total		268	45.52	244	236	96.72	161	68.22	236	96.72	148	62.71	14	5.74	5	35.71	243	99.59	199	81.89	236	96.72	209	88.56	168	68.85	148	88.10
2002	LDGV	41	39.02	38	37	97.37	26	70.27	37	97.37	28	75.68	10	26.32	7	70.00	38	100.00	32	84.21	37	97.37	36	97.30	7	18.42	6	85.71
	LDGT1	14	21.43	13	13	100.00	10	76.92	12	92.31	12	100.00	1	7.69	1	100.00	13	100.00	10	76.92	13	100.00	12	92.31	1	7.69	1	100.00
	LDGT2	252	42.46	235	231	98.30	163	70.56	231	98.30	144	62.34	0	0.00	0	0.00	235	100.00	201	85.53	231	98.30	206	89.18	17	7.23	17	100.00
2002 Total		307	41.04	286	281	98.25	199	70.82	280	97.90	184	65.71	11	3.85	8	72.73	286	100.00	243	84.97	281	98.25	254	90.39	25	8.74	24	96.00
2003	LDGV	44	38.64	42	37	88.10	27	72.97	37	88.10	23	62.16	11	26.19	6	54.55	40	95.24	32	80.00	40	95.24	38	95.00	18	42.86	18	100.00
	LDGT1	5	80.00	5	4	80.00	2	50.00	5	100.00	3	60.00	1	20.00	1	100.00	5	100.00	5	100.00	4	80.00	4	100.00	2	40.00	2	100.00
	LDGT2	284	48.24	263	253	96.20	167	66.01	253	96.20	135	53.36	0	0.00	0	0.00	253	96.20	189	74.70	235	89.35	222	94.47	3	1.14	3	100.00
2003 Total		333	47.45	310	294	94.84	196	66.67	295	95.16	161	54.58	12	3.87	7	58.33	298	96.13	226	75.84	279	90.00	264	94.62	23	7.42	23	100.00
2004	LDGV	72	45.83	70	67	95.71	44	65.67	67	95.71	43	64.18	24	34.29	16	66.67	67	95.71	49	73.13	56	80.00	51	91.07	23	32.86	19	82.61
	LDGT1	11	45.45	11	11	100.00	8	72.73	11	100.00	7	63.64	1	9.09	1	100.00	11	100.00	8	72.73	11	100.00	11	100.00	5	45.45	5	100.00
	LDGT2	246	54.47	228	228	100.00	156	68.42	228	100.00	119	52.19	1	0.44	1	100.00	228	100.00	172	75.44	228	100.00	220	96.49	14	6.14	6	42.86
2004 Total		329	52.28	309	306	99.03	208	67.97	306	99.03	169	55.23	26	8.41	18	69.23	306	99.03	229	74.84	295	95.47	282	95.59	42	13.59	30	71.43
2005	LDGV	135	37.78	129	128	99.22	100	78.13	127	98.45	85	66.93	17	13.18	12	70.59	128	99.22	103	80.47	70	54.26	65	92.86	39	30.23	35	89.74
	LDGT1	22	50.00	22	20	90.91	14	70.00	20	90.91	15	75.00	0	0.00	0	0.00	21	95.45	16	76.19	15	68.18	11	73.33	6	27.27	5	83.33
	LDGT2	225	57.78	206	206	100.00	116	56.31	206	100.00	92	44.66	3	1.46	2	66.67	206	100.00	129	62.62	204	99.03	177	86.76	19	9.22	10	52.63
2005 Total		382	50.26	357	354	99.16	230	64.97	353	98.88	192	54.39	20	5.60	14	70.00	355	99.44	248	69.86	289	80.95	253	87.54	64	17.93	50	78.13
2006	LDGV	115	43.48	111	110	99.10	85	77.27	110	99.10	66	60.00	10	9.01	8	80.00	109	98.20	85	77.98	63	56.76	56	88.89	31	27.93	28	90.32
	LDGT1	66	39.39	65	64	98.46	50	78.13	64	98.46	45	70.31	7	10.77	7	100.00	65	100.00	57	87.69	17	26.15	16	94.12	5	7.69	4	80.00
	LDGT2	167	52.10	155	154	99.35	93	60.39	154	99.35	81	52.60	17	10.97	13	76.47	154	99.35	100	64.94	139	89.68	118	84.89	25	16.13	16	64.00
2006 Total		348	46.84	331	328	99.09	228	69.51	328	99.09	192	58.54	34	10.27	28	82.35	328	99.09	242	73.78	219	66.16	190	86.76	61	18.43	48	78.69
2007	LDGV	157	35.03	152	152	100.00	129	84.87	151	99.34	110	72.85	18	11.84	13	72.22	149	98.03	129	86.58	67	44.08	61	91.04	28	18.42	26	92.86
	LDGT1	59	42.37	58	58	100.00	41	70.69	58	100.00	40	68.97	6	10.34	2	33.33	58	100.00	44	75.86	58	100.00	53	91.38	25	43.10	20	80.00
	LDGT2	387	53.75	380	379	99.74	295	77.84	380	100.00	209	55.00	43	11.32	33	76.74	379	99.74	253	66.75	379	99.74	313	82.59	21	5.53	16	76.19
2007 Total		603	47.76	590	589	99.83	465	78.95	589	99.83	359	60.95	67	11.36	48	71.64	586	99.32	426	72.70	504	85.42	427	84.72	74	12.54	62	83.78
2008	LDGV	168	37.50	165	162	98.18	129	79.63	164	99.39	122	74.39	22	13.33	17	77.27	162	98.18	127	78.40	162	98.18	152	93.83	44	26.67	41	93.18
	LDGT1	66	34.85	64	64	100.00	49	76.56	64	100.00	49	76.56	5	7.81	5	100.00	64	100.00	51	79.69	64	100.00	60	93.75	31	48.44	28	90.32
	LDGT2	340	52.35	334	334	100.00	246	73.65	334	100.00	186	55.69	49	14.67	37	75.51	334	100.00	228	68.26	334	100.00	287	85.93	64	19.16	51	79.69
2008 Total		574	45.99	563	560	99.47	424	75.71	562	99.82	357	63.52	76	13.50	59	77.63	560	99.47	406	72.50	560	99.47	499	89.11	139	24.69	120	86.33
2009	LDGV	113	36.28	111	111	100.00	88	79.28	111	100.00	86	77.48	17	15.32	12	70.59	110	99.10	92	83.64	110	99.10	105	95.45	45	40.54	40	88.89
	LDGT1	25	52.00	25	24	96.00	15	62.50	24	96.00	15	62.50	0	0.00	0	0.00	24	96.00	16	66.67	25	100.00	22	88.00	15	60.00	12	80.00
	LDGT2	149	55.70	145	145	100.00	111	76.55	145	100.00	70	48.28	1	0.69	1	100.00	145	100.00	88	60.69	145	100.00	112	77.24	47	32.41	36	76.60

					CAT				EVAP				SAIR				O2				HO2				EGR			
Model Year	Type	Total OBD Fail	% of Total Fail with Unset Readiness Monitors	Total OBD Fail W/ Ready Info	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%
2009 Total		287	47.74	281	280	99.64	214	76.43	280	99.64	171	61.07	18	6.41	13	72.22	279	99.29	196	70.25	280	99.64	239	85.36	107	38.08	88	82.24
2010	LDGV	104	35.58	104	100	96.15	79	79.00	104	100.00	85	81.73	16	15.38	9	56.25	104	100.00	88	84.62	104	100.00	99	95.19	97	93.27	93	95.88
	LDGT1	47	48.94	44	44	100.00	27	61.36	44	100.00	31	70.45	4	9.09	4	100.00	44	100.00	34	77.27	44	100.00	42	95.45	43	97.73	35	81.40
	LDGT2	137	53.28	136	136	100.00	107	78.68	136	100.00	71	52.21	21	15.44	17	80.95	136	100.00	90	66.18	136	100.00	119	87.50	128	94.12	102	79.69
2010 Total		288	46.18	284	280	98.59	213	76.07	284	100.00	187	65.85	41	14.44	30	73.17	284	100.00	212	74.65	284	100.00	260	91.55	268	94.37	230	85.82
2011	LDGV	88	44.32	85	78	91.76	63	80.77	85	100.00	59	69.41	16	18.82	14	87.50	85	100.00	67	78.82	85	100.00	81	95.29	84	98.82	71	84.52
	LDGT1	21	38.10	21	21	100.00	18	85.71	21	100.00	14	66.67	0	0.00	0	0.00	21	100.00	15	71.43	21	100.00	21	100.00	21	100.00	19	90.48
	LDGT2	138	48.55	137	137	100.00	115	83.94	137	100.00	81	59.12	10	7.30	9	90.00	137	100.00	94	68.61	137	100.00	124	90.51	136	99.27	119	87.50
2011 Total		247	46.15	243	236	97.12	196	83.05	243	100.00	154	63.37	26	10.70	23	88.46	243	100.00	176	72.43	243	100.00	226	93.00	241	99.18	209	86.72
2012	LDGV	137	35.04	133	127	95.49	106	83.46	131	98.50	100	76.34	26	19.55	20	76.92	130	97.74	103	79.23	130	97.74	124	95.38	132	99.25	126	95.45
	LDGT1	42	33.33	40	40	100.00	34	85.00	40	100.00	32	80.00	11	27.50	10	90.91	40	100.00	28	70.00	40	100.00	38	95.00	40	100.00	33	82.50
	LDGT2	116	41.38	111	109	98.20	90	82.57	110	99.10	72	65.45	13	11.71	10	76.92	111	100.00	81	72.97	111	100.00	100	90.09	109	98.20	101	92.66
2012 Total		295	37.29	284	276	97.18	230	83.33	281	98.94	204	72.60	50	17.61	40	80.00	281	98.94	212	75.44	281	98.94	262	93.24	281	98.94	260	92.53
2013	LDGV	1,115	36.32	1,106	1,081	97.74	891	82.42	1,098	99.28	786	71.58	181	16.37	167	92.27	1,097	99.19	850	77.48	1,101	99.55	1,012	91.92	1,089	98.46	990	90.91
	LDGT1	572	29.20	568	561	98.77	498	88.77	562	98.94	442	78.65	28	4.93	24	85.71	562	98.94	486	86.48	562	98.94	533	94.84	562	98.94	512	91.10
	LDGT2	502	39.24	492	488	99.19	394	80.74	491	99.80	339	69.04	13	2.64	10	76.92	490	99.59	379	77.35	491	99.80	449	91.45	486	98.78	434	89.30
2013 Total		2,189	35.13	2,166	2,130	98.34	1,783	83.71	2,151	99.31	1,567	72.85	222	10.25	201	90.54	2,149	99.22	1,715	79.80	2,154	99.45	1,994	92.57	2,137	98.66	1,936	90.59
2014	LDGV	1,039	34.55	1,029	1,005	97.67	839	83.48	1,014	98.54	715	70.51	99	9.62	89	89.90	1,012	98.35	798	78.85	1,013	98.45	931	91.91	1,005	97.67	926	92.14
	LDGT1	616	27.60	609	593	97.37	514	86.68	595	97.70	477	80.17	17	2.79	14	82.35	595	97.70	516	86.72	595	97.70	568	95.46	595	97.70	552	92.77
	LDGT2	867	34.83	859	850	98.95	701	82.47	855	99.53	638	74.62	10	1.16	9	90.00	852	99.19	678	79.58	856	99.65	773	90.30	853	99.30	762	89.33
2014 Total		2,522	32.95	2,497	2,448	98.04	2,054	83.91	2,464	98.68	1,830	74.27	126	5.05	112	88.89	2,459	98.48	1,992	81.01	2,464	98.68	2,272	92.21	2,453	98.24	2,240	91.32
2015	LDGV	752	34.04	745	718	96.38	611	85.10	729	97.85	537	73.66	87	11.68	77	88.51	735	98.66	583	79.32	735	98.66	695	94.56	725	97.32	662	91.31
	LDGT1	457	28.88	456	453	99.34	390	86.09	453	99.34	353	77.92	14	3.07	9	64.29	453	99.34	379	83.66	453	99.34	442	97.57	453	99.34	429	94.70
	LDGT2	427	38.17	420	415	98.81	340	81.93	418	99.52	279	66.75	17	4.05	17	100.00	417	99.29	321	76.98	420	100.00	387	92.14	419	99.76	379	90.45
2015 Total		1,636	33.68	1,621	1,586	97.84	1,341	84.55	1,600	98.70	1,169	73.06	118	7.28	103	87.29	1,605	99.01	1,283	79.94	1,608	99.20	1,524	94.78	1,597	98.52	1,470	92.05
2016	LDGV	965	31.81	952	898	94.33	765	85.19	926	97.27	675	72.89	115	12.08	107	93.04	929	97.58	771	82.99	930	97.69	870	93.55	928	97.48	884	95.26
	LDGT1	809	18.29	804	754	93.78	695	92.18	757	94.15	644	85.07	9	1.12	7	77.78	755	93.91	678	89.80	757	94.15	733	96.83	757	94.15	729	96.30
	LDGT2	474	30.17	463	446	96.33	381	85.43	455	98.27	349	76.70	18	3.89	18	100.00	452	97.62	376	83.19	455	98.27	429	94.29	454	98.06	417	91.85
2016 Total		2,248	26.60	2,219	2,098	94.55	1,841	87.75	2,138	96.35	1,668	78.02	142	6.40	132	92.96	2,136	96.26	1,825	85.44	2,142	96.53	2,032	94.86	2,139	96.39	2,030	94.90
2017	LDGV	93	34.41	91	85	93.41	65	76.47	87	95.60	58	66.67	6	6.59	5	83.33	86	94.51	62	72.09	87	95.60	77	88.51	87	95.60	76	87.36
	LDGT1	80	23.75	79	73	92.41	65	89.04	74	93.67	57	77.03	3	3.80	2	66.67	74	93.67	64	86.49	74	93.67	73	98.65	74	93.67	72	97.30
	LDGT2	65	43.08	65	65	100.00	51	78.46	65	100.00	41	63.08	2	3.08	2	100.00	65	100.00	47	72.31	65	100.00	58	89.23	65	100.00	55	84.62
2017 Total		238	33.19	235	223	94.89	181	81.17	226	96.17	156	69.03	11	4.68	9	81.82	225	95.74	173	76.89	226	96.17	208	92.04	226	96.17	203	89.82
2018	LDGV	30	40.00	30	24	80.00	23	95.83	28	93.33	19	67.86	0	0.00	0	0.00	28	93.33	22	78.57	28	93.33	27	96.43	28	93.33	22	78.57
	LDGT1	20	40.00	20	20	100.00	15	75.00	20	100.00	12	60.00	0	0.00	0	0.00	20	100.00	15	75.00	20	100.00	17	85.00	20	100.00	18	90.00
	LDGT2	19	36.84	18	17	94.44	15	88.24	18	100.00	12	66.67	1	5.56	1	100.00	17	94.44	15	88.24	18	100.00	17	94.44	18	100.00	16	88.89
2018 Total		69	39.13	68	61	89.71	53	86.89	66	97.06	43	65.15	1	1.47	1	100.00	65	95.59	52	80.00	66	97.06	61	92.42	66	97.06	56	84.85
2019	LDGV	23	34.78	21	14	66.67	11	78.57	17	80.95	11	64.71	2	9.52	2	100.00	17	80.95	13	76.47	16	76.19	13	81.25	17	80.95	17	100.00
	LDGT1	9	11.11	9	8	88.89	8	100.00	8	88.89	7	87.50	1	11.11	1	100.00	8	88.89	8	100.00	8	88.89	8	100.00	8	88.89	8	100.00
	LDGT2	3	33.33	3	2	66.67	1	50.00	2	66.67	1	50.00	0	0.00	0	0.00	2	66.67	1	50.00	2	66.67	1	50.00	2	66.67	2	100.00
2019 Total		35	28.57	33	24	72.73	20	83.33	27	81.82	19	70.37	3	9.09	3	100.00	27	81.82	22	81.48	26	78.79	22	84.62	27	81.82	27	100.00
2020	LDGV	7	71.43	7	7	100.00	4	57.14	7	100.00	3	42.86	0	0.00	0	0.00	7	100.00	3	42.86	7	100.00	6	85.71	7	100.00	6	85.71
	LDGT1	2	50.00	2	1	50.00	1	100.00	1	50.00	0	0.00	0	0.00	0	0.00	1	50.00	0	0.00	1	50.00	1	100.00	1	50.00	1	100.00
	LDGT2	2	50.00	2	2	100.00	1	50.00	2	100.00	1	50.00	0	0.00	0	0.00	2	100.00	1	50.00	2	100.00	2	100.00	2	100.00	1	50.00
2020 Total		11	63.64	11	10	90.91	6	60.00	10	90.91	4	40.00	0	0.00	0	0.00	10	90.91	4	40.00	10	90.91	9	90.00	10	90.91	8	80.00
2021	LDGV	7	28.57	7	5	71.43	5	100.00	6	85.71	4	66.67	1	14.29	1	100.00	6	85.71	5	83.33	6	85.71	6	100.00	6	85.71	6	100.00
	LDGT2	1	0.00	1	1	100.00	1	100.00	1	100.00	1	100.00	0	0.00	0	0.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00
2021 Total		8	25.00	8	6	75.00	6	100.00	7	87.50	5	71.43	1	12.50	1	100.00	7	87.50	6	85.71	7	87.50	7	100.00	7	87.50	7	100.00
2022	LDGV	1	0.00	1	1	100.00	1	100.00	1	100.00	1	100.00	0	0.00	0	0.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00
	LDGT1	1	0.00	1	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00
	LDGT2	1	0.00	1	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00
2022 Total		3	0.00	3	3	100.00	3	100.00	3	100.00	3	100.00	2	66.67	2	100.00	3	100.00	3	100.00	3	100.00	3	100.00	3	100.00	3	100.00
Grand Total		**13,618**	**37.35**	**13,321**	**12,980**	**97.44**	**10,461**	**80.59**	**13,068**	**98.10**	**9,109**	**69.70**	**1,041**	**7.81**	**875**	**84.05**	**13,112**	**98.43**	**10,395**	**79.28**	**12,834**	**96.34**	**11,806**	**91.99**	**10,465**	**78.56**	**9,538**	**91.14**

Initial OBD Fail Readiness Monitor Summary Report - Summary by Veh(V 1.04)

	CAT	EVAP	SAIR	O2	HO2	EGR

Type	Total OBD Fail	% of Total Fail with Unset Readiness Monitors	Total OBD Fail W/ Ready Info	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%	Supported Count	Supported %	Ready Count	Ready%
LDGV	5,312	35.64	5,225	5,039	96.44	4,143	82.22	5,122	98.03	3,662	71.50	701	13.42	597	85.16	5,134	98.26	4,073	79.33	4,941	94.56	4,594	92.98	4,478	85.70	4,118	91.96
LDGT1	3,019	27.76	2,986	2,897	97.02	2,497	86.19	2,894	96.92	2,295	79.30	109	3.65	89	81.65	2,905	97.29	2,482	85.44	2,853	95.55	2,719	95.30	2,680	89.75	2,499	93.25
LDGT2	5,287	44.56	5,110	5,044	98.71	3,821	75.75	5,052	98.86	3,152	62.39	231	4.52	189	81.82	5,073	99.28	3,840	75.69	5,040	98.63	4,493	89.15	3,307	64.72	2,921	88.33
Grand Total	**13,618**	**37.35**	**13,321**	**12,980**	**97.44**	**10,461**	**80.59**	**13,068**	**98.10**	**9,109**	**69.70**	**1,041**	**7.81**	**875**	**84.05**	**13,112**	**98.43**	**10,395**	**79.28**	**12,834**	**96.34**	**11,806**	**91.99**	**10,465**	**78.56**	**9,538**	**91.14**

Appendix A6

OBD Retest Frequency Report

Date Range
Between 1/1/2023 and 1/1/2024

OBD Retest Frequency Report (V 1.04)

				Retest #1 Inspected				Retest #2 Inspected				Retest #3 Inspected				Retest #4 Inspected				Retest >=5 Inspected			
Model Year	Type	Total	Avg Retest #	Count	%	Pass	%	Count	%	Pass	%	Count	%	Pass	%	Count	%	Pass	%	Count	%	Pass	%
1980	LDGT1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1980 Total		0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1996	LDGT1	8	1.75	5	62.50	3	60.00	2	25.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	12.50	0	0.00
	LDGT2	15	2.07	7	46.67	2	28.57	3	20.00	0	0.00	3	20.00	0	0.00	1	6.67	0	0.00	1	6.67	0	0.00
	LDGV	9	1.44	6	66.67	5	83.33	2	22.22	0	0.00	1	11.11	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00
1996 Total		32	1.81	18	56.25	10	55.56	7	21.88	0	0.00	4	12.50	1	25.00	1	3.13	0	0.00	2	6.25	0	0.00
1997	LDGT1	14	2.21	8	57.14	3	37.50	4	28.57	1	25.00	0	0.00	0	0.00	0	0.00	0	0.00	2	14.29	1	50.00
	LDGT2	28	2.54	11	39.29	6	54.55	4	14.29	0	0.00	5	17.86	1	20.00	4	14.29	0	0.00	4	14.29	4	100.00
	LDGV	9	1.22	7	77.78	3	42.86	2	22.22	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1997 Total		51	2.22	26	50.98	12	46.15	10	19.61	3	30.00	5	9.80	1	20.00	4	7.84	0	0.00	6	11.76	5	83.33
1998	LDGT1	8	1.13	7	87.50	4	57.14	1	12.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	20	2.35	9	45.00	4	44.44	4	20.00	1	25.00	2	10.00	0	0.00	2	10.00	0	0.00	3	15.00	0	0.00
	LDGV	16	1.94	10	62.50	6	60.00	1	6.25	0	0.00	2	12.50	0	0.00	2	12.50	1	50.00	1	6.25	0	0.00
1998 Total		44	1.98	26	59.09	14	53.85	6	13.64	1	16.67	4	9.09	0	0.00	4	9.09	1	25.00	4	9.09	0	0.00
1999	LDGT1	12	1.25	9	75.00	4	44.44	3	25.00	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	147	1.59	92	62.59	53	57.61	32	21.77	11	34.38	18	12.24	10	55.56	3	2.04	1	33.33	2	1.36	1	50.00
	LDGV	25	1.96	14	56.00	9	64.29	4	16.00	2	50.00	3	12.00	0	0.00	2	8.00	0	0.00	2	8.00	1	50.00
1999 Total		184	1.61	115	62.50	66	57.39	39	21.20	16	41.03	21	11.41	10	47.62	5	2.72	1	20.00	4	2.17	2	50.00
2000	LDGT1	65	2.08	40	61.54	29	72.50	10	15.38	4	40.00	5	7.69	1	20.00	4	6.15	1	25.00	6	9.23	1	16.67
	LDGT2	244	1.64	160	65.57	98	61.25	47	19.26	20	42.55	21	8.61	10	47.62	7	2.87	2	28.57	9	3.69	4	44.44
	LDGV	49	2.12	22	44.90	10	45.45	15	30.61	7	46.67	5	10.20	0	0.00	2	4.08	1	50.00	5	10.20	0	0.00
2000 Total		358	1.78	222	62.01	137	61.71	72	20.11	31	43.06	31	8.66	11	35.48	13	3.63	4	30.77	20	5.59	5	25.00
2001	LDGT1	67	1.63	43	64.18	29	67.44	15	22.39	3	20.00	3	4.48	0	0.00	4	5.97	2	50.00	2	2.99	0	0.00
	LDGT2	307	1.45	222	72.31	153	68.92	56	18.24	33	58.93	16	5.21	6	37.50	7	2.28	4	57.14	6	1.95	1	16.67
	LDGV	61	1.49	46	75.41	33	71.74	8	13.11	5	62.50	2	3.28	0	0.00	2	3.28	0	0.00	3	4.92	0	0.00
2001 Total		435	1.48	311	71.49	215	69.13	79	18.16	41	51.90	21	4.83	6	28.57	13	2.99	6	46.15	11	2.53	1	9.09
2002	LDGT1	42	1.95	24	57.14	17	70.83	8	19.05	4	50.00	3	7.14	0	0.00	5	11.90	2	40.00	2	4.76	0	0.00
	LDGT2	372	1.54	260	69.89	174	66.92	67	18.01	39	58.21	23	6.18	8	34.78	11	2.96	3	27.27	11	2.96	4	36.36
	LDGV	70	2.00	43	61.43	28	65.12	12	17.14	5	41.67	5	7.14	1	20.00	4	5.71	2	50.00	6	8.57	1	16.67
2002 Total		484	1.64	327	67.56	219	66.97	87	17.98	48	55.17	31	6.40	9	29.03	20	4.13	7	35.00	19	3.93	5	26.32
2003	LDGT1	34	2.59	17	50.00	10	58.82	5	14.71	1	20.00	5	14.71	1	20.00	1	2.94	0	0.00	6	17.65	0	0.00
	LDGT2	419	1.45	307	73.27	220	71.66	68	16.23	40	58.82	23	5.49	7	30.43	12	2.86	6	50.00	9	2.15	5	55.56
	LDGV	89	1.70	58	65.17	39	67.24	17	19.10	8	47.06	6	6.74	0	0.00	4	4.49	1	25.00	4	4.49	0	0.00
2003 Total		542	1.56	382	70.48	269	70.42	90	16.61	49	54.44	34	6.27	8	23.53	17	3.14	7	41.18	19	3.51	5	26.32
2004	LDGT1	39	1.49	25	64.10	19	76.00	10	25.64	3	30.00	3	7.69	1	33.33	1	2.56	0	0.00	0	0.00	0	0.00
	LDGT2	345	1.39	268	77.68	206	76.87	47	13.62	24	51.06	18	5.22	10	55.56	5	1.45	1	20.00	7	2.03	2	28.57
	LDGV	100	1.48	74	74.00	48	64.86	15	15.00	12	80.00	6	6.00	2	33.33	2	2.00	0	0.00	3	3.00	1	33.33
2004 Total		484	1.42	367	75.83	273	74.39	72	14.88	39	54.17	27	5.58	13	48.15	8	1.65	1	12.50	10	2.07	3	30.00
2005	LDGT1	46	2.11	28	60.87	22	78.57	6	13.04	2	33.33	4	8.70	1	25.00	2	4.35	0	0.00	6	13.04	1	16.67
	LDGT2	311	1.33	238	76.53	170	71.43	51	16.40	27	52.94	18	5.79	12	66.67	2	0.64	0	0.00	2	0.64	1	50.00

				Retest #1 Inspected				Retest #2 Inspected				Retest #3 Inspected				Retest #4 Inspected				Retest >=5 Inspected			
Model Year	Type	Total	Avg Retest #	Count	%	Pass	%	Count	%	Pass	%	Count	%	Pass	%	Count	%	Pass	%	Count	%	Pass	%
	LDGV	197	1.41	152	77.16	116	76.32	24	12.18	12	50.00	12	6.09	4	33.33	5	2.54	3	60.00	4	2.03	0	0.00
2005 Total		554	1.42	418	75.45	308	73.68	81	14.62	41	50.62	34	6.14	17	50.00	9	1.62	3	33.33	12	2.17	2	16.67
2006	LDGT1	131	1.50	93	70.99	69	74.19	22	16.79	9	40.91	10	7.63	4	40.00	4	3.05	1	25.00	2	1.53	0	0.00
	LDGT2	257	1.32	194	75.49	133	68.56	46	17.90	26	56.52	14	5.45	6	42.86	3	1.17	2	66.67	0	0.00	0	0.00
	LDGV	160	1.41	128	80.00	100	78.13	16	10.00	7	43.75	8	5.00	3	37.50	4	2.50	1	25.00	4	2.50	0	0.00
2006 Total		548	1.39	415	75.73	302	72.77	84	15.33	42	50.00	32	5.84	13	40.63	11	2.01	4	36.36	6	1.09	0	0.00
2007	LDGT1	107	1.50	80	74.77	58	72.50	14	13.08	8	57.14	7	6.54	1	14.29	3	2.80	1	33.33	3	2.80	1	33.33
	LDGT2	508	1.51	372	73.23	264	70.97	78	15.35	49	62.82	28	5.51	13	46.43	13	2.56	7	53.85	17	3.35	5	29.41
	LDGV	230	1.39	174	75.65	125	71.84	39	16.96	20	51.28	9	3.91	3	33.33	3	1.30	0	0.00	5	2.17	2	40.00
2007 Total		845	1.47	626	74.08	447	71.41	131	15.50	77	58.78	44	5.21	17	38.64	19	2.25	8	42.11	25	2.96	8	32.00
2008	LDGT1	115	1.30	91	79.13	69	75.82	16	13.91	5	31.25	6	5.22	4	66.67	2	1.74	0	0.00	0	0.00	0	0.00
	LDGT2	494	1.50	359	72.67	272	75.77	73	14.78	41	56.16	31	6.28	11	35.48	16	3.24	3	18.75	15	3.04	8	53.33
	LDGV	251	1.35	197	78.49	157	79.70	36	14.34	19	52.78	9	3.59	5	55.56	4	1.59	1	25.00	5	1.99	2	40.00
2008 Total		860	1.43	647	75.23	498	76.97	125	14.53	65	52.00	46	5.35	20	43.48	22	2.56	4	18.18	20	2.33	10	50.00
2009	LDGT1	66	1.56	43	65.15	30	69.77	15	22.73	9	60.00	4	6.06	1	25.00	2	3.03	0	0.00	2	3.03	2	100.00
	LDGT2	197	1.21	162	82.23	114	70.37	29	14.72	14	48.28	5	2.54	4	80.00	1	0.51	0	0.00	0	0.00	0	0.00
	LDGV	172	1.56	126	73.26	85	67.46	28	16.28	17	60.71	8	4.65	4	50.00	3	1.74	3	100.00	7	4.07	0	0.00
2009 Total		435	1.40	331	76.09	229	69.18	72	16.55	40	55.56	17	3.91	9	52.94	6	1.38	3	50.00	9	2.07	2	22.22
2010	LDGT1	81	1.33	63	77.78	45	71.43	13	16.05	7	53.85	3	3.70	2	66.67	1	1.23	0	0.00	1	1.23	0	0.00
	LDGT2	206	1.37	155	75.24	113	72.90	36	17.48	23	63.89	8	3.88	2	25.00	4	1.94	0	0.00	3	1.46	1	33.33
	LDGV	155	1.37	120	77.42	104	86.67	20	12.90	10	50.00	10	6.45	7	70.00	4	2.58	3	75.00	1	0.65	1	100.00
2010 Total		442	1.37	338	76.47	262	77.51	69	15.61	40	57.97	21	4.75	11	52.38	9	2.04	3	33.33	5	1.13	2	40.00
2011	LDGT1	97	1.91	67	69.07	54	80.60	13	13.40	8	61.54	5	5.15	0	0.00	3	3.09	1	33.33	9	9.28	2	22.22
	LDGT2	213	1.38	164	77.00	127	77.44	29	13.62	16	55.17	12	5.63	6	50.00	5	2.35	2	40.00	3	1.41	1	33.33
	LDGV	174	1.47	130	74.71	107	82.31	23	13.22	13	56.52	11	6.32	3	27.27	5	2.87	0	0.00	5	2.87	1	20.00
2011 Total		484	1.51	361	74.59	288	79.78	65	13.43	37	56.92	28	5.79	9	32.14	13	2.69	3	23.08	17	3.51	4	23.53
2012	LDGT1	207	1.32	163	78.74	136	83.44	28	13.53	19	67.86	11	5.31	5	45.45	4	1.93	3	75.00	1	0.48	1	100.00
	LDGT2	261	1.44	205	78.54	168	81.95	34	13.03	23	67.65	10	3.83	5	50.00	4	1.53	2	50.00	8	3.07	2	25.00
	LDGV	454	1.46	344	75.77	264	76.74	67	14.76	39	58.21	20	4.41	9	45.00	8	1.76	0	0.00	15	3.30	6	40.00
2012 Total		922	1.43	712	77.22	568	79.78	129	13.99	81	62.79	41	4.45	19	46.34	16	1.74	5	31.25	24	2.60	9	37.50
2013	LDGT1	843	1.12	769	91.22	702	91.29	56	6.64	39	69.64	13	1.54	7	53.85	3	0.36	0	0.00	2	0.24	2	100.00
	LDGT2	923	1.15	823	89.17	731	88.82	73	7.91	52	71.23	18	1.95	9	50.00	6	0.65	2	33.33	3	0.33	1	33.33
	LDGV	1,439	1.19	1,252	87.00	1,054	84.19	139	9.66	95	68.35	29	2.02	16	55.17	12	0.83	6	50.00	7	0.49	3	42.86
2013 Total		3,205	1.16	2,844	88.74	2,487	87.45	268	8.36	186	69.40	60	1.87	32	53.33	21	0.66	8	38.10	12	0.37	6	50.00
2014	LDGT1	1,098	1.11	1,017	92.62	950	93.41	58	5.28	41	70.69	12	1.09	6	50.00	5	0.46	2	40.00	6	0.55	2	33.33
	LDGT2	1,367	1.16	1,243	90.93	1,120	90.10	87	6.36	61	70.11	21	1.54	11	52.38	7	0.51	1	14.29	9	0.66	0	0.00
	LDGV	1,338	1.15	1,190	88.94	1,031	86.64	109	8.15	67	61.47	30	2.24	13	43.33	8	0.60	3	37.50	1	0.07	0	0.00
2014 Total		3,803	1.14	3,450	90.72	3,101	89.88	254	6.68	169	66.54	63	1.66	30	47.62	20	0.53	6	30.00	16	0.42	2	12.50
2015	LDGT1	771	1.09	716	92.87	656	91.62	48	6.23	40	83.33	4	0.52	3	75.00	1	0.13	0	0.00	2	0.26	0	0.00
	LDGT2	740	1.25	643	86.89	557	86.63	69	9.32	49	71.01	15	2.03	8	53.33	4	0.54	3	75.00	9	1.22	0	0.00
	LDGV	1,056	1.17	925	87.59	790	85.41	99	9.38	69	69.70	20	1.89	13	65.00	6	0.57	3	50.00	6	0.57	4	66.67
2015 Total		2,567	1.17	2,284	88.98	2,003	87.70	216	8.41	158	73.15	39	1.52	24	61.54	11	0.43	6	54.55	17	0.66	4	23.53
2016	LDGT1	1,856	1.04	1,789	96.39	1,711	95.64	56	3.02	49	87.50	7	0.38	5	71.43	3	0.16	2	66.67	1	0.05	1	100.00
	LDGT2	817	1.08	764	93.51	704	92.15	43	5.26	33	76.74	8	0.98	6	75.00	1	0.12	0	0.00	1	0.12	1	100.00

				Retest #1 Inspected				Retest #2 Inspected				Retest #3 Inspected				Retest #4 Inspected				Retest >=5 Inspected			
Model Year	Type	Total	Avg Retest #	Count	%	Pass	%	Count	%	Pass	%	Count	%	Pass	%	Count	%	Pass	%	Count	%	Pass	%
	LDGV	1,320	1.09	1,229	93.11	1,121	91.21	76	5.76	60	78.95	9	0.68	4	44.44	3	0.23	1	33.33	3	0.23	2	66.67
2016 Total		3,993	1.07	3,782	94.72	3,536	93.50	175	4.38	142	81.14	24	0.60	15	62.50	7	0.18	3	42.86	5	0.13	4	80.00
2017	LDGT1	155	1.04	149	96.13	142	95.30	6	3.87	5	83.33	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	98	1.14	87	88.78	76	87.36	9	9.18	7	77.78	1	1.02	0	0.00	1	1.02	0	0.00	0	0.00	0	0.00
	LDGV	135	1.05	128	94.81	116	90.63	7	5.19	4	57.14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2017 Total		388	1.07	364	93.81	334	91.76	22	5.67	16	72.73	1	0.26	0	0.00	1	0.26	0	0.00	0	0.00	0	0.00
2018	LDGT1	32	1.00	32	100.00	32	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	30	1.10	27	90.00	24	88.89	3	10.00	2	66.67	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	32	1.00	32	100.00	31	96.88	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2018 Total		94	1.03	91	96.81	87	95.60	3	3.19	2	66.67	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2019	LDGT1	18	1.00	18	100.00	18	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	6	1.00	6	100.00	6	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	10	1.00	10	100.00	9	90.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2019 Total		34	1.00	34	100.00	33	97.06	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2020	LDGT1	2	1.00	2	100.00	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	3	1.00	3	100.00	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	11	1.09	10	90.91	9	90.00	1	9.09	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2020 Total		16	1.06	15	93.75	14	93.33	1	6.25	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2021	LDGV	4	1.00	4	100.00	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2021 Total		4	1.00	4	100.00	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2022	LDGT1	1	1.00	1	100.00	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	2	1.00	2	100.00	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2022 Total		3	1.00	3	100.00	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Overall Total		**21,811**	**1.25**	**18,513**	**84.88**	**15,719**	**84.91**	**2,157**	**9.89**	**1,325**	**61.43**	**628**	**2.88**	**275**	**43.79**	**250**	**1.15**	**83**	**33.20**	**263**	**1.21**	**79**	**30.04**

OBD Retest Frequency Report - Summary by Veh (V 1.04)

			Retest #1 Inspected				Retest #2 Inspected				Retest #3 Inspected				Retest #4 Inspected				Retest >=5 Inspected			
Type	Total	Avg Retest #	Count	%	Pass	%	Count	%	Pass	%	Count	%	Pass	%	Count	%	Pass	%	Count	%	Pass	%
LDGT1	5,915	1.18	5,299	89.59	4,815	90.87	409	6.91	260	63.57	105	1.78	42	40.00	48	0.81	15	31.25	54	0.91	14	25.93
LDGT2	8,328	1.31	6,781	81.42	5,498	81.08	988	11.86	591	59.82	318	3.82	145	45.60	119	1.43	39	32.77	122	1.46	41	33.61
LDGV	7,568	1.24	6,433	85.00	5,406	84.04	760	10.04	474	62.37	205	2.71	88	42.93	83	1.10	29	34.94	87	1.15	24	27.59
Overall Total	**21,811**	**1.25**	**18,513**	**84.88**	**15,719**	**84.91**	**2,157**	**9.89**	**1,325**	**61.43**	**628**	**2.88**	**275**	**43.79**	**250**	**1.15**	**83**	**33.20**	**263**	**1.21**	**79**	**30.04**

Appendix A7

Initial OBD Pass DTC Report

Date Range
Between 1/1/2023 and 1/1/2024

Initial OBD Pass DTC Report (V 1.02)

			Count of Tests by Number of DTC Present											
Model Year	Type	Total Pass	0 Count	0 %	1 Count	1 %	2 Count	2 %	3 Count	3 %	4 Count	4 %	>= 5 Count	>= 5 %
1996	LDGT1	9	8	88.89	1	11.11	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	17	14	82.35	3	17.65	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	38	37	97.37	0	0.00	0	0.00	0	0.00	0	0.00	1	2.63
1996 Total		64	59	92.19	4	6.25	0	0.00	0	0.00	0	0.00	1	1.56
1997	LDGT1	35	31	88.57	3	8.57	0	0.00	0	0.00	1	2.86	0	0.00
	LDGT2	42	37	88.10	4	9.52	0	0.00	0	0.00	1	2.38	0	0.00
	LDGV	42	42	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1997 Total		119	110	92.44	7	5.88	0	0.00	0	0.00	2	1.68	0	0.00
1998	LDGT1	33	28	84.85	3	9.09	2	6.06	0	0.00	0	0.00	0	0.00
	LDGT2	15	12	80.00	2	13.33	0	0.00	1	6.67	0	0.00	0	0.00
	LDGV	38	33	86.84	4	10.53	0	0.00	0	0.00	1	2.63	0	0.00
1998 Total		86	73	84.88	9	10.47	2	2.33	1	1.16	1	1.16	0	0.00
1999	LDGT1	44	42	95.45	1	2.27	0	0.00	0	0.00	0	0.00	1	2.27
	LDGT2	520	458	88.08	25	4.81	24	4.62	10	1.92	1	0.19	2	0.38
	LDGV	93	84	90.32	4	4.30	2	2.15	1	1.08	1	1.08	1	1.08
1999 Total		657	584	88.89	30	4.57	26	3.96	11	1.67	2	0.30	4	0.61
2000	LDGT1	126	111	88.10	10	7.94	2	1.59	3	2.38	0	0.00	0	0.00
	LDGT2	694	589	84.87	61	8.79	33	4.76	7	1.01	2	0.29	2	0.29
	LDGV	94	81	86.17	4	4.26	4	4.26	2	2.13	2	2.13	1	1.06
2000 Total		914	781	85.45	75	8.21	39	4.27	12	1.31	4	0.44	3	0.33
2001	LDGT1	205	187	91.22	16	7.80	0	0.00	1	0.49	1	0.49	0	0.00
	LDGT2	916	795	86.79	77	8.41	24	2.62	18	1.97	2	0.22	0	0.00
	LDGV	229	200	87.34	22	9.61	4	1.75	2	0.87	0	0.00	1	0.44
2001 Total		1,350	1,182	87.56	115	8.52	28	2.07	21	1.56	3	0.22	1	0.07
2002	LDGT1	102	91	89.22	8	7.84	0	0.00	0	0.00	3	2.94	0	0.00
	LDGT2	1,109	960	86.56	91	8.21	30	2.71	20	1.80	4	0.36	4	0.36
	LDGV	257	225	87.55	20	7.78	6	2.33	5	1.95	1	0.39	0	0.00
2002 Total		1,468	1,276	86.92	119	8.11	36	2.45	25	1.70	8	0.54	4	0.27
2003	LDGT1	60	54	90.00	4	6.67	1	1.67	1	1.67	0	0.00	0	0.00
	LDGT2	1,420	1,244	87.61	131	9.23	22	1.55	12	0.85	8	0.56	3	0.21
	LDGV	361	315	87.26	30	8.31	13	3.60	1	0.28	2	0.55	0	0.00
2003 Total		1,841	1,613	87.62	165	8.96	36	1.96	14	0.76	10	0.54	3	0.16

			Count of Tests by Number of DTC Present											
Model Year	Type	Total Pass	0 Count	0 %	1 Count	1 %	2 Count	2 %	3 Count	3 %	4 Count	4 %	>= 5 Count	>= 5 %
2004	LDGT1	98	91	92.86	4	4.08	2	2.04	0	0.00	1	1.02	0	0.00
	LDGT2	1,348	1,175	87.17	102	7.57	32	2.37	28	2.08	9	0.67	2	0.15
	LDGV	573	504	87.96	50	8.73	11	1.92	6	1.05	1	0.17	1	0.17
2004 Total		2,019	1,770	87.67	156	7.73	45	2.23	34	1.68	11	0.54	3	0.15
2005	LDGT1	186	173	93.01	8	4.30	5	2.69	0	0.00	0	0.00	0	0.00
	LDGT2	1,447	1,280	88.46	103	7.12	37	2.56	19	1.31	5	0.35	3	0.21
	LDGV	1,070	967	90.37	63	5.89	20	1.87	8	0.75	9	0.84	3	0.28
2005 Total		2,703	2,420	89.53	174	6.44	62	2.29	27	1.00	14	0.52	6	0.22
2006	LDGT1	1,261	1,221	96.83	29	2.30	8	0.63	2	0.16	1	0.08	0	0.00
	LDGT2	1,179	1,056	89.57	67	5.68	20	1.70	25	2.12	3	0.25	8	0.68
	LDGV	1,212	1,089	89.85	102	8.42	13	1.07	4	0.33	2	0.17	2	0.17
2006 Total		3,652	3,366	92.17	198	5.42	41	1.12	31	0.85	6	0.16	10	0.27
2007	LDGT1	1,202	1,154	96.01	32	2.66	9	0.75	6	0.50	0	0.00	1	0.08
	LDGT2	2,908	2,666	91.68	158	5.43	62	2.13	14	0.48	5	0.17	3	0.10
	LDGV	2,275	2,084	91.60	130	5.71	43	1.89	6	0.26	3	0.13	9	0.40
2007 Total		6,385	5,904	92.47	320	5.01	114	1.79	26	0.41	8	0.13	13	0.20
2008	LDGT1	1,519	1,459	96.05	49	3.23	7	0.46	3	0.20	1	0.07	0	0.00
	LDGT2	2,658	2,372	89.24	195	7.34	63	2.37	18	0.68	4	0.15	6	0.23
	LDGV	2,204	2,035	92.33	120	5.44	31	1.41	7	0.32	3	0.14	8	0.36
2008 Total		6,381	5,866	91.93	364	5.70	101	1.58	28	0.44	8	0.13	14	0.22
2009	LDGT1	766	734	95.82	28	3.66	4	0.52	0	0.00	0	0.00	0	0.00
	LDGT2	1,093	960	87.83	80	7.32	31	2.84	15	1.37	5	0.46	2	0.18
	LDGV	1,413	1,308	92.57	78	5.52	20	1.42	4	0.28	0	0.00	3	0.21
2009 Total		3,272	3,002	91.75	186	5.68	55	1.68	19	0.58	5	0.15	5	0.15
2010	LDGT1	1,577	1,524	96.64	43	2.73	3	0.19	4	0.25	2	0.13	1	0.06
	LDGT2	1,957	1,802	92.08	101	5.16	38	1.94	6	0.31	3	0.15	7	0.36
	LDGV	3,291	3,119	94.77	129	3.92	30	0.91	6	0.18	4	0.12	3	0.09
2010 Total		6,825	6,445	94.43	273	4.00	71	1.04	16	0.23	9	0.13	11	0.16
2011	LDGT1	932	898	96.35	21	2.25	8	0.86	2	0.21	3	0.32	0	0.00
	LDGT2	1,798	1,653	91.94	93	5.17	31	1.72	7	0.39	6	0.33	8	0.44
	LDGV	1,955	1,826	93.40	98	5.01	21	1.07	7	0.36	2	0.10	1	0.05
2011 Total		4,685	4,377	93.43	212	4.53	60	1.28	16	0.34	11	0.23	9	0.19
2012	LDGT1	1,567	1,513	96.55	45	2.87	6	0.38	1	0.06	2	0.13	0	0.00
	LDGT2	2,385	2,220	93.08	115	4.82	31	1.30	9	0.38	5	0.21	5	0.21
	LDGV	4,363	4,193	96.10	111	2.54	41	0.94	13	0.30	3	0.07	2	0.05
2012 Total		8,315	7,926	95.32	271	3.26	78	0.94	23	0.28	10	0.12	7	0.08

			Count of Tests by Number of DTC Present											
Model Year	Type	Total Pass	0 Count	0 %	1 Count	1 %	2 Count	2 %	3 Count	3 %	4 Count	4 %	>= 5 Count	>= 5 %
2013	LDGT1	17,893	16,993	94.97	675	3.77	176	0.98	32	0.18	10	0.06	7	0.04
	LDGT2	8,428	7,603	90.21	572	6.79	173	2.05	47	0.56	24	0.28	9	0.11
	LDGV	19,946	18,583	93.17	1,057	5.30	207	1.04	62	0.31	21	0.11	16	0.08
2013 Total		46,267	43,179	93.33	2,304	4.98	556	1.20	141	0.30	55	0.12	32	0.07
2014	LDGT1	33,409	32,072	96.00	1,050	3.14	217	0.65	46	0.14	13	0.04	11	0.03
	LDGT2	17,004	15,754	92.65	854	5.02	292	1.72	62	0.36	19	0.11	23	0.14
	LDGV	27,502	26,117	94.96	1,023	3.72	246	0.89	62	0.23	34	0.12	20	0.07
2014 Total		77,915	73,943	94.90	2,927	3.76	755	0.97	170	0.22	66	0.08	54	0.07
2015	LDGT1	19,296	18,561	96.19	583	3.02	112	0.58	25	0.13	5	0.03	10	0.05
	LDGT2	8,682	8,105	93.35	418	4.81	110	1.27	23	0.26	16	0.18	10	0.12
	LDGV	15,673	14,912	95.14	587	3.75	130	0.83	24	0.15	11	0.07	9	0.06
2015 Total		43,651	41,578	95.25	1,588	3.64	352	0.81	72	0.16	32	0.07	29	0.07
2016	LDGT1	52,165	50,903	97.58	978	1.87	208	0.40	48	0.09	18	0.03	10	0.02
	LDGT2	17,960	17,147	95.47	580	3.23	175	0.97	37	0.21	8	0.04	13	0.07
	LDGV	29,723	28,692	96.53	802	2.70	156	0.52	43	0.14	17	0.06	13	0.04
2016 Total		99,848	96,742	96.89	2,360	2.36	539	0.54	128	0.13	43	0.04	36	0.04
2017	LDGT1	4,909	4,756	96.88	127	2.59	14	0.29	9	0.18	2	0.04	1	0.02
	LDGT2	2,130	2,003	94.04	89	4.18	33	1.55	4	0.19	1	0.05	0	0.00
	LDGV	3,618	3,449	95.33	126	3.48	24	0.66	14	0.39	3	0.08	2	0.06
2017 Total		10,657	10,208	95.79	342	3.21	71	0.67	27	0.25	6	0.06	3	0.03
2018	LDGT1	1,769	1,720	97.23	38	2.15	8	0.45	1	0.06	1	0.06	1	0.06
	LDGT2	674	634	94.07	30	4.45	5	0.74	2	0.30	2	0.30	1	0.15
	LDGV	1,131	1,095	96.82	26	2.30	6	0.53	3	0.27	1	0.09	0	0.00
2018 Total		3,574	3,449	96.50	94	2.63	19	0.53	6	0.17	4	0.11	2	0.06
2019	LDGT1	887	864	97.41	20	2.25	2	0.23	1	0.11	0	0.00	0	0.00
	LDGT2	342	325	95.03	5	1.46	2	0.58	8	2.34	2	0.58	0	0.00
	LDGV	654	636	97.25	15	2.29	3	0.46	0	0.00	0	0.00	0	0.00
2019 Total		1,883	1,825	96.92	40	2.12	7	0.37	9	0.48	2	0.11	0	0.00
2020	LDGT1	128	124	96.88	2	1.56	2	1.56	0	0.00	0	0.00	0	0.00
	LDGT2	112	108	96.43	3	2.68	0	0.00	1	0.89	0	0.00	0	0.00
	LDGV	465	457	98.28	5	1.08	2	0.43	1	0.22	0	0.00	0	0.00
2020 Total		705	689	97.73	10	1.42	4	0.57	2	0.28	0	0.00	0	0.00
2021	LDGT1	100	99	99.00	1	1.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	79	77	97.47	2	2.53	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	320	314	98.13	3	0.94	3	0.94	0	0.00	0	0.00	0	0.00
2021 Total		499	490	98.20	6	1.20	3	0.60	0	0.00	0	0.00	0	0.00

			Count of Tests by Number of DTC Present											
Model Year	Type	Total Pass	0 Count	0 %	1 Count	1 %	2 Count	2 %	3 Count	3 %	4 Count	4 %	>= 5 Count	>= 5 %
2022	LDGT1	68	68	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	36	34	94.44	2	5.56	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	169	166	98.22	2	1.18	1	0.59	0	0.00	0	0.00	0	0.00
2022 Total		273	268	98.17	4	1.47	1	0.37	0	0.00	0	0.00	0	0.00
2023	LDGT1	22	21	95.45	1	4.55	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	13	13	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	74	74	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2023 Total		109	108	99.08	1	0.92	0	0.00	0	0.00	0	0.00	0	0.00
2024	LDGT1	2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	8	8	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2024 Total		10	10	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Grand Total		**336,127**	**319,243**	**94.98**	**12,354**	**3.68**	**3,101**	**0.92**	**859**	**0.26**	**320**	**0.10**	**250**	**0.07**

Initial OBD Pass DTC Report - Summary by Veh (V 1.02)

		Count of Tests by Number of DTC Present											
Type	Total Pass	0 Count	0 %	1 Count	1 %	2 Count	2 %	3 Count	3 %	4 Count	4 %	>= 5 Count	>= 5 %
LDGT1	140,370	135,502	96.53	3,780	2.69	796	0.57	185	0.13	64	0.05	43	0.03
LDGT2	76,966	71,096	92.37	3,963	5.15	1,268	1.65	393	0.51	135	0.18	111	0.14
LDGV	118,791	112,645	94.83	4,611	3.88	1,037	0.87	281	0.24	121	0.10	96	0.08
Grand Total	**336,127**	**319,243**	**94.98**	**12,354**	**3.68**	**3,101**	**0.92**	**859**	**0.26**	**320**	**0.10**	**250**	**0.07**

Appendix A8

Initial OBD Pass Readiness Monitor Summary Report

Date Range
Between 1/1/2023 and 1/1/2024

Initial OBD Pass Readiness Monitor Summary Report (V 1.03)

				CAT				EVAP				SAIR				O2				HO2				EGR			
Model Year	Type	Total Pass	% of Total Pass with Unset Readiness Monitors	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %
1996	LDGV	38	23.68	37	97.37	35	94.59	21	55.26	19	90.48	20	52.63	17	85.00	37	97.37	34	91.89	37	97.37	36	97.30	9	23.68	5	55.56
	LDGT1	9	11.11	9	100.00	9	100.00	2	22.22	1	50.00	0	0.00	0	0.00	9	100.00	9	100.00	7	77.78	7	100.00	2	22.22	2	100.00
	LDGT2	17	5.88	16	94.12	16	100.00	0	0.00	0	0.00	3	17.65	3	100.00	16	94.12	16	100.00	16	94.12	16	100.00	13	76.47	12	92.31
1996 Total		64	17.19	62	96.88	60	96.77	23	35.94	20	86.96	23	35.94	20	86.96	62	96.88	59	95.16	60	93.75	59	98.33	24	37.50	19	79.17
1997	LDGV	42	16.67	41	97.62	40	97.56	23	54.76	19	82.61	15	35.71	13	86.67	41	97.62	40	97.56	40	95.24	39	97.50	13	30.95	11	84.62
	LDGT1	35	8.57	32	91.43	32	100.00	16	45.71	13	81.25	0	0.00	0	0.00	32	91.43	32	100.00	26	74.29	26	100.00	9	25.71	9	100.00
	LDGT2	42	2.38	42	100.00	42	100.00	11	26.19	11	100.00	0	0.00	0	0.00	42	100.00	42	100.00	42	100.00	42	100.00	27	64.29	26	96.30
1997 Total		119	9.24	115	96.64	114	99.13	50	42.02	43	86.00	15	12.61	13	86.67	115	96.64	114	99.13	108	90.76	107	99.07	49	41.18	46	93.88
1998	LDGV	38	31.58	38	100.00	37	97.37	35	92.11	26	74.29	12	31.58	9	75.00	38	100.00	37	97.37	38	100.00	37	97.37	10	26.32	8	80.00
	LDGT1	33	18.18	33	100.00	32	96.97	14	42.42	8	57.14	0	0.00	0	0.00	33	100.00	32	96.97	33	100.00	32	96.97	9	27.27	7	77.78
	LDGT2	15	20.00	14	93.33	14	100.00	7	46.67	4	57.14	1	6.67	1	100.00	14	93.33	14	100.00	14	93.33	14	100.00	7	46.67	7	100.00
1998 Total		86	24.42	85	98.84	83	97.65	56	65.12	38	67.86	13	15.12	10	76.92	85	98.84	83	97.65	85	98.84	83	97.65	26	30.23	22	84.62
1999	LDGV	93	12.90	93	100.00	93	100.00	92	98.92	82	89.13	51	54.84	48	94.12	93	100.00	93	100.00	93	100.00	93	100.00	15	16.13	15	100.00
	LDGT1	44	15.91	43	97.73	43	100.00	28	63.64	21	75.00	0	0.00	0	0.00	43	97.73	43	100.00	43	97.73	43	100.00	13	29.55	12	92.31
	LDGT2	520	38.46	517	99.42	517	100.00	512	98.46	313	61.13	7	1.35	7	100.00	517	99.42	517	100.00	517	99.42	517	100.00	507	97.50	497	98.03
1999 Total		657	33.33	653	99.39	653	100.00	632	96.19	416	65.82	58	8.83	55	94.83	653	99.39	653	100.00	653	99.39	653	100.00	535	81.43	524	97.94
2000	LDGV	94	15.96	94	100.00	94	100.00	94	100.00	81	86.17	38	40.43	35	92.11	94	100.00	94	100.00	94	100.00	94	100.00	28	29.79	27	96.43
	LDGT1	126	10.32	121	96.03	121	100.00	101	80.16	88	87.13	1	0.79	1	100.00	121	96.03	121	100.00	121	96.03	121	100.00	12	9.52	12	100.00
	LDGT2	694	25.07	694	100.00	694	100.00	671	96.69	500	74.52	18	2.59	16	88.89	694	100.00	694	100.00	694	100.00	694	100.00	655	94.38	651	99.39
2000 Total		914	22.10	909	99.45	909	100.00	866	94.75	669	77.25	57	6.24	52	91.23	909	99.45	909	100.00	909	99.45	909	100.00	695	76.04	690	99.28
2001	LDGV	229	11.35	228	99.56	228	100.00	226	98.69	206	91.15	120	52.40	115	95.83	228	99.56	228	100.00	228	99.56	228	100.00	30	13.10	29	96.67
	LDGT1	205	15.61	177	86.34	177	100.00	177	86.34	146	82.49	1	0.49	1	100.00	177	86.34	177	100.00	177	86.34	177	100.00	14	6.83	13	92.86
	LDGT2	916	23.03	914	99.78	914	100.00	913	99.67	721	78.97	21	2.29	13	61.90	914	99.78	914	100.00	914	99.78	914	100.00	818	89.30	807	98.66
2001 Total		1,350	19.93	1,319	97.70	1,319	100.00	1,316	97.48	1,073	81.53	142	10.52	129	90.85	1,319	97.70	1,319	100.00	1,319	97.70	1,319	100.00	862	63.85	849	98.49
2002	LDGV	257	10.12	256	99.61	256	100.00	253	98.44	230	90.91	102	39.69	99	97.06	256	99.61	256	100.00	249	96.89	249	100.00	27	10.51	27	100.00
	LDGT1	102	13.73	97	95.10	97	100.00	97	95.10	83	85.57	2	1.96	2	100.00	97	95.10	97	100.00	97	95.10	97	100.00	12	11.76	12	100.00
	LDGT2	1,109	21.55	1,106	99.73	1,106	100.00	1,106	99.73	867	78.39	3	0.27	3	100.00	1,106	99.73	1,106	100.00	1,106	99.73	1,106	100.00	114	10.28	114	100.00
2002 Total		1,468	19.01	1,459	99.39	1,459	100.00	1,456	99.18	1,180	81.04	107	7.29	104	97.20	1,459	99.39	1,459	100.00	1,452	98.91	1,452	100.00	153	10.42	153	100.00
2003	LDGV	361	12.47	358	99.17	358	100.00	352	97.51	317	90.06	151	41.83	142	94.04	358	99.17	358	100.00	342	94.74	342	100.00	117	32.41	116	99.15
	LDGT1	60	15.00	58	96.67	58	100.00	58	96.67	49	84.48	4	6.67	4	100.00	58	96.67	58	100.00	52	86.67	52	100.00	11	18.33	11	100.00
	LDGT2	1,420	39.79	1,419	99.93	1,419	100.00	1,419	99.93	854	60.18	3	0.21	3	100.00	1,419	99.93	1,419	100.00	1,281	90.21	1,281	100.00	20	1.41	20	100.00
2003 Total		1,841	33.62	1,835	99.67	1,835	100.00	1,829	99.35	1,220	66.70	158	8.58	149	94.30	1,835	99.67	1,835	100.00	1,675	90.98	1,675	100.00	148	8.04	147	99.32
2004	LDGV	573	10.65	571	99.65	571	100.00	566	98.78	512	90.46	145	25.31	138	95.17	571	99.65	571	100.00	289	50.44	289	100.00	85	14.83	85	100.00
	LDGT1	98	20.41	98	100.00	98	100.00	98	100.00	78	79.59	4	4.08	4	100.00	98	100.00	98	100.00	97	98.98	97	100.00	16	16.33	16	100.00
	LDGT2	1,348	35.68	1,345	99.78	1,345	100.00	1,345	99.78	865	64.31	2	0.15	2	100.00	1,345	99.78	1,345	100.00	1,344	99.70	1,344	100.00	51	3.78	50	98.04
2004 Total		2,019	27.84	2,014	99.75	2,014	100.00	2,009	99.50	1,455	72.42	151	7.48	144	95.36	2,014	99.75	2,014	100.00	1,730	85.69	1,730	100.00	152	7.53	151	99.34
2005	LDGV	1,070	11.68	1,062	99.25	1,062	100.00	1,060	99.07	937	88.40	86	8.04	84	97.67	1,062	99.25	1,062	100.00	391	36.54	391	100.00	159	14.86	159	100.00
	LDGT1	186	6.99	182	97.85	182	100.00	182	97.85	169	92.86	8	4.30	8	100.00	182	97.85	182	100.00	96	51.61	96	100.00	64	34.41	64	100.00
	LDGT2	1,447	22.11	1,447	100.00	1,447	100.00	1,447	100.00	1,127	77.89	83	5.74	83	100.00	1,447	100.00	1,447	100.00	1,367	94.47	1,367	100.00	221	15.27	221	100.00
2005 Total		2,703	16.94	2,691	99.56	2,691	100.00	2,689	99.48	2,233	83.04	177	6.55	175	98.87	2,691	99.56	2,691	100.00	1,854	68.59	1,854	100.00	444	16.43	444	100.00
2006	LDGV	1,212	16.09	1,204	99.34	1,204	100.00	1,204	99.34	1,034	85.88	195	16.09	173	88.72	1,204	99.34	1,204	100.00	665	54.87	665	100.00	230	18.98	227	98.70
	LDGT1	1,261	8.25	1,256	99.60	1,256	100.00	1,256	99.60	1,152	91.72	28	2.22	28	100.00	1,256	99.60	1,256	100.00	165	13.08	165	100.00	104	8.25	104	100.00
	LDGT2	1,179	23.41	1,174	99.58	1,174	100.00	1,174	99.58	898	76.49	206	17.47	206	100.00	1,174	99.58	1,174	100.00	972	82.44	972	100.00	123	10.43	123	100.00
2006 Total		3,652	15.74	3,634	99.51	3,634	100.00	3,634	99.51	3,084	84.87	429	11.75	407	94.87	3,634	99.51	3,634	100.00	1,802	49.34	1,802	100.00	457	12.51	454	99.34
2007	LDGV	2,275	9.27	2,264	99.52	2,264	100.00	2,264	99.52	2,066	91.25	274	12.04	261	95.26	2,264	99.52	2,264	100.00	791	34.77	791	100.00	288	12.66	288	100.00
	LDGT1	1,202	6.24	1,188	98.84	1,188	100.00	1,188	98.84	1,113	93.69	39	3.24	39	100.00	1,188	98.84	1,188	100.00	1,186	98.67	1,186	100.00	221	18.39	221	100.00
	LDGT2	2,908	24.24	2,906	99.93	2,906	100.00	2,906	99.93	2,205	75.88	689	23.69	686	99.56	2,906	99.93	2,906	100.00	2,906	99.93	2,906	100.00	167	5.74	166	99.40
2007 Total		6,385	15.52	6,358	99.58	6,358	100.00	6,358	99.58	5,384	84.68	1,002	15.69	986	98.40	6,358	99.58	6,358	100.00	4,883	76.48	4,883	100.00	676	10.59	675	99.85
2008	LDGV	2,204	10.57	2,174	98.64	2,174	100.00	2,174	98.64	1,958	90.06	338	15.34	322	95.27	2,174	98.64	2,174	100.00	2,166	98.28	2,166	100.00	353	16.02	352	99.72
	LDGT1	1,519	4.87	1,510	99.41	1,510	100.00	1,510	99.41	1,438	95.23	36	2.37	35	97.22	1,510	99.41	1,510	100.00	1,510	99.41	1,510	100.00	390	25.67	389	99.74
	LDGT2	2,658	19.75	2,647	99.59	2,647	100.00	2,647	99.59	2,125	80.28	649	24.42	647	99.69	2,647	99.59	2,647	100.00	2,647	99.59	2,647	100.00	427	16.06	426	99.77
2008 Total		6,381	13.04	6,331	99.22	6,331	100.00	6,331	99.22	5,521	87.21	1,023	16.03	1,004	98.14	6,331	99.22	6,331	100.00	6,323	99.09	6,323	100.00	1,170	18.34	1,167	99.74
2009	LDGV	1,413	11.32	1,399	99.01	1,399	100.00	1,398	98.94	1,245	89.06	216	15.29	210	97.22	1,399	99.01	1,399	100.00	1,399	99.01	1,399	100.00	443	31.35	442	99.77
	LDGT1	766	6.66	755	98.56	755	100.00	755	98.56	705	93.38	50	6.53	50	100.00	755	98.56	755	100.00	754	98.43	754	100.00	200	26.11	199	99.50
	LDGT2	1,093	23.33	1,085	99.27	1,085	100.00	1,085	99.27	832	76.68	70	6.40	69	98.57	1,085	99.27	1,085	100.00	1,085	99.27	1,085	100.00	237	21.68	236	99.58
2009 Total		3,272	14.24	3,239	98.99	3,239	100.00	3,238	98.96	2,782	85.92	336	10.27	329	97.92	3,239	98.99	3,239	100.00	3,238	98.96	3,238	100.00	880	26.89	877	99.66

				CAT				EVAP				SAIR				O2				HO2				EGR			
Model Year	Type	Total Pass	% of Total Pass with Unset Readiness Monitors	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %
2010	LDGV	3,291	4.74	3,284	99.79	3,284	100.00	3,283	99.76	3,138	95.58	233	7.08	229	98.28	3,284	99.79	3,284	100.00	3,283	99.76	3,283	100.00	3,137	95.32	3,130	99.78
	LDGT1	1,577	4.12	1,573	99.75	1,573	100.00	1,573	99.75	1,509	95.93	37	2.35	37	100.00	1,573	99.75	1,573	100.00	1,573	99.75	1,573	100.00	1,557	98.73	1,556	99.94
	LDGT2	1,957	12.57	1,941	99.18	1,941	100.00	1,941	99.18	1,702	87.69	683	34.90	680	99.56	1,941	99.18	1,941	100.00	1,941	99.18	1,941	100.00	1,754	89.63	1,750	99.77
2010 Total		6,825	6.84	6,798	99.60	6,798	100.00	6,797	99.59	6,349	93.41	953	13.96	946	99.27	6,798	99.60	6,798	100.00	6,797	99.59	6,797	100.00	6,448	94.48	6,436	99.81
2011	LDGV	1,955	7.06	1,946	99.54	1,946	100.00	1,945	99.49	1,816	93.37	337	17.24	333	98.81	1,946	99.54	1,946	100.00	1,946	99.54	1,946	100.00	1,910	97.70	1,905	99.74
	LDGT1	932	5.58	927	99.46	927	100.00	927	99.46	875	94.39	42	4.51	42	100.00	927	99.46	927	100.00	927	99.46	927	100.00	923	99.03	923	100.00
	LDGT2	1,798	14.40	1,789	99.50	1,789	100.00	1,789	99.50	1,532	85.63	336	18.69	335	99.70	1,789	99.50	1,789	100.00	1,789	99.50	1,789	100.00	1,766	98.22	1,765	99.94
2011 Total		4,685	9.58	4,662	99.51	4,662	100.00	4,661	99.49	4,223	90.60	715	15.26	710	99.30	4,662	99.51	4,662	100.00	4,662	99.51	4,662	100.00	4,599	98.16	4,593	99.87
2012	LDGV	4,363	4.19	4,353	99.77	4,353	100.00	4,349	99.68	4,180	96.11	372	8.53	367	98.66	4,353	99.77	4,353	100.00	4,353	99.77	4,353	100.00	4,307	98.72	4,298	99.79
	LDGT1	1,567	2.94	1,564	99.81	1,564	100.00	1,564	99.81	1,521	97.25	724	46.20	723	99.86	1,564	99.81	1,564	100.00	1,564	99.81	1,564	100.00	1,563	99.74	1,561	99.87
	LDGT2	2,385	10.52	2,377	99.66	2,377	100.00	2,376	99.62	2,129	89.60	661	27.71	659	99.70	2,377	99.66	2,377	100.00	2,377	99.66	2,377	100.00	2,366	99.20	2,364	99.92
2012 Total		8,315	5.77	8,294	99.75	8,294	100.00	8,289	99.69	7,830	94.46	1,757	21.13	1,749	99.54	8,294	99.75	8,294	100.00	8,294	99.75	8,294	100.00	8,236	99.05	8,223	99.84
2013	LDGV	19,946	6.61	19,902	99.78	19,902	100.00	19,896	99.75	18,663	93.80	1,149	5.76	1,141	99.30	19,902	99.78	19,902	100.00	19,902	99.78	19,902	100.00	19,698	98.76	19,621	99.61
	LDGT1	17,893	5.60	17,888	99.97	17,888	100.00	17,887	99.97	16,908	94.53	1,438	8.04	1,437	99.93	17,888	99.97	17,888	100.00	17,888	99.97	17,888	100.00	17,888	99.97	17,866	99.88
	LDGT2	8,428	9.97	8,409	99.77	8,409	100.00	8,409	99.77	7,575	90.08	721	8.55	718	99.58	8,409	99.77	8,409	100.00	8,409	99.77	8,409	100.00	8,357	99.16	8,354	99.96
2013 Total		46,267	6.83	46,199	99.85	46,199	100.00	46,192	99.84	43,146	93.41	3,308	7.15	3,296	99.64	46,199	99.85	46,199	100.00	46,199	99.85	46,199	100.00	45,943	99.30	45,841	99.78
2014	LDGV	27,502	5.01	27,404	99.64	27,404	100.00	27,394	99.61	26,093	95.25	1,296	4.71	1,294	99.85	27,404	99.64	27,404	100.00	27,404	99.64	27,404	100.00	27,115	98.59	27,040	99.72
	LDGT1	33,409	4.79	33,391	99.95	33,391	100.00	33,390	99.94	31,814	95.28	2,460	7.36	2,459	99.96	33,391	99.95	33,391	100.00	33,391	99.95	33,391	100.00	33,391	99.95	33,367	99.93
	LDGT2	17,004	6.13	16,907	99.43	16,907	100.00	16,906	99.42	15,941	94.29	1,484	8.73	1,484	100.00	16,907	99.43	16,907	100.00	16,907	99.43	16,907	100.00	16,876	99.25	16,798	99.54
2014 Total		77,915	5.16	77,702	99.73	77,702	100.00	77,690	99.71	73,848	95.05	5,240	6.73	5,237	99.94	77,702	99.73	77,702	100.00	77,702	99.73	77,702	100.00	77,382	99.32	77,205	99.77
2015	LDGV	15,673	5.74	15,582	99.42	15,582	100.00	15,582	99.42	14,748	94.65	928	5.92	926	99.78	15,582	99.42	15,582	100.00	15,582	99.42	15,582	100.00	15,415	98.35	15,352	99.59
	LDGT1	19,296	5.57	19,266	99.84	19,266	100.00	19,265	99.84	18,235	94.65	1,497	7.76	1,497	100.00	19,266	99.84	19,266	100.00	19,266	99.84	19,266	100.00	19,266	99.84	19,221	99.77
	LDGT2	8,682	9.23	8,656	99.70	8,656	100.00	8,655	99.69	7,903	91.31	704	8.11	704	100.00	8,656	99.70	8,656	100.00	8,656	99.70	8,656	100.00	8,655	99.69	8,606	99.43
2015 Total		43,651	6.36	43,504	99.66	43,504	100.00	43,502	99.66	40,886	93.99	3,129	7.17	3,127	99.94	43,504	99.66	43,504	100.00	43,504	99.66	43,504	100.00	43,336	99.28	43,179	99.64
2016	LDGV	29,723	4.55	29,617	99.64	29,617	100.00	29,613	99.63	28,331	95.67	1,729	5.82	1,728	99.94	29,617	99.64	29,617	100.00	29,616	99.64	29,616	100.00	29,587	99.54	29,517	99.76
	LDGT1	52,165	3.30	52,126	99.93	52,126	100.00	52,126	99.93	50,467	96.82	2,994	5.74	2,994	100.00	52,126	99.93	52,126	100.00	52,126	99.93	52,126	100.00	52,126	99.93	52,062	99.88
	LDGT2	17,960	4.49	17,882	99.57	17,882	100.00	17,879	99.55	17,156	95.96	2,178	12.13	2,177	99.95	17,882	99.57	17,882	100.00	17,882	99.57	17,882	100.00	17,880	99.55	17,797	99.54
2016 Total		99,848	3.89	99,625	99.78	99,625	100.00	99,618	99.77	95,954	96.32	6,901	6.91	6,899	99.97	99,625	99.78	99,625	100.00	99,624	99.78	99,624	100.00	99,593	99.74	99,376	99.78
2017	LDGV	3,618	9.07	3,608	99.72	3,608	100.00	3,607	99.70	3,294	91.32	249	6.88	249	100.00	3,608	99.72	3,608	100.00	3,608	99.72	3,608	100.00	3,606	99.67	3,591	99.58
	LDGT1	4,909	6.48	4,907	99.96	4,907	100.00	4,895	99.71	4,580	93.56	199	4.05	198	99.50	4,907	99.96	4,907	100.00	4,907	99.96	4,907	100.00	4,907	99.96	4,905	99.96
	LDGT2	2,130	9.95	2,119	99.48	2,119	100.00	2,119	99.48	1,920	90.61	161	7.56	161	100.00	2,119	99.48	2,119	100.00	2,119	99.48	2,119	100.00	2,119	99.48	2,106	99.39
2017 Total		10,657	8.05	10,634	99.78	10,634	100.00	10,621	99.66	9,794	92.21	609	5.71	608	99.84	10,634	99.78	10,634	100.00	10,634	99.78	10,634	100.00	10,632	99.77	10,602	99.72
2018	LDGV	1,131	6.81	1,128	99.73	1,128	100.00	1,128	99.73	1,054	93.44	48	4.24	48	100.00	1,128	99.73	1,128	100.00	1,068	94.43	1,068	100.00	1,127	99.65	1,124	99.73
	LDGT1	1,769	4.92	1,762	99.60	1,762	100.00	1,757	99.32	1,674	95.28	127	7.18	127	100.00	1,762	99.60	1,762	100.00	1,762	99.60	1,762	100.00	1,762	99.60	1,758	99.77
	LDGT2	674	7.27	666	98.81	666	100.00	666	98.81	622	93.39	41	6.08	41	100.00	666	98.81	666	100.00	666	98.81	666	100.00	666	98.81	661	99.25
2018 Total		3,574	5.96	3,556	99.50	3,556	100.00	3,551	99.36	3,350	94.34	216	6.04	216	100.00	3,556	99.50	3,556	100.00	3,496	97.82	3,496	100.00	3,555	99.47	3,543	99.66
2019	LDGV	654	6.27	653	99.85	653	100.00	652	99.69	616	94.48	35	5.35	35	100.00	653	99.85	653	100.00	584	89.30	584	100.00	653	99.85	648	99.23
	LDGT1	887	4.74	886	99.89	886	100.00	885	99.77	857	96.84	55	6.20	55	100.00	886	99.89	886	100.00	866	97.63	866	100.00	886	99.89	872	98.42
	LDGT2	342	5.85	340	99.42	340	100.00	340	99.42	324	95.29	18	5.26	18	100.00	340	99.42	340	100.00	340	99.42	340	100.00	340	99.42	336	98.82
2019 Total		1,883	5.47	1,879	99.79	1,879	100.00	1,877	99.68	1,797	95.74	108	5.74	108	100.00	1,879	99.79	1,879	100.00	1,790	95.06	1,790	100.00	1,879	99.79	1,856	98.78
2020	LDGV	465	5.38	464	99.78	464	100.00	464	99.78	449	96.77	20	4.30	20	100.00	464	99.78	464	100.00	454	97.63	454	100.00	464	99.78	454	97.84
	LDGT1	128	2.34	127	99.22	127	100.00	127	99.22	125	98.43	6	4.69	6	100.00	127	99.22	127	100.00	125	97.66	125	100.00	127	99.22	126	99.21
	LDGT2	112	2.68	100	89.29	100	100.00	100	89.29	97	97.00	18	16.07	18	100.00	100	89.29	100	100.00	100	89.29	100	100.00	100	89.29	100	100.00
2020 Total		705	4.40	691	98.01	691	100.00	691	98.01	671	97.11	44	6.24	44	100.00	691	98.01	691	100.00	679	96.31	679	100.00	691	98.01	680	98.41
2021	LDGV	320	2.50	318	99.38	318	100.00	318	99.38	311	97.80	21	6.56	21	100.00	318	99.38	318	100.00	318	99.38	318	100.00	318	99.38	317	99.69
	LDGT1	100	4.00	98	98.00	98	100.00	98	98.00	95	96.94	4	4.00	4	100.00	98	98.00	98	100.00	98	98.00	98	100.00	98	98.00	97	98.98
	LDGT2	79	0.00	73	92.41	73	100.00	73	92.41	73	100.00	12	15.19	12	100.00	73	92.41	73	100.00	73	92.41	73	100.00	73	92.41	73	100.00
2021 Total		499	2.40	489	98.00	489	100.00	489	98.00	479	97.96	37	7.41	37	100.00	489	98.00	489	100.00	489	98.00	489	100.00	489	98.00	487	99.59
2022	LDGV	169	2.96	169	100.00	169	100.00	169	100.00	166	98.22	12	7.10	12	100.00	169	100.00	169	100.00	169	100.00	169	100.00	169	100.00	167	98.82
	LDGT1	68	4.41	67	98.53	67	100.00	67	98.53	66	98.51	4	5.88	4	100.00	67	98.53	67	100.00	66	97.06	66	100.00	67	98.53	65	97.01
	LDGT2	36	2.78	35	97.22	35	100.00	35	97.22	35	100.00	2	5.56	2	100.00	35	97.22	35	100.00	35	97.22	35	100.00	35	97.22	34	97.14
2022 Total		273	3.30	271	99.27	271	100.00	271	99.27	267	98.52	18	6.59	18	100.00	271	99.27	271	100.00	270	98.90	270	100.00	271	99.27	266	98.15
2023	LDGV	74	4.05	74	100.00	74	100.00	74	100.00	71	95.95	6	8.11	6	100.00	74	100.00	74	100.00	74	100.00	74	100.00	74	100.00	74	100.00
	LDGT1	22	4.55	22	100.00	22	100.00	22	100.00	21	95.45	1	4.55	1	100.00	22	100.00	22	100.00	22	100.00	22	100.00	22	100.00	22	100.00
	LDGT2	13	7.69	13	100.00	13	100.00	13	100.00	12	92.31	0	0.00	0	0.00	13	100.00	13	100.00	13	100.00	13	100.00	13	100.00	13	100.00
2023 Total		109	4.59	109	100.00	109	100.00	109	100.00	104	95.41	7	6.42	7	100.00	109	100.00	109	100.00	109	100.00	109	100.00	109	100.00	109	100.00
2024	LDGV	8	12.50	8	100.00	8	100.00	8	100.00	7	87.50	0	0.00	0	0.00	8	100.00	8	100.00	8	100.00	8	100.00	8	100.00	8	100.00
	LDGT1	2	0.00	2	100.00	2	100.00	2	100.00	2	100.00	0	0.00	0	0.00	2	100.00	2	100.00	2	100.00	2	100.00	2	100.00	2	100.00
2024 Total		10	10.00	10	100.00	10	100.00	10	100.00	9	90.00	0	0.00	0	0.00	10	100.00	10	100.00	10	100.00	10	100.00	10	100.00	10	100.00

				CAT				EVAP				SAIR				O2				HO2				EGR			
Model Year	Type	Total Pass	% of Total Pass with Unset Readiness Monitors	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %
Overall Total		**336,127**	**6.54**	**335,127**	**99.70**	**335,122**	**100.00**	**334,855**	**99.62**	**313,825**	**93.72**	**26,733**	**7.95**	**26,579**	**99.42**	**335,127**	**99.70**	**335,121**	**100.00**	**330,350**	**98.28**	**330,346**	**100.00**	**309,444**	**92.06**	**308,624**	**99.74**

Initial OBD Pass Readiness Monitor Summary Report - Summary by Veh (V 1.03)

			CAT				EVAP				SAIR				O2				HO2				EGR			
Type	Total Pass	% of Total Pass with Unset Readiness Monitors	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %	Supported Count	Supported %	Ready Count	Ready %
LDGV	118,791	5.93	118,329	99.61	118,325	100.00	118,244	99.54	111,669	94.44	8,198	6.90	8,075	98.50	118,329	99.61	118,324	100.00	115,191	96.97	115,188	100.00	109,395	92.09	109,037	99.67
LDGT1	140,370	4.59	140,165	99.85	140,164	100.00	140,067	99.78	133,813	95.53	9,761	6.95	9,756	99.95	140,165	99.85	140,164	100.00	138,947	98.99	138,946	100.00	135,662	96.65	135,474	99.86
LDGT2	76,966	11.03	76,633	99.57	76,633	100.00	76,544	99.45	68,343	89.29	8,774	11.40	8,748	99.70	76,633	99.57	76,633	100.00	76,212	99.02	76,212	100.00	64,387	83.66	64,113	99.57
Grand Total	**336,127**	**6.54**	**335,127**	**99.70**	**335,122**	**100.00**	**334,855**	**99.62**	**313,825**	**93.72**	**26,733**	**7.95**	**26,579**	**99.42**	**335,127**	**99.70**	**335,121**	**100.00**	**330,350**	**98.28**	**330,346**	**100.00**	**309,444**	**92.06**	**308,624**	**99.74**

Appendix A9

OBD Initial Inspection Emissions Report

Date Range
Between 1/1/2023 and 1/1/2024

OBD Initial Inspection Emissions Report (V 1.02)

			Passing Initial OBD Inspection												Failing Initial OBD Inspection										
Model Year	Type	Overall Total	Count	%	Pass IM240 Count	Pass IM240 %	Pass IM240 Avg HC (gpm)	Pass IM240 Avg CO (gpm)	Pass IM240 Avg Nox (gpm)	Fail IM240 Count	Fail IM240 %	Fail IM240 Avg HC (gpm)	Fail IM240 Avg CO (gpm)	Fail IM240 Avg Nox (gpm)	Count	%	Pass IM240 Count	Pass IM240 %	Pass IM240 Avg HC (gpm)	Pass IM240 Avg CO (gpm)	Pass IM240 Avg Nox (gpm)	Fail IM240 Count	Fail IM240 %	Fail IM240 Avg HC (gpm)	Fail IM240 Avg CO (gpm)	Fail IM240 Avg Nox (gpm)
1996	LDGT1	1,294	894	69.09	858	95.97	0.34	4.62	1.03	36	4.03	1.08	11.86	3.04	400	30.91	341	85.25	0.36	5.60	1.10	59	14.75	2.88	30.75	2.66
	LDGT2	835	552	66.11	507	91.85	0.40	5.10	1.01	45	8.15	1.34	16.93	2.49	283	33.89	226	79.86	0.44	5.93	1.18	57	20.14	2.02	19.64	2.52
	LDGV	1,157	881	76.15	850	96.48	0.24	3.10	0.64	31	3.52	1.14	14.17	1.67	276	23.85	215	77.90	0.24	3.48	0.69	61	22.10	2.43	25.66	1.51
1996 Total		3,286	2,327	70.82	2,215	95.19	0.32	4.15	0.88	112	4.81	1.20	14.54	2.44	959	29.18	782	81.54	0.35	5.11	1.01	177	18.46	2.45	25.42	2.22
1997	LDGT1	2,533	1,807	71.34	1,733	95.90	0.33	4.39	1.01	74	4.10	0.91	13.91	2.69	726	28.66	608	83.75	0.37	5.41	1.16	118	16.25	1.99	19.41	2.99
	LDGT2	1,204	793	65.86	761	95.96	0.34	4.50	1.02	32	4.04	1.15	13.37	2.70	411	34.14	315	76.64	0.37	5.20	1.20	96	23.36	2.01	23.40	2.93
	LDGV	1,925	1,502	78.03	1,442	96.01	0.25	3.30	0.60	60	3.99	1.24	10.52	1.64	423	21.97	345	81.56	0.25	3.66	0.64	78	18.44	1.60	19.84	1.47
1997 Total		5,662	4,102	72.45	3,936	95.95	0.30	4.01	0.86	166	4.05	1.08	12.58	2.31	1,560	27.55	1,268	81.28	0.34	4.88	1.03	292	18.72	1.89	20.83	2.56
1998	LDGT1	2,929	2,324	79.34	2,248	96.73	0.28	3.81	0.85	76	3.27	1.42	17.69	2.64	605	20.66	488	80.66	0.29	5.04	0.99	117	19.34	1.61	20.20	2.64
	LDGT2	1,227	887	72.29	854	96.28	0.25	3.29	0.93	33	3.72	1.01	13.89	2.95	340	27.71	254	74.71	0.29	3.83	1.08	86	25.29	2.50	24.52	2.80
	LDGV	2,520	1,985	78.77	1,915	96.47	0.22	3.14	0.58	70	3.53	1.30	12.46	1.54	535	21.23	460	85.98	0.26	3.70	0.67	75	14.02	2.35	18.28	1.88
1998 Total		6,676	5,196	77.83	5,017	96.56	0.25	3.47	0.76	179	3.44	1.30	14.95	2.27	1,480	22.17	1,202	81.22	0.28	4.27	0.89	278	18.78	2.09	21.02	2.48
1999	LDGT1	3,976	3,329	83.73	3,141	94.35	0.20	3.15	0.63	188	5.65	0.58	10.08	2.25	647	16.27	487	75.27	0.22	3.94	0.69	160	24.73	1.35	21.14	2.71
	LDGT2	1,999	1,516	75.84	1,405	92.68	0.19	2.10	0.67	111	7.32	0.83	8.41	2.31	483	24.16	346	71.64	0.19	2.51	0.69	137	28.36	1.63	16.13	2.30
	LDGV	3,659	3,008	82.21	2,927	97.31	0.20	2.79	0.54	81	2.69	1.09	11.82	1.57	651	17.79	553	84.95	0.23	3.59	0.63	98	15.05	1.49	15.17	2.45
1999 Total		9,634	7,853	81.51	7,473	95.16	0.20	2.81	0.60	380	4.84	0.76	9.96	2.12	1,781	18.49	1,386	77.82	0.22	3.44	0.67	395	22.18	1.48	17.92	2.50
2000	LDGT1	4,550	3,738	82.15	3,515	94.03	0.18	2.56	0.56	223	5.97	0.59	9.43	2.21	812	17.85	611	75.25	0.19	3.09	0.60	201	24.75	1.37	19.53	2.40
	LDGT2	1,980	1,583	79.95	1,519	95.96	0.17	2.31	0.57	64	4.04	0.75	10.74	2.44	397	20.05	288	72.54	0.20	3.08	0.61	109	27.46	2.04	18.91	2.38
	LDGV	4,230	3,335	78.84	3,222	96.61	0.14	2.38	0.40	113	3.39	1.27	12.57	1.64	895	21.16	742	82.91	0.19	3.13	0.53	153	17.09	1.18	19.63	1.91
2000 Total		10,760	8,656	80.45	8,256	95.38	0.16	2.44	0.50	400	4.62	0.81	10.53	2.09	2,104	19.55	1,641	77.99	0.19	3.11	0.57	463	22.01	1.47	19.42	2.23
2001	LDGT1	5,854	4,594	78.48	4,502	98.00	0.14	2.58	0.42	92	2.00	0.85	15.97	2.29	1,260	21.52	1,071	85.00	0.16	3.33	0.51	189	15.00	1.33	20.70	2.45
	LDGT2	2,812	2,232	79.37	2,147	96.19	0.17	2.05	0.50	85	3.81	0.61	7.23	2.45	580	20.63	454	78.28	0.22	2.88	0.58	126	21.72	1.64	17.17	2.52
	LDGV	5,517	4,335	78.58	4,238	97.76	0.11	2.08	0.30	97	2.24	1.19	12.71	1.83	1,182	21.42	1,016	85.96	0.15	2.91	0.44	166	14.04	1.21	15.86	2.05
2001 Total		14,183	11,161	78.69	10,887	97.55	0.13	2.28	0.39	274	2.45	0.90	12.10	2.18	3,022	21.31	2,541	84.08	0.17	3.08	0.49	481	15.92	1.37	18.10	2.33
2002	LDGT1	6,324	4,933	78.00	4,811	97.53	0.13	3.03	0.38	122	2.47	0.66	17.08	2.09	1,391	22.00	1,128	81.09	0.16	3.60	0.45	263	18.91	1.38	23.13	2.55
	LDGT2	2,746	2,196	79.97	2,104	95.81	0.15	1.87	0.51	92	4.19	0.48	9.17	2.17	550	20.03	403	73.27	0.18	2.54	0.57	147	26.73	1.61	17.99	2.48
	LDGV	5,990	4,715	78.71	4,597	97.50	0.10	2.59	0.28	118	2.50	0.93	10.74	2.03	1,275	21.29	1,060	83.14	0.15	3.43	0.41	215	16.86	1.59	20.36	2.11
2002 Total		15,060	11,844	78.65	11,512	97.20	0.12	2.64	0.37	332	2.80	0.70	12.64	2.09	3,216	21.35	2,591	80.57	0.16	3.37	0.45	625	19.43	1.51	20.97	2.38
2003	LDGT1	8,746	7,260	83.01	7,128	98.18	0.10	1.87	0.32	132	1.82	0.67	14.59	2.34	1,486	16.99	1,212	81.56	0.15	2.84	0.43	274	18.44	1.47	25.13	2.57
	LDGT2	3,746	3,101	82.78	3,046	98.23	0.13	1.66	0.37	55	1.77	0.84	9.78	2.67	645	17.22	529	82.02	0.17	2.52	0.44	116	17.98	2.12	21.57	2.61
	LDGV	7,942	6,521	82.11	6,420	98.45	0.07	1.57	0.23	101	1.55	1.47	9.90	1.92	1,421	17.89	1,236	86.98	0.13	2.38	0.38	185	13.02	1.07	16.93	2.28
2003 Total		20,434	16,882	82.62	16,594	98.29	0.10	1.72	0.29	288	1.71	0.98	12.02	2.26	3,552	17.38	2,977	83.81	0.14	2.59	0.41	575	16.19	1.47	21.77	2.49
2004	LDGT1	9,329	7,753	83.11	7,622	98.31	0.09	1.67	0.22	131	1.69	1.09	16.35	2.33	1,576	16.89	1,317	83.57	0.14	2.85	0.34	259	16.43	1.45	24.85	2.65
	LDGT2	3,979	3,240	81.43	3,199	98.73	0.10	1.58	0.25	41	1.27	0.79	13.75	2.52	739	18.57	598	80.92	0.14	2.81	0.35	141	19.08	1.32	20.84	2.96
	LDGV	7,668	6,282	81.92	6,211	98.87	0.07	1.41	0.20	71	1.13	0.94	10.87	1.97	1,386	18.08	1,199	86.51	0.11	2.27	0.31	187	13.49	0.95	15.08	2.38
2004 Total		20,976	17,275	82.36	17,032	98.59	0.08	1.56	0.22	243	1.41	1.00	14.31	2.26	3,701	17.64	3,114	84.14	0.13	2.62	0.33	587	15.86	1.26	20.77	2.64
2005	LDGT1	12,104	10,254	84.72	10,183	99.31	0.08	1.30	0.14	71	0.69	0.81	9.31	2.23	1,850	15.28	1,606	86.81	0.13	2.37	0.24	244	13.19	1.34	25.65	2.67
	LDGT2	4,110	3,531	85.91	3,455	97.85	0.11	1.52	0.21	76	2.15	0.66	12.55	2.10	579	14.09	474	81.87	0.17	2.58	0.33	105	18.13	1.80	19.54	2.87
	LDGV	11,056	9,477	85.72	9,394	99.12	0.05	1.10	0.15	83	0.88	1.51	10.37	2.08	1,579	14.28	1,377	87.21	0.09	1.97	0.25	202	12.79	1.65	17.52	2.33
2005 Total		27,270	23,262	85.30	23,032	99.01	0.07	1.25	0.16	230	0.99	1.01	10.76	2.13	4,008	14.70	3,457	86.25	0.12	2.24	0.26	551	13.75	1.54	21.50	2.59
2006	LDGT1	10,415	8,797	84.46	8,746	99.42	0.07	1.50	0.16	51	0.58	0.59	9.13	3.00	1,618	15.54	1,460	90.23	0.09	2.47	0.23	158	9.77	1.76	25.19	2.65
	LDGT2	4,539	3,901	85.94	3,838	98.39	0.08	1.20	0.15	63	1.61	1.32	12.51	2.35	638	14.06	518	81.19	0.13	2.22	0.25	120	18.81	1.52	18.60	3.20
	LDGV	10,796	9,301	86.15	9,233	99.27	0.06	1.41	0.13	68	0.73	1.46	15.20	1.94	1,495	13.85	1,357	90.77	0.09	2.23	0.21	138	9.23	1.31	18.53	2.23
2006 Total		25,750	21,999	85.43	21,817	99.17	0.07	1.41	0.14	182	0.83	1.17	12.57	2.38	3,751	14.57	3,335	88.91	0.10	2.33	0.23	416	11.09	1.54	21.08	2.67
2007	LDGT1	14,944	13,415	89.77	13,347	99.49	0.05	1.27	0.12	68	0.51	0.63	14.94	2.50	1,529	10.23	1,355	88.62	0.07	2.18	0.17	174	11.38	0.86	17.73	3.00
	LDGT2	5,367	4,623	86.14	4,595	99.39	0.07	0.97	0.11	28	0.61	0.61	11.10	1.96	744	13.86	658	88.44	0.10	1.58	0.19	86	11.56	1.98	24.58	2.55

			Passing Initial OBD Inspection												Failing Initial OBD Inspection										
Model Year	Type	Overall Total	Count	%	Pass IM240 Count	Pass IM240 %	Pass IM240 Avg HC (gpm)	Pass IM240 Avg CO (gpm)	Pass IM240 Avg Nox (gpm)	Fail IM240 Count	Fail IM240 %	Fail IM240 Avg HC (gpm)	Fail IM240 Avg CO (gpm)	Fail IM240 Avg Nox (gpm)	Count	%	Pass IM240 Count	Pass IM240 %	Pass IM240 Avg HC (gpm)	Pass IM240 Avg CO (gpm)	Pass IM240 Avg Nox (gpm)	Fail IM240 Count	Fail IM240 %	Fail IM240 Avg HC (gpm)	Fail IM240 Avg CO (gpm)	Fail IM240 Avg Nox (gpm)
	LDGV	13,932	12,361	88.72	12,290	99.43	0.05	1.30	0.11	71	0.57	1.49	12.20	1.90	1,571	11.28	1,433	91.22	0.08	2.17	0.18	138	8.78	1.08	18.19	2.71
2007 Total		34,243	30,399	88.77	30,232	99.45	0.05	1.24	0.11	167	0.55	0.99	13.13	2.15	3,844	11.23	3,446	89.65	0.08	2.06	0.18	398	10.35	1.18	19.37	2.80
2008	LDGT1	13,533	12,376	91.45	12,297	99.36	0.05	1.27	0.12	79	0.64	0.67	17.75	2.03	1,157	8.55	1,041	89.97	0.07	2.28	0.18	116	10.03	1.11	24.77	2.84
	LDGT2	4,916	4,223	85.90	4,192	99.27	0.07	1.30	0.10	31	0.73	0.77	17.11	1.62	693	14.10	618	89.18	0.09	2.33	0.17	75	10.82	1.41	25.23	2.67
	LDGV	11,964	10,699	89.43	10,603	99.10	0.05	1.42	0.11	96	0.90	1.42	18.41	1.74	1,265	10.57	1,159	91.62	0.09	2.22	0.18	106	8.38	1.01	19.42	2.27
2008 Total		30,413	27,298	89.76	27,092	99.25	0.05	1.33	0.11	206	0.75	1.03	17.96	1.83	3,115	10.24	2,818	90.47	0.08	2.27	0.18	297	9.53	1.15	22.98	2.59
2009	LDGT1	7,572	6,905	91.19	6,856	99.29	0.05	1.50	0.12	49	0.71	0.79	11.77	2.54	667	8.81	616	92.35	0.06	2.56	0.16	51	7.65	0.61	17.47	2.46
	LDGT2	2,873	2,508	87.30	2,499	99.64	0.06	1.21	0.11	9	0.36	0.76	20.03	2.53	365	12.70	329	90.14	0.10	2.42	0.21	36	9.86	0.91	29.25	1.80
	LDGV	9,615	8,786	91.38	8,725	99.31	0.05	1.50	0.12	61	0.69	1.64	14.70	2.17	829	8.62	753	90.83	0.08	2.24	0.16	76	9.17	1.04	20.67	1.89
2009 Total		20,060	18,199	90.72	18,080	99.35	0.05	1.46	0.12	119	0.65	1.22	13.90	2.35	1,861	9.28	1,698	91.24	0.08	2.39	0.17	163	8.76	0.87	21.56	2.05
2010	LDGT1	14,790	14,051	95.00	14,017	99.76	0.04	1.25	0.10	34	0.24	0.65	15.71	1.54	739	5.00	690	93.37	0.06	2.30	0.16	49	6.63	0.82	22.08	2.53
	LDGT2	5,594	5,084	90.88	5,069	99.70	0.05	1.18	0.10	15	0.30	0.83	17.46	1.73	510	9.12	468	91.76	0.09	2.20	0.17	42	8.24	1.07	26.70	2.17
	LDGV	14,008	13,122	93.68	13,061	99.54	0.05	1.46	0.10	61	0.46	1.69	15.77	1.46	886	6.32	829	93.57	0.07	2.24	0.14	57	6.43	0.92	17.49	2.37
2010 Total		34,392	32,257	93.79	32,147	99.66	0.05	1.33	0.10	110	0.34	1.25	15.98	1.52	2,135	6.21	1,987	93.07	0.07	2.25	0.16	148	6.93	0.93	21.63	2.37
2011	LDGT1	12,791	12,127	94.81	12,084	99.65	0.04	1.47	0.10	43	0.35	0.68	19.10	1.72	664	5.19	618	93.07	0.07	2.74	0.16	46	6.93	0.85	28.45	1.63
	LDGT2	5,650	5,247	92.87	5,234	99.75	0.05	1.14	0.09	13	0.25	1.72	12.64	1.51	403	7.13	379	94.04	0.08	2.28	0.14	24	5.96	2.56	40.78	2.32
	LDGV	10,342	9,626	93.08	9,561	99.32	0.05	1.59	0.10	65	0.68	1.30	18.32	2.95	716	6.92	664	92.74	0.08	2.79	0.16	52	7.26	1.19	16.34	1.81
2011 Total		28,783	27,000	93.81	26,879	99.55	0.05	1.45	0.10	121	0.45	1.13	17.98	2.36	1,783	6.19	1,661	93.16	0.08	2.65	0.16	122	6.84	1.33	25.71	1.84
2012	LDGT1	19,331	18,753	97.01	18,705	99.74	0.04	1.57	0.09	48	0.26	0.52	16.05	0.93	578	2.99	533	92.21	0.07	2.85	0.15	45	7.79	1.44	30.98	1.79
	LDGT2	8,402	7,971	94.87	7,953	99.77	0.05	1.05	0.09	18	0.23	1.65	12.73	2.03	431	5.13	404	93.74	0.07	2.04	0.15	27	6.26	2.94	32.16	1.83
	LDGV	18,863	17,951	95.17	17,882	99.62	0.04	1.50	0.08	69	0.38	1.60	19.06	1.86	912	4.83	857	93.97	0.07	2.60	0.13	55	6.03	1.55	22.15	1.81
2012 Total		46,596	44,675	95.88	44,540	99.70	0.04	1.45	0.09	135	0.30	1.22	17.15	1.55	1,921	4.12	1,794	93.39	0.07	2.55	0.14	127	6.61	1.81	27.41	1.81
2013	LDGT1	84	77	91.67	77	100.00	0.04	1.62	0.13	0	0.00	0.00	0.00	0.00	7	8.33	7	100.00	0.04	2.55	0.17	0	0.00	0.00	0.00	0.00
	LDGT2	33	32	96.97	31	96.88	0.04	2.09	0.12	1	3.13	0.13	37.06	0.09	1	3.03	1	100.00	0.06	4.08	0.11	0	0.00	0.00	0.00	0.00
	LDGV	55	53	96.36	53	100.00	0.04	1.13	0.07	0	0.00	0.00	0.00	0.00	2	3.64	2	100.00	0.02	1.71	0.05	0	0.00	0.00	0.00	0.00
2013 Total		172	162	94.19	161	99.38	0.04	1.55	0.11	1	0.62	0.13	37.06	0.09	10	5.81	10	100.00	0.04	2.53	0.14	0	0.00	0.00	0.00	0.00
2014	LDGT1	228	224	98.25	224	100.00	0.03	1.48	0.07	0	0.00	0.00	0.00	0.00	4	1.75	4	100.00	0.03	0.95	0.11	0	0.00	0.00	0.00	0.00
	LDGT2	76	73	96.05	73	100.00	0.04	1.47	0.07	0	0.00	0.00	0.00	0.00	3	3.95	3	100.00	0.07	5.02	0.02	0	0.00	0.00	0.00	0.00
	LDGV	107	104	97.20	104	100.00	0.03	1.33	0.07	0	0.00	0.00	0.00	0.00	3	2.80	3	100.00	0.03	1.25	0.31	0	0.00	0.00	0.00	0.00
2014 Total		411	401	97.57	401	100.00	0.03	1.44	0.07	0	0.00	0.00	0.00	0.00	10	2.43	10	100.00	0.04	2.26	0.14	0	0.00	0.00	0.00	0.00
2015	LDGT1	72	70	97.22	70	100.00	0.03	1.48	0.06	0	0.00	0.00	0.00	0.00	2	2.78	2	100.00	0.03	2.24	0.02	0	0.00	0.00	0.00	0.00
	LDGT2	29	27	93.10	27	100.00	0.07	1.39	0.07	0	0.00	0.00	0.00	0.00	2	6.90	2	100.00	0.04	0.57	0.07	0	0.00	0.00	0.00	0.00
	LDGV	36	35	97.22	35	100.00	0.04	1.44	0.04	0	0.00	0.00	0.00	0.00	1	2.78	1	100.00	0.00	0.10	0.00	0	0.00	0.00	0.00	0.00
2015 Total		137	132	96.35	132	100.00	0.04	1.45	0.06	0	0.00	0.00	0.00	0.00	5	3.65	5	100.00	0.03	1.14	0.04	0	0.00	0.00	0.00	0.00
2016	LDGT1	409	406	99.27	405	99.75	0.02	1.09	0.05	1	0.25	0.09	20.00	0.05	3	0.73	3	100.00	0.03	1.76	0.03	0	0.00	0.00	0.00	0.00
	LDGT2	101	98	97.03	97	98.98	0.08	1.71	0.08	1	1.02	0.56	68.08	0.56	3	2.97	3	100.00	0.10	2.41	0.01	0	0.00	0.00	0.00	0.00
	LDGV	142	138	97.18	138	100.00	0.02	0.84	0.03	0	0.00	0.00	0.00	0.00	4	2.82	4	100.00	0.02	1.21	0.03	0	0.00	0.00	0.00	0.00
2016 Total		652	642	98.47	640	99.69	0.03	1.13	0.05	2	0.31	0.33	44.04	0.30	10	1.53	10	100.00	0.05	1.74	0.03	0	0.00	0.00	0.00	0.00
2017	LDGT1	1	1	100.00	1	100.00	0.00	0.35	0.01	0	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
	LDGT2	1	1	100.00	1	100.00	0.03	0.53	0.10	0	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00
	LDGV	1	0	0.00	0	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	1	100.00	1	100.00	0.01	0.10	0.01	0	0.00	0.00	0.00	0.00
2017 Total		3	2	66.67	2	100.00	0.02	0.44	0.06	0	0.00	0.00	0.00	0.00	1	33.33	1	100.00	0.01	0.10	0.01	0	0.00	0.00	0.00	0.00
Grand Total		**355,553**	**311,724**	**87.67**	**308,077**	**98.83**	**0.08**	**1.63**	**0.19**	**3,647**	**1.17**	**0.98**	**13.03**	**2.14**	**43,829**	**12.33**	**37,734**	**86.09**	**0.13**	**2.76**	**0.36**	**6,095**	**13.91**	**1.47**	**20.92**	**2.46**

OBD Initial Inspection Emissions Report - Summary by Veh (V 1.02)

		Passing Initial OBD Inspection												Failing Initial OBD Inspection											
Type	Overall Total	Count	%	Pass IM240 Count	Pass IM240 %	Pass IM240 Avg HC (gpm)	Pass IM240 Avg CO (gpm)	Pass IM240 Avg Nox (gpm)	Fail IM240 Count	Fail IM240 %	Fail IM240 Avg HC (gpm)	Fail IM240 Avg CO (gpm)	Fail IM240 Avg Nox (gpm)	Count	%	Pass IM240 Count	Pass IM240 %	Pass IM240 Avg HC (gpm)	Pass IM240 Avg CO (gpm)	Pass IM240 Avg Nox (gpm)	Fail IM240 Count	Fail IM240 %	Fail IM240 Avg HC (gpm)	Fail IM240 Avg CO (gpm)	Fail IM240 Avg Nox (gpm)
LDGT1	151,809	134,088	88.33	132,570	98.87	0.08	1.71	0.21	1,518	1.13	0.75	13.63	2.27	17,721	11.67	15,198	85.76	0.14	2.99	0.38	2,523	14.24	1.40	22.97	2.61
LDGT2	62,219	53,419	85.86	52,606	98.48	0.09	1.47	0.23	813	1.52	0.85	11.50	2.32	8,800	14.14	7,270	82.61	0.16	2.68	0.42	1,530	17.39	1.77	21.11	2.62
LDGV	141,525	124,217	87.77	122,901	98.94	0.07	1.61	0.17	1,316	1.06	1.32	13.29	1.88	17,308	12.23	15,266	88.20	0.12	2.58	0.31	2,042	11.80	1.34	18.23	2.16
Grand Total	**355,553**	**311,724**	**87.67**	**308,077**	**98.83**	**0.08**	**1.63**	**0.19**	**3,647**	**1.17**	**0.98**	**13.03**	**2.14**	**43,829**	**12.33**	**37,734**	**86.09**	**0.13**	**2.76**	**0.36**	**6,095**	**13.91**	**1.47**	**20.92**	**2.46**

Appendix A10

Initial OBD Incomplete Inspection Report

Date Range
Between 1/1/2023 and 1/1/2024

Initial OBD Incomplete Inspection Report (V 1.00)

			Incomplete Total		Unable to Communicate - Communication Error		Unable to Communicate - Inaccessible		MIL Commanded Off and Not Ready		Potential Tampering Readiness Monitors	
Model Year	**Type**	**OBD Total All**	**Count**	**%**	**Count**	**%**	**Count**	**%**	**Count**	**%**	**Count**	**%**
1996	LDGT1	33	19	57.58	4	21.05	0	0.00	15	78.95	0	0.00
	LDGT2	49	26	53.06	3	11.54	0	0.00	23	88.46	0	0.00
	LDGV	99	49	49.49	8	16.33	1	2.04	40	81.63	0	0.00
1996 Total		181	94	51.93	15	15.96	1	1.06	78	82.98	0	0.00
1997	LDGT1	75	34	45.33	3	8.82	0	0.00	31	91.18	0	0.00
	LDGT2	85	29	34.12	3	10.34	0	0.00	26	89.66	0	0.00
	LDGV	107	54	50.47	7	12.96	0	0.00	47	87.04	0	0.00
1997 Total		267	117	43.82	13	11.11	0	0.00	104	88.89	0	0.00
1998	LDGT1	89	48	53.93	12	25.00	0	0.00	36	75.00	0	0.00
	LDGT2	47	19	40.43	7	36.84	0	0.00	12	63.16	0	0.00
	LDGV	87	36	41.38	8	22.22	0	0.00	28	77.78	0	0.00
1998 Total		223	103	46.19	27	26.21	0	0.00	76	73.79	0	0.00
1999	LDGT1	102	45	44.12	8	17.78	0	0.00	37	82.22	0	0.00
	LDGT2	879	245	27.87	44	17.96	1	0.41	200	81.63	0	0.00
	LDGV	162	55	33.95	18	32.73	0	0.00	37	67.27	0	0.00
1999 Total		1,143	345	30.18	70	20.29	1	0.29	274	79.42	0	0.00
2000	LDGT1	273	109	39.93	18	16.51	0	0.00	91	83.49	0	0.00
	LDGT2	1,251	355	28.38	64	18.03	0	0.00	291	81.97	0	0.00
	LDGV	173	50	28.90	12	24.00	0	0.00	38	76.00	0	0.00
2000 Total		1,697	514	30.29	94	18.29	0	0.00	420	81.71	0	0.00
2001	LDGT1	339	91	26.84	21	23.08	0	0.00	70	76.92	0	0.00
	LDGT2	1,538	374	24.32	82	21.93	0	0.00	292	78.07	0	0.00
	LDGV	405	128	31.60	25	19.53	0	0.00	103	80.47	0	0.00
2001 Total		2,282	593	25.99	128	21.59	0	0.00	465	78.41	0	0.00
2002	LDGT1	171	48	28.07	4	8.33	0	0.00	44	91.67	0	0.00
	LDGT2	1,915	500	26.11	96	19.20	0	0.00	404	80.80	0	0.00
	LDGV	435	123	28.28	20	16.26	1	0.81	102	82.93	0	0.00
2002 Total		2,521	671	26.62	120	17.88	1	0.15	550	81.97	0	0.00
2003	LDGT1	79	9	11.39	0	0.00	0	0.00	9	100.00	0	0.00
	LDGT2	2,249	468	20.81	144	30.77	1	0.21	323	69.02	0	0.00
	LDGV	593	168	28.33	42	25.00	0	0.00	126	75.00	0	0.00
2003 Total		2,921	645	22.08	186	28.84	1	0.16	458	71.01	0	0.00
2004	LDGT1	160	41	25.62	4	9.76	0	0.00	37	90.24	0	0.00
	LDGT2	2,290	628	27.42	194	30.89	0	0.00	434	69.11	0	0.00
	LDGV	837	171	20.43	37	21.64	2	1.17	132	77.19	0	0.00
2004 Total		3,287	840	25.56	235	27.98	2	0.24	603	71.79	0	0.00
2005	LDGT1	288	71	24.65	3	4.23	1	1.41	67	94.37	0	0.00
	LDGT2	2,249	522	23.21	143	27.39	0	0.00	379	72.61	0	0.00
	LDGV	1,523	282	18.52	44	15.60	0	0.00	238	84.40	0	0.00
2005 Total		4,060	875	21.55	190	21.71	1	0.11	684	78.17	0	0.00
2006	LDGT1	1,556	211	13.56	18	8.53	0	0.00	193	91.47	0	0.00

			Incomplete Total		Unable to Communicate - Communication Error		Unable to Communicate - Inaccessible		MIL Commanded Off and Not Ready		Potential Tampering Readiness Monitors	
Model Year	Type	OBD Total All	Count	%	Count	%	Count	%	Count	%	Count	%
	LDGT2	1,765	357	20.23	95	26.61	0	0.00	262	73.39	0	0.00
	LDGV	1,645	281	17.08	47	16.73	0	0.00	234	83.27	0	0.00
2006 Total		4,966	849	17.10	160	18.85	0	0.00	689	81.15	0	0.00
2007	LDGT1	1,477	191	12.93	18	9.42	1	0.52	172	90.05	0	0.00
	LDGT2	4,053	688	16.98	87	12.65	1	0.15	600	87.21	0	0.00
	LDGV	2,901	430	14.82	90	20.93	1	0.23	339	78.84	0	0.00
2007 Total		8,431	1,309	15.53	195	14.90	3	0.23	1,111	84.87	0	0.00
2008	LDGT1	1,839	231	12.56	26	11.26	0	0.00	205	88.74	0	0.00
	LDGT2	3,784	711	18.79	56	7.88	0	0.00	655	92.12	0	0.00
	LDGV	2,821	394	13.97	75	19.04	1	0.25	318	80.71	0	0.00
2008 Total		8,444	1,336	15.82	157	11.75	1	0.07	1,178	88.17	0	0.00
2009	LDGT1	884	80	9.05	15	18.75	0	0.00	65	81.25	0	0.00
	LDGT2	1,617	345	21.34	23	6.67	0	0.00	322	93.33	0	0.00
	LDGV	1,822	273	14.98	49	17.95	0	0.00	224	82.05	0	0.00
2009 Total		4,323	698	16.15	87	12.46	0	0.00	611	87.54	0	0.00
2010	LDGT1	1,873	234	12.49	35	14.96	0	0.00	199	85.04	0	0.00
	LDGT2	2,548	412	16.17	37	8.98	0	0.00	375	91.02	0	0.00
	LDGV	3,787	363	9.59	81	22.31	1	0.28	281	77.41	0	0.00
2010 Total		8,208	1,009	12.29	153	15.16	1	0.10	855	84.74	0	0.00
2011	LDGT1	1,123	149	13.27	35	23.49	0	0.00	114	76.51	0	0.00
	LDGT2	2,443	473	19.36	34	7.19	0	0.00	439	92.81	0	0.00
	LDGV	2,306	238	10.32	27	11.34	0	0.00	211	88.66	0	0.00
2011 Total		5,872	860	14.65	96	11.16	0	0.00	764	88.84	0	0.00
2012	LDGT1	1,848	181	9.79	35	19.34	0	0.00	146	80.66	0	0.00
	LDGT2	2,932	389	13.27	59	15.17	0	0.00	330	84.83	0	0.00
	LDGV	4,938	366	7.41	62	16.94	1	0.27	303	82.79	0	0.00
2012 Total		9,718	936	9.63	156	16.67	1	0.11	779	83.23	0	0.00
2013	LDGT1	19,003	225	1.18	49	21.78	1	0.44	175	77.78	0	0.00
	LDGT2	9,783	424	4.33	36	8.49	0	0.00	388	91.51	0	0.00
	LDGV	21,991	510	2.32	77	15.10	2	0.39	431	84.51	0	0.00
2013 Total		50,777	1,159	2.28	162	13.98	3	0.26	994	85.76	0	0.00
2014	LDGT1	34,756	209	0.60	63	30.14	0	0.00	146	69.86	0	0.00
	LDGT2	19,284	817	4.24	45	5.51	1	0.12	771	94.37	0	0.00
	LDGV	29,447	485	1.65	108	22.27	3	0.62	374	77.11	0	0.00
2014 Total		83,487	1,511	1.81	216	14.30	4	0.26	1,291	85.44	0	0.00
2015	LDGT1	20,246	192	0.95	40	20.83	0	0.00	152	79.17	0	0.00
	LDGT2	9,788	456	4.66	23	5.04	1	0.22	432	94.74	0	0.00
	LDGV	17,219	447	2.60	86	19.24	0	0.00	361	80.76	0	0.00
2015 Total		47,253	1,095	2.32	149	13.61	1	0.09	945	86.30	0	0.00
2016	LDGT1	54,421	279	0.51	85	30.47	2	0.72	192	68.82	0	0.00
	LDGT2	19,352	517	2.67	98	18.96	3	0.58	416	80.46	0	0.00
	LDGV	31,862	598	1.88	124	20.74	2	0.33	472	78.93	0	0.00
2016 Total		105,635	1,394	1.32	307	22.02	7	0.50	1,080	77.47	0	0.00
2017	LDGT1	5,175	67	1.29	21	31.34	0	0.00	46	68.66	0	0.00
	LDGT2	2,370	124	5.23	19	15.32	0	0.00	105	84.68	0	0.00

			Incomplete Total		Unable to Communicate - Communication Error		Unable to Communicate - Inaccessible		MIL Commanded Off and Not Ready		Potential Tampering Readiness Monitors	
Model Year	Type	OBD Total All	Count	%	Count	%	Count	%	Count	%	Count	%
	LDGV	3,942	146	3.70	18	12.33	0	0.00	128	87.67	0	0.00
2017 Total		11,487	337	2.93	58	17.21	0	0.00	279	82.79	0	0.00
2018	LDGT1	1,845	28	1.52	13	46.43	1	3.57	14	50.00	0	0.00
	LDGT2	740	28	3.78	8	28.57	0	0.00	20	71.43	0	0.00
	LDGV	1,198	17	1.42	8	47.06	0	0.00	9	52.94	0	0.00
2018 Total		3,783	73	1.93	29	39.73	1	1.37	43	58.90	0	0.00
2019	LDGT1	915	4	0.44	2	50.00	0	0.00	2	50.00	0	0.00
	LDGT2	358	5	1.40	1	20.00	0	0.00	4	80.00	0	0.00
	LDGV	700	16	2.29	5	31.25	0	0.00	11	68.75	0	0.00
2019 Total		1,973	25	1.27	8	32.00	0	0.00	17	68.00	0	0.00
2020	LDGT1	133	2	1.50	1	50.00	0	0.00	1	50.00	0	0.00
	LDGT2	122	5	4.10	2	40.00	0	0.00	3	60.00	0	0.00
	LDGV	486	6	1.23	2	33.33	0	0.00	4	66.67	0	0.00
2020 Total		741	13	1.75	5	38.46	0	0.00	8	61.54	0	0.00
2021	LDGT1	102	2	1.96	2	100.00	0	0.00	0	0.00	0	0.00
	LDGT2	83	3	3.61	3	100.00	0	0.00	0	0.00	0	0.00
	LDGV	332	4	1.20	3	75.00	0	0.00	1	25.00	0	0.00
2021 Total		517	9	1.74	8	88.89	0	0.00	1	11.11	0	0.00
2022	LDGT1	72	2	2.78	1	50.00	0	0.00	1	50.00	0	0.00
	LDGT2	41	4	9.76	3	75.00	0	0.00	1	25.00	0	0.00
	LDGV	173	2	1.16	2	100.00	0	0.00	0	0.00	0	0.00
2022 Total		286	8	2.80	6	75.00	0	0.00	2	25.00	0	0.00
2023	LDGT1	22	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	13	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	76	2	2.63	0	0.00	0	0.00	2	100.00	0	0.00
2023 Total		111	2	1.80	0	0.00	0	0.00	2	100.00	0	0.00
2024	LDGT1	2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	8	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2024 Total		10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Grand Total		**374,604**	**17,420**	**4.65**	**3,030**	**17.39**	**29**	**0.17**	**14,361**	**82.44**	**0**	**0.00**

Initial OBD Incomplete Inspection Report - Summary by Veh (V 1.00)

		Incomplete Total		Unable to Communicate - Communication Error		Unable to Communicate - Inaccessible		MIL Commanded Off and Not Ready		Potential Tampering Readiness Monitors	
Type	OBD Total All	Count	%	Count	%	Count	%	Count	%	Count	%
LDGT1	148,901	2,802	1.88	536	19.13	6	0.21	2,260	80.66	0	0.00
LDGT2	93,628	8,924	9.53	1,409	15.79	8	0.09	7,507	84.12	0	0.00
LDGV	132,075	5,694	4.31	1,085	19.06	15	0.26	4,594	80.68	0	0.00
Grand Total	**374,604**	**17,420**	**4.65**	**3,030**	**17.39**	**29**	**0.17**	**14,361**	**82.44**	**0**	**0.00**

Appendix A11

OBD Retest Incomplete Inspection Report

Date Range
Between 1/1/2023 and 1/1/2024

OBD Retest Incomplete Inspection Report (V 1.00)

			Incomplete Total		Unable to Communicate - Communication Error		Unable to Communicate - Inaccessible		MIL Commanded Off and Not Ready		Potential Tampering Readiness Monitors		Retest # 1	
Model Year	**Type**	**OBD Retest Total All**	**Count**	**%**	**Count**	**%**	**Count**	**%**	**Count**	**%**	**Count**	**%**	**Count**	**%**
1980	LDGT1	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1980 Total		0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1996	LDGT1	10	2	20.00	0	0.00	0	0.00	2	100.00	0	0.00	1	50.00
	LDGT2	22	7	31.82	0	0.00	0	0.00	7	100.00	0	0.00	4	57.14
	LDGV	16	7	43.75	1	14.29	1	0.14	5	71.43	0	0.00	6	85.71
1996 Total		48	16	33.33	1	6.25	1	0.06	14	87.50	0	0.00	11	68.75
1997	LDGT1	29	15	51.72	0	0.00	0	0.00	15	100.00	0	0.00	5	33.33
	LDGT2	62	34	54.84	1	2.94	0	0.00	33	97.06	0	0.00	19	55.88
	LDGV	15	6	40.00	2	33.33	0	0.00	4	66.67	0	0.00	6	100.00
1997 Total		106	55	51.89	3	5.45	0	0.00	52	94.55	0	0.00	30	54.55
1998	LDGT1	14	6	42.86	0	0.00	0	0.00	6	100.00	0	0.00	0	0.00
	LDGT2	24	4	16.67	0	0.00	0	0.00	4	100.00	0	0.00	3	75.00
	LDGV	31	15	48.39	0	0.00	0	0.00	15	100.00	0	0.00	15	100.00
1998 Total		69	25	36.23	0	0.00	0	0.00	25	100.00	0	0.00	18	72.00
1999	LDGT1	16	4	25.00	0	0.00	0	0.00	4	100.00	0	0.00	3	75.00
	LDGT2	258	111	43.02	11	9.91	0	0.00	100	90.09	0	0.00	72	64.86
	LDGV	33	8	24.24	2	25.00	0	0.00	6	75.00	0	0.00	3	37.50
1999 Total		307	123	40.07	13	10.57	0	0.00	110	89.43	0	0.00	78	63.41
2000	LDGT1	103	38	36.89	5	13.16	0	0.00	33	86.84	0	0.00	20	52.63
	LDGT2	447	203	45.41	14	6.90	0	0.00	189	93.10	0	0.00	115	56.65
	LDGV	80	31	38.75	4	12.90	0	0.00	27	87.10	0	0.00	14	45.16
2000 Total		630	272	43.17	23	8.46	0	0.00	249	91.54	0	0.00	149	54.78
2001	LDGT1	116	49	42.24	6	12.24	0	0.00	43	87.76	0	0.00	32	65.31
	LDGT2	502	195	38.84	18	9.23	0	0.00	177	90.77	0	0.00	140	71.79
	LDGV	90	29	32.22	8	27.59	0	0.00	21	72.41	0	0.00	25	86.21
2001 Total		708	273	38.56	32	11.72	0	0.00	241	88.28	0	0.00	197	72.16
2002	LDGT1	55	13	23.64	2	15.38	0	0.00	11	84.62	0	0.00	4	30.77
	LDGT2	609	237	38.92	24	10.13	0	0.00	213	89.87	0	0.00	145	61.18
	LDGV	115	45	39.13	3	6.67	0	0.00	42	93.33	0	0.00	35	77.78
2002 Total		779	295	37.87	29	9.83	0	0.00	266	90.17	0	0.00	184	62.37
2003	LDGT1	49	15	30.61	1	6.67	0	0.00	14	93.33	0	0.00	10	66.67
	LDGT2	659	240	36.42	34	14.17	0	0.00	206	85.83	0	0.00	163	67.92
	LDGV	132	43	32.58	5	11.63	0	0.00	38	88.37	0	0.00	25	58.14
2003 Total		840	298	35.48	40	13.42	0	0.00	258	86.58	0	0.00	198	66.44
2004	LDGT1	65	26	40.00	1	3.85	0	0.00	25	96.15	0	0.00	20	76.92
	LDGT2	554	209	37.73	18	8.61	0	0.00	191	91.39	0	0.00	153	73.21
	LDGV	167	67	40.12	6	8.96	1	0.01	60	89.55	0	0.00	44	65.67
2004 Total		786	302	38.42	25	8.28	1	0.00	276	91.39	0	0.00	217	71.85
2005	LDGT1	72	26	36.11	2	7.69	0	0.00	24	92.31	0	0.00	14	53.85
	LDGT2	513	202	39.38	16	7.92	0	0.00	186	92.08	0	0.00	160	79.21

			Incomplete Total		Unable to Communicate - Communication Error		Unable to Communicate - Inaccessible		MIL Commanded Off and Not Ready		Potential Tampering Readiness Monitors		Retest # 1	
Model Year	**Type**	**OBD Retest Total All**	**Count**	**%**	**Count**	**%**	**Count**	**%**	**Count**	**%**	**Count**	**%**	**Count**	**%**
	LDGV	304	107	35.20	10	9.35	0	0.00	97	90.65	0	0.00	75	70.09
2005 Total		889	335	37.68	28	8.36	0	0.00	307	91.64	0	0.00	249	74.33
2006	LDGT1	201	70	34.83	4	5.71	0	0.00	66	94.29	0	0.00	36	51.43
	LDGT2	410	153	37.32	17	11.11	0	0.00	136	88.89	0	0.00	95	62.09
	LDGV	266	106	39.85	12	11.32	0	0.00	94	88.68	0	0.00	77	72.64
2006 Total		877	329	37.51	33	10.03	0	0.00	296	89.97	0	0.00	208	63.22
2007	LDGT1	174	67	38.51	3	4.48	0	0.00	64	95.52	0	0.00	38	56.72
	LDGT2	803	295	36.74	12	4.07	0	0.00	283	95.93	0	0.00	215	72.88
	LDGV	368	138	37.50	15	10.87	0	0.00	123	89.13	0	0.00	87	63.04
2007 Total		1,345	500	37.17	30	6.00	0	0.00	470	94.00	0	0.00	340	68.00
2008	LDGT1	172	57	33.14	2	3.51	0	0.00	55	96.49	0	0.00	47	82.46
	LDGT2	841	347	41.26	13	3.75	1	0.00	333	95.97	0	0.00	274	78.96
	LDGV	404	153	37.87	12	7.84	1	0.01	140	91.50	0	0.00	98	64.05
2008 Total		1,417	557	39.31	27	4.85	2	0.00	528	94.79	0	0.00	419	75.22
2009	LDGT1	104	38	36.54	0	0.00	0	0.00	38	100.00	0	0.00	18	47.37
	LDGT2	339	142	41.89	3	2.11	0	0.00	139	97.89	0	0.00	109	76.76
	LDGV	262	90	34.35	6	6.67	0	0.00	84	93.33	0	0.00	67	74.44
2009 Total		705	270	38.30	9	3.33	0	0.00	261	96.67	0	0.00	194	71.85
2010	LDGT1	145	64	44.14	3	4.69	0	0.00	61	95.31	0	0.00	50	78.13
	LDGT2	373	167	44.77	4	2.40	0	0.00	163	97.60	0	0.00	123	73.65
	LDGV	265	110	41.51	2	1.82	0	0.00	108	98.18	0	0.00	75	68.18
2010 Total		783	341	43.55	9	2.64	0	0.00	332	97.36	0	0.00	248	72.73
2011	LDGT1	180	83	46.11	2	2.41	0	0.00	81	97.59	0	0.00	51	61.45
	LDGT2	363	150	41.32	3	2.00	0	0.00	147	98.00	0	0.00	122	81.33
	LDGV	279	105	37.63	9	8.57	0	0.00	96	91.43	0	0.00	70	66.67
2011 Total		822	338	41.12	14	4.14	0	0.00	324	95.86	0	0.00	243	71.89
2012	LDGT1	338	131	38.76	7	5.34	0	0.00	124	94.66	0	0.00	88	67.18
	LDGT2	450	189	42.00	10	5.29	0	0.00	179	94.71	0	0.00	130	68.78
	LDGV	673	219	32.54	12	5.48	0	0.00	207	94.52	0	0.00	168	76.71
2012 Total		1,461	539	36.89	29	5.38	0	0.00	510	94.62	0	0.00	386	71.61
2013	LDGT1	1,191	348	29.22	7	2.01	0	0.00	341	97.99	0	0.00	308	88.51
	LDGT2	1,314	391	29.76	16	4.09	2	0.01	373	95.40	0	0.00	313	80.05
	LDGV	2,144	705	32.88	35	4.96	7	0.01	663	94.04	0	0.00	583	82.70
2013 Total		4,649	1,444	31.06	58	4.02	9	0.01	1,377	95.36	0	0.00	1,204	83.38
2014	LDGT1	1,423	325	22.84	9	2.77	2	0.01	314	96.62	0	0.00	280	86.15
	LDGT2	2,053	686	33.41	31	4.52	1	0.00	654	95.34	0	0.00	586	85.42
	LDGV	2,015	677	33.60	37	5.47	4	0.01	636	93.94	0	0.00	551	81.39
2014 Total		5,491	1,688	30.74	77	4.56	7	0.00	1,604	95.02	0	0.00	1,417	83.95
2015	LDGT1	1,040	269	25.87	14	5.20	2	0.01	253	94.05	0	0.00	248	92.19
	LDGT2	1,068	328	30.71	14	4.27	1	0.00	313	95.43	0	0.00	278	84.76
	LDGV	1,530	474	30.98	19	4.01	2	0.00	453	95.57	0	0.00	390	82.28
2015 Total		3,638	1,071	29.44	47	4.39	5	0.00	1,019	95.14	0	0.00	916	85.53
2016	LDGT1	2,251	395	17.55	31	7.85	4	0.01	360	91.14	0	0.00	364	92.15
	LDGT2	1,094	277	25.32	30	10.83	1	0.00	246	88.81	0	0.00	242	87.36

			Incomplete Total		Unable to Communicate - Communication Error		Unable to Communicate - Inaccessible		MIL Commanded Off and Not Ready		Potential Tampering Readiness Monitors		Retest # 1	
Model Year	Type	OBD Retest Total All	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
	LDGV	1,763	443	25.13	15	3.39	0	0.00	428	96.61	0	0.00	384	86.68
2016 Total		5,108	1,115	21.83	76	6.82	5	0.00	1,034	92.74	0	0.00	990	88.79
2017	LDGT1	180	25	13.89	4	16.00	0	0.00	21	84.00	0	0.00	25	100.00
	LDGT2	141	43	30.50	1	2.33	1	0.02	41	95.35	0	0.00	29	67.44
	LDGV	172	37	21.51	3	8.11	0	0.00	34	91.89	0	0.00	35	94.59
2017 Total		493	105	21.30	8	7.62	1	0.01	96	91.43	0	0.00	89	84.76
2018	LDGT1	36	4	11.11	0	0.00	0	0.00	4	100.00	0	0.00	4	100.00
	LDGT2	43	13	30.23	0	0.00	0	0.00	13	100.00	0	0.00	10	76.92
	LDGV	35	3	8.57	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00
2018 Total		114	20	17.54	0	0.00	0	0.00	20	100.00	0	0.00	17	85.00
2019	LDGT1	18	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGT2	7	1	14.29	0	0.00	0	0.00	1	100.00	0	0.00	1	100.00
	LDGV	17	7	41.18	0	0.00	0	0.00	7	100.00	0	0.00	6	85.71
2019 Total		42	8	19.05	0	0.00	0	0.00	8	100.00	0	0.00	7	87.50
2020	LDGT1	4	2	50.00	2	100.00	0	0.00	0	0.00	0	0.00	2	100.00
	LDGT2	3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	13	2	15.38	0	0.00	0	0.00	2	100.00	0	0.00	2	100.00
2020 Total		20	4	20.00	2	50.00	0	0.00	2	50.00	0	0.00	4	100.00
2021	LDGV	4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2021 Total		4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2022	LDGT1	1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	LDGV	2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2022 Total		3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Grand Total		**32,134**	**10,323**	**32.12**	**613**	**5.94**	**31**	**0.00**	**9,679**	**93.76**	**0**	**0.00**	**8,013**	**77.62**

OBD Retest Incomplete Inspection Report - Summary by Veh (V 1.00)

		Incomplete Total		Unable to Communicate - Communication Error		Unable to Communicate - Inaccessible		MIL Commanded Off and Not Ready		Potential Tampering Readiness Monitors		Retest # 1	
Type	OBD Retest Total All	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
LDGT1	7,987	2,072	25.94	105	5.07	8	0.00	1,959	94.55	0	0.00	1,668	80.50
LDGT2	12,952	4,624	35.70	290	6.27	7	0.00	4,327	93.58	0	0.00	3,501	75.71
LDGV	11,195	3,627	32.40	218	6.01	16	0.00	3,393	93.55	0	0.00	2,844	78.41
Grand Total	**32,134**	**10,323**	**32.12**	**613**	**5.94**	**31**	**0.00**	**9,679**	**93.76**	**0**	**0.00**	**8,013**	**77.62**

Appendix B1

I/M240 Initial Inspection Report

Date
Between 1/1/2023 and 1/1/2024

Initial Inspection Report (V1.01)

Vehicle		All Initial Inspections				Passing Initial Inspections					Failing Initial Inspections				
Year	Type	Total	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)	Total	Total %	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)	Total	Total %	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)
1982	LDGV	119	2.1132	23.5335	2.1973	91	76.47%	1.7161	18.2911	1.9289	28	23.53%	3.4038	40.5711	3.0694
	LDGT1	83	3.1816	49.4703	2.3653	52	62.65%	2.2915	32.0588	2.7321	31	37.35%	4.6746	78.6766	1.7499
	LDGT2	17	3.7972	69.4632	1.9704	11	64.71%	1.9956	33.3189	2.3484	6	35.29%	7.1001	135.7279	1.2776
1982 Total		219	2.6488	36.9287	2.2433	154	70.32%	1.9303	24.0133	2.2301	65	29.68%	4.3511	67.5282	2.2747
1983	LDGV	131	1.6319	19.5479	1.8795	101	77.10%	1.2440	12.0924	1.8528	30	22.90%	2.9375	44.6480	1.9692
	LDGT1	124	3.2140	36.4276	2.4054	93	75.00%	2.9205	32.9314	2.2981	31	25.00%	4.0944	46.9162	2.7274
	LDGT2	47	3.8008	58.9125	2.6020	26	55.32%	3.0145	31.9124	2.5717	21	44.68%	4.7743	92.3412	2.6394
1983 Total		302	2.6190	32.6049	2.2079	220	72.85%	2.1620	23.2440	2.1260	82	27.15%	3.8453	57.7196	2.4275
1984	LDGV	247	1.7412	17.9254	1.8387	184	74.49%	1.1870	11.0292	1.7043	63	25.51%	3.3595	38.0663	2.2315
	LDGT1	228	2.8447	39.6152	2.3197	154	67.54%	1.9222	22.6023	2.2725	74	32.46%	4.7645	75.0206	2.4177
	LDGT2	74	2.9327	52.2139	2.8835	37	50.00%	2.2362	29.4902	2.6511	37	50.00%	3.6292	74.9376	3.1160
1984 Total		549	2.3601	31.5549	2.1793	375	68.31%	1.5925	17.6034	2.0311	174	31.69%	4.0144	61.6230	2.4988
1985	LDGV	338	1.6123	18.2810	1.7724	253	74.85%	1.0216	10.6718	1.6833	85	25.15%	3.3703	40.9294	2.0376
	LDGT1	330	2.1645	28.0233	2.6015	247	74.85%	1.6585	17.4442	2.5290	83	25.15%	3.6705	59.5056	2.8174
	LDGT2	79	3.2325	45.7440	2.8956	41	51.90%	1.6778	20.6093	2.7367	38	48.10%	4.9098	72.8631	3.0670
1985 Total		747	2.0276	25.4892	2.2575	541	72.42%	1.3621	14.5170	2.1493	206	27.58%	3.7752	54.3047	2.5417
1986	LDGV	426	1.3825	13.1010	1.7799	324	76.06%	0.8447	7.3331	1.6026	102	23.94%	3.0908	31.4224	2.3431
	LDGT1	463	1.9878	25.9217	2.3703	351	75.81%	1.5633	15.5602	2.3825	112	24.19%	3.3182	58.3937	2.3320
	LDGT2	117	2.7798	40.2152	2.7083	67	57.26%	1.6982	16.9893	2.6018	50	42.74%	4.2291	71.3380	2.8509
1986 Total		1006	1.8236	22.1550	2.1596	742	73.76%	1.2617	12.0969	2.0617	264	26.24%	3.4029	50.4245	2.4346
1987	LDGV	460	1.4518	12.9209	1.6059	370	80.43%	0.7920	7.1107	1.5250	90	19.57%	4.1646	36.8071	1.9384
	LDGT1	505	1.7116	21.0966	2.2544	408	80.79%	1.3249	14.2628	2.2050	97	19.21%	3.3383	49.8405	2.4620
	LDGT2	144	2.2770	17.7411	2.7989	116	80.56%	1.8517	13.1879	2.6842	28	19.44%	4.0390	36.6044	3.2741
1987 Total		1109	1.6773	17.2697	2.0561	894	80.61%	1.1727	11.1633	1.9858	215	19.39%	3.7754	42.6609	2.3486
1988	LDGV	465	1.2120	12.5912	1.4539	355	76.34%	0.6245	7.3653	1.2949	110	23.66%	3.1081	29.4565	1.9670
	LDGT1	576	1.8217	18.0115	2.1713	433	75.17%	1.2843	11.3287	1.9862	143	24.83%	3.4489	38.2466	2.7320
	LDGT2	209	1.9912	19.4965	2.5019	160	76.56%	1.4777	11.7523	2.3807	49	23.44%	3.6682	44.7837	2.8977
1988 Total		1250	1.6232	16.2434	1.9597	948	75.84%	1.0698	9.9160	1.7939	302	24.16%	3.3604	36.1056	2.4802
1989	LDGV	662	1.0609	10.5355	1.4969	523	79.00%	0.6146	7.0713	1.3076	139	21.00%	2.7401	23.5697	2.2092
	LDGT1	865	1.5670	17.8637	2.0176	702	81.16%	1.1366	11.8543	1.8637	163	18.84%	3.4205	43.7448	2.6802
	LDGT2	296	1.7172	14.6472	2.7408	249	84.12%	1.4644	11.4023	2.6249	47	15.88%	3.0566	31.8383	3.3550
1989 Total		1823	1.4076	14.6803	1.9459	1474	80.86%	1.0068	10.0809	1.7950	349	19.14%	3.1005	34.1060	2.5835
1990	LDGV	847	0.9174	9.9799	1.4345	712	84.06%	0.5907	6.8023	1.3160	135	15.94%	2.6409	26.7384	2.0596
	LDGT1	785	1.4110	14.1394	2.0796	632	80.51%	1.0574	10.1343	1.9593	153	19.49%	2.8718	30.6831	2.5766
	LDGT2	326	1.6376	14.4399	2.4586	261	80.06%	1.3312	12.4756	2.3001	65	19.94%	2.8680	22.3275	3.0947
1990 Total		1958	1.2352	12.3901	1.8636	1605	81.97%	0.8949	9.0369	1.7293	353	18.03%	2.7828	27.6360	2.4743
1991	LDGV	1269	0.8162	9.3523	1.3800	1043	82.19%	0.5018	6.0154	1.2569	226	17.81%	2.2670	24.7524	1.9482
	LDGT1	1201	1.1163	12.8603	1.7133	1007	83.85%	0.8727	9.7129	1.6105	194	16.15%	2.3805	29.1976	2.2470
	LDGT2	396	1.5888	17.3341	2.4351	290	73.23%	1.1152	13.4800	2.1852	106	26.77%	2.8846	27.8784	3.1186

Vehicle		All Initial Inspections				Passing Initial Inspections					Failing Initial Inspections				
Year	Type	Total	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)	Total	Total %	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)	Total	Total %	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)
1991 Total		2866	1.0487	11.9252	1.6655	2340	81.65%	0.7374	8.5317	1.5241	526	18.35%	2.4333	27.0218	2.2943
1992	LDGV	1171	0.7585	8.1934	1.3713	974	83.18%	0.4854	5.4907	1.2403	197	16.82%	2.1086	21.5558	2.0186
	LDGT1	1030	1.0730	11.6010	1.7231	857	83.20%	0.8374	9.1646	1.5585	173	16.80%	2.2402	23.6702	2.5385
	LDGT2	613	1.6096	15.5574	2.2978	460	75.04%	1.2060	12.4404	2.1509	153	24.96%	2.8229	24.9288	2.7397
1992 Total		2814	1.0590	11.0448	1.7019	2291	81.41%	0.7618	8.2604	1.5422	523	18.59%	2.3611	23.2420	2.4015
1993	LDGV	1515	0.7005	7.2697	1.3632	1279	84.42%	0.4560	5.1674	1.2333	236	15.58%	2.0253	18.6633	2.0672
	LDGT1	1685	1.0827	11.9019	1.8243	1429	84.81%	0.8246	8.8803	1.7113	256	15.19%	2.5229	28.7687	2.4547
	LDGT2	761	1.7051	16.8593	2.3318	549	72.14%	1.1923	12.5992	2.1019	212	27.86%	3.0332	27.8914	2.9270
1993 Total		3961	1.0561	11.0826	1.7454	3257	82.23%	0.7419	8.0491	1.5894	704	17.77%	2.5098	25.1169	2.4671
1994	LDGV	1664	0.5315	5.9231	1.0739	1364	81.97%	0.3524	4.4048	0.9012	300	18.03%	1.3458	12.8262	1.8596
	LDGT1	1982	0.9570	10.2863	1.7543	1680	84.76%	0.7543	7.6404	1.6493	302	15.24%	2.0846	25.0051	2.3384
	LDGT2	1313	1.1941	13.0581	2.1528	1043	79.44%	0.9444	10.1446	1.9655	270	20.56%	2.1586	24.3125	2.8764
1994 Total		4959	0.8770	9.5561	1.6315	4087	82.42%	0.6687	7.1996	1.4803	872	17.58%	1.8533	20.6007	2.3403
1995	LDGV	2483	0.5841	6.1839	0.9587	2102	84.66%	0.3347	4.1125	0.8485	381	15.34%	1.9598	17.6121	1.5667
	LDGT1	2426	0.9220	9.8195	1.8229	2069	85.28%	0.7260	7.4786	1.7055	357	14.72%	2.0579	23.3862	2.5031
	LDGT2	1892	1.2508	12.6009	2.0909	1487	78.59%	0.9022	9.8414	1.9342	405	21.41%	2.5306	22.7327	2.6663
1995 Total		6801	0.8901	9.2659	1.5820	5658	83.19%	0.6269	6.8490	1.4472	1143	16.81%	2.1927	21.2300	2.2488
1996	LDGV	2562	0.3709	4.7534	0.7469	2202	85.95%	0.2363	3.2228	0.6508	360	14.05%	1.1946	14.1160	1.3347
	LDGT1	2583	0.4661	6.1326	1.2492	2163	83.74%	0.3442	4.8478	1.0650	420	16.26%	1.0940	12.7489	2.1982
	LDGT2	1622	0.5599	6.9034	1.3015	1293	79.72%	0.4117	5.3795	1.0891	329	20.28%	1.1426	12.8925	2.1363
1996 Total		6767	0.4526	5.7952	1.0716	5658	83.61%	0.3176	4.3369	0.9093	1109	16.39%	1.1411	13.2353	1.8995
1997	LDGV	3784	0.3555	4.5591	0.6972	3282	86.73%	0.2516	3.4271	0.6177	502	13.27%	1.0348	11.9598	1.2171
	LDGT1	4646	0.4622	6.1433	1.2424	3936	84.72%	0.3419	4.6196	1.0661	710	15.28%	1.1287	14.5906	2.2197
	LDGT2	2118	0.5048	6.6166	1.2877	1752	82.72%	0.3467	4.7491	1.0727	366	17.28%	1.2620	15.5560	2.3170
1997 Total		10548	0.4325	5.6700	1.0559	8970	85.04%	0.3098	4.2086	0.9033	1578	14.96%	1.1297	13.9776	1.9233
1998	LDGV	4398	0.3399	4.3333	0.6847	3768	85.68%	0.2282	3.2876	0.5976	630	14.32%	1.0080	10.5871	1.2053
	LDGT1	5309	0.3898	5.3308	1.0594	4554	85.78%	0.2818	4.1361	0.8960	755	14.22%	1.0412	12.5372	2.0450
	LDGT2	2187	0.4721	5.3626	1.1794	1819	83.17%	0.2542	3.5078	0.9684	368	16.83%	1.5492	14.5311	2.2226
1998 Total		11894	0.3865	4.9678	0.9429	10141	85.26%	0.2569	3.7081	0.7981	1753	14.74%	1.1359	12.2549	1.7805
1999	LDGV	6039	0.2903	3.8930	0.6544	5362	88.79%	0.2120	3.0184	0.5682	677	11.21%	0.9101	10.8200	1.3370
	LDGT1	6698	0.2900	4.7240	0.8515	5668	84.62%	0.2001	3.2932	0.6398	1030	15.38%	0.7847	12.5975	2.0164
	LDGT2	3461	0.3412	3.7306	0.9120	2792	80.67%	0.1891	2.2490	0.6796	669	19.33%	0.9757	9.9139	1.8820
1999 Total		16198	0.3010	4.2019	0.7910	13822	85.33%	0.2025	2.9757	0.6201	2376	14.67%	0.8742	11.3354	1.7850
2000	LDGV	7080	0.2440	3.5962	0.5554	6187	87.39%	0.1533	2.6017	0.4382	893	12.61%	0.8722	10.4868	1.3673
	LDGT1	7322	0.2789	4.0104	0.7678	6158	84.10%	0.1835	2.6721	0.5703	1164	15.90%	0.7831	11.0909	1.8127
	LDGT2	3385	0.3260	4.0469	0.7775	2827	83.52%	0.1773	2.5235	0.5826	558	16.48%	1.0798	11.7650	1.7646
2000 Total		17787	0.2740	3.8525	0.6851	15172	85.30%	0.1700	2.6157	0.5187	2615	14.70%	0.8768	11.0284	1.6503
2001	LDGV	8957	0.1986	3.1655	0.4409	8015	89.48%	0.1211	2.3587	0.3428	942	10.52%	0.8582	10.0295	1.2751
	LDGT1	8812	0.1999	3.6670	0.5666	7801	88.53%	0.1459	2.7760	0.4460	1011	11.47%	0.6165	10.5417	1.4972
	LDGT2	4670	0.2689	3.4225	0.7186	3978	85.18%	0.1803	2.3161	0.5143	692	14.82%	0.7782	9.7826	1.8928
2001 Total		22439	0.2137	3.4159	0.5481	19794	88.21%	0.1428	2.5146	0.4180	2645	11.79%	0.7449	10.1607	1.5216
2002	LDGV	9537	0.2004	3.7280	0.4401	8414	88.22%	0.1170	2.8716	0.3146	1123	11.78%	0.8256	10.1446	1.3805
	LDGT1	9466	0.2177	4.4730	0.5541	8257	87.23%	0.1340	3.1941	0.4032	1209	12.77%	0.7888	13.2075	1.5842

Vehicle		All Initial Inspections				Passing Initial Inspections					Failing Initial Inspections				
Year	Type	Total	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)	Total	Total %	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)	Total	Total %	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)
	LDGT2	4233	0.2926	3.4861	0.7362	3541	83.65%	0.1621	2.0986	0.5319	692	16.35%	0.9604	10.5861	1.7819
2002 Total		23236	0.2242	3.9874	0.5405	20212	86.99%	0.1319	2.8679	0.3889	3024	13.01%	0.8417	11.4702	1.5538
2003	LDGV	11883	0.1404	2.3615	0.3560	10783	90.74%	0.0876	1.7619	0.2688	1100	9.26%	0.6575	8.2387	1.2098
	LDGT1	12161	0.1801	3.2527	0.4820	10815	88.93%	0.1150	2.1392	0.3478	1346	11.07%	0.7030	12.1991	1.5610
	LDGT2	5465	0.2298	2.9608	0.5321	4807	87.96%	0.1402	1.8737	0.3841	658	12.04%	0.8849	10.9026	1.6139
2003 Total		29509	0.1733	2.8397	0.4405	26405	89.48%	0.1084	1.9368	0.3221	3104	10.52%	0.7254	10.5207	1.4478
2004	LDGV	11407	0.1304	2.2619	0.3141	10378	90.98%	0.0830	1.6582	0.2263	1029	9.02%	0.6083	8.3507	1.1993
	LDGT1	13075	0.1565	2.9614	0.3673	11719	89.63%	0.0996	1.9782	0.2521	1356	10.37%	0.6489	11.4588	1.3622
	LDGT2	6096	0.1957	2.9364	0.4311	5387	88.37%	0.1126	1.8878	0.2721	709	11.63%	0.8275	10.9034	1.6388
2004 Total		30578	0.1546	2.6955	0.3601	27484	89.88%	0.0959	1.8397	0.2463	3094	10.12%	0.6763	10.2979	1.3714
2005	LDGV	15593	0.1105	1.7701	0.2500	14322	91.85%	0.0640	1.2976	0.1760	1271	8.15%	0.6349	7.0937	1.0843
	LDGT1	16948	0.1274	2.2490	0.2469	15756	92.97%	0.0875	1.5469	0.1655	1192	7.03%	0.6538	11.5297	1.3223
	LDGT2	5883	0.1864	2.6206	0.3738	5255	89.33%	0.1171	1.6948	0.2325	628	10.67%	0.7664	10.3676	1.5567
2005 Total		38424	0.1296	2.1115	0.2676	35333	91.96%	0.0824	1.4678	0.1797	3091	8.04%	0.6689	9.4695	1.2721
2006	LDGV	15259	0.1074	2.0168	0.2060	14357	94.09%	0.0668	1.5865	0.1470	902	5.91%	0.7544	8.8661	1.1458
	LDGT1	14478	0.1051	2.2206	0.2466	13578	93.78%	0.0722	1.7227	0.1771	900	6.22%	0.6009	9.7315	1.2955
	LDGT2	6338	0.1705	2.2031	0.3043	5746	90.66%	0.0934	1.4096	0.1707	592	9.34%	0.9189	9.9041	1.6011
2006 Total		36075	0.1176	2.1313	0.2396	33681	93.36%	0.0735	1.6113	0.1632	2394	6.64%	0.7374	9.4481	1.3147
2007	LDGV	18686	0.0825	1.7386	0.1746	17840	95.47%	0.0586	1.4345	0.1281	846	4.53%	0.5870	8.1501	1.1568
	LDGT1	19359	0.0743	1.7921	0.1880	18276	94.41%	0.0508	1.4175	0.1271	1083	5.59%	0.4705	8.1131	1.2155
	LDGT2	7243	0.1405	1.8871	0.2125	6708	92.61%	0.0753	1.1339	0.1263	535	7.39%	0.9583	11.3307	1.2932
2007 Total		45288	0.0883	1.7852	0.1864	42824	94.56%	0.0579	1.3802	0.1274	2464	5.44%	0.6164	8.8244	1.2122
2008	LDGV	16060	0.0903	1.9670	0.1675	15234	94.86%	0.0594	1.5502	0.1221	826	5.14%	0.6595	9.6557	1.0046
	LDGT1	17324	0.0663	1.7664	0.1753	16478	95.12%	0.0508	1.4135	0.1288	846	4.88%	0.3677	8.6411	1.0806
	LDGT2	6596	0.1088	2.2290	0.1812	6054	91.78%	0.0718	1.5136	0.1178	542	8.22%	0.5221	10.2203	0.8890
2008 Total		39980	0.0829	1.9233	0.1731	37766	94.46%	0.0576	1.4847	0.1244	2214	5.54%	0.5143	9.4062	1.0053
2009	LDGV	12621	0.0846	1.9317	0.1623	12064	95.59%	0.0593	1.6108	0.1256	557	4.41%	0.6336	8.8812	0.9567
	LDGT1	9735	0.0676	1.9057	0.1767	9317	95.71%	0.0532	1.6621	0.1328	418	4.29%	0.3885	7.3372	1.1549
	LDGT2	3832	0.0904	1.8971	0.1716	3563	92.98%	0.0707	1.4175	0.1287	269	7.02%	0.3517	8.2503	0.7391
2009 Total		26188	0.0791	1.9170	0.1690	24944	95.25%	0.0586	1.6023	0.1288	1244	4.75%	0.4902	8.2260	0.9763
2010	LDGV	17646	0.0689	1.7340	0.1263	17035	96.54%	0.0507	1.5480	0.1024	611	3.46%	0.5770	6.9207	0.7924
	LDGT1	18276	0.0509	1.4603	0.1222	17718	96.95%	0.0450	1.3367	0.1060	558	3.05%	0.2371	5.3844	0.6359
	LDGT2	7142	0.0722	1.6312	0.1333	6795	95.14%	0.0588	1.3221	0.1056	347	4.86%	0.3351	7.6837	0.6758
2010 Total		43064	0.0618	1.6008	0.1257	41548	96.48%	0.0496	1.4209	0.1045	1516	3.52%	0.3965	6.5299	0.7081
2011	LDGV	13362	0.0785	1.9784	0.1411	12838	96.08%	0.0552	1.7144	0.1041	524	3.92%	0.6496	8.4467	1.0472
	LDGT1	15963	0.0555	1.8007	0.1259	15482	96.99%	0.0480	1.5829	0.1104	481	3.01%	0.2963	8.8108	0.6248
	LDGT2	7201	0.0743	1.5390	0.1164	6705	93.11%	0.0577	1.2524	0.0970	496	6.89%	0.2984	5.4138	0.3784
2011 Total		36526	0.0676	1.8141	0.1296	35025	95.89%	0.0525	1.5678	0.1055	1501	4.11%	0.4203	7.5611	0.6908
2012	LDGV	23632	0.0602	1.7408	0.1044	22821	96.57%	0.0466	1.5695	0.0876	811	3.43%	0.4442	6.5597	0.5775
	LDGT1	23059	0.0485	1.7662	0.1042	22411	97.19%	0.0431	1.6329	0.0943	648	2.81%	0.2356	6.3766	0.4467
	LDGT2	10274	0.0668	1.3436	0.1082	9590	93.34%	0.0516	1.1516	0.0915	684	6.66%	0.2786	4.0349	0.3414
2012 Total		56965	0.0567	1.6794	0.1050	54822	96.24%	0.0461	1.5223	0.0910	2143	3.76%	0.3282	5.6985	0.4626
2013	LDGV	1942	0.1183	2.4545	0.1852	1814	93.41%	0.0561	1.9073	0.1042	128	6.59%	0.9991	10.2095	1.3321

Vehicle		All Initial Inspections				Passing Initial Inspections					Failing Initial Inspections				
Year	Type	Total	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)	Total	Total %	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)	Total	Total %	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)
	LDGT1	1273	0.0695	2.6829	0.1453	1218	95.68%	0.0570	2.2206	0.1165	55	4.32%	0.3466	12.9198	0.7836
	LDGT2	977	0.1016	2.0644	0.1998	887	90.79%	0.0676	1.5097	0.1253	90	9.21%	0.4367	7.5318	0.9337
2013 Total		4192	0.0996	2.4329	0.1765	3919	93.49%	0.0590	1.9147	0.1128	273	6.51%	0.6823	9.8727	1.0902
2014	LDGV	1881	0.0982	2.3329	0.1434	1797	95.53%	0.0466	1.7599	0.0883	84	4.47%	1.2011	14.5930	1.3223
	LDGT1	1676	0.0461	1.9805	0.0950	1629	97.20%	0.0416	1.8074	0.0844	47	2.80%	0.2018	7.9780	0.4616
	LDGT2	1317	0.0801	1.7654	0.1291	1240	94.15%	0.0619	1.3898	0.0866	77	5.85%	0.3729	7.8148	0.8128
2014 Total		4874	0.0754	2.0584	0.1229	4666	95.73%	0.0490	1.6781	0.0865	208	4.27%	0.6687	10.5890	0.9392
2015	LDGV	1302	0.1228	2.6531	0.2048	1203	92.40%	0.0494	1.7261	0.0889	99	7.60%	1.0146	13.9175	1.6133
	LDGT1	1245	0.0520	1.7641	0.1259	1193	95.82%	0.0375	1.5409	0.0846	52	4.18%	0.3851	6.8858	1.0715
	LDGT2	680	0.0921	1.7405	0.1110	653	96.03%	0.0791	1.5235	0.0836	27	3.97%	0.4074	6.9890	0.7744
2015 Total		3227	0.0890	2.1178	0.1546	3049	94.48%	0.0511	1.6103	0.0861	178	5.52%	0.7386	10.8123	1.3278
2016	LDGV	1709	0.1151	2.2317	0.1808	1595	93.33%	0.0405	1.4306	0.0758	114	6.67%	1.1576	13.4395	1.6498
	LDGT1	2195	0.0339	1.4659	0.0722	2126	96.86%	0.0303	1.2796	0.0650	69	3.14%	0.1446	7.2079	0.2946
	LDGT2	1032	0.0949	1.6379	0.1220	991	96.03%	0.0792	1.3746	0.0917	41	3.97%	0.4727	8.0030	0.8544
2016 Total		4936	0.0748	1.7670	0.1202	4712	95.46%	0.0441	1.3507	0.0743	224	4.54%	0.7202	10.5249	1.0868
2017	LDGV	359	0.1351	1.7914	0.1193	347	96.66%	0.0477	1.6019	0.0831	12	3.34%	2.6640	7.2721	1.1661
	LDGT1	327	0.0389	1.5273	0.0737	318	97.25%	0.0365	1.3867	0.0622	9	2.75%	0.1227	6.4951	0.4811
	LDGT2	202	0.0720	1.3034	0.0854	197	97.52%	0.0650	1.2056	0.0753	5	2.48%	0.3451	5.1565	0.4820
2017 Total		888	0.0853	1.5831	0.0948	862	97.07%	0.0475	1.4319	0.0736	26	2.93%	1.3384	6.5963	0.7975
2018	LDGV	61	0.1170	1.7808	0.1688	58	95.08%	0.0419	1.4641	0.0753	3	4.92%	1.5690	7.9039	1.9757
	LDGT1	98	0.0592	1.4334	0.1332	96	97.96%	0.0321	1.0800	0.0647	2	2.04%	1.3585	18.3974	3.4219
	LDGT2	47	0.1070	1.4777	0.1605	45	95.74%	0.0662	1.0736	0.0473	2	4.26%	1.0262	10.5706	2.7076
2018 Total		206	0.0872	1.5464	0.1500	199	96.60%	0.0427	1.1905	0.0639	7	3.40%	1.3538	11.6640	2.5980
2019	LDGV	26	0.0437	1.1881	0.1239	25	96.15%	0.0172	0.6867	0.0471	1	3.85%	0.7068	13.7224	2.0448
	LDGT1	37	0.0227	0.8187	0.0433	35	94.59%	0.0230	0.8249	0.0433	2	5.41%	0.0171	0.7101	0.0449
	LDGT2	7	0.0643	1.1194	0.0424	7	100.00%	0.0643	1.1194	0.0424	0	0.00%	0.0000	0.0000	0.0000
2019 Total		70	0.0346	0.9860	0.0732	67	95.71%	0.0251	0.8041	0.0446	3	4.29%	0.2470	5.0475	0.7115
2020	LDGV	17	0.1304	1.9224	0.2545	16	94.12%	0.0198	0.9755	0.0624	1	5.88%	1.9011	17.0736	3.3279
	LDGT1	6	0.0224	0.6780	0.0409	6	100.00%	0.0224	0.6780	0.0409	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	4	0.1453	1.8599	0.0454	4	100.00%	0.1453	1.8599	0.0454	0	0.00%	0.0000	0.0000	0.0000
2020 Total		27	0.1086	1.6366	0.1760	26	96.30%	0.0397	1.0429	0.0548	1	3.70%	1.9011	17.0736	3.3279
2021	LDGV	13	0.0220	0.5104	0.0440	13	100.00%	0.0220	0.5104	0.0440	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	5	0.0365	1.0012	0.0869	5	100.00%	0.0365	1.0012	0.0869	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	1	0.0271	0.5512	0.0361	1	100.00%	0.0271	0.5512	0.0361	0	0.00%	0.0000	0.0000	0.0000
2021 Total		19	0.0261	0.6417	0.0549	19	100.00%	0.0261	0.6417	0.0549	0	0.00%	0.0000	0.0000	0.0000
2022	LDGV	4	0.0158	0.5742	0.0414	4	100.00%	0.0158	0.5742	0.0414	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	2	0.0195	0.5266	0.0406	2	100.00%	0.0195	0.5266	0.0406	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	1	0.0178	0.2534	0.0361	1	100.00%	0.0178	0.2534	0.0361	0	0.00%	0.0000	0.0000	0.0000
2022 Total		7	0.0172	0.5148	0.0404	7	100.00%	0.0172	0.5148	0.0404	0	0.00%	0.0000	0.0000	0.0000
2023	LDGT2	2	0.0236	0.6476	0.0366	2	100.00%	0.0236	0.6476	0.0366	0	0.00%	0.0000	0.0000	0.0000
2023 Total		2	0.0236	0.6476	0.0366	2	100.00%	0.0236	0.6476	0.0366	0	0.00%	0.0000	0.0000	0.0000
2024	LDGV	1	0.0109	0.3316	0.0412	1	100.00%	0.0109	0.3316	0.0412	0	0.00%	0.0000	0.0000	0.0000
2024 Total		1	0.0109	0.3316	0.0412	1	100.00%	0.0109	0.3316	0.0412	0	0.00%	0.0000	0.0000	0.0000

Vehicle		All Initial Inspections				Passing Initial Inspections					Failing Initial Inspections				
Year	Type	Total	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)	Total	Total %	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)	Total	Total %	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)
Overall Total		**540279**	**0.1958**	**3.0564**	**0.3967**	**495716**	**91.75%**	**0.1262**	**2.2014**	**0.2999**	**44563**	**8.25%**	**0.9703**	**12.5675**	**1.4742**

Summary by Vehicle Type (V1.01)

Vehicle Type	All Initial Inspections				Passing Initial Inspections					Failing Initial Inspections				
	Total	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)	Total	Total %	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)	Total	Total %	Avg HC (gpm)	Avg CO (gpm)	Avg NOx (gpm)
LDGV	217618	0.1660	2.6833	0.3209	201450	92.57%	0.1023	2.0095	0.2456	16168	7.43%	0.9591	11.0793	1.2591
LDGT1	224361	0.1933	3.2442	0.4185	206829	92.19%	0.1326	2.3549	0.3209	17532	7.81%	0.9090	13.7351	1.5706
LDGT2	98300	0.2675	3.4539	0.5149	87437	88.95%	0.1658	2.2806	0.3753	10863	11.05%	1.0857	12.8980	1.6386
Overall Total	**540279**	**0.1958**	**3.0564**	**0.3967**	**495716**	**91.75%**	**0.1262**	**2.2014**	**0.2999**	**44563**	**8.25%**	**0.9703**	**12.5675**	**1.4742**

Appendix B2

I/M240 Initial Failure Report

Date
Between 1/1/2023 and 1/1/2024

Initial Failure Report (V1.03)

Vehicle		Failure for Both Exhaust and Other					Failure for Exhaust Only					Failure for Other				
Year	Type	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx (gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
1982	LDGT1	8	9.64%	7.5916	111.6654	1.8944	12	14.46%	4.8360	97.1231	1.5127	11	13.25%	2.3772	34.5614	1.9036
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	4	23.53%	9.0423	179.9954	1.1367	2	11.76%	3.2160	47.1929	1.5595
	LDGV	1	0.84%	4.1063	85.9930	1.1681	23	19.33%	3.7413	43.1388	3.2990	4	3.36%	1.2876	14.4518	2.2247
1982 Total		9	4.11%	7.2043	108.8129	1.8137	39	17.81%	4.6218	73.7859	2.5276	17	7.76%	2.2195	31.3158	1.9386
1983	LDGT1	4	3.23%	4.1455	69.2845	3.2529	10	8.06%	6.5975	63.4260	3.0379	17	13.71%	2.6100	31.9414	2.4212
	LDGT2	4	8.51%	7.1618	205.7865	0.5513	11	23.40%	4.8230	76.0232	3.5369	6	12.77%	3.0932	46.6273	2.3861
	LDGV	3	2.29%	3.5755	83.6171	2.2314	21	16.03%	3.3034	48.3636	1.9509	6	4.58%	1.3377	12.1591	1.9022
1983 Total		11	3.64%	5.0869	122.8305	1.9919	42	13.91%	4.4857	59.1941	2.6251	29	9.60%	2.4468	30.8870	2.3065
1984	LDGT1	8	3.51%	8.0119	145.4413	3.6663	38	16.67%	5.7669	95.1971	2.0246	28	12.28%	2.4763	27.5181	2.5945
	LDGT2	8	10.81%	4.8724	109.7248	2.5648	23	31.08%	3.4967	74.1049	3.4528	6	8.11%	2.4796	31.7467	2.5599
	LDGV	7	2.83%	3.2903	32.9645	3.2673	42	17.00%	4.1290	48.4997	2.2990	14	5.67%	1.0857	9.3172	1.5112
1984 Total		23	4.19%	5.4829	98.7861	3.1617	103	18.76%	4.5921	71.4455	2.4554	48	8.74%	2.0711	22.7381	2.2742
1985	LDGT1	6	1.82%	4.7055	74.6088	3.0305	53	16.06%	4.2913	75.3191	2.9243	24	7.27%	2.0407	20.8083	2.5280
	LDGT2	6	7.59%	7.8135	112.8476	3.6146	23	29.11%	5.5322	83.2188	3.4234	9	11.39%	1.3834	19.7424	1.7912
	LDGV	8	2.37%	3.6713	46.2043	2.7206	65	19.23%	3.7365	45.4969	2.0530	12	3.55%	1.1861	12.6724	1.4986
1985 Total		20	2.68%	5.2242	74.7186	3.0818	141	18.88%	4.2380	62.8599	2.6041	45	6.02%	1.6813	18.4255	2.1061
1986	LDGT1	8	1.73%	5.0524	59.8259	2.3488	74	15.98%	3.8216	75.6173	2.3403	30	6.48%	1.6141	15.5268	2.3071
	LDGT2	7	5.98%	4.0169	81.6671	2.3588	31	26.50%	5.0217	88.7264	3.2047	12	10.26%	2.3054	20.3924	2.2240
	LDGV	10	2.35%	2.9337	22.7016	2.9469	79	18.54%	3.4279	36.2048	2.3692	13	3.05%	1.1632	9.0685	1.7198
1986 Total		25	2.49%	3.9150	51.0917	2.5908	184	18.29%	3.8548	60.9042	2.4983	55	5.47%	1.6584	15.0619	2.1502
1987	LDGT1	6	1.19%	9.3096	147.1117	1.7530	61	12.08%	3.6794	56.8944	2.5305	30	5.94%	1.4503	16.0431	2.4645
	LDGT2	4	2.78%	4.7291	57.9450	2.7992	11	7.64%	6.6054	56.3760	4.5342	13	9.03%	1.6552	13.3083	2.3540
	LDGV	7	1.52%	8.1006	38.8380	2.4527	69	15.00%	4.4465	42.4148	2.0008	14	3.04%	0.8069	8.1535	1.3738
1987 Total		17	1.53%	7.7340	81.5480	2.2873	141	12.71%	4.2831	49.7682	2.4276	57	5.14%	1.3390	13.4816	2.1714
1988	LDGT1	14	2.43%	4.3405	31.4311	4.1099	86	14.93%	4.3952	53.2104	2.7847	43	7.47%	1.2659	10.5382	2.1781
	LDGT2	6	2.87%	7.8895	59.6682	2.4157	31	14.83%	3.7256	54.8748	3.1089	12	5.74%	1.4091	11.2731	2.5930
	LDGV	4	0.86%	4.3405	37.9845	1.4215	84	18.06%	3.6608	34.5928	2.0923	22	4.73%	0.7739	8.2946	1.5877
1988 Total		24	1.92%	5.2277	39.5826	3.2383	201	16.08%	3.9850	45.6866	2.5453	77	6.16%	1.1477	10.0117	2.0741
1989	LDGT1	11	1.27%	4.2908	53.3148	3.4402	107	12.37%	4.2558	56.0044	2.8094	45	5.20%	1.2213	12.2550	2.1873
	LDGT2	6	2.03%	4.5021	47.9707	3.6220	24	8.11%	3.8710	43.3843	3.5172	17	5.74%	1.3968	9.8443	3.0317
	LDGV	11	1.66%	2.5379	19.4795	2.7507	94	14.20%	3.5102	30.0114	2.4314	34	5.14%	0.6765	7.0834	1.4199
1989 Total		28	1.54%	3.6474	38.8772	3.2083	225	12.34%	3.9033	43.7989	2.7270	96	5.27%	1.0594	9.9965	2.0650
1990	LDGT1	10	1.27%	4.9848	42.6230	3.4732	89	11.34%	3.6326	41.2860	2.8763	54	6.88%	1.2265	10.9969	1.9167
	LDGT2	5	1.53%	4.9228	20.4563	3.3861	39	11.96%	3.3282	27.5759	3.2640	21	6.44%	1.5243	13.0261	2.7109
	LDGV	5	0.59%	4.0742	57.0833	2.0334	95	11.22%	3.3022	32.3456	2.2513	35	4.13%	0.6412	7.1840	1.5431
1990 Total		20	1.02%	4.7417	40.6964	3.0915	223	11.39%	3.4386	35.0796	2.6778	110	5.62%	1.0971	10.1711	1.9494
1991	LDGT1	11	0.92%	5.8803	51.1540	2.2318	117	9.74%	2.9019	37.9943	2.6126	66	5.50%	0.8729	9.9439	1.6013
	LDGT2	9	2.27%	4.2456	56.4210	3.3126	74	18.69%	3.2549	28.9070	3.4576	23	5.81%	1.1607	13.4001	1.9521
	LDGV	15	1.18%	2.1723	16.5884	3.3101	164	12.92%	2.7782	30.7524	2.0272	47	3.70%	0.5137	6.4215	1.2379
1991 Total		35	1.22%	3.8708	37.6946	2.9718	355	12.39%	2.9183	32.7545	2.5183	136	4.75%	0.7974	9.3111	1.5350
1992	LDGT1	15	1.46%	3.9820	57.9486	1.9125	97	9.42%	2.8407	28.0166	3.1822	61	5.92%	0.8570	8.3296	1.6689

Vehicle		Failure for Both Exhaust and Other					Failure for Exhaust Only					Failure for Other				
Year	Type	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx (gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
	LDGT2	11	1.79%	3.1744	25.3574	3.3678	104	16.97%	3.4296	29.6810	2.9488	38	6.20%	1.0608	11.7988	1.9853
	LDGV	9	0.77%	2.0974	28.3659	2.1853	149	12.72%	2.5303	25.2726	2.1751	39	3.33%	0.5001	5.7839	1.3820
1992 Total		35	1.24%	3.2436	40.0987	2.4400	350	12.44%	2.8836	27.3430	2.6841	138	4.90%	0.8122	8.5655	1.6750
1993	LDGT1	13	0.77%	3.0512	31.8528	2.9168	145	8.61%	3.5205	41.3990	2.7837	98	5.82%	0.9767	9.6718	1.9068
	LDGT2	14	1.84%	4.1375	63.2802	3.4965	154	20.24%	3.4151	28.9468	3.1333	44	5.78%	1.3451	12.9373	2.0239
	LDGV	15	0.99%	1.6290	30.0751	2.1345	168	11.09%	2.5473	21.8810	2.3045	53	3.50%	0.4829	5.2341	1.2961
1993 Total		42	1.06%	2.9054	41.6937	2.8306	467	11.79%	3.1357	30.2713	2.7266	195	4.92%	0.9256	9.2025	1.7672
1994	LDGT1	16	0.81%	3.4857	23.9894	4.0529	162	8.17%	2.9263	37.6901	2.7008	124	6.26%	0.8040	8.5639	1.6437
	LDGT2	19	1.45%	2.0798	28.6479	3.3611	182	13.86%	2.6208	29.3783	3.1893	69	5.26%	0.9610	9.7569	1.9177
	LDGV	20	1.20%	3.3291	17.4653	1.9092	214	12.86%	1.4485	14.9783	2.1387	66	3.97%	0.4116	4.4425	0.9395
1994 Total		55	1.11%	2.9431	23.2263	3.0344	558	11.25%	2.2599	26.2688	2.6446	259	5.22%	0.7459	7.8315	1.5373
1995	LDGT1	24	0.99%	3.3235	36.6073	3.0136	175	7.21%	3.0706	36.0030	3.1139	158	6.51%	0.7440	7.4036	1.7491
	LDGT2	26	1.37%	4.1692	39.7477	3.2976	245	12.95%	3.2365	27.9641	2.9867	134	7.08%	0.9219	9.8665	1.9581
	LDGV	20	0.81%	4.9587	30.0570	2.2299	257	10.35%	2.3763	21.7981	1.8169	104	4.19%	0.3538	4.8747	0.8208
1995 Total		70	1.03%	4.1048	35.9022	2.8952	677	9.95%	2.8671	27.7014	2.5755	396	5.82%	0.7017	7.5729	1.5760
1996	LDGT1	28	1.08%	1.7174	23.7090	3.1215	213	8.25%	1.5957	17.1645	2.9414	179	6.93%	0.3995	5.7801	1.1694
	LDGT2	24	1.48%	0.8747	12.1080	3.1511	186	11.47%	1.6328	17.9307	2.6691	119	7.34%	0.4305	5.1759	1.0989
	LDGV	22	0.86%	1.9731	17.6441	1.6771	216	8.43%	1.6365	19.7214	1.6595	122	4.76%	0.2719	3.5554	0.6979
1996 Total		74	1.09%	1.5201	18.1435	2.7017	615	9.09%	1.6212	18.2943	2.4088	420	6.21%	0.3712	4.9627	1.0125
1997	LDGT1	49	1.05%	2.5752	35.4066	3.2173	384	8.27%	1.5181	19.0065	2.9185	277	5.96%	0.3331	4.7867	1.0745
	LDGT2	22	1.04%	1.9997	30.3583	2.7432	237	11.19%	1.5966	18.9705	2.8262	107	5.05%	0.3692	4.9496	1.1017
	LDGV	34	0.90%	1.9261	18.5559	1.7153	276	7.29%	1.4703	16.8739	1.5819	192	5.07%	0.2508	3.7275	0.6044
1997 Total		105	1.00%	2.2444	28.8925	2.6316	897	8.50%	1.5241	18.3408	2.4828	576	5.46%	0.3124	4.4639	0.9229
1998	LDGT1	46	0.87%	1.4923	15.3734	3.2098	409	7.70%	1.5476	18.4510	2.7657	300	5.65%	0.2845	4.0399	0.8837
	LDGT2	21	0.96%	1.6846	22.8546	2.6735	221	10.11%	2.2574	19.7776	2.8972	126	5.76%	0.2847	3.9418	0.9643
	LDGV	26	0.59%	1.3528	15.0293	1.8929	312	7.09%	1.7076	16.7056	1.7101	292	6.64%	0.2299	3.6539	0.6046
1998 Total		93	0.78%	1.4967	16.9665	2.7205	942	7.92%	1.7671	18.1841	2.4469	718	6.04%	0.2623	3.8657	0.7844
1999	LDGT1	56	0.84%	1.8126	27.5164	2.7372	695	10.38%	0.9225	14.9884	2.4849	279	4.17%	0.2352	3.6473	0.7047
	LDGT2	48	1.39%	2.1078	14.2673	3.0872	431	12.45%	1.1770	12.5258	2.2758	190	5.49%	0.2330	2.8892	0.6842
	LDGV	34	0.56%	1.5682	23.3010	1.8588	345	5.71%	1.4419	16.1463	1.9609	298	4.93%	0.2194	3.2297	0.5552
1999 Total		138	0.85%	1.8551	21.8694	2.6425	1,471	9.08%	1.1189	14.5384	2.3007	767	4.74%	0.2285	3.2972	0.6415
2000	LDGT1	77	1.05%	1.0650	15.3002	2.5385	728	9.94%	1.0393	14.6338	2.3343	359	4.90%	0.2031	3.0035	0.5993
	LDGT2	33	0.97%	2.9764	21.3834	2.5476	341	10.07%	1.3658	15.7996	2.3103	184	5.44%	0.2095	2.5627	0.6128
	LDGV	50	0.71%	2.6362	17.9157	1.9923	504	7.12%	1.1737	15.0367	1.9216	339	4.79%	0.1638	2.6265	0.4510
2000 Total		160	0.90%	1.9503	17.3722	2.3697	1,573	8.84%	1.1532	15.0156	2.1968	882	4.96%	0.1893	2.7667	0.5451
2001	LDGT1	39	0.44%	1.6797	14.0765	2.4368	482	5.47%	0.9883	18.0571	2.4123	490	5.56%	0.1660	2.8677	0.5223
	LDGT2	37	0.79%	1.2225	16.5198	3.3517	413	8.84%	1.0754	13.4850	2.5768	242	5.18%	0.2032	2.4338	0.5022
	LDGV	36	0.40%	1.6490	22.3108	1.8209	482	5.38%	1.4509	15.8228	2.0538	424	4.73%	0.1174	2.4010	0.3436
2001 Total		112	0.50%	1.5188	17.5304	2.5411	1,377	6.14%	1.1763	15.9037	2.3361	1,156	5.15%	0.1560	2.6057	0.4526
2002	LDGT1	45	0.48%	0.9764	15.5798	3.0136	652	6.89%	1.2768	20.9062	2.3971	512	5.41%	0.1510	3.1952	0.4234
	LDGT2	31	0.73%	1.3624	15.8816	2.3156	421	9.95%	1.3723	15.0130	2.4429	240	5.67%	0.1860	2.1364	0.5533
	LDGV	51	0.53%	1.4263	11.5917	2.4718	588	6.17%	1.3538	15.9653	2.1518	484	5.07%	0.1205	2.9207	0.3285
2002 Total		127	0.55%	1.2513	14.0519	2.6256	1,661	7.15%	1.3282	17.6634	2.3219	1,236	5.32%	0.1459	2.8821	0.4115
2003	LDGT1	47	0.39%	2.2834	30.5665	2.7520	665	5.47%	1.1424	20.3383	2.6075	634	5.21%	0.1249	2.3002	0.3749

Vehicle		Failure for Both Exhaust and Other					Failure for Exhaust Only					Failure for Other				
Year	Type	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx (gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
	LDGT2	37	0.68%	2.0033	23.0145	2.9945	305	5.58%	1.4976	18.5131	2.6875	316	5.78%	0.1626	2.1388	0.4161
	LDGV	28	0.24%	1.3702	10.2835	2.5265	508	4.28%	1.2331	15.1056	2.1484	564	4.75%	0.1036	1.9521	0.2992
2003 Total		112	0.38%	1.9626	23.0009	2.7757	1,478	5.01%	1.2469	18.1632	2.4662	1,514	5.13%	0.1249	2.1368	0.3553
2004	LDGT1	46	0.35%	0.9969	18.8346	3.1888	596	4.56%	1.2740	22.2461	2.5381	714	5.46%	0.1048	1.9792	0.2629
	LDGT2	25	0.41%	1.1212	18.4181	3.2050	349	5.73%	1.4798	18.8702	2.8114	335	5.50%	0.1260	2.0429	0.3002
	LDGV	23	0.20%	0.7951	6.6218	2.3902	470	4.12%	1.1837	15.8639	2.2160	536	4.70%	0.0957	1.8368	0.2567
2004 Total		94	0.31%	0.9806	15.7356	2.9977	1,415	4.63%	1.2948	19.2935	2.4985	1,585	5.18%	0.1062	1.9445	0.2687
2005	LDGT1	30	0.18%	1.2034	31.6085	2.2812	532	3.14%	1.2695	21.9090	2.6167	630	3.72%	0.1077	1.8088	0.1837
	LDGT2	24	0.41%	1.8782	25.0695	2.9901	316	5.37%	1.2466	16.7272	2.5953	288	4.90%	0.1468	2.1646	0.2977
	LDGV	32	0.21%	1.0942	13.5102	1.9561	479	3.07%	1.4953	15.6750	2.4140	760	4.87%	0.0734	1.4150	0.2095
2005 Total		86	0.22%	1.3511	23.0494	2.3580	1,327	3.45%	1.3455	18.4248	2.5384	1,678	4.37%	0.0989	1.6915	0.2149
2006	LDGT1	15	0.10%	1.8805	35.4583	2.6480	371	2.56%	1.2675	19.8252	2.7907	514	3.55%	0.0823	1.6951	0.1768
	LDGT2	20	0.32%	1.0106	13.2552	4.1681	293	4.62%	1.6821	17.6689	2.7804	279	4.40%	0.1108	1.5093	0.1787
	LDGV	27	0.18%	1.0452	13.6491	1.5357	395	2.59%	1.5595	17.1749	2.3009	480	3.15%	0.0756	1.7595	0.1733
2006 Total		62	0.17%	1.2361	18.7984	2.6540	1,059	2.94%	1.4911	18.2401	2.6052	1,273	3.53%	0.0860	1.6787	0.1759
2007	LDGT1	27	0.14%	0.7924	19.9472	2.2012	413	2.13%	1.0931	17.6165	2.8581	643	3.32%	0.0570	1.5122	0.1190
	LDGT2	17	0.23%	1.1469	19.1948	3.1425	229	3.16%	2.0487	23.6114	2.6334	289	3.99%	0.0832	1.1370	0.1225
	LDGV	22	0.12%	1.3666	13.4600	2.6339	364	1.95%	1.1957	15.8844	2.3601	460	2.46%	0.0681	1.7760	0.1339
2007 Total		66	0.15%	1.0751	17.5910	2.5879	1,006	2.22%	1.3478	18.3544	2.6268	1,392	3.07%	0.0661	1.5215	0.1247
2008	LDGT1	15	0.09%	1.9056	50.0865	1.7967	303	1.75%	0.8440	18.9916	2.7356	528	3.05%	0.0507	1.5238	0.1104
	LDGT2	13	0.20%	0.7422	23.7843	1.8658	183	2.77%	1.3334	25.3231	2.2398	346	5.25%	0.0847	1.7229	0.1378
	LDGV	14	0.09%	1.0686	7.2455	2.4720	365	2.27%	1.3607	19.2915	2.0181	447	2.78%	0.0741	1.8630	0.1311
2008 Total		42	0.11%	1.2665	27.6650	2.0432	851	2.13%	1.1708	20.4818	2.3213	1,321	3.30%	0.0675	1.6907	0.1246
2009	LDGT1	8	0.08%	0.6061	17.6040	1.3304	174	1.79%	0.8275	14.2951	2.5419	236	2.42%	0.0573	1.8592	0.1263
	LDGT2	5	0.13%	1.3966	26.4085	2.8721	77	2.01%	0.9727	23.5827	2.1212	187	4.88%	0.0680	1.4515	0.1129
	LDGV	6	0.05%	0.8652	9.2779	2.3579	231	1.83%	1.4201	18.6986	2.0740	320	2.54%	0.0615	1.7868	0.1239
2009 Total		19	0.07%	0.8960	17.2917	2.0606	482	1.84%	1.1347	17.8892	2.2505	743	2.84%	0.0618	1.7254	0.1219
2010	LDGT1	7	0.04%	0.6664	15.2738	1.5777	128	0.70%	0.8327	18.0738	2.3317	423	2.31%	0.0498	1.3810	0.1071
	LDGT2	6	0.08%	1.1816	10.5034	2.3842	94	1.32%	1.0063	24.0548	2.0777	247	3.46%	0.0591	1.3849	0.1008
	LDGV	10	0.06%	0.9473	9.8771	1.9393	196	1.11%	1.6305	17.5451	2.1264	405	2.30%	0.0580	1.7060	0.1184
2010 Total		23	0.05%	0.9229	11.6829	1.9453	418	0.97%	1.2458	19.1709	2.1783	1,075	2.50%	0.0550	1.5043	0.1099
2011	LDGT1	8	0.05%	1.1901	20.8053	3.1947	136	0.85%	0.8579	25.2423	1.7110	337	2.11%	0.0484	1.8949	0.1255
	LDGT2	9	0.12%	3.4304	46.2486	0.5342	61	0.85%	1.5712	25.5848	2.4458	426	5.92%	0.0500	1.6627	0.0791
	LDGV	7	0.05%	0.5783	15.8090	1.5749	203	1.52%	1.5585	18.4418	2.4793	314	2.35%	0.0635	1.8207	0.1096
2011 Total		24	0.07%	1.8518	28.8893	1.7246	400	1.10%	1.3222	21.8433	2.2129	1,077	2.95%	0.0534	1.7814	0.1025
2012	LDGT1	3	0.01%	1.2356	11.9798	2.1116	148	0.64%	0.8527	21.9545	1.5490	497	2.16%	0.0457	1.7038	0.1083
	LDGT2	6	0.06%	2.0026	16.1054	0.9550	76	0.74%	2.0000	24.7782	2.4328	602	5.86%	0.0440	1.2958	0.0712
	LDGV	11	0.05%	2.5858	25.3222	2.4025	194	0.82%	1.5243	20.3410	1.9608	606	2.56%	0.0595	1.8074	0.1016
2012 Total		20	0.04%	2.2083	20.5558	1.9246	418	0.73%	1.3730	21.7191	1.9008	1,705	2.99%	0.0500	1.5966	0.0928
2013	LDGT1	0	0.00%	0.0000	0.0000	0.0000	29	2.28%	0.6057	22.1471	1.3648	26	2.04%	0.0576	2.6277	0.1353
	LDGT2	2	0.20%	0.3853	14.5857	1.7235	28	2.87%	1.2841	20.5627	2.7098	60	6.14%	0.0430	1.2155	0.0785
	LDGV	4	0.21%	1.5526	14.0584	2.8264	70	3.60%	1.7055	16.7221	2.2052	54	2.78%	0.0425	1.4820	0.0896
2013 Total		6	0.14%	1.1635	14.2342	2.4588	127	3.03%	1.3615	18.8077	2.1245	140	3.34%	0.0455	1.5806	0.0933
2014	LDGT1	0	0.00%	0.0000	0.0000	0.0000	17	1.01%	0.4745	18.4855	1.0854	30	1.79%	0.0473	2.0238	0.1081

Vehicle		Failure for Both Exhaust and Other					Failure for Exhaust Only					Failure for Other				
Year	Type	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx (gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
	LDGT2	3	0.23%	0.5037	18.4271	1.6542	24	1.82%	1.0125	18.9638	2.2252	50	3.80%	0.0580	1.8264	0.0844
	LDGV	3	0.16%	1.4954	18.7998	3.1805	51	2.71%	1.8707	21.9278	1.9430	30	1.59%	0.0334	1.7033	0.0813
2014 Total		6	0.12%	0.9996	18.6135	2.4174	92	1.89%	1.3888	20.5185	1.8581	110	2.26%	0.0484	1.8467	0.0900
2015	LDGT1	0	0.00%	0.0000	0.0000	0.0000	24	1.93%	0.7917	12.4518	2.2062	28	2.25%	0.0365	2.1149	0.0989
	LDGT2	1	0.15%	0.3676	10.8745	1.6983	11	1.62%	0.8765	13.1082	1.6515	15	2.21%	0.0660	2.2425	0.0695
	LDGV	2	0.15%	1.8472	13.5049	4.2243	58	4.45%	1.6250	21.5656	2.5380	39	3.00%	0.0642	2.5645	0.1044
2015 Total		3	0.09%	1.3540	12.6281	3.3823	93	2.88%	1.3214	18.2133	2.3475	82	2.54%	0.0551	2.3521	0.0961
2016	LDGT1	0	0.00%	0.0000	0.0000	0.0000	18	0.82%	0.4840	24.2344	0.9643	51	2.32%	0.0248	1.1985	0.0582
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	16	1.55%	1.1511	18.5118	2.1052	25	2.42%	0.0384	1.2774	0.0540
	LDGV	5	0.29%	1.0858	11.1532	2.7142	63	3.69%	1.9671	22.1519	2.6844	46	2.69%	0.0568	1.7557	0.1171
2016 Total		5	0.10%	1.0858	11.1532	2.7142	97	1.97%	1.5573	21.9379	2.2697	122	2.47%	0.0396	1.4248	0.0795
2017	LDGT1	0	0.00%	0.0000	0.0000	0.0000	3	0.92%	0.2906	17.8276	1.2956	6	1.83%	0.0388	0.8289	0.0739
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	2	0.99%	0.8293	11.9227	1.1453	3	1.49%	0.0222	0.6457	0.0398
	LDGV	0	0.00%	0.0000	0.0000	0.0000	7	1.95%	4.5153	11.6943	1.9244	5	1.39%	0.0722	1.0810	0.1046
2017 Total		0	0.00%	0.0000	0.0000	0.0000	12	1.35%	2.8448	13.2657	1.6373	14	1.58%	0.0472	0.8797	0.0776
2018	LDGT1	0	0.00%	0.0000	0.0000	0.0000	1	1.02%	2.6835	35.8919	6.8034	1	1.02%	0.0334	0.9029	0.0404
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	2	4.26%	1.0262	10.5706	2.7076	0	0.00%	0.0000	0.0000	0.0000
	LDGV	0	0.00%	0.0000	0.0000	0.0000	3	4.92%	1.5690	7.9039	1.9757	0	0.00%	0.0000	0.0000	0.0000
2018 Total		0	0.00%	0.0000	0.0000	0.0000	6	2.91%	1.5738	13.4575	3.0243	1	0.49%	0.0334	0.9029	0.0404
2019	LDGT1	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	2	5.41%	0.0171	0.7101	0.0449
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGV	0	0.00%	0.0000	0.0000	0.0000	1	3.85%	0.7068	13.7224	2.0448	0	0.00%	0.0000	0.0000	0.0000
2019 Total		0	0.00%	0.0000	0.0000	0.0000	1	1.43%	0.7068	13.7224	2.0448	2	2.86%	0.0171	0.7101	0.0449
2020	LDGT1	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGV	0	0.00%	0.0000	0.0000	0.0000	1	5.88%	1.9011	17.0736	3.3279	0	0.00%	0.0000	0.0000	0.0000
2020 Total		0	0.00%	0.0000	0.0000	0.0000	1	3.70%	1.9011	17.0736	3.3279	0	0.00%	0.0000	0.0000	0.0000
2021	LDGT1	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGV	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2021 Total		0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2022	LDGT1	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGV	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2022 Total		0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2023	LDGT2	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2023 Total		0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2024	LDGV	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2024 Total		0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
Grand Total		**1,791**	**0.33%**	**2.1698**	**26.1840**	**2.6287**	**21,525**	**3.98%**	**1.6450**	**21.0508**	**2.4218**	**21,247**	**3.93%**	**0.1857**	**2.8253**	**0.4168**

Initial Failure Report - Summary by Veh (V1.03)

Vehicle	Failure for Both Exhaust and Other					Failure for Exhaust Only					Failure for Other				
Type	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx (gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
LDGT1	700	0.31%	2.2135	30.4318	2.7995	8,347	3.72%	1.5043	23.0364	2.5710	8,485	3.78%	0.2160	3.2076	0.4851

Vehicle	Failure for Both Exhaust and Other					Failure for Exhaust Only					Failure for Other				
Type	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx (gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
LDGT2	509	0.52%	2.3240	28.9391	2.9153	5,272	5.36%	1.8048	21.0349	2.6582	5,082	5.17%	0.2157	2.8502	0.4529
LDGV	582	0.27%	1.9824	18.6656	2.1725	7,906	3.63%	1.6869	18.9652	2.1067	7,680	3.53%	0.1323	2.3865	0.3173
Grand Total	**1,791**	**0.33%**	**2.1698**	**26.1840**	**2.6287**	**21,525**	**3.98%**	**1.6450**	**21.0508**	**2.4218**	**21,247**	**3.93%**	**0.1857**	**2.8253**	**0.4168**

Appendix B3

I/M240 Initial Exhaust Failure Report

Date
Between 1/1/2023 and 1/1/2024

Initial Exhaust Failure Report (V1.01)

Vehicle		HC Failures					CO Failures					NOX Failures				
Year	Type	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
1982	LDGV	12	50.00%	5.5685	59.2995	2.8122	12	50.00%	4.4941	71.0859	1.8108	10	41.67%	2.6163	15.5947	4.9678
	LDGT1	9	45.00%	8.9950	119.5571	1.6856	18	90.00%	6.1901	109.9770	1.2367	2	10.00%	3.6716	39.6067	5.5238
	LDGT2	3	75.00%	10.8038	216.5480	1.1377	4	100.00%	9.0423	179.9954	1.1367	0	0.00%	0.0000	0.0000	0.0000
1982 Total		24	50.00%	7.5078	101.5522	2.1804	34	70.83%	5.9270	104.4882	1.4275	12	25.00%	2.7922	19.5967	5.0605
1983	LDGV	11	45.83%	5.4870	80.5522	1.0992	15	62.50%	4.1305	78.0573	1.1730	7	29.17%	1.4587	16.5618	4.2618
	LDGT1	6	42.86%	9.7379	56.2127	2.6404	7	50.00%	5.0597	100.7159	1.7380	3	21.43%	2.5043	27.9594	5.9344
	LDGT2	6	40.00%	7.6880	155.1256	1.8243	10	66.67%	5.5603	147.0827	1.3410	5	33.33%	4.3280	41.1096	5.9292
1983 Total		23	43.40%	7.1701	93.6567	1.6904	32	60.38%	4.7806	104.5843	1.3491	15	28.30%	2.6243	27.0239	5.1521
1984	LDGV	27	55.10%	5.9668	58.6236	1.9900	30	61.22%	4.7077	66.9103	1.4862	16	32.65%	2.2341	18.6658	4.9006
	LDGT1	15	32.61%	12.1999	175.8032	0.9785	38	82.61%	6.7511	122.0453	1.4563	9	19.57%	3.2192	26.1960	7.4308
	LDGT2	9	29.03%	7.2213	134.9365	2.3081	21	67.74%	4.3963	114.4228	1.6145	11	35.48%	2.8325	24.2774	6.5988
1984 Total		51	40.48%	8.0214	106.5552	1.7486	89	70.63%	5.5067	101.6619	1.5037	36	28.57%	2.6632	22.2630	6.0520
1985	LDGV	40	54.79%	5.6584	65.5417	1.6518	46	63.01%	4.3522	66.9645	1.2440	21	28.77%	1.8485	11.1571	4.4982
	LDGT1	27	45.76%	6.9358	98.5894	2.5130	40	67.80%	5.1648	103.6850	1.5065	18	30.51%	2.8456	25.4411	6.4219
	LDGT2	15	51.72%	9.7586	124.4011	2.7191	20	68.97%	6.7047	119.8368	2.4535	11	37.93%	3.4821	35.0746	6.3794
1985 Total		82	50.93%	6.8290	87.1902	2.1306	106	65.84%	5.1027	90.7972	1.5713	50	31.06%	2.5669	21.5612	5.6046
1986	LDGV	56	62.92%	4.7210	43.9868	2.1955	44	49.44%	4.3514	60.4784	1.5683	29	32.58%	1.8211	12.2782	4.4321
	LDGT1	33	40.24%	6.3389	99.9576	1.9325	59	71.95%	4.3249	95.9119	1.2478	18	21.95%	2.1902	15.8065	5.9562
	LDGT2	18	47.37%	7.8411	122.9439	2.2766	28	73.68%	5.5375	112.7738	1.9365	10	26.32%	2.5864	28.4581	6.6824
1986 Total		107	51.20%	5.7449	74.5313	2.1281	131	62.68%	4.5930	87.6146	1.5026	57	27.27%	2.0719	16.2310	5.3082
1987	LDGV	53	69.74%	6.4418	51.9662	1.9605	47	61.84%	5.8185	62.0215	1.5084	27	35.53%	3.8152	15.5394	3.5998
	LDGT1	27	40.30%	7.5317	102.4995	2.0088	53	79.10%	4.3168	77.7346	1.7199	12	17.91%	2.1538	18.9436	5.8162
	LDGT2	8	53.33%	9.2008	74.2553	3.1389	8	53.33%	5.7413	93.2671	2.5450	6	40.00%	5.6425	15.6434	6.4598
1987 Total		88	55.70%	7.0271	69.4970	2.0825	108	68.35%	5.0759	72.0471	1.6889	45	28.48%	3.6158	16.4610	4.5722
1988	LDGV	68	77.27%	4.5318	41.1181	1.8524	43	48.86%	4.1027	61.4789	1.2022	29	32.95%	1.8985	10.1453	3.8824
	LDGT1	53	53.00%	6.9162	71.4262	2.3167	63	63.00%	5.5585	71.9216	2.1069	34	34.00%	2.4984	19.5447	5.6358
	LDGT2	18	48.65%	7.1907	82.0568	1.8859	22	59.46%	4.7413	84.9636	2.1247	12	32.43%	1.6555	18.5028	5.6026
1988 Total		139	61.78%	5.7853	57.9758	2.0338	128	56.89%	4.9290	70.6551	1.8060	75	33.33%	2.1316	15.7436	4.9525
1989	LDGV	83	79.05%	4.0507	32.0547	2.2774	48	45.71%	4.3624	50.5402	1.4994	40	38.10%	2.2389	12.7067	4.1641
	LDGT1	48	40.68%	7.7773	91.3912	2.2188	80	67.80%	5.2195	75.6944	1.8722	32	27.12%	2.0005	15.1830	5.9031
	LDGT2	17	56.67%	5.7108	61.6893	3.4624	16	53.33%	5.2478	73.3365	2.2093	13	43.33%	2.7865	21.6210	5.9884
1989 Total		148	58.50%	5.4500	54.7030	2.3945	144	56.92%	4.9369	67.0477	1.7854	85	33.60%	2.2329	15.0023	5.0978
1990	LDGV	75	75.00%	4.2074	41.3495	1.9410	42	42.00%	4.7943	66.8801	1.2222	38	38.00%	2.7028	13.2642	3.8756
	LDGT1	59	59.60%	5.4048	52.7718	2.4586	51	51.52%	4.8278	67.6555	1.6040	25	25.25%	1.8355	12.1283	5.7918
	LDGT2	25	56.82%	5.3733	36.4485	2.3531	12	27.27%	6.3387	63.8545	1.7577	18	40.91%	2.0141	10.6909	5.4681
1990 Total		159	65.43%	4.8350	44.8173	2.1979	105	43.21%	4.9871	66.9109	1.4688	81	33.33%	2.2821	12.3418	4.8209
1991	LDGV	149	83.24%	3.1303	32.0992	1.9593	79	44.13%	3.7785	54.7090	1.2143	54	30.17%	1.8026	11.5760	4.1701
	LDGT1	88	68.75%	4.0498	44.4797	2.5222	66	51.56%	3.4998	62.0156	1.6300	37	28.91%	2.6693	17.8675	4.9339
	LDGT2	48	57.83%	4.9070	42.4187	2.9660	32	38.55%	5.4964	60.2738	2.4193	36	43.37%	1.7246	14.4197	5.1850

Vehicle		HC Failures					CO Failures					NOX Failures				
Year	Type	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
1991 Total		285	73.08%	3.7134	37.6600	2.3027	177	45.38%	3.9852	58.4396	1.5872	127	32.56%	2.0330	14.2150	4.6803
1992	LDGV	104	65.82%	3.4671	31.9567	1.9269	79	50.00%	3.6071	43.8598	1.3174	57	36.08%	1.3989	8.2329	3.8104
	LDGT1	74	66.07%	3.8774	36.9583	2.8426	46	41.07%	3.8442	59.0240	1.7927	40	35.71%	2.1634	15.6949	5.1154
	LDGT2	89	77.39%	4.0203	31.4330	2.7468	49	42.61%	3.8335	47.4771	2.1721	32	27.83%	2.8241	17.6384	5.5427
1992 Total		267	69.35%	3.7652	33.1683	2.4540	174	45.19%	3.7336	48.8874	1.6838	129	33.51%	1.9895	12.8799	4.6448
1993	LDGV	122	66.67%	3.4112	27.8315	1.9689	88	48.09%	3.2954	38.2883	1.4977	68	37.16%	1.2501	10.6313	3.9667
	LDGT1	106	67.09%	4.5374	49.3127	2.5354	88	55.70%	4.5981	62.6524	2.0005	57	36.08%	2.2355	17.5170	4.7927
	LDGT2	114	67.86%	4.5183	37.3915	2.8221	71	42.26%	4.6674	54.8030	2.4471	57	33.93%	2.0841	16.4052	5.2381
1993 Total		342	67.19%	4.1293	37.6761	2.4289	247	48.53%	4.1539	51.7158	1.9497	182	35.76%	1.8199	14.5961	4.6236
1994	LDGV	114	48.72%	2.7979	21.3752	1.5916	70	29.91%	2.7541	36.2474	1.3014	137	58.55%	0.9544	8.2946	3.0084
	LDGT1	99	55.62%	4.3731	45.8515	2.6426	107	60.11%	3.5756	52.4619	1.7495	61	34.27%	1.9835	13.9795	5.3622
	LDGT2	114	56.72%	3.7316	35.3256	2.8567	108	53.73%	2.9531	42.6898	2.4141	77	38.31%	1.8786	16.3508	5.3472
1994 Total		327	53.34%	3.6003	33.6489	2.3508	285	46.49%	3.1379	44.7763	1.8913	275	44.86%	1.4415	11.8113	4.1854
1995	LDGV	174	62.82%	3.7993	28.7489	1.5688	119	42.96%	3.5615	44.0524	1.3813	119	42.96%	1.5561	10.2019	3.1393
	LDGT1	102	51.26%	4.9626	49.8815	2.8874	105	52.76%	4.2469	57.6343	2.1787	83	41.71%	2.1824	15.7647	5.0828
	LDGT2	158	58.30%	4.8767	34.1888	2.8762	168	61.99%	4.0793	38.6311	2.5448	94	34.69%	2.5659	17.8492	5.1886
1995 Total		434	58.10%	4.4649	35.6960	2.3547	392	52.48%	3.9670	45.3670	2.0936	296	39.63%	2.0524	14.1903	4.3351
1996	LDGV	128	53.78%	2.7833	29.4454	1.3378	81	34.03%	3.0436	45.7794	1.1285	132	55.46%	1.0793	8.0918	2.4325
	LDGT1	117	48.55%	2.8236	26.6799	2.9947	74	30.71%	3.2864	40.5144	2.2062	173	71.78%	1.0462	10.4025	3.6623
	LDGT2	118	56.19%	2.3392	21.6195	2.6068	84	40.00%	2.3626	30.4175	2.5345	117	55.71%	1.3570	12.4841	3.7570
1996 Total		363	52.69%	2.6519	26.0101	2.2844	239	34.69%	2.8794	38.7501	1.9563	422	61.25%	1.1427	10.2568	3.3039
1997	LDGV	176	56.77%	2.3920	22.8899	1.3819	99	31.94%	1.9176	39.9710	1.0102	178	57.42%	0.9481	8.4026	2.3182
	LDGT1	205	47.34%	2.9185	31.6572	2.9447	176	40.65%	2.7921	39.1651	2.3671	292	67.44%	1.2168	12.0062	3.8232
	LDGT2	139	53.67%	2.6104	26.8455	2.8180	119	45.95%	2.3648	33.5205	2.6591	153	59.07%	1.3116	13.6784	3.7144
1997 Total		520	51.90%	2.6580	27.4036	2.3819	394	39.32%	2.4433	37.6627	2.1144	623	62.18%	1.1633	11.3873	3.3665
1998	LDGV	198	58.58%	2.5828	21.7384	1.6452	125	36.98%	2.6040	34.3053	1.1247	195	57.69%	1.1637	8.8562	2.4894
	LDGT1	302	66.37%	2.1198	22.5560	2.6954	177	38.90%	2.4826	34.1923	2.3227	265	58.24%	1.2141	11.6204	3.8867
	LDGT2	175	72.31%	2.9020	23.9664	2.8306	107	44.21%	3.7410	34.7496	2.9760	134	55.37%	2.0025	15.7331	3.9348
1998 Total		675	65.22%	2.4584	22.6818	2.4224	409	39.52%	2.8489	34.3726	2.1275	594	57.39%	1.3754	11.6407	3.4388
1999	LDGV	221	58.31%	2.2487	22.7291	1.8871	116	30.61%	2.2447	40.3386	1.2915	233	61.48%	1.0003	8.8766	2.7352
	LDGT1	239	31.82%	2.4539	35.4090	2.9577	189	25.17%	2.4536	45.5505	2.3372	634	84.42%	0.7165	9.1171	2.8525
	LDGT2	205	42.80%	2.4666	21.5471	2.4903	113	23.59%	2.9921	33.6455	2.2817	409	85.39%	1.0548	9.4487	2.6288
1999 Total		665	41.33%	2.3896	26.9219	2.4578	418	25.98%	2.5412	40.8858	2.0320	1,276	79.30%	0.8767	9.1795	2.7594
2000	LDGV	330	59.57%	1.9949	19.8249	1.8118	172	31.05%	1.8240	34.8208	1.3829	341	61.55%	0.9014	8.8118	2.7218
	LDGT1	298	37.02%	2.3257	27.2204	2.4732	215	26.71%	2.3991	37.6381	2.0069	656	81.49%	0.7177	9.6287	2.7363
	LDGT2	158	42.25%	3.0333	26.3747	2.5104	117	31.28%	3.2507	36.1408	2.3593	298	79.68%	1.3463	11.1157	2.7595
2000 Total		786	45.35%	2.3290	23.9454	2.2030	504	29.08%	2.4005	36.3291	1.8757	1,295	74.73%	0.9107	9.7558	2.7378
2001	LDGV	334	64.48%	2.1179	21.3461	1.8989	145	27.99%	2.4662	41.3393	1.1942	324	62.55%	0.9216	7.8094	2.9140
	LDGT1	169	32.44%	2.5128	36.5765	2.4160	175	33.59%	2.0729	41.2825	1.4908	385	73.90%	0.7719	8.9615	3.0973
	LDGT2	165	36.67%	2.3317	24.6831	3.0984	104	23.11%	2.7028	36.2049	2.8717	390	86.67%	0.8271	10.0489	2.9403
2001 Total		668	44.86%	2.2706	26.0236	2.3260	424	28.48%	2.3619	40.0564	1.7281	1,099	73.81%	0.8356	9.0077	2.9876
2002	LDGV	405	63.38%	1.9937	20.6543	2.0518	194	30.36%	2.2612	37.0140	1.5705	416	65.10%	1.2001	9.4049	3.0233
	LDGT1	278	39.89%	2.6441	36.1142	2.5677	266	38.16%	2.3226	42.6165	1.5919	505	72.45%	1.0158	11.4231	3.1605

Vehicle		HC Failures					CO Failures					NOX Failures				
Year	Type	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
	LDGT2	148	32.74%	3.4938	30.6225	2.6964	111	24.56%	3.7471	41.0774	2.4447	383	84.73%	0.8149	9.0348	2.7567
2002 Total		831	46.48%	2.4785	27.6015	2.3392	571	31.94%	2.5786	40.4138	1.7504	1,304	72.93%	1.0156	10.0777	2.9982
2003	LDGV	322	60.07%	1.8861	19.5769	2.1585	154	28.73%	1.6764	35.7553	1.3554	371	69.22%	0.8944	8.5693	2.9046
	LDGT1	275	38.62%	2.6149	38.4394	2.8748	256	35.96%	2.2750	45.7631	1.7708	548	76.97%	0.9739	11.7775	3.2461
	LDGT2	158	46.20%	2.9111	30.7165	2.9411	122	35.67%	2.9556	38.6927	2.5237	275	80.41%	1.1549	12.1215	3.2505
2003 Total		755	47.48%	2.3660	28.7785	2.5832	532	33.46%	2.2578	41.2447	1.8232	1,194	75.09%	0.9909	10.8599	3.1410
2004	LDGV	277	56.19%	1.8839	21.8966	2.1107	140	28.40%	1.9109	40.1701	1.6115	349	70.79%	0.9358	8.7122	2.9554
	LDGT1	255	39.72%	2.6676	39.5644	2.8165	239	37.23%	2.2187	47.5498	1.7621	467	72.74%	0.8780	10.4419	3.3798
	LDGT2	160	42.78%	2.9115	30.6425	3.1759	138	36.90%	2.9017	37.3549	2.6944	310	82.89%	1.0364	13.2707	3.3004
2004 Total		692	45.86%	2.4103	30.4293	2.6171	517	34.26%	2.3177	42.8301	1.9702	1,126	74.62%	0.9395	10.6846	3.2264
2005	LDGV	298	58.32%	2.3431	22.0666	2.2716	146	28.57%	2.3263	39.7295	1.7520	372	72.80%	1.3250	9.4605	3.1114
	LDGT1	243	43.24%	2.4835	36.2303	2.7069	234	41.64%	2.0784	44.5321	1.7972	408	72.60%	0.9410	12.4461	3.4436
	LDGT2	157	46.18%	2.3644	25.8992	2.9725	129	37.94%	2.2934	31.9884	2.6243	293	86.18%	1.1393	14.5960	2.9416
2005 Total		698	49.40%	2.3968	27.8596	2.5808	509	36.02%	2.2040	39.9755	1.9939	1,073	75.94%	1.1283	11.9981	3.1913
2006	LDGV	265	62.80%	2.2815	22.5978	2.1192	145	34.36%	2.3811	38.0167	1.6308	273	64.69%	1.1224	10.3186	3.2259
	LDGT1	150	38.86%	2.8216	35.4370	3.0873	146	37.82%	2.3816	43.1245	1.8869	285	73.83%	1.1916	11.5935	3.6058
	LDGT2	146	46.65%	3.0690	25.3023	3.1322	119	38.02%	2.9356	32.1168	2.7281	263	84.03%	1.3913	14.3037	3.2951
2006 Total		561	50.04%	2.6309	26.7346	2.6417	410	36.57%	2.5422	38.1232	2.0404	821	73.24%	1.2325	12.0378	3.3800
2007	LDGV	238	61.66%	1.8226	21.3173	2.2931	116	30.05%	1.8135	38.7268	1.7749	267	69.17%	1.0333	9.6584	3.2244
	LDGT1	211	47.95%	2.0008	27.2547	2.8974	148	33.64%	2.0460	40.2408	1.7681	329	74.77%	0.7387	9.6522	3.6052
	LDGT2	146	59.35%	3.1291	32.0484	2.8955	106	43.09%	3.7112	43.2130	2.4486	186	75.61%	1.4670	14.6634	3.3592
2007 Total		595	55.50%	2.2064	26.0560	2.6552	370	34.51%	2.4501	40.6176	1.9651	782	72.95%	1.0125	10.8462	3.4167
2008	LDGV	244	64.38%	1.9730	24.4476	1.8953	135	35.62%	1.8538	42.6119	1.6740	223	58.84%	1.0575	9.1357	3.1882
	LDGT1	132	41.51%	1.8387	36.0530	2.7591	124	38.99%	1.3983	43.5941	1.6030	226	71.07%	0.7384	9.6467	3.6616
	LDGT2	116	59.18%	1.9893	30.1030	2.4792	104	53.06%	1.6900	40.0411	1.7550	113	57.65%	1.2097	14.7642	3.4487
2008 Total		492	55.10%	1.9408	28.8946	2.2647	363	40.65%	1.6513	42.2109	1.6730	562	62.93%	0.9598	10.4729	3.4310
2009	LDGV	146	61.60%	2.1323	22.8726	2.1767	106	44.73%	1.6850	33.8429	1.5475	142	59.92%	1.2362	11.1996	3.2808
	LDGT1	75	41.21%	1.5881	17.3488	2.6701	56	30.77%	0.7712	32.6743	1.1789	126	69.23%	0.6243	8.4400	3.4393
	LDGT2	49	59.76%	1.4643	27.9434	2.5115	48	58.54%	1.1152	34.0837	1.9005	52	63.41%	1.1560	16.6473	3.0889
2009 Total		270	53.89%	1.8599	22.2585	2.3745	210	41.92%	1.3111	33.5863	1.5299	320	63.87%	0.9823	10.9983	3.3120
2010	LDGV	141	68.45%	2.2470	20.1710	2.1297	79	38.35%	2.2266	34.0767	1.6215	116	56.31%	1.2857	11.1331	3.4307
	LDGT1	59	43.70%	1.5841	28.1184	2.1476	52	38.52%	1.1179	37.4452	1.2506	86	63.70%	0.5876	7.2793	3.3954
	LDGT2	54	54.00%	1.6307	30.3881	2.3460	54	54.00%	1.4099	36.7800	1.8644	63	63.00%	0.9368	12.6396	3.0391
2010 Total		254	57.60%	1.9620	24.1892	2.1799	185	41.95%	1.6766	35.8126	1.5882	265	60.09%	0.9762	10.2406	3.3261
2011	LDGV	150	71.43%	2.0112	20.2273	2.8588	101	48.10%	1.5677	29.1029	2.1036	134	63.81%	1.4650	14.2031	3.6544
	LDGT1	72	50.00%	1.5022	33.9204	1.9915	75	52.08%	1.0266	41.0930	0.8251	70	48.61%	0.7795	10.4729	3.3133
	LDGT2	39	55.71%	3.0333	43.3603	2.2513	32	45.71%	3.0023	53.8096	2.4060	48	68.57%	0.9903	13.3049	3.0115
2011 Total		261	61.56%	2.0235	27.4614	2.5287	208	49.06%	1.5933	37.2273	1.6891	252	59.43%	1.1841	12.9959	3.4372
2012	LDGV	137	66.83%	2.2427	22.7465	2.3618	108	52.68%	1.5941	33.1090	1.7659	114	55.61%	1.4293	14.0279	3.3048
	LDGT1	55	36.42%	1.8748	29.4156	2.2854	102	67.55%	0.8400	29.3062	1.0208	53	35.10%	1.0044	9.4221	3.7685
	LDGT2	49	59.76%	3.1588	32.4050	2.3636	42	51.22%	2.5464	41.2051	2.0607	51	62.20%	1.0893	13.0314	3.5945
2012 Total		241	55.02%	2.3450	26.2322	2.3447	252	57.53%	1.4476	32.9191	1.5135	218	49.77%	1.2465	12.6750	3.4853
2013	LDGV	56	75.68%	2.1551	16.0941	2.7038	39	52.70%	1.9426	23.8353	2.0154	48	64.86%	2.0686	15.6105	3.1871

Vehicle		HC Failures					CO Failures					NOX Failures				
Year	Type	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
	LDGT1	10	34.48%	1.3934	33.2902	1.9959	17	58.62%	0.5075	32.3848	0.4863	13	44.83%	0.6642	18.2737	2.7850
	LDGT2	20	66.67%	1.7218	24.7285	2.9099	13	43.33%	1.7338	35.5285	2.5949	22	73.33%	1.1638	11.3843	3.3916
2013 Total		86	64.66%	1.9658	20.1017	2.6694	69	51.88%	1.5497	28.1448	1.7478	83	62.41%	1.6088	14.9074	3.1783
2014	LDGV	42	77.78%	2.2818	21.7439	2.3061	23	42.59%	1.7687	38.1548	1.7815	33	61.11%	1.4823	15.5077	3.1225
	LDGT1	4	23.53%	1.2912	17.7479	1.2214	12	70.59%	0.4861	25.6177	0.5080	5	29.41%	0.4554	4.4811	2.9891
	LDGT2	20	74.07%	1.1984	21.1098	2.3833	15	55.56%	1.1379	29.2064	2.1922	20	74.07%	0.9748	14.1511	2.7287
2014 Total		66	67.35%	1.8934	21.3096	2.2637	50	51.02%	1.2716	32.4614	1.5990	58	59.18%	1.2188	14.0893	2.9752
2015	LDGV	52	86.67%	1.8345	21.8787	2.7905	33	55.00%	1.9903	30.3443	2.3738	44	73.33%	1.7204	21.0884	3.3368
	LDGT1	11	45.83%	1.3496	8.8901	3.2502	7	29.17%	0.2222	22.9235	0.1533	14	58.33%	0.9514	8.6772	3.6560
	LDGT2	6	50.00%	1.2503	16.6438	1.4093	4	33.33%	1.0511	22.7676	1.1534	7	58.33%	0.6910	10.0181	2.3456
2015 Total		69	71.88%	1.7064	19.3528	2.7437	44	45.83%	1.6236	28.4749	1.9096	65	67.71%	1.4439	17.2230	3.2988
2016	LDGV	61	89.71%	2.0745	22.0725	2.7923	35	51.47%	2.2826	33.4374	2.9443	49	72.06%	1.6902	15.3577	3.5557
	LDGT1	5	27.78%	1.1938	24.1082	2.6097	16	88.89%	0.4690	26.2143	0.7731	5	27.78%	1.0733	15.9468	2.8930
	LDGT2	10	62.50%	1.6586	15.3454	2.2486	8	50.00%	1.5128	28.1662	1.9429	9	56.25%	1.5329	13.1293	3.4826
2016 Total		76	74.51%	1.9619	21.3213	2.7087	59	57.84%	1.6864	30.7638	2.2197	63	61.76%	1.6188	15.0861	3.4927
2017	LDGV	6	85.71%	5.1715	11.0992	1.8850	3	42.86%	1.6220	19.4831	2.7408	4	57.14%	1.3978	16.5628	3.0708
	LDGT1	1	33.33%	0.8270	13.2867	3.1972	2	66.67%	0.0224	20.0981	0.3448	1	33.33%	0.8270	13.2867	3.1972
	LDGT2	1	50.00%	1.5155	5.4469	1.8593	1	50.00%	0.1432	18.3985	0.4314	1	50.00%	1.5155	5.4469	1.8593
2017 Total		8	66.67%	4.1714	10.6661	2.0458	6	50.00%	0.8423	19.5073	1.5572	6	50.00%	1.3223	14.1642	2.8899
2018	LDGV	3	100.00%	1.5690	7.9039	1.9757	0	0.00%	0.0000	0.0000	0.0000	2	66.67%	1.0060	10.8972	2.9591
	LDGT1	1	100.00%	2.6835	35.8919	6.8034	1	100.00%	2.6835	35.8919	6.8034	1	100.00%	2.6835	35.8919	6.8034
	LDGT2	2	100.00%	1.0262	10.5706	2.7076	0	0.00%	0.0000	0.0000	0.0000	1	50.00%	1.1807	12.5562	3.9699
2018 Total		6	100.00%	1.5738	13.4575	3.0243	1	16.67%	2.6835	35.8919	6.8034	4	66.67%	1.4691	17.5606	4.1728
2019	LDGV	1	100.00%	0.7068	13.7224	2.0448	0	0.00%	0.0000	0.0000	0.0000	1	100.00%	0.7068	13.7224	2.0448
	LDGT1	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2019 Total		1	100.00%	0.7068	13.7224	2.0448	0	0.00%	0.0000	0.0000	0.0000	1	100.00%	0.7068	13.7224	2.0448
2020	LDGV	1	100.00%	1.9011	17.0736	3.3279	1	100.00%	1.9011	17.0736	3.3279	1	100.00%	1.9011	17.0736	3.3279
	LDGT1	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2020 Total		1	100.00%	1.9011	17.0736	3.3279	1	100.00%	1.9011	17.0736	3.3279	1	100.00%	1.9011	17.0736	3.3279
2021	LDGV	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2021 Total		0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2022	LDGV	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2022 Total		0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2023	LDGT2	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2023 Total		0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2024	LDGV	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2024 Total		0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000

Vehicle		HC Failures					CO Failures					NOX Failures				
Year	Type	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
Grand Total		12,116	51.96%	2.8136	30.4095	2.4121	8,897	38.16%	2.7532	44.2034	1.8528	14,972	64.21%	1.1275	11.0635	3.2903

Summary by Vehicle Type (V1.01)

Vehicle Type	HC Failures					CO Failures					NOX Failures				
	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
LDGV	5,320	62.68%	2.5044	24.5124	2.0195	3,058	36.03%	2.5366	40.8226	1.5066	5,014	59.07%	1.1845	9.8679	3.0791
LDGT1	3,913	43.25%	2.9672	37.7632	2.6788	3,580	39.57%	2.6805	48.3231	1.7802	5,978	66.08%	0.9887	10.9521	3.4430
LDGT2	2,883	49.87%	3.1755	31.3108	2.7745	2,259	39.08%	3.1618	42.2512	2.4364	3,980	68.85%	1.2643	12.7368	3.3270
Grand Total	12,116	51.96%	2.8136	30.4095	2.4121	8,897	38.16%	2.7532	44.2034	1.8528	14,972	64.21%	1.1275	11.0635	3.2903

Appendix B4

I/M240 Initial Failure for Other Report

Date
Between 1/1/2023 and 1/1/2024

Initial Failure for Other Report (V1.03)

Vehicle		Visual Overall					CAT				AIS				O2				Gas Cap				Opacity			
Year	Type	Total	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %
1982	LDGT1	83	64	77.11	19	22.89	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	58	77.33	17	22.67	80	96.39	3	3.61
	LDGT2	17	15	88.24	2	11.76	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	15	88.24	2	11.76	17	100.00	0	0.00
	LDGV	119	114	95.80	5	4.20	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	102	96.23	4	3.77	118	99.16	1	0.84
1982 Total		219	193	88.13	26	11.87	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	175	88.38	23	11.62	215	98.17	4	1.83
1983	LDGT1	124	103	83.06	21	16.94	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	94	81.74	21	18.26	124	100.00	0	0.00
	LDGT2	47	37	78.72	10	21.28	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	37	80.43	9	19.57	46	97.87	1	2.13
	LDGV	131	122	93.13	9	6.87	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	109	92.37	9	7.63	131	100.00	0	0.00
1983 Total		302	262	86.75	40	13.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	240	86.02	39	13.98	301	99.67	1	0.33
1984	LDGT1	228	192	84.21	36	15.79	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	168	82.76	35	17.24	226	99.12	2	0.88
	LDGT2	74	60	81.08	14	18.92	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	58	80.56	14	19.44	74	100.00	0	0.00
	LDGV	247	226	91.50	21	8.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	216	91.53	20	8.47	246	99.60	1	0.40
1984 Total		549	478	87.07	71	12.93	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	442	86.50	69	13.50	546	99.45	3	0.55
1985	LDGT1	330	300	90.91	30	9.09	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	279	90.88	28	9.12	328	99.39	2	0.61
	LDGT2	79	64	81.01	15	18.99	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	63	80.77	15	19.23	79	100.00	0	0.00
	LDGV	338	318	94.08	20	5.92	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	308	94.48	18	5.52	335	99.11	3	0.89
1985 Total		747	682	91.30	65	8.70	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	650	91.42	61	8.58	742	99.33	5	0.67
1986	LDGT1	463	425	91.79	38	8.21	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	395	91.22	38	8.78	463	100.00	0	0.00
	LDGT2	117	98	83.76	19	16.24	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	99	84.62	18	15.38	116	99.15	1	0.85
	LDGV	426	403	94.60	23	5.40	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	394	95.17	20	4.83	423	99.30	3	0.70
1986 Total		1,006	926	92.05	80	7.95	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	888	92.12	76	7.88	1002	99.60	4	0.40
1987	LDGT1	505	469	92.87	36	7.13	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	431	92.89	33	7.11	502	99.41	3	0.59
	LDGT2	144	127	88.19	17	11.81	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	128	88.89	16	11.11	143	99.31	1	0.69
	LDGV	460	439	95.43	21	4.57	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	428	95.54	20	4.46	459	99.78	1	0.22
1987 Total		1,109	1035	93.33	74	6.67	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	987	93.47	69	6.53	1104	99.55	5	0.45
1988	LDGT1	576	519	90.10	57	9.90	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	510	89.95	57	10.05	575	99.83	1	0.17
	LDGT2	209	191	91.39	18	8.61	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	191	92.27	16	7.73	207	99.04	2	0.96
	LDGV	465	439	94.41	26	5.59	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	428	94.48	25	5.52	463	99.57	2	0.43
1988 Total		1,250	1149	91.92	101	8.08	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,129	92.01	98	7.99	1245	99.60	5	0.40
1989	LDGT1	865	809	93.53	56	6.47	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	788	93.59	54	6.41	863	99.77	2	0.23
	LDGT2	296	273	92.23	23	7.77	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	274	92.88	21	7.12	294	99.32	2	0.68
	LDGV	662	617	93.20	45	6.80	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	610	93.27	44	6.73	661	99.85	1	0.15
1989 Total		1,823	1699	93.20	124	6.80	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,672	93.36	119	6.64	1818	99.73	5	0.27
1990	LDGT1	785	721	91.85	64	8.15	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	696	91.82	62	8.18	783	99.75	2	0.25
	LDGT2	326	300	92.02	26	7.98	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	299	92.00	26	8.00	326	100.00	0	0.00
	LDGV	847	807	95.28	40	4.72	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	795	95.44	38	4.56	845	99.76	2	0.24
1990 Total		1,958	1828	93.36	130	6.64	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,790	93.42	126	6.58	1954	99.80	4	0.20
1991	LDGT1	1,201	1124	93.59	77	6.41	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,101	93.62	75	6.38	1199	99.83	2	0.17
	LDGT2	396	364	91.92	32	8.08	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	363	91.90	32	8.10	395	99.75	1	0.25
	LDGV	1,269	1207	95.11	62	4.89	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,197	95.38	58	4.62	1265	99.68	4	0.32
1991 Total		2,866	2695	94.03	171	5.97	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2,661	94.16	165	5.84	2859	99.76	7	0.24
1992	LDGT1	1,030	954	92.62	76	7.38	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	955	92.72	75	7.28	1029	99.90	1	0.10
	LDGT2	613	564	92.01	49	7.99	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	566	92.33	47	7.67	611	99.67	2	0.33
	LDGV	1,171	1123	95.90	48	4.10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,116	95.96	47	4.04	1169	99.83	2	0.17
1992 Total		2,814	2641	93.85	173	6.15	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2,637	93.98	169	6.02	2809	99.82	5	0.18
1993	LDGT1	1,685	1574	93.41	111	6.59	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,558	93.52	108	6.48	1681	99.76	4	0.24
	LDGT2	761	703	92.38	58	7.62	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	706	93.02	53	6.98	754	99.08	7	0.92
	LDGV	1,515	1447	95.51	68	4.49	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,447	95.76	64	4.24	1511	99.74	4	0.26
1993 Total		3,961	3724	94.02	237	5.98	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3,711	94.28	225	5.72	3946	99.62	15	0.38
1994	LDGT1	1,982	1842	92.94	140	7.06	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,848	93.29	133	6.71	1974	99.60	8	0.40
	LDGT2	1,313	1225	93.30	88	6.70	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,228	93.60	84	6.40	1309	99.70	4	0.30
	LDGV	1,664	1578	94.83	86	5.17	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,579	95.47	75	4.53	1652	99.28	12	0.72
1994 Total		4,959	4645	93.67	314	6.33	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4,655	94.10	292	5.90	4935	99.52	24	0.48

Vehicle		Visual Overall					CAT				AIS				O2				Gas Cap				Opacity			
Year	Type	Total	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %
1995	LDGT1	2,426	2244	92.50	182	7.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2,232	92.65	177	7.35	2421	99.79	5	0.21
	LDGT2	1,892	1732	91.54	160	8.46	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,729	91.63	158	8.37	1889	99.84	3	0.16
	LDGV	2,483	2359	95.01	124	4.99	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2,359	95.47	112	4.53	2471	99.52	12	0.48
1995 Total		6,801	6335	93.15	466	6.85	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6,320	93.39	447	6.61	6781	99.71	20	0.29
1996	LDGT1	2,583	2376	91.99	207	8.01	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2,376	92.02	206	7.98	2581	99.92	2	0.08
	LDGT2	1,622	1479	91.18	143	8.82	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,476	91.17	143	8.83	1622	100.00	0	0.00
	LDGV	2,562	2418	94.38	144	5.62	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2,410	94.55	139	5.45	2556	99.77	6	0.23
1996 Total		6,767	6273	92.70	494	7.30	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6,262	92.77	488	7.23	6759	99.88	8	0.12
1997	LDGT1	4,646	4320	92.98	326	7.02	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4,279	92.94	325	7.06	4643	99.94	3	0.06
	LDGT2	2,118	1989	93.91	129	6.09	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,989	93.95	128	6.05	2116	99.91	2	0.09
	LDGV	3,784	3558	94.03	226	5.97	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3,553	94.34	213	5.66	3771	99.66	13	0.34
1997 Total		10,548	9867	93.54	681	6.46	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9,821	93.65	666	6.35	10530	99.83	18	0.17
1998	LDGT1	5,309	4963	93.48	346	6.52	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4,970	93.65	337	6.35	5300	99.83	9	0.17
	LDGT2	2,187	2040	93.28	147	6.72	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2,038	93.27	147	6.73	2186	99.95	1	0.05
	LDGV	4,398	4080	92.77	318	7.23	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4,076	93.00	307	7.00	4385	99.70	13	0.30
1998 Total		11,894	11083	93.18	811	6.82	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	11,084	93.34	791	6.66	11871	99.81	23	0.19
1999	LDGT1	6,698	6363	95.00	335	5.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6,379	95.28	316	4.72	6678	99.70	20	0.30
	LDGT2	3,461	3223	93.12	238	6.88	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3,222	93.20	235	6.80	3458	99.91	3	0.09
	LDGV	6,039	5707	94.50	332	5.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	5,705	94.69	320	5.31	6026	99.78	13	0.22
1999 Total		16,198	15293	94.41	905	5.59	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	15,306	94.62	871	5.38	16162	99.78	36	0.22
2000	LDGT1	7,322	6886	94.05	436	5.95	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6,898	94.23	422	5.77	7306	99.78	16	0.22
	LDGT2	3,385	3168	93.59	217	6.41	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3,167	93.73	212	6.27	3380	99.85	5	0.15
	LDGV	7,080	6691	94.51	389	5.49	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6,701	94.83	365	5.17	7056	99.66	24	0.34
2000 Total		17,787	16745	94.14	1042	5.86	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16,766	94.38	999	5.62	17742	99.75	45	0.25
2001	LDGT1	8,812	8283	94.00	529	6.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	8,294	94.19	512	5.81	8794	99.80	18	0.20
	LDGT2	4,670	4391	94.03	279	5.97	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4,392	94.13	274	5.87	4665	99.89	5	0.11
	LDGV	8,957	8497	94.86	460	5.14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	8,484	94.97	449	5.03	8946	99.88	11	0.12
2001 Total		22,439	21171	94.35	1268	5.65	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	21,170	94.49	1,235	5.51	22405	99.85	34	0.15
2002	LDGT1	9,466	8909	94.12	557	5.88	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	8,918	94.25	544	5.75	9452	99.85	14	0.15
	LDGT2	4,233	3962	93.60	271	6.40	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3,970	93.83	261	6.17	4222	99.74	11	0.26
	LDGV	9,537	9002	94.39	535	5.61	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	8,990	94.49	524	5.51	9526	99.88	11	0.12
2002 Total		23,236	21873	94.13	1363	5.87	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	21,878	94.27	1,329	5.73	23200	99.85	36	0.15
2003	LDGT1	12,161	11480	94.40	681	5.60	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	11,494	94.55	663	5.45	12143	99.85	18	0.15
	LDGT2	5,465	5112	93.54	353	6.46	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	5,114	93.68	345	6.32	5457	99.85	8	0.15
	LDGV	11,883	11291	95.02	592	4.98	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	11,285	95.10	581	4.90	11870	99.89	13	0.11
2003 Total		29,509	27883	94.49	1626	5.51	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	27,893	94.61	1,589	5.39	29470	99.87	39	0.13
2004	LDGT1	13,075	12315	94.19	760	5.81	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	12,329	94.33	741	5.67	13055	99.85	20	0.15
	LDGT2	6,096	5736	94.09	360	5.91	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	5,744	94.30	347	5.70	6083	99.79	13	0.21
	LDGV	11,407	10848	95.10	559	4.90	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	10,844	95.16	552	4.84	11399	99.93	8	0.07
2004 Total		30,578	28899	94.51	1679	5.49	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	28,917	94.63	1,640	5.37	30537	99.87	41	0.13
2005	LDGT1	16,948	16288	96.11	660	3.89	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16,304	96.24	637	3.76	16923	99.85	25	0.15
	LDGT2	5,883	5571	94.70	312	5.30	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	5,574	94.86	302	5.14	5872	99.81	11	0.19
	LDGV	15,593	14801	94.92	792	5.08	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	14,791	94.95	787	5.05	15588	99.97	5	0.03
2005 Total		38,424	36660	95.41	1764	4.59	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	36,669	95.50	1,726	4.50	38383	99.89	41	0.11
2006	LDGT1	14,478	13949	96.35	529	3.65	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	13,947	96.44	515	3.56	14462	99.89	16	0.11
	LDGT2	6,338	6039	95.28	299	4.72	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6,045	95.45	288	4.55	6325	99.79	13	0.21
	LDGV	15,259	14752	96.68	507	3.32	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	14,749	96.75	496	3.25	15247	99.92	12	0.08
2006 Total		36,075	34740	96.30	1335	3.70	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	34,741	96.40	1,299	3.60	36034	99.89	41	0.11
2007	LDGT1	19,359	18689	96.54	670	3.46	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	18,684	96.59	660	3.41	19348	99.94	11	0.06
	LDGT2	7,243	6937	95.78	306	4.22	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6,939	95.84	301	4.16	7238	99.93	5	0.07
	LDGV	18,686	18204	97.42	482	2.58	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	18,205	97.47	472	2.53	18676	99.95	10	0.05
2007 Total		45,288	43830	96.78	1458	3.22	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	43,828	96.83	1,433	3.17	45262	99.94	26	0.06
2008	LDGT1	17,324	16781	96.87	543	3.13	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16,771	96.91	535	3.09	17316	99.95	8	0.05
	LDGT2	6,596	6237	94.56	359	5.44	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6,091	94.68	342	5.32	6578	99.73	18	0.27
	LDGV	16,060	15599	97.13	461	2.87	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	15,598	97.17	455	2.83	16054	99.96	6	0.04
2008 Total		39,980	38617	96.59	1363	3.41	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	38,460	96.65	1,332	3.35	39948	99.92	32	0.08

Vehicle		Visual Overall					CAT				AIS				O2				Gas Cap				Opacity			
Year	Type	Total	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %
2009	LDGT1	9,735	9491	97.49	244	2.51	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9,022	97.44	237	2.56	9727	99.92	8	0.08
	LDGT2	3,832	3640	94.99	192	5.01	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2,914	94.00	186	6.00	3826	99.84	6	0.16
	LDGV	12,621	12295	97.42	326	2.58	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	12,263	97.48	317	2.52	12612	99.93	9	0.07
2009 Total		26,188	25426	97.09	762	2.91	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	24,199	97.03	740	2.97	26165	99.91	23	0.09
2010	LDGT1	18,276	17846	97.65	430	2.35	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16,819	97.51	429	2.49	18275	99.99	1	0.01
	LDGT2	7,142	6889	96.46	253	3.54	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4,222	94.41	250	5.59	7139	99.96	3	0.04
	LDGV	17,646	17231	97.65	415	2.35	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16,216	97.55	407	2.45	17637	99.95	9	0.05
2010 Total		43,064	41966	97.45	1098	2.55	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	37,257	97.17	1,086	2.83	43051	99.97	13	0.03
2011	LDGT1	15,963	15618	97.84	345	2.16	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	14,486	97.71	340	2.29	15958	99.97	5	0.03
	LDGT2	7,201	6766	93.96	435	6.04	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	5,316	92.55	428	7.45	7194	99.90	7	0.10
	LDGV	13,362	13041	97.60	321	2.40	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	12,109	97.49	312	2.51	13353	99.93	9	0.07
2011 Total		36,526	35425	96.99	1101	3.01	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	31,911	96.73	1,080	3.27	36505	99.94	21	0.06
2012	LDGT1	23,059	22559	97.83	500	2.17	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	21,052	97.72	491	2.28	23050	99.96	9	0.04
	LDGT2	10,274	9666	94.08	608	5.92	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	7,558	92.62	602	7.38	10267	99.93	7	0.07
	LDGV	23,632	23015	97.39	617	2.61	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	20,470	97.11	609	2.89	23624	99.97	8	0.03
2012 Total		56,965	55240	96.97	1725	3.03	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	49,080	96.65	1,702	3.35	56941	99.96	24	0.04
2013	LDGT1	1,273	1247	97.96	26	2.04	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,124	97.74	26	2.26	1273	100.00	0	0.00
	LDGT2	977	915	93.65	62	6.35	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	567	90.29	61	9.71	976	99.90	1	0.10
	LDGV	1,942	1884	97.01	58	2.99	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,623	96.66	56	3.34	1940	99.90	2	0.10
2013 Total		4,192	4046	96.52	146	3.48	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3,314	95.86	143	4.14	4189	99.93	3	0.07
2014	LDGT1	1,676	1646	98.21	30	1.79	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,492	98.03	30	1.97	1676	100.00	0	0.00
	LDGT2	1,317	1264	95.98	53	4.02	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	636	92.31	53	7.69	1317	100.00	0	0.00
	LDGV	1,881	1848	98.25	33	1.75	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,529	97.95	32	2.05	1880	99.95	1	0.05
2014 Total		4,874	4758	97.62	116	2.38	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3,657	96.95	115	3.05	4873	99.98	1	0.02
2015	LDGT1	1,245	1217	97.75	28	2.25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,118	97.64	27	2.36	1244	99.92	1	0.08
	LDGT2	680	664	97.65	16	2.35	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	430	96.41	16	3.59	680	100.00	0	0.00
	LDGV	1,302	1261	96.85	41	3.15	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,123	96.73	38	3.27	1299	99.77	3	0.23
2015 Total		3,227	3142	97.37	85	2.63	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2,671	97.06	81	2.94	3223	99.88	4	0.12
2016	LDGT1	2,195	2144	97.68	51	2.32	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,919	97.41	51	2.59	2195	100.00	0	0.00
	LDGT2	1,032	1007	97.58	25	2.42	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	500	95.24	25	4.76	1032	100.00	0	0.00
	LDGV	1,709	1658	97.02	51	2.98	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1,361	96.52	49	3.48	1707	99.88	2	0.12
2016 Total		4,936	4809	97.43	127	2.57	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3,780	96.80	125	3.20	4934	99.96	2	0.04
2017	LDGT1	327	321	98.17	6	1.83	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	267	97.80	6	2.20	327	100.00	0	0.00
	LDGT2	202	199	98.51	3	1.49	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	82	96.47	3	3.53	202	100.00	0	0.00
	LDGV	359	354	98.61	5	1.39	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	282	98.26	5	1.74	359	100.00	0	0.00
2017 Total		888	874	98.42	14	1.58	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	631	97.83	14	2.17	888	100.00	0	0.00
2018	LDGT1	98	97	98.98	1	1.02	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	84	98.82	1	1.18	98	100.00	0	0.00
	LDGT2	47	47	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	12	100.00	0	0.00	47	100.00	0	0.00
	LDGV	61	61	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	42	100.00	0	0.00	61	100.00	0	0.00
2018 Total		206	205	99.51	1	0.49	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	138	99.28	1	0.72	206	100.00	0	0.00
2019	LDGT1	37	35	94.59	2	5.41	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	22	91.67	2	8.33	37	100.00	0	0.00
	LDGT2	7	7	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	7	100.00	0	0.00
	LDGV	26	26	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	19	100.00	0	0.00	26	100.00	0	0.00
2019 Total		70	68	97.14	2	2.86	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	44	95.65	2	4.35	70	100.00	0	0.00
2020	LDGT1	6	6	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	6	100.00	0	0.00
	LDGT2	4	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	4	100.00	0	0.00
	LDGV	17	17	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	11	100.00	0	0.00	17	100.00	0	0.00
2020 Total		27	27	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	17	100.00	0	0.00	27	100.00	0	0.00
2021	LDGT1	5	5	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	5	100.00	0	0.00
	LDGT2	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0		0		1	100.00	0	0.00
	LDGV	13	13	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	8	100.00	0	0.00	13	100.00	0	0.00
2021 Total		19	19	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9	100.00	0	0.00	19	100.00	0	0.00
2022	LDGT1	2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0		0		2	100.00	0	0.00
	LDGT2	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0		0		1	100.00	0	0.00
	LDGV	4	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	4	100.00	0	0.00
2022 Total		7	7	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	7	100.00	0	0.00

Vehicle		Visual Overall					CAT				AIS				O2				Gas Cap				Opacity			
Year	Type	Total	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %
2023	LDGT2	2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	2	100.00	0	0.00
2023 Total		2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	2	100.00	0	0.00
2024	LDGV	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0		0		1	100.00	0	0.00
2024 Total		1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0		0		1	100.00	0	0.00
Grand Total		**540,279**	**517241**	**95.74**	**23038**	**4.26**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**497,465**	**95.68**	**22,465**	**4.32**	**539661**	**99.89**	**618**	**0.11**

Initial Failure for Other Report - Summary by Veh (V1.03)

Vehicle	Visual Overall					CAT				AIS				O2				Gas Cap				Opacity			
Type	Total	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %
LDGT1	224,361	215176	95.91	9185	4.09	0		0	0.00	0		0		0		0		210,166	95.91	8,966	4.09	224122	99.89	239	0.11
LDGT2	98,300	92709	94.31	5591	5.69	0		0	0.00	0		0		0		0		83,760	93.88	5,460	6.12	98157	99.85	143	0.15
LDGV	217,618	209356	96.20	8262	3.80	0		0	0.00	0		0		0		0		203,539	96.20	8,039	3.80	217382	99.89	236	0.11
Grand Total	**540,279**	**517241**	**95.74**	**23038**	**4.26**	**0**		**0**	**0.00**	**0**		**0**		**0**		**0**		**497,465**	**95.68**	**22,465**	**4.32**	**539661**	**99.89**	**618**	**0.11**

Appendix B5

I/M240 Retest Pass Reduction Report

Date
Between 1/1/2023 and 1/1/2024

Retest Pass Reduction Report (V1.01)

Vehicle		Initial Exhaust Emissions				Passing Retest Exhaust Emissions					Emission Reductions						Average Repair Costs
Year	Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Avg HC(gpm)	Avg HC%(gpm)	Avg CO(gpm)	Avg CO%(gpm)	Avg NOx(gpm)	Avg NOx%(gpm)	
1982	LDGV	48	5.0436	105.5712	2.0924	19	39.58%	1.3753	18.2819	2.1319	0.9977	42.04%	19.7975	51.99%	0.5286	19.87%	0.00
	LDGT1	43	4.2604	78.7019	2.3114	26	60.47%	2.6999	37.9665	2.2076	1.6839	38.41%	38.5529	50.38%	-0.1811	-8.94%	0.00
	LDGT2	7	10.3531	172.6727	0.9807	3	42.86%	3.4415	36.4786	1.6434	0.7635	18.16%	72.1142	66.41%	-1.0309	-168.33%	0.00
1982 Total		98	5.0792	98.5746	2.1091	48	48.98%	2.2219	30.0816	2.1424	1.3548	37.88%	33.2264	52.48%	0.0467	2.13%	0.00
1983	LDGV	72	3.2426	51.5331	1.8592	23	31.94%	1.5165	13.0706	2.0617	0.7178	32.13%	27.2392	67.57%	-0.0858	-4.34%	1800.00
	LDGT1	33	5.4178	55.1269	2.6337	24	72.73%	2.3385	30.0922	2.4925	2.5414	52.08%	18.3968	37.94%	0.2854	10.28%	0.00
	LDGT2	34	5.3903	88.4579	2.7199	12	35.29%	2.8130	36.7536	3.0471	1.7722	38.65%	40.1211	52.19%	-0.3749	-14.03%	0.00
1983 Total		139	4.2844	61.4183	2.2536	59	42.45%	2.1146	24.8115	2.4374	1.6741	44.19%	26.2624	51.42%	0.0064	0.26%	1800.00
1984	LDGV	83	4.8995	53.3020	2.2973	45	54.22%	1.2447	14.8432	1.5257	2.4315	66.14%	16.6567	52.88%	0.3239	17.51%	920.00
	LDGT1	115	4.3938	81.1677	2.1576	56	48.70%	2.3593	26.7519	2.3824	1.0602	31.00%	35.4003	56.96%	-0.1682	-7.60%	580.00
	LDGT2	71	8.0747	120.6475	2.3881	21	29.58%	2.0090	25.2180	2.5503	1.8010	47.27%	45.8438	64.51%	0.1603	5.91%	0.00
1984 Total		269	5.5214	82.9900	2.2615	122	45.35%	1.8879	22.0953	2.0953	1.6935	47.29%	30.2843	57.82%	0.0698	3.22%	750.00
1985	LDGV	156	4.2815	53.6417	2.0610	57	36.54%	1.1933	9.5088	1.7107	1.8816	61.19%	23.2253	70.95%	0.1142	6.26%	0.00
	LDGT1	151	4.3483	66.3713	2.9286	74	49.01%	2.0679	20.7619	2.5654	1.2134	36.98%	25.0923	54.72%	0.4827	15.84%	107.50
	LDGT2	82	5.2459	75.5103	3.4887	25	30.49%	1.6328	19.8942	2.8208	1.5921	49.37%	27.5469	58.07%	0.2755	8.90%	180.00
1985 Total		389	4.5107	63.1928	2.6987	156	40.10%	1.6786	16.5112	2.2941	1.5183	47.49%	24.8035	60.04%	0.3148	12.07%	131.67
1986	LDGV	181	4.0293	55.2595	2.0838	67	37.02%	1.0434	8.6705	1.6902	1.7917	63.20%	21.3856	71.15%	0.6159	26.71%	400.50
	LDGT1	181	3.6741	65.3258	2.4737	80	44.20%	1.7436	21.7835	2.2661	0.8742	33.39%	22.2261	50.50%	0.2311	9.25%	1284.00
	LDGT2	87	4.6560	102.8069	2.4088	26	29.89%	1.5084	21.2644	2.3956	1.4163	48.43%	35.1526	62.31%	0.3753	13.55%	270.00
1986 Total		449	4.0075	68.5304	2.3040	173	38.53%	1.4371	16.6270	2.0625	1.3110	47.71%	23.8433	58.92%	0.4018	16.31%	727.80
1987	LDGV	161	5.0526	37.7121	2.1010	58	36.02%	0.8798	8.2513	1.2097	2.0545	70.02%	22.0207	72.74%	0.5689	31.99%	614.50
	LDGT1	167	5.0235	70.1647	2.3639	78	46.71%	1.4986	15.6698	2.3850	1.4411	49.02%	28.8537	64.81%	0.0530	2.17%	1431.50
	LDGT2	38	5.3446	45.9181	3.2097	21	55.26%	1.7703	15.5707	2.7207	1.1897	40.19%	16.9501	52.12%	0.0801	2.86%	316.00
1987 Total		366	5.0696	53.3717	2.3360	157	42.90%	1.3064	12.9159	1.9957	1.6341	55.57%	24.7372	65.70%	0.2472	11.02%	881.60
1988	LDGV	178	3.4979	27.5879	1.9906	69	38.76%	0.7841	7.1565	1.3764	1.8266	69.97%	12.5224	63.63%	0.6752	32.91%	2500.00
	LDGT1	216	3.4240	41.0435	2.8397	97	44.91%	1.2736	10.9399	2.1130	1.1973	48.46%	16.8043	60.57%	0.6373	23.17%	760.00
	LDGT2	79	3.8979	57.2409	2.8721	34	43.04%	1.5354	12.9464	2.6043	1.1820	43.50%	28.8745	69.04%	0.1468	5.33%	1130.00
1988 Total		473	3.5310	38.6852	2.5256	200	42.28%	1.1492	9.9758	1.9424	1.4118	55.13%	17.3790	63.53%	0.5670	22.59%	1256.00
1989	LDGV	233	3.1112	34.4816	2.0451	99	42.49%	0.6898	7.4450	1.3995	1.5007	68.51%	15.6434	67.75%	0.4840	25.70%	160.50
	LDGT1	247	3.4002	47.9624	2.7653	121	48.99%	1.2111	11.7631	2.1602	1.7346	58.89%	25.2709	68.24%	0.3018	12.26%	0.00
	LDGT2	75	3.1967	31.6559	3.6039	41	54.67%	1.3787	10.7821	2.4689	1.8028	56.66%	16.4954	60.47%	0.4735	16.09%	725.00
1989 Total		555	3.2514	40.0993	2.5763	261	47.03%	1.0397	9.9711	1.9201	1.6566	61.44%	20.2406	67.00%	0.3979	17.16%	348.67
1990	LDGV	221	2.8169	20.3779	2.4268	113	51.13%	0.6936	6.5256	1.4352	1.2919	65.07%	14.8607	69.49%	0.5452	27.53%	951.00
	LDGT1	241	3.8024	50.1716	2.5141	123	51.04%	1.1959	11.1505	1.8718	1.5240	56.03%	22.0405	66.40%	0.6357	25.35%	0.00
	LDGT2	135	3.1663	24.9524	4.0273	64	47.41%	1.2440	10.7432	2.4374	1.5617	55.66%	12.6359	54.05%	0.7107	22.58%	0.00
1990 Total		597	3.2937	33.4396	2.8240	300	50.25%	1.0169	9.3216	1.8280	1.4446	58.69%	17.3298	65.02%	0.6176	25.25%	951.00
1991	LDGV	363	2.5959	26.0058	1.9777	159	43.80%	0.5859	6.1609	1.2778	0.9329	61.42%	13.7821	69.11%	0.5928	31.69%	200.00
	LDGT1	289	2.6203	33.3856	2.4155	163	56.40%	0.9693	10.7805	1.6531	1.2089	55.50%	17.3420	61.67%	0.5573	25.21%	100.33

Vehicle		Initial Exhaust Emissions				Passing Retest Exhaust Emissions					Emission Reductions						Average Repair Costs
Year	Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Avg HC(gpm)	Avg HC%(gpm)	Avg CO(gpm)	Avg CO%(gpm)	Avg NOx(gpm)	Avg NOx%(gpm)	
	LDGT2	193	2.8202	24.1107	3.3618	82	42.49%	1.1924	12.0504	2.2311	1.4757	55.31%	11.3634	48.53%	0.7964	26.31%	1285.00
1991 Total		845	2.6555	28.0969	2.4436	404	47.81%	0.8637	9.2202	1.6227	1.1544	57.20%	14.7274	61.50%	0.6198	27.64%	331.00
1992	LDGV	294	2.3500	28.4582	2.2105	131	44.56%	0.5783	5.8656	1.4561	0.9029	60.96%	9.8426	62.66%	0.5707	28.16%	16.00
	LDGT1	274	2.7084	28.0002	2.6313	141	51.46%	0.9242	8.0803	1.6201	1.1568	55.59%	12.6062	60.94%	0.7459	31.53%	436.00
	LDGT2	268	3.2567	28.0612	2.8534	117	43.66%	1.1700	11.9233	1.8921	1.4590	55.50%	8.8963	42.73%	0.8748	31.62%	1279.00
1992 Total		836	2.7581	28.1808	2.5545	389	46.53%	0.8816	8.4904	1.6467	1.1622	56.86%	10.5597	55.43%	0.7257	30.59%	436.60
1993	LDGV	353	2.1680	23.6721	2.0462	168	47.59%	0.5571	5.8402	1.3041	0.8603	60.70%	10.6300	64.54%	0.4334	24.95%	238.50
	LDGT1	363	2.6330	30.5577	2.8282	204	56.20%	0.8958	9.1569	1.8365	1.4360	61.58%	15.6434	63.08%	0.6650	26.58%	1297.50
	LDGT2	380	3.2309	33.7576	2.8086	155	40.79%	1.1386	11.3476	1.9590	1.4436	55.91%	15.6077	57.90%	0.6551	25.06%	1789.00
1993 Total		1096	2.6905	29.4494	2.5695	527	48.08%	0.8592	8.7439	1.7028	1.2547	59.35%	14.0347	61.61%	0.5883	25.68%	1065.14
1994	LDGV	460	1.5970	14.9806	1.9612	216	46.96%	0.4183	4.7032	1.0680	0.8611	67.31%	8.8646	65.34%	0.5417	33.65%	1225.50
	LDGT1	489	2.5660	30.0781	2.6213	255	52.15%	0.8394	8.4554	1.6237	0.8200	49.42%	12.3466	59.35%	0.5153	24.09%	358.33
	LDGT2	467	2.5188	27.1347	2.7697	211	45.18%	1.0096	9.9781	1.9956	1.0897	51.91%	12.7235	56.05%	0.5057	20.22%	611.00
1994 Total		1416	2.2356	24.2028	2.4558	682	48.16%	0.7587	7.7381	1.5628	0.9164	54.71%	11.3604	59.48%	0.5207	24.99%	658.10
1995	LDGV	568	1.8271	15.8694	1.8235	280	49.30%	0.4059	4.7760	0.9262	0.7311	64.30%	8.2590	63.36%	0.5622	37.77%	264.00
	LDGT1	547	2.3999	27.8934	2.7270	299	54.66%	0.7651	7.9329	1.8239	0.9602	55.66%	13.0996	62.28%	0.5347	22.67%	1256.25
	LDGT2	643	2.6731	25.7201	2.8746	299	46.50%	0.9644	10.1444	1.8791	1.0051	51.03%	11.5737	53.29%	0.6066	24.40%	1696.00
1995 Total		1758	2.3147	23.2136	2.4891	878	49.94%	0.7184	7.6793	1.5564	0.9024	55.68%	11.0363	58.97%	0.5679	26.73%	939.13
1996	LDGV	528	1.2022	14.2354	1.5177	263	49.81%	0.3094	3.9627	0.7568	0.5605	64.43%	7.8579	66.48%	0.4490	37.23%	357.50
	LDGT1	619	1.5382	15.0115	2.5735	338	54.60%	0.3800	5.1935	1.2493	0.4345	53.34%	5.6800	52.24%	0.7617	37.88%	403.00
	LDGT2	498	1.4273	14.4464	2.3576	249	50.00%	0.4306	5.5576	1.1660	0.5140	54.41%	5.7419	50.82%	0.7238	38.30%	240.00
1996 Total		1645	1.3968	14.5913	2.1693	850	51.67%	0.3730	4.9193	1.0725	0.4968	57.11%	6.3720	56.43%	0.6538	37.87%	371.25
1997	LDGV	695	1.0219	13.3398	1.4242	390	56.12%	0.2921	4.0100	0.6806	0.5244	64.23%	5.9510	59.74%	0.4229	38.32%	320.40
	LDGT1	995	1.1313	16.4684	2.4356	546	54.87%	0.3806	5.3334	1.2304	0.4915	56.36%	7.8959	59.68%	0.6988	36.22%	556.40
	LDGT2	600	1.3108	17.4790	2.5215	269	44.83%	0.4085	5.6155	1.2260	0.6330	60.78%	9.5502	62.97%	0.7347	37.47%	0.00
1997 Total		2290	1.1451	15.7836	2.1511	1205	52.62%	0.3582	4.9680	1.0515	0.5338	59.84%	7.6357	60.58%	0.6175	37.00%	438.40
1998	LDGV	825	0.9849	10.9643	1.3627	483	58.55%	0.2616	3.8160	0.6676	0.4503	63.26%	5.7172	59.97%	0.2710	28.87%	822.00
	LDGT1	1022	1.0636	14.1553	2.4412	552	54.01%	0.3206	4.3276	1.0364	0.4170	56.54%	6.4493	59.84%	0.7178	40.92%	365.13
	LDGT2	542	1.9006	15.9518	2.4312	241	44.46%	0.3514	4.1837	1.1045	0.9521	73.04%	7.3469	63.72%	0.8041	42.13%	1382.00
1998 Total		2389	1.2263	13.4609	2.0665	1276	53.41%	0.3041	4.1067	0.9097	0.5307	63.57%	6.3417	60.70%	0.5650	38.31%	774.50
1999	LDGV	884	0.8825	10.6933	1.5158	518	58.60%	0.2433	3.5732	0.6392	0.4810	66.41%	4.7166	56.90%	0.4676	42.25%	541.33
	LDGT1	1688	0.8598	13.5800	2.2729	762	45.14%	0.2343	3.3643	0.7741	0.3912	62.54%	7.1434	67.98%	0.9665	55.53%	888.91
	LDGT2	1195	1.0130	11.1464	2.1367	492	41.17%	0.2675	3.2651	0.8053	0.4725	63.85%	5.4103	62.36%	0.8388	51.02%	606.33
1999 Total		3767	0.9137	12.1306	2.0520	1772	47.04%	0.2461	3.3978	0.7433	0.4400	64.13%	5.9528	63.66%	0.7852	51.37%	777.71
2000	LDGV	1260	1.1405	12.8825	1.5410	665	52.78%	0.2065	3.4818	0.5852	0.6641	76.28%	6.1723	63.93%	0.5737	49.50%	728.40
	LDGT1	1904	0.8531	11.6012	2.1633	823	43.22%	0.2106	3.3227	0.7460	0.4782	69.42%	6.0947	64.72%	0.8105	52.07%	451.14
	LDGT2	852	1.1391	11.1452	2.0872	403	47.30%	0.2380	3.4630	0.7419	0.5459	69.64%	6.1484	63.97%	0.7090	48.86%	326.25
2000 Total		4016	1.0039	11.9065	1.9519	1891	47.09%	0.2150	3.4086	0.6886	0.5580	72.19%	6.1334	64.28%	0.7056	50.61%	506.56
2001	LDGV	1268	0.9648	10.1174	1.6104	694	54.73%	0.1656	2.9024	0.4587	0.5266	76.07%	4.2444	59.39%	0.5230	53.27%	427.33
	LDGT1	1385	0.6662	12.3646	1.7761	806	58.19%	0.1866	3.5508	0.5692	0.2696	59.09%	5.1208	59.05%	0.6455	53.14%	1003.50
	LDGT2	1047	0.7814	10.3273	2.0480	474	45.27%	0.2258	3.1726	0.6777	0.4442	66.30%	4.8441	60.42%	0.7642	53.00%	876.29

Vehicle		Initial Exhaust Emissions				Passing Retest Exhaust Emissions					Emission Reductions						Average Repair Costs
Year	Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Avg HC(gpm)	Avg HC%(gpm)	Avg CO(gpm)	Avg CO%(gpm)	Avg NOx(gpm)	Avg NOx%(gpm)	
2001 Total		3700	0.8011	11.0180	1.7962	1974	53.35%	0.1887	3.2321	0.5564	0.4019	68.05%	4.7462	59.49%	0.6309	53.14%	839.81
2002	LDGV	1501	0.8415	10.5104	1.6552	830	55.30%	0.1661	3.2136	0.4269	0.4113	71.23%	5.0492	61.11%	0.6221	59.30%	523.60
	LDGT1	1674	0.8375	14.5532	1.7865	908	54.24%	0.1755	3.6935	0.5210	0.3183	64.45%	6.6112	64.16%	0.7092	57.65%	266.50
	LDGT2	1037	0.8383	9.2597	2.0533	460	44.36%	0.2132	3.0048	0.7342	0.3413	61.55%	3.6466	54.83%	0.6837	48.22%	343.00
2002 Total		4212	0.8391	11.8092	1.8054	2198	52.18%	0.1799	3.3681	0.5301	0.3582	66.57%	5.4009	61.59%	0.6710	55.87%	372.60
2003	LDGV	1394	0.8367	9.1991	1.4132	860	61.69%	0.1286	2.3448	0.3722	0.4519	77.85%	4.6630	66.54%	0.5082	57.72%	37.17
	LDGT1	1875	0.7121	13.2161	1.9202	1017	54.24%	0.1488	2.7784	0.4536	0.3126	67.74%	6.8528	71.15%	0.7216	61.40%	476.13
	LDGT2	902	0.8773	11.9676	1.9002	481	53.33%	0.1756	2.6196	0.5428	0.3308	65.33%	4.9400	65.35%	0.6161	53.16%	690.00
2003 Total		4171	0.7895	11.6036	1.7464	2358	56.53%	0.1469	2.5879	0.4421	0.3671	71.42%	5.6640	68.64%	0.6222	58.46%	314.80
2004	LDGV	1343	0.7319	9.5145	1.4642	797	59.34%	0.1266	2.4865	0.3425	0.3567	73.80%	4.4830	64.32%	0.5315	60.81%	458.00
	LDGT1	1818	0.7247	12.0784	1.6844	1081	59.46%	0.1324	2.7350	0.3597	0.3527	72.71%	6.3314	69.83%	0.6327	63.76%	959.67
	LDGT2	1050	0.9380	11.7631	2.0397	510	48.57%	0.1630	2.7947	0.4373	0.3087	65.44%	5.0676	64.45%	0.7341	62.67%	0.00
2004 Total		4211	0.7802	11.1821	1.7028	2388	56.71%	0.1370	2.6648	0.3705	0.3446	71.55%	5.4446	67.14%	0.6206	62.61%	740.19
2005	LDGV	1575	0.6209	6.8590	1.4150	1012	64.25%	0.1062	1.9071	0.2838	0.2560	70.68%	2.8284	59.73%	0.4612	61.91%	216.67
	LDGT1	1458	0.7080	13.0850	1.6182	903	61.93%	0.1270	2.3029	0.2756	0.2956	69.95%	6.9662	75.15%	0.5945	68.33%	853.25
	LDGT2	849	1.0849	12.8724	1.8067	445	52.41%	0.1595	2.7621	0.4192	0.3239	67.01%	5.0627	64.70%	0.6767	61.75%	1019.00
2005 Total		3882	0.7551	10.5125	1.5770	2360	60.79%	0.1242	2.2198	0.3062	0.2840	69.57%	4.8329	68.53%	0.5528	64.36%	609.67
2006	LDGV	1037	0.8021	10.1988	1.2839	673	64.90%	0.1167	2.2864	0.2471	0.3577	75.40%	4.3521	65.56%	0.5151	67.58%	368.00
	LDGT1	1145	0.6269	11.3178	1.6731	701	61.22%	0.0991	2.2637	0.2684	0.2631	72.64%	5.1991	69.67%	0.6043	69.25%	1062.00
	LDGT2	788	1.0048	11.4377	1.9087	430	54.57%	0.1514	2.4982	0.3480	0.4264	73.80%	4.4676	64.14%	0.7362	67.90%	295.00
2006 Total		2970	0.7883	10.9589	1.5997	1804	60.74%	0.1181	2.3281	0.2794	0.3373	74.07%	4.7088	66.92%	0.6024	68.31%	473.56
2007	LDGV	991	0.7420	10.0301	1.3406	646	65.19%	0.0985	2.0706	0.2094	0.3320	77.13%	5.1087	71.16%	0.5905	73.83%	614.00
	LDGT1	1354	0.4772	10.8516	1.5175	865	63.88%	0.0820	2.0787	0.2137	0.1470	64.18%	4.5975	68.86%	0.6279	74.60%	316.86
	LDGT2	687	1.1798	13.4557	1.5192	402	58.52%	0.1172	2.1526	0.2702	0.4606	79.71%	5.9147	73.32%	0.5115	65.44%	16.00
2007 Total		3032	0.7229	11.1731	1.4601	1913	63.09%	0.0950	2.0915	0.2241	0.2754	74.36%	5.0469	70.70%	0.5908	72.50%	390.83
2008	LDGV	924	0.7603	10.3415	1.1157	641	69.37%	0.1041	2.2629	0.2005	0.3638	77.75%	5.2756	69.98%	0.5091	71.74%	487.50
	LDGT1	1031	0.4876	13.0284	1.4160	701	67.99%	0.0746	2.1756	0.1731	0.1769	70.34%	4.7536	68.60%	0.6182	78.12%	706.00
	LDGT2	704	0.5464	10.2434	1.2294	440	62.50%	0.1060	2.5449	0.1983	0.1312	55.32%	3.3299	56.68%	0.3996	66.83%	837.00
2008 Total		2659	0.5979	11.3573	1.2622	1782	67.02%	0.0930	2.2982	0.1892	0.2328	71.47%	4.5898	66.64%	0.5250	73.51%	700.50
2009	LDGV	638	0.6692	10.3691	1.2045	443	69.44%	0.1048	2.4095	0.1946	0.3407	76.47%	4.8131	66.64%	0.4082	67.72%	510.00
	LDGT1	533	0.4764	11.0593	1.3841	338	63.41%	0.0801	2.1539	0.2144	0.2431	75.21%	4.7870	68.97%	0.6153	74.16%	512.00
	LDGT2	324	0.5119	10.5509	0.9529	239	73.77%	0.1094	2.5527	0.2199	0.1346	55.17%	3.2231	55.80%	0.2781	55.85%	155.00
2009 Total		1495	0.5664	10.6546	1.2140	1020	68.23%	0.0977	2.3583	0.2071	0.2601	72.69%	4.4319	65.27%	0.4463	68.31%	451.17
2010	LDGV	680	0.5814	8.5586	0.9044	504	74.12%	0.0791	2.1272	0.1487	0.2885	78.49%	3.4941	62.16%	0.3675	71.19%	14.67
	LDGT1	584	0.2262	6.2727	0.6162	495	84.76%	0.0669	1.9087	0.1596	0.0524	43.92%	1.3258	40.99%	0.2675	62.64%	1208.50
	LDGT2	411	0.4050	8.2437	1.0188	304	73.97%	0.0851	2.3207	0.1794	0.1365	61.60%	3.2741	58.52%	0.2698	60.06%	18.00
2010 Total		1675	0.4143	7.6844	0.8320	1303	77.79%	0.0758	2.0894	0.1600	0.1633	68.29%	2.6190	55.62%	0.3067	65.72%	413.17
2011	LDGV	590	0.6734	9.5755	1.2432	431	73.05%	0.0954	2.5585	0.1758	0.3439	78.28%	4.0505	61.29%	0.5632	76.22%	16.00
	LDGT1	546	0.3341	9.2110	0.7799	407	74.54%	0.0668	2.3189	0.1545	0.1160	63.47%	4.2773	64.84%	0.2280	59.61%	12.00
	LDGT2	483	0.2495	4.5311	0.4333	438	90.68%	0.0601	1.8141	0.1189	0.1357	69.29%	1.9108	51.30%	0.1215	50.55%	0.00
2011 Total		1619	0.4325	7.9477	0.8453	1276	78.81%	0.0742	2.2266	0.1494	0.1997	72.92%	3.3884	60.35%	0.3047	67.09%	14.00

Vehicle		Initial Exhaust Emissions				Passing Retest Exhaust Emissions					Emission Reductions						Average Repair Costs
Year	Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Avg HC(gpm)	Avg HC%(gpm)	Avg CO(gpm)	Avg CO%(gpm)	Avg NOx(gpm)	Avg NOx%(gpm)	
2012	LDGV	850	0.4518	7.1400	0.6659	697	82.00%	0.0683	2.0749	0.1241	0.2169	76.04%	2.6189	55.79%	0.2629	67.94%	19.00
	LDGT1	679	0.2771	6.7598	0.5638	576	84.83%	0.0589	2.3044	0.1204	0.1129	65.73%	2.8721	55.48%	0.1817	60.14%	3138.67
	LDGT2	678	0.2325	3.8368	0.4037	616	90.86%	0.0473	1.4364	0.0912	0.0962	67.05%	1.1371	44.18%	0.0959	51.26%	26.00
2012 Total		2207	0.3307	6.0083	0.5539	1889	85.59%	0.0586	1.9367	0.1122	0.1458	71.34%	2.2129	53.33%	0.1837	62.07%	1358.00
2013	LDGV	159	1.2025	10.7140	1.4279	91	57.23%	0.1097	2.0911	0.2002	0.4108	78.93%	5.0566	70.74%	0.6737	77.09%	0.00
	LDGT1	77	0.4593	14.3369	1.2987	49	63.64%	0.1036	4.5838	0.2068	0.2104	67.00%	6.9153	60.14%	0.4881	70.25%	1869.00
	LDGT2	102	0.4544	7.6135	1.2982	77	75.49%	0.0729	2.1144	0.1867	0.2309	75.99%	3.0649	59.18%	0.4705	71.59%	622.00
2013 Total		338	0.8074	10.6037	1.3593	217	64.20%	0.0953	2.6623	0.1969	0.3017	76.00%	4.7696	64.18%	0.5597	73.97%	1245.50
2014	LDGV	118	1.3146	18.9851	1.7681	68	57.63%	0.0748	2.3237	0.1187	1.1573	93.93%	14.0530	85.81%	1.1397	90.57%	0.00
	LDGT1	49	0.2888	7.3561	0.6278	41	83.67%	0.0590	2.8368	0.1843	0.1636	73.51%	3.3876	54.42%	0.3307	64.21%	0.00
	LDGT2	94	0.5015	6.7486	1.1430	61	64.89%	0.0777	2.0997	0.1556	0.1585	67.12%	1.7674	45.70%	0.4317	73.51%	0.00
2014 Total		261	0.8292	12.3949	1.3289	170	65.13%	0.0720	2.3671	0.1478	0.5593	88.59%	7.0724	74.92%	0.6906	82.37%	0.00
2015	LDGV	115	0.9299	12.8073	1.8100	74	64.35%	0.0973	2.8567	0.1411	0.5390	84.71%	7.5054	72.43%	1.1565	89.12%	54.00
	LDGT1	68	0.4850	7.5802	1.7174	44	64.71%	0.0592	2.7833	0.2233	0.2079	77.84%	4.5019	61.79%	0.5175	69.86%	0.00
	LDGT2	29	0.4178	5.5982	1.0569	24	82.76%	0.1159	2.3871	0.2209	0.2445	67.84%	2.9032	54.88%	0.5795	72.40%	0.00
2015 Total		212	0.7172	10.1445	1.6773	142	66.98%	0.0886	2.7546	0.1801	0.3866	81.35%	5.7969	67.79%	0.8610	82.70%	54.00
2016	LDGV	136	0.8838	11.9101	1.5112	87	63.97%	0.0910	2.4209	0.1263	0.7191	88.76%	9.2575	79.27%	1.0152	88.93%	0.00
	LDGT1	78	0.1690	8.4737	0.4381	64	82.05%	0.0362	1.9485	0.0743	0.0370	50.56%	4.2243	68.43%	0.0735	49.74%	370.00
	LDGT2	42	0.4165	8.8025	0.9446	32	76.19%	0.0704	1.3792	0.0863	0.1433	67.06%	5.3309	79.45%	0.3677	81.00%	0.00
2016 Total		256	0.5893	10.3532	1.0913	183	71.48%	0.0683	2.0736	0.1011	0.3799	84.77%	6.8106	76.66%	0.5727	84.99%	370.00
2017	LDGV	9	3.1818	5.9270	0.3754	7	77.78%	0.0719	1.9724	0.0563	3.6940	98.09%	0.9627	32.80%	0.1881	76.96%	0.00
	LDGT1	8	0.0308	8.1200	0.1846	6	75.00%	0.0385	1.3877	0.0826	-0.0044	-12.74%	2.5079	64.38%	0.0071	7.88%	0.00
	LDGT2	4	0.3955	1.8460	0.4947	4	100.00%	0.1597	2.1738	0.2681	0.2358	59.62%	-0.3279	-17.76%	0.2266	45.81%	0.00
2017 Total		21	1.4507	5.9851	0.3254	17	80.95%	0.0808	1.8134	0.1154	1.5750	95.12%	1.2044	39.91%	0.1332	53.59%	0.00
2018	LDGV	1	2.6950	1.9175	0.0091	1	100.00%	0.0027	0.2553	0.0931	2.6923	99.90%	1.6622	86.69%	-0.0840	-923.08%	0.00
	LDGT1	2	1.3585	18.3974	3.4219	2	100.00%	0.1186	3.5088	0.1177	1.2399	91.27%	14.8887	80.93%	3.3042	96.56%	0.00
	LDGT2	3	1.0777	11.2325	3.1284	0	0.00%	0.0000	0.0000	0.0000	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.00
2018 Total		6	1.4408	12.0683	2.7063	3	50.00%	0.0800	2.4243	0.1095	1.7240	95.57%	10.4798	81.21%	2.1748	95.21%	0.00
2019	LDGV	1	0.7068	13.7224	2.0448	1	100.00%	0.0919	1.7268	0.0401	0.6149	87.00%	11.9956	87.42%	2.0047	98.04%	0.00
	LDGT1	2	0.0171	0.7101	0.0449	2	100.00%	0.0157	0.5275	0.0409	0.0015	8.48%	0.1826	25.71%	0.0040	8.91%	0.00
2019 Total		3	0.2470	5.0475	0.7115	3	100.00%	0.0411	0.9273	0.0406	0.2059	83.37%	4.1202	81.63%	0.6709	94.29%	0.00
Grand Total		**60323**	**1.1508**	**15.0289**	**1.7717**	**34350**	**56.94%**	**0.2624**	**3.7616**	**0.6018**	**0.4550**	**63.42%**	**6.3628**	**62.85%**	**0.5592**	**48.16%**	**634.49**

Retest Pass Reduction Report - Summary by Veh (V1.01)

Vehicle	Initial Exhaust Emissions				Passing Retest Exhaust Emissions					Emission Reductions						Average Repair Costs
Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total%	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Avg HC(gpm)	Avg HC%(gpm)	Avg CO(gpm)	Avg CO%(gpm)	Avg NOx(gpm)	Avg NOx%(gpm)	
LDGV	20893	1.1344	13.1632	1.4825	12380	59.25%	0.2055	3.1498	0.4683	0.4963	70.72%	5.6965	64.39%	0.4994	51.60%	459.06
LDGT1	23950	1.0655	16.4822	1.8959	13768	57.49%	0.2840	4.1217	0.6572	0.4064	58.87%	7.2393	63.72%	0.6114	48.19%	746.31
LDGT2	15480	1.3050	15.2985	1.9699	8202	52.98%	0.3121	4.0805	0.7104	0.4741	60.31%	5.8972	59.10%	0.5618	44.16%	669.43
Grand Total	**60323**	**1.1508**	**15.0289**	**1.7717**	**34350**	**56.94%**	**0.2624**	**3.7616**	**0.6018**	**0.4550**	**63.42%**	**6.3628**	**62.85%**	**0.5592**	**48.16%**	**634.49**

Appendix B6

I/M240 Retest Frequency Report

Date
Between 1/1/2023 and 1/1/2024

Retest Frequency Report (V1.01)

Vehicle			Avg Retest	Retest #1				Retest #2				Retest #3				Retest #4				Retest >= #5			
Year	Type	Total	#	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt %	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%
1982	LDGV	48	1.7	21	43.75%	12	57.14%	10	20.83%	5	50.00%	5	10.42%	1	20.00%	4	8.33%	0	0.00%	8	16.67%	1	12.50%
	LDGT1	43	1.5	28	65.12%	19	67.86%	8	18.60%	5	62.50%	3	6.98%	1	33.33%	2	4.65%	0	0.00%	2	4.65%	1	50.00%
	LDGT2	7	1.0	6	85.71%	3	50.00%	1	14.29%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1982 Total		98	1.5	55	56.12%	34	61.82%	19	19.39%	10	52.63%	8	8.16%	2	25.00%	6	6.12%	0	0.00%	10	10.20%	2	20.00%
1983	LDGV	72	1.9	30	41.67%	14	46.67%	17	23.61%	3	17.65%	8	11.11%	3	37.50%	4	5.56%	1	25.00%	13	18.06%	2	15.38%
	LDGT1	33	1.1	28	84.85%	22	78.57%	3	9.09%	2	66.67%	1	3.03%	0	0.00%	0	0.00%	0	0.00%	1	3.03%	0	0.00%
	LDGT2	34	1.8	18	52.94%	8	44.44%	7	20.59%	2	28.57%	5	14.71%	1	20.00%	2	5.88%	0	0.00%	2	5.88%	1	50.00%
1983 Total		139	1.5	76	54.68%	44	57.89%	27	19.42%	7	25.93%	14	10.07%	4	28.57%	6	4.32%	1	16.67%	16	11.51%	3	18.75%
1984	LDGV	83	1.3	55	66.27%	34	61.82%	14	16.87%	8	57.14%	9	10.84%	2	22.22%	2	2.41%	1	50.00%	3	3.61%	0	0.00%
	LDGT1	115	1.6	68	59.13%	44	64.71%	16	13.91%	5	31.25%	12	10.43%	5	41.67%	5	4.35%	1	20.00%	14	12.17%	1	7.14%
	LDGT2	71	2.0	31	43.66%	13	41.94%	18	25.35%	4	22.22%	6	8.45%	1	16.67%	5	7.04%	0	0.00%	11	15.49%	3	27.27%
1984 Total		269	1.5	154	57.25%	91	59.09%	48	17.84%	17	35.42%	27	10.04%	8	29.63%	12	4.46%	2	16.67%	28	10.41%	4	14.29%
1985	LDGV	156	1.9	73	46.79%	36	49.32%	29	18.59%	6	20.69%	19	12.18%	10	52.63%	8	5.13%	2	25.00%	27	17.31%	3	11.11%
	LDGT1	151	1.8	82	54.30%	44	53.66%	34	22.52%	18	52.94%	16	10.60%	7	43.75%	7	4.64%	3	42.86%	12	7.95%	2	16.67%
	LDGT2	82	2.4	33	40.24%	15	45.45%	16	19.51%	4	25.00%	9	10.98%	2	22.22%	9	10.98%	2	22.22%	15	18.29%	2	13.33%
1985 Total		389	1.9	188	48.33%	95	50.53%	79	20.31%	28	35.44%	44	11.31%	19	43.18%	24	6.17%	7	29.17%	54	13.88%	7	12.96%
1986	LDGV	181	1.9	88	48.62%	41	46.59%	42	23.20%	13	30.95%	20	11.05%	6	30.00%	12	6.63%	4	33.33%	19	10.50%	3	15.79%
	LDGT1	181	1.9	95	52.49%	47	49.47%	40	22.10%	21	52.50%	14	7.73%	5	35.71%	8	4.42%	3	37.50%	24	13.26%	4	16.67%
	LDGT2	87	2.4	36	41.38%	15	41.67%	15	17.24%	4	26.67%	10	11.49%	3	30.00%	7	8.05%	1	14.29%	19	21.84%	3	15.79%
1986 Total		449	2.0	219	48.78%	103	47.03%	97	21.60%	38	39.18%	44	9.80%	14	31.82%	27	6.01%	8	29.63%	62	13.81%	10	16.13%
1987	LDGV	161	2.0	71	44.10%	28	39.44%	40	24.84%	10	25.00%	26	16.15%	13	50.00%	12	7.45%	5	41.67%	12	7.45%	2	16.67%
	LDGT1	167	1.6	91	54.49%	51	56.04%	34	20.36%	14	41.18%	18	10.78%	8	44.44%	10	5.99%	4	40.00%	14	8.38%	1	7.14%
	LDGT2	38	1.3	25	65.79%	17	68.00%	7	18.42%	2	28.57%	4	10.53%	1	25.00%	1	2.63%	1	100.00%	1	2.63%	0	0.00%
1987 Total		366	1.7	187	51.09%	96	51.34%	81	22.13%	26	32.10%	48	13.11%	22	45.83%	23	6.28%	10	43.48%	27	7.38%	3	11.11%
1988	LDGV	178	1.9	87	48.88%	42	48.28%	35	19.66%	15	42.86%	17	9.55%	3	17.65%	14	7.87%	4	28.57%	25	14.04%	5	20.00%
	LDGT1	216	1.5	124	57.41%	70	56.45%	40	18.52%	15	37.50%	28	12.96%	7	25.00%	14	6.48%	1	7.14%	10	4.63%	4	40.00%
	LDGT2	79	1.9	37	46.84%	21	56.76%	15	18.99%	8	53.33%	9	11.39%	1	11.11%	5	6.33%	1	20.00%	13	16.46%	3	23.08%
1988 Total		473	1.7	248	52.43%	133	53.63%	90	19.03%	38	42.22%	54	11.42%	11	20.37%	33	6.98%	6	18.18%	48	10.15%	12	25.00%
1989	LDGV	233	1.9	117	50.21%	61	52.14%	47	20.17%	22	46.81%	27	11.59%	6	22.22%	17	7.30%	4	23.53%	25	10.73%	6	24.00%
	LDGT1	247	1.7	144	58.30%	83	57.64%	49	19.84%	20	40.82%	24	9.72%	6	25.00%	13	5.26%	4	30.77%	17	6.88%	8	47.06%
	LDGT2	75	1.6	47	62.67%	29	61.70%	15	20.00%	5	33.33%	8	10.67%	4	50.00%	2	2.67%	1	50.00%	3	4.00%	2	66.67%
1989 Total		555	1.7	308	55.50%	173	56.17%	111	20.00%	47	42.34%	59	10.63%	16	27.12%	32	5.77%	9	28.13%	45	8.11%	16	35.56%
1990	LDGV	221	1.7	132	59.73%	79	59.85%	45	20.36%	23	51.11%	13	5.88%	3	23.08%	11	4.98%	2	18.18%	20	9.05%	6	30.00%
	LDGT1	241	1.7	139	57.68%	91	65.47%	40	16.60%	11	27.50%	26	10.79%	10	38.46%	12	4.98%	5	41.67%	24	9.96%	6	25.00%
	LDGT2	135	1.9	70	51.85%	42	60.00%	27	20.00%	12	44.44%	11	8.15%	4	36.36%	7	5.19%	1	14.29%	20	14.81%	5	25.00%

Vehicle			Avg Retest	Retest #1				Retest #2				Retest #3				Retest #4				Retest >= #5			
Year	Type	Total	#	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt %	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%
1990 Total		597	1.7	341	57.12%	212	62.17%	112	18.76%	46	41.07%	50	8.38%	17	34.00%	30	5.03%	8	26.67%	64	10.72%	17	26.56%
1991	LDGV	363	1.7	191	52.62%	108	56.54%	71	19.56%	26	36.62%	42	11.57%	12	28.57%	21	5.79%	3	14.29%	38	10.47%	10	26.32%
	LDGT1	289	1.6	182	62.98%	104	57.14%	66	22.84%	33	50.00%	31	10.73%	20	64.52%	8	2.77%	5	62.50%	2	0.69%	1	50.00%
	LDGT2	193	1.8	101	52.33%	52	51.49%	41	21.24%	20	48.78%	13	6.74%	2	15.38%	13	6.74%	1	7.69%	25	12.95%	7	28.00%
1991 Total		845	1.7	474	56.09%	264	55.70%	178	21.07%	79	44.38%	86	10.18%	34	39.53%	42	4.97%	9	21.43%	65	7.69%	18	27.69%
1992	LDGV	294	1.9	156	53.06%	88	56.41%	56	19.05%	17	30.36%	29	9.86%	9	31.03%	16	5.44%	4	25.00%	37	12.59%	13	35.14%
	LDGT1	274	1.6	163	59.49%	94	57.67%	61	22.26%	21	34.43%	33	12.04%	18	54.55%	11	4.01%	6	54.55%	6	2.19%	2	33.33%
	LDGT2	268	1.8	141	52.61%	74	52.48%	57	21.27%	24	42.11%	24	8.96%	6	25.00%	16	5.97%	6	37.50%	30	11.19%	7	23.33%
1992 Total		836	1.8	460	55.02%	256	55.65%	174	20.81%	62	35.63%	86	10.29%	33	38.37%	43	5.14%	16	37.21%	73	8.73%	22	30.14%
1993	LDGV	353	1.7	202	57.22%	113	55.94%	69	19.55%	33	47.83%	32	9.07%	12	37.50%	15	4.25%	2	13.33%	35	9.92%	8	22.86%
	LDGT1	363	1.6	229	63.09%	147	64.19%	68	18.73%	33	48.53%	31	8.54%	16	51.61%	11	3.03%	0	0.00%	24	6.61%	8	33.33%
	LDGT2	380	1.9	194	51.05%	93	47.94%	79	20.79%	32	40.51%	43	11.32%	13	30.23%	22	5.79%	5	22.73%	42	11.05%	12	28.57%
1993 Total		1096	1.7	625	57.03%	353	56.48%	216	19.71%	98	45.37%	106	9.67%	41	38.68%	48	4.38%	7	14.58%	101	9.22%	28	27.72%
1994	LDGV	460	1.6	261	56.74%	147	56.32%	101	21.96%	33	32.67%	49	10.65%	20	40.82%	24	5.22%	9	37.50%	25	5.43%	7	28.00%
	LDGT1	489	1.6	275	56.24%	184	66.91%	92	18.81%	38	41.30%	47	9.61%	12	25.53%	32	6.54%	10	31.25%	43	8.79%	11	25.58%
	LDGT2	467	1.9	249	53.32%	138	55.42%	94	20.13%	30	31.91%	51	10.92%	17	33.33%	29	6.21%	8	27.59%	44	9.42%	18	40.91%
1994 Total		1416	1.7	785	55.44%	469	59.75%	287	20.27%	101	35.19%	147	10.38%	49	33.33%	85	6.00%	27	31.76%	112	7.91%	36	32.14%
1995	LDGV	568	1.6	327	57.57%	198	60.55%	114	20.07%	45	39.47%	56	9.86%	16	28.57%	25	4.40%	11	44.00%	46	8.10%	10	21.74%
	LDGT1	547	1.4	337	61.61%	228	67.66%	106	19.38%	43	40.57%	51	9.32%	13	25.49%	25	4.57%	8	32.00%	28	5.12%	7	25.00%
	LDGT2	643	1.6	372	57.85%	216	58.06%	123	19.13%	43	34.96%	65	10.11%	13	20.00%	38	5.91%	13	34.21%	45	7.00%	14	31.11%
1995 Total		1758	1.5	1036	58.93%	642	61.97%	343	19.51%	131	38.19%	172	9.78%	42	24.42%	88	5.01%	32	36.36%	119	6.77%	31	26.05%
1996	LDGV	528	1.6	304	57.58%	181	59.54%	103	19.51%	51	49.51%	49	9.28%	14	28.57%	27	5.11%	7	25.93%	45	8.52%	10	22.22%
	LDGT1	619	1.5	372	60.10%	247	66.40%	119	19.22%	44	36.97%	71	11.47%	31	43.66%	32	5.17%	8	25.00%	25	4.04%	8	32.00%
	LDGT2	498	1.6	298	59.84%	180	60.40%	86	17.27%	33	38.37%	48	9.64%	14	29.17%	27	5.42%	14	51.85%	39	7.83%	8	20.51%
1996 Total		1645	1.6	974	59.21%	608	62.42%	308	18.72%	128	41.56%	168	10.21%	59	35.12%	86	5.23%	29	33.72%	109	6.63%	26	23.85%
1997	LDGV	695	1.5	438	63.02%	302	68.95%	113	16.26%	45	39.82%	65	9.35%	24	36.92%	31	4.46%	6	19.35%	48	6.91%	13	27.08%
	LDGT1	995	1.5	622	62.51%	408	65.59%	176	17.69%	76	43.18%	86	8.64%	32	37.21%	44	4.42%	10	22.73%	67	6.73%	20	29.85%
	LDGT2	600	1.7	328	54.67%	187	57.01%	104	17.33%	38	36.54%	68	11.33%	17	25.00%	40	6.67%	14	35.00%	60	10.00%	13	21.67%
1997 Total		2290	1.5	1388	60.61%	897	64.63%	393	17.16%	159	40.46%	219	9.56%	73	33.33%	115	5.02%	30	26.09%	175	7.64%	46	26.29%
1998	LDGV	825	1.3	566	68.61%	401	70.85%	120	14.55%	46	38.33%	63	7.64%	22	34.92%	29	3.52%	3	10.34%	47	5.70%	11	23.40%
	LDGT1	1022	1.5	640	62.62%	422	65.94%	181	17.71%	64	35.36%	99	9.69%	34	34.34%	51	4.99%	19	37.25%	51	4.99%	13	25.49%
	LDGT2	542	1.6	304	56.09%	174	57.24%	103	19.00%	40	38.83%	55	10.15%	11	20.00%	26	4.80%	4	15.38%	54	9.96%	12	22.22%
1998 Total		2389	1.4	1510	63.21%	997	66.03%	404	16.91%	150	37.13%	217	9.08%	67	30.88%	106	4.44%	26	24.53%	152	6.36%	36	23.68%
1999	LDGV	884	1.4	594	67.19%	408	68.69%	143	16.18%	59	41.26%	73	8.26%	32	43.84%	29	3.28%	4	13.79%	45	5.09%	15	33.33%
	LDGT1	1688	1.6	929	55.04%	516	55.54%	349	20.68%	132	37.82%	184	10.90%	57	30.98%	94	5.57%	30	31.91%	132	7.82%	27	20.45%
	LDGT2	1195	1.8	610	51.05%	301	49.34%	255	21.34%	91	35.69%	144	12.05%	44	30.56%	83	6.95%	28	33.73%	103	8.62%	28	27.18%
1999 Total		3767	1.6	2133	56.62%	1225	57.43%	747	19.83%	282	37.75%	401	10.65%	133	33.17%	206	5.47%	62	30.10%	280	7.43%	70	25.00%
2000	LDGV	1260	1.4	781	61.98%	507	64.92%	235	18.65%	93	39.57%	104	8.25%	31	29.81%	55	4.37%	17	30.91%	85	6.75%	17	20.00%
	LDGT1	1904	1.7	1021	53.62%	576	56.42%	365	19.17%	108	29.59%	212	11.13%	59	27.83%	132	6.93%	39	29.55%	174	9.14%	41	23.56%

Vehicle			Avg Retest	Retest #1				Retest #2				Retest #3				Retest #4				Retest >= #5			
Year	Type	Total	#	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt %	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%
	LDGT2	852	1.5	502	58.92%	303	60.36%	162	19.01%	49	30.25%	88	10.33%	27	30.68%	45	5.28%	12	26.67%	55	6.46%	12	21.82%
2000 Total		4016	1.6	2304	57.37%	1386	60.16%	762	18.97%	250	32.81%	404	10.06%	117	28.96%	232	5.78%	68	29.31%	314	7.82%	70	22.29%
2001	LDGV	1268	1.4	815	64.27%	557	68.34%	214	16.88%	79	36.92%	107	8.44%	27	25.23%	56	4.42%	12	21.43%	76	5.99%	19	25.00%
	LDGT1	1385	1.4	924	66.71%	650	70.35%	220	15.88%	90	40.91%	103	7.44%	35	33.98%	54	3.90%	17	31.48%	84	6.06%	14	16.67%
	LDGT2	1047	1.6	586	55.97%	326	55.63%	207	19.77%	77	37.20%	120	11.46%	30	25.00%	61	5.83%	22	36.07%	73	6.97%	19	26.03%
2001 Total		3700	1.4	2325	62.84%	1533	65.94%	641	17.32%	246	38.38%	330	8.92%	92	27.88%	171	4.62%	51	29.82%	233	6.30%	52	22.32%
2002	LDGV	1501	1.4	973	64.82%	654	67.21%	271	18.05%	104	38.38%	116	7.73%	36	31.03%	59	3.93%	13	22.03%	82	5.46%	23	28.05%
	LDGT1	1674	1.5	1057	63.14%	705	66.70%	282	16.85%	100	35.46%	147	8.78%	53	36.05%	73	4.36%	23	31.51%	115	6.87%	27	23.48%
	LDGT2	1037	1.5	589	56.80%	348	59.08%	195	18.80%	58	29.74%	102	9.84%	20	19.61%	62	5.98%	15	24.19%	89	8.58%	19	21.35%
2002 Total		4212	1.5	2619	62.18%	1707	65.18%	748	17.76%	262	35.03%	365	8.67%	109	29.86%	194	4.61%	51	26.29%	286	6.79%	69	24.13%
2003	LDGV	1394	1.3	973	69.80%	714	73.38%	211	15.14%	87	41.23%	95	6.81%	30	31.58%	47	3.37%	14	29.79%	68	4.88%	15	22.06%
	LDGT1	1875	1.4	1224	65.28%	820	66.99%	295	15.73%	108	36.61%	151	8.05%	47	31.13%	83	4.43%	12	14.46%	122	6.51%	30	24.59%
	LDGT2	902	1.4	574	63.64%	377	65.68%	162	17.96%	66	40.74%	68	7.54%	15	22.06%	35	3.88%	11	31.43%	63	6.98%	12	19.05%
2003 Total		4171	1.4	2771	66.43%	1911	68.96%	668	16.02%	261	39.07%	314	7.53%	92	29.30%	165	3.96%	37	22.42%	253	6.07%	57	22.53%
2004	LDGV	1343	1.4	912	67.91%	652	71.49%	203	15.12%	83	40.89%	101	7.52%	28	27.72%	50	3.72%	11	22.00%	77	5.73%	23	29.87%
	LDGT1	1818	1.4	1234	67.88%	894	72.45%	280	15.40%	91	32.50%	144	7.92%	45	31.25%	78	4.29%	24	30.77%	82	4.51%	27	32.93%
	LDGT2	1050	1.4	626	59.62%	398	63.58%	183	17.43%	52	28.42%	98	9.33%	33	33.67%	49	4.67%	16	32.65%	94	8.95%	11	11.70%
2004 Total		4211	1.4	2772	65.83%	1944	70.13%	666	15.82%	226	33.93%	343	8.15%	106	30.90%	177	4.20%	51	28.81%	253	6.01%	61	24.11%
2005	LDGV	1575	1.3	1134	72.00%	876	77.25%	218	13.84%	77	35.32%	105	6.67%	32	30.48%	52	3.30%	16	30.77%	66	4.19%	11	16.67%
	LDGT1	1458	1.3	1040	71.33%	772	74.23%	205	14.06%	72	35.12%	89	6.10%	24	26.97%	50	3.43%	15	30.00%	74	5.08%	20	27.03%
	LDGT2	849	1.5	545	64.19%	349	64.04%	144	16.96%	48	33.33%	74	8.72%	20	27.03%	35	4.12%	8	22.86%	51	6.01%	20	39.22%
2005 Total		3882	1.3	2719	70.04%	1997	73.45%	567	14.61%	197	34.74%	268	6.90%	76	28.36%	137	3.53%	39	28.47%	191	4.92%	51	26.70%
2006	LDGV	1037	1.2	772	74.45%	586	75.91%	135	13.02%	52	38.52%	54	5.21%	15	27.78%	36	3.47%	10	27.78%	40	3.86%	10	25.00%
	LDGT1	1145	1.3	798	69.69%	599	75.06%	161	14.06%	56	34.78%	80	6.99%	22	27.50%	46	4.02%	13	28.26%	60	5.24%	11	18.33%
	LDGT2	788	1.5	495	62.82%	342	69.09%	118	14.97%	37	31.36%	69	8.76%	18	26.09%	42	5.33%	12	28.57%	64	8.12%	21	32.81%
2006 Total		2970	1.3	2065	69.53%	1527	73.95%	414	13.94%	145	35.02%	203	6.84%	55	27.09%	124	4.18%	35	28.23%	164	5.52%	42	25.61%
2007	LDGV	991	1.2	731	73.76%	569	77.84%	120	12.11%	45	37.50%	56	5.65%	11	19.64%	34	3.43%	5	14.71%	50	5.05%	16	32.00%
	LDGT1	1354	1.3	967	71.42%	744	76.94%	186	13.74%	69	37.10%	94	6.94%	28	29.79%	45	3.32%	9	20.00%	62	4.58%	15	24.19%
	LDGT2	687	1.3	466	67.83%	334	71.67%	108	15.72%	40	37.04%	50	7.28%	11	22.00%	31	4.51%	8	25.81%	32	4.66%	9	28.13%
2007 Total		3032	1.3	2164	71.37%	1647	76.11%	414	13.65%	154	37.20%	200	6.60%	50	25.00%	110	3.63%	22	20.00%	144	4.75%	40	27.78%
2008	LDGV	924	1.2	703	76.08%	560	79.66%	118	12.77%	53	44.92%	50	5.41%	15	30.00%	29	3.14%	8	27.59%	24	2.60%	5	20.83%
	LDGT1	1031	1.3	763	74.01%	599	78.51%	139	13.48%	53	38.13%	66	6.40%	29	43.94%	29	2.81%	8	27.59%	34	3.30%	12	35.29%
	LDGT2	704	1.3	481	68.32%	374	77.75%	94	13.35%	29	30.85%	50	7.10%	16	32.00%	30	4.26%	10	33.33%	49	6.96%	11	22.45%
2008 Total		2659	1.3	1947	73.22%	1533	78.74%	351	13.20%	135	38.46%	166	6.24%	60	36.14%	88	3.31%	26	29.55%	107	4.02%	28	26.17%
2009	LDGV	638	1.2	489	76.65%	393	80.37%	71	11.13%	27	38.03%	35	5.49%	14	40.00%	14	2.19%	2	14.29%	29	4.55%	7	24.14%
	LDGT1	533	1.4	378	70.92%	278	73.54%	78	14.63%	32	41.03%	35	6.57%	11	31.43%	20	3.75%	9	45.00%	22	4.13%	8	36.36%
	LDGT2	324	1.2	251	77.47%	212	84.46%	39	12.04%	12	30.77%	19	5.86%	8	42.11%	8	2.47%	5	62.50%	7	2.16%	2	28.57%
2009 Total		1495	1.3	1118	74.78%	883	78.98%	188	12.58%	71	37.77%	89	5.95%	33	37.08%	42	2.81%	16	38.10%	58	3.88%	17	29.31%
2010	LDGV	680	1.2	539	79.26%	452	83.86%	67	9.85%	35	52.24%	25	3.68%	5	20.00%	17	2.50%	5	29.41%	32	4.71%	7	21.88%

Vehicle			Avg Retest	Retest #1				Retest #2				Retest #3				Retest #4				Retest >= #5			
Year	Type	Total	#	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt %	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%
	LDGT1	584	1.1	513	87.84%	462	90.06%	36	6.16%	22	61.11%	11	1.88%	5	45.45%	6	1.03%	2	33.33%	18	3.08%	4	22.22%
	LDGT2	411	1.2	321	78.10%	273	85.05%	41	9.98%	14	34.15%	24	5.84%	7	29.17%	10	2.43%	4	40.00%	15	3.65%	6	40.00%
2010 Total		1675	1.2	1373	81.97%	1187	86.45%	144	8.60%	71	49.31%	60	3.58%	17	28.33%	33	1.97%	11	33.33%	65	3.88%	17	26.15%
2011	LDGV	590	1.2	461	78.14%	385	83.51%	57	9.66%	22	38.60%	32	5.42%	11	34.38%	20	3.39%	10	50.00%	20	3.39%	3	15.00%
	LDGT1	546	1.1	447	81.87%	371	83.00%	54	9.89%	23	42.59%	25	4.58%	7	28.00%	10	1.83%	4	40.00%	10	1.83%	2	20.00%
	LDGT2	483	1.0	452	93.58%	426	94.25%	19	3.93%	8	42.11%	7	1.45%	3	42.86%	3	0.62%	0	0.00%	2	0.41%	1	50.00%
2011 Total		1619	1.1	1360	84.00%	1182	86.91%	130	8.03%	53	40.77%	64	3.95%	21	32.81%	33	2.04%	14	42.42%	32	1.98%	6	18.75%
2012	LDGV	850	1.1	737	86.71%	657	89.15%	58	6.82%	25	43.10%	30	3.53%	8	26.67%	13	1.53%	3	23.08%	12	1.41%	4	33.33%
	LDGT1	679	1.1	596	87.78%	531	89.09%	52	7.66%	30	57.69%	16	2.36%	6	37.50%	8	1.18%	5	62.50%	7	1.03%	4	57.14%
	LDGT2	678	1.0	638	94.10%	595	93.26%	28	4.13%	15	53.57%	9	1.33%	3	33.33%	3	0.44%	3	100.00%	0	0.00%	0	0.00%
2012 Total		2207	1.1	1971	89.31%	1783	90.46%	138	6.25%	70	50.72%	55	2.49%	17	30.91%	24	1.09%	11	45.83%	19	0.86%	8	42.11%
2013	LDGV	159	1.4	104	65.41%	72	69.23%	28	17.61%	12	42.86%	13	8.18%	3	23.08%	7	4.40%	2	28.57%	7	4.40%	2	28.57%
	LDGT1	77	1.3	52	67.53%	40	76.92%	13	16.88%	4	30.77%	6	7.79%	3	50.00%	3	3.90%	1	33.33%	3	3.90%	1	33.33%
	LDGT2	102	1.2	82	80.39%	69	84.15%	10	9.80%	6	60.00%	4	3.92%	1	25.00%	2	1.96%	0	0.00%	4	3.92%	1	25.00%
2013 Total		338	1.3	238	70.41%	181	76.05%	51	15.09%	22	43.14%	23	6.80%	7	30.43%	12	3.55%	3	25.00%	14	4.14%	4	28.57%
2014	LDGV	118	1.5	75	63.56%	52	69.33%	22	18.64%	8	36.36%	11	9.32%	3	27.27%	5	4.24%	2	40.00%	5	4.24%	3	60.00%
	LDGT1	49	1.1	42	85.71%	38	90.48%	3	6.12%	1	33.33%	3	6.12%	1	33.33%	1	2.04%	1	100.00%	0	0.00%	0	0.00%
	LDGT2	94	1.2	69	73.40%	53	76.81%	11	11.70%	5	45.45%	6	6.38%	1	16.67%	4	4.26%	1	25.00%	4	4.26%	1	25.00%
2014 Total		261	1.3	186	71.26%	143	76.88%	36	13.79%	14	38.89%	20	7.66%	5	25.00%	10	3.83%	4	40.00%	9	3.45%	4	44.44%
2015	LDGV	115	1.4	85	73.91%	56	65.88%	20	17.39%	13	65.00%	6	5.22%	2	33.33%	3	2.61%	2	66.67%	1	0.87%	1	100.00%
	LDGT1	68	1.3	49	72.06%	36	73.47%	12	17.65%	6	50.00%	3	4.41%	0	0.00%	2	2.94%	1	50.00%	2	2.94%	1	50.00%
	LDGT2	29	1.3	22	75.86%	19	86.36%	4	13.79%	2	50.00%	3	10.34%	3	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2015 Total		212	1.3	156	73.58%	111	71.15%	36	16.98%	21	58.33%	12	5.66%	5	41.67%	5	2.36%	3	60.00%	3	1.42%	2	66.67%
2016	LDGV	136	1.4	94	69.12%	68	72.34%	22	16.18%	10	45.45%	11	8.09%	4	36.36%	6	4.41%	3	50.00%	3	2.21%	2	66.67%
	LDGT1	78	1.2	66	84.62%	58	87.88%	7	8.97%	4	57.14%	2	2.56%	0	0.00%	2	2.56%	1	50.00%	1	1.28%	1	100.00%
	LDGT2	42	1.0	37	88.10%	31	83.78%	4	9.52%	1	25.00%	1	2.38%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2016 Total		256	1.3	197	76.95%	157	79.70%	33	12.89%	15	45.45%	14	5.47%	4	28.57%	8	3.13%	4	50.00%	4	1.56%	3	75.00%
2017	LDGV	9	1.0	7	77.78%	7	100.00%	1	11.11%	0	0.00%	1	11.11%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	8	1.0	7	87.50%	6	85.71%	1	12.50%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	4	1.0	4	100.00%	4	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2017 Total		21	1.0	18	85.71%	17	94.44%	2	9.52%	0	0.00%	1	4.76%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2018	LDGV	1	1.0	1	100.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	2	1.0	2	100.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	3	0.0	2	66.67%	0	0.00%	1	33.33%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2018 Total		6	1.0	5	83.33%	3	60.00%	1	16.67%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2019	LDGV	1	1.0	1	100.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	2	1.0	2	100.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2019 Total		3	1.0	3	100.00%	3	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Overall Total		**60323**	**1.4**	**39472**	**65.43%**	**27527**	**69.74%**	**9704**	**16.09%**	**3660**	**37.72%**	**4881**	**8.09%**	**1510**	**30.94%**	**2,577**	**4.27%**	**735**	**28.52%**	**3689**	**6.12%**	**918**	**24.88%**

Retest Frequency Report Summary by Veh (V1.01)

Vehicle		Avg Retest	Retest #1				Retest #2				Retest #3				Retest #4				Retest >= #5			
Type	Total	#	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt %	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%
LDGV	20893	1.4	14100	67.49%	10112	71.72%	3240	15.51%	1285	39.66%	1554	7.44%	483	31.08%	804	3.85%	207	25.75%	1195	5.72%	293	24.52%
LDGT1	23950	1.4	15730	65.68%	11004	69.96%	3871	16.16%	1464	37.82%	1962	8.19%	657	33.49%	1,021	4.26%	301	29.48%	1366	5.70%	342	25.04%
LDGT2	15480	1.5	9642	62.29%	6411	66.49%	2593	16.75%	911	35.13%	1365	8.82%	370	27.11%	752	4.86%	227	30.19%	1128	7.29%	283	25.09%
Overall Total	**60323**	**1.4**	**39472**	**65.43%**	**27527**	**69.74%**	**9704**	**16.09%**	**3660**	**37.72%**	**4881**	**8.09%**	**1510**	**30.94%**	**2,577**	**4.27%**	**735**	**28.52%**	**3689**	**6.12%**	**918**	**24.88%**

Appendix B7

I/M240 Fleet Characterization Summary Report

Initial Inspection Component

Date
Between 1/1/2023 and 1/1/2024

IM240 Fleet Initial Inspection Report (V1.01)

Vehicle		Overall Initial Exhaust Emissions				Pass Initial Test Exhaust Emissions					Pass or Waived Retest Initial Exhaust Emissions				
Year	Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
1982	LDGV	110	1.8295	21.7091	2.0553	91	82.73%	1.7161	18.2911	1.9289	19	17.27%	2.3730	38.0794	2.6605
	LDGT1	78	2.9890	46.8790	2.4969	52	66.67%	2.2915	32.0588	2.7321	26	33.33%	4.3838	76.5193	2.0265
	LDGT2	14	2.4691	49.4490	1.9764	11	78.57%	1.9956	33.3189	2.3484	3	21.43%	4.2050	108.5928	0.6124
1982 Total		202	2.3216	33.3507	2.2203	154	76.24%	1.9303	24.0133	2.2301	48	23.76%	3.5767	63.3081	2.1891
1983	LDGV	124	1.4277	17.3262	1.8757	101	81.45%	1.2440	12.0924	1.8528	23	18.55%	2.2343	40.3098	1.9759
	LDGT1	118	3.3157	36.6644	2.3860	93	78.81%	2.9205	32.9314	2.2981	25	21.19%	4.7860	50.5511	2.7132
	LDGT2	38	3.5105	46.1110	2.6034	26	68.42%	3.0145	31.9124	2.5717	12	31.58%	4.5852	76.8747	2.6721
1983 Total		280	2.5060	29.3824	2.1895	220	78.57%	2.1620	23.2440	2.1260	60	21.43%	3.7677	51.8900	2.4223
1984	LDGV	231	1.6837	15.2596	1.7415	184	79.65%	1.1870	11.0292	1.7043	47	20.35%	3.6280	31.8208	1.8873
	LDGT1	214	2.3470	34.0639	2.2563	154	71.96%	1.9222	22.6023	2.2725	60	28.04%	3.4371	63.4822	2.2147
	LDGT2	61	2.9599	47.4950	2.6939	37	60.66%	2.2362	29.4902	2.6511	24	39.34%	4.0755	75.2524	2.7598
1984 Total		506	2.1181	27.0985	2.0740	375	74.11%	1.5925	17.6034	2.0311	131	25.89%	3.6225	54.2791	2.1971
1985	LDGV	314	1.4145	15.3940	1.6964	253	80.57%	1.0216	10.6718	1.6833	61	19.43%	3.0437	34.9794	1.7505
	LDGT1	324	2.0903	25.4632	2.6322	247	76.23%	1.6585	17.4442	2.5290	77	23.77%	3.4755	51.1865	2.9631
	LDGT2	67	2.2984	32.8271	2.8380	41	61.19%	1.6778	20.6093	2.7367	26	38.81%	3.2769	52.0935	2.9978
1985 Total		705	1.8091	21.6783	2.2349	541	76.74%	1.3621	14.5170	2.1493	164	23.26%	3.2834	45.3020	2.5176
1986	LDGV	395	1.2433	11.4700	1.7330	324	82.03%	0.8447	7.3331	1.6026	71	17.97%	3.0624	30.3483	2.3280
	LDGT1	432	1.7612	21.0039	2.3984	351	81.25%	1.5633	15.5602	2.3825	81	18.75%	2.6188	44.5929	2.4673
	LDGT2	95	2.0803	27.5607	2.6810	67	70.53%	1.6982	16.9893	2.6018	28	29.47%	2.9947	52.8565	2.8706
1986 Total		922	1.5722	17.5950	2.1424	742	80.48%	1.2617	12.0969	2.0617	180	19.52%	2.8523	40.2597	2.4751
1987	LDGV	429	1.0872	10.2590	1.5650	370	86.25%	0.7920	7.1107	1.5250	59	13.75%	2.9386	30.0025	1.8159
	LDGT1	486	1.5841	19.1195	2.2424	408	83.95%	1.3249	14.2628	2.2050	78	16.05%	2.9397	44.5235	2.4380
	LDGT2	137	2.0216	16.1513	2.7021	116	84.67%	1.8517	13.1879	2.6842	21	15.33%	2.9600	32.5208	2.8008
1987 Total		1052	1.4384	15.1197	2.0260	894	84.98%	1.1727	11.1633	1.9858	158	15.02%	2.9420	37.5058	2.2539
1988	LDGV	428	1.0112	10.2420	1.4177	355	82.94%	0.6245	7.3653	1.2949	73	17.06%	2.8917	24.2318	2.0152
	LDGT1	531	1.5030	14.4454	2.1223	433	81.54%	1.2843	11.3287	1.9862	98	18.46%	2.4693	28.2159	2.7237
	LDGT2	195	1.7288	17.4742	2.4596	160	82.05%	1.4777	11.7523	2.3807	35	17.95%	2.8767	43.6317	2.8204
1988 Total		1154	1.3587	13.3982	1.9180	948	82.15%	1.0698	9.9160	1.7939	206	17.85%	2.6882	29.4233	2.4890
1989	LDGV	625	0.8884	9.7669	1.4003	523	83.68%	0.6146	7.0713	1.3076	102	16.32%	2.2922	23.5886	1.8760
	LDGT1	827	1.4110	15.6927	1.9572	702	84.89%	1.1366	11.8543	1.8637	125	15.11%	2.9524	37.2492	2.4824
	LDGT2	291	1.7046	13.6169	2.6785	249	85.57%	1.4644	11.4023	2.6249	42	14.43%	3.1291	26.7460	2.9963
1989 Total		1743	1.2727	13.2213	1.8780	1474	84.57%	1.0068	10.0809	1.7950	269	15.43%	2.7297	30.4294	2.3327
1990	LDGV	827	0.7882	8.8092	1.4092	712	86.09%	0.5907	6.8023	1.3160	115	13.91%	2.0114	21.2343	1.9868
	LDGT1	759	1.3437	14.0670	2.0497	632	83.27%	1.0574	10.1343	1.9593	127	16.73%	2.7684	33.6376	2.4995
	LDGT2	325	1.6215	14.6227	2.4671	261	80.31%	1.3312	12.4756	2.3001	64	19.69%	2.8057	23.3792	3.1480
1990 Total		1911	1.1506	11.8861	1.8435	1605	83.99%	0.8949	9.0369	1.7293	306	16.01%	2.4917	26.8307	2.4425
1991	LDGV	1207	0.6657	7.9754	1.3385	1043	86.41%	0.5018	6.0154	1.2569	164	13.59%	1.7084	20.4409	1.8574
	LDGT1	1174	1.0592	12.2886	1.7035	1007	85.78%	0.8727	9.7129	1.6105	167	14.22%	2.1838	27.8204	2.2646
	LDGT2	373	1.4571	15.7154	2.3750	290	77.75%	1.1152	13.4800	2.1852	83	22.25%	2.6517	23.5257	3.0381
1991 Total		2754	0.9407	10.8624	1.6345	2340	84.97%	0.7374	8.5317	1.5241	414	15.03%	2.0893	24.0361	2.2584

Vehicle		Overall Initial Exhaust Emissions				Pass Initial Test Exhaust Emissions					Pass or Waived Retest Initial Exhaust Emissions				
Year	Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
1992	LDGV	1108	0.6028	6.7021	1.3394	974	87.91%	0.4854	5.4907	1.2403	134	12.09%	1.4559	15.5075	2.0591
	LDGT1	1000	1.0156	10.8053	1.6748	857	85.70%	0.8374	9.1646	1.5585	143	14.30%	2.0840	20.6378	2.3718
	LDGT2	580	1.5221	14.6714	2.2687	460	79.31%	1.2060	12.4404	2.1509	120	20.69%	2.7339	23.2237	2.7205
1992 Total		2688	0.9547	9.9482	1.6647	2291	85.23%	0.7618	8.2604	1.5422	397	14.77%	2.0684	19.6878	2.3717
1993	LDGV	1453	0.6145	6.7849	1.2963	1279	88.02%	0.4560	5.1674	1.2333	174	11.98%	1.7798	18.6744	1.7597
	LDGT1	1635	1.0169	10.9253	1.8114	1429	87.40%	0.8246	8.8803	1.7113	206	12.60%	2.3504	25.1110	2.5056
	LDGT2	713	1.5334	16.2485	2.2440	549	77.00%	1.1923	12.5992	2.1019	164	23.00%	2.6752	28.4650	2.7199
1993 Total		3801	0.9600	10.3411	1.6957	3257	85.69%	0.7419	8.0491	1.5894	544	14.31%	2.2658	24.0633	2.3316
1994	LDGV	1587	0.4851	5.6466	1.0045	1364	85.95%	0.3524	4.4048	0.9012	223	14.05%	1.2965	13.2423	1.6365
	LDGT1	1944	0.8785	9.4666	1.7175	1680	86.42%	0.7543	7.6404	1.6493	264	13.58%	1.6686	21.0881	2.1514
	LDGT2	1263	1.1537	12.3893	2.0668	1043	82.58%	0.9444	10.1446	1.9655	220	17.42%	2.1457	23.0311	2.5468
1994 Total		4794	0.8207	8.9720	1.5735	4087	85.25%	0.6687	7.1996	1.4803	707	14.75%	1.6997	19.2180	2.1120
1995	LDGV	2389	0.4345	5.1724	0.9246	2102	87.99%	0.3347	4.1125	0.8485	287	12.01%	1.1654	12.9352	1.4819
	LDGT1	2372	0.8550	9.2139	1.7925	2069	87.23%	0.7260	7.4786	1.7055	303	12.77%	1.7357	21.0629	2.3861
	LDGT2	1797	1.1205	12.0456	2.0355	1487	82.75%	0.9022	9.8414	1.9342	310	17.25%	2.1679	22.6189	2.5213
1995 Total		6558	0.7746	8.5176	1.5429	5658	86.28%	0.6269	6.8490	1.4472	900	13.72%	1.7027	19.0070	2.1443
1996	LDGV	2467	0.3040	4.1435	0.7108	2202	89.26%	0.2363	3.2228	0.6508	265	10.74%	0.8673	11.7944	1.2096
	LDGT1	2507	0.4101	5.6775	1.1989	2163	86.28%	0.3442	4.8478	1.0650	344	13.72%	0.8248	10.8945	2.0412
	LDGT2	1547	0.5009	6.3612	1.2229	1293	83.58%	0.4117	5.3795	1.0891	254	16.42%	0.9549	11.3588	1.9039
1996 Total		6521	0.3915	5.2594	1.0199	5658	86.77%	0.3176	4.3369	0.9093	863	13.23%	0.8761	11.3075	1.7455
1997	LDGV	3682	0.3130	4.1378	0.6738	3282	89.14%	0.2516	3.4271	0.6177	400	10.86%	0.8168	9.9690	1.1338
	LDGT1	4494	0.4084	5.6960	1.1768	3936	87.58%	0.3419	4.6196	1.0661	558	12.42%	0.8771	13.2892	1.9576
	LDGT2	2026	0.4408	6.1465	1.1950	1752	86.48%	0.3467	4.7491	1.0727	274	13.52%	1.0428	15.0815	1.9766
1997 Total		10202	0.3804	5.2231	0.9989	8970	87.92%	0.3098	4.2086	0.9033	1232	12.08%	0.8944	12.6098	1.6943
1998	LDGV	4263	0.2859	4.0168	0.6392	3768	88.39%	0.2282	3.2876	0.5976	495	11.61%	0.7253	9.5673	0.9559
	LDGT1	5113	0.3317	4.8589	0.9925	4554	89.07%	0.2818	4.1361	0.8960	559	10.93%	0.7376	10.7473	1.7787
	LDGT2	2068	0.3859	4.6143	1.0840	1819	87.96%	0.2542	3.5078	0.9684	249	12.04%	1.3484	12.6977	1.9287
1998 Total		11444	0.3244	4.5010	0.8774	10141	88.61%	0.2569	3.7081	0.7981	1303	11.39%	0.8497	10.6717	1.4948
1999	LDGV	5887	0.2573	3.4948	0.6170	5362	91.08%	0.2120	3.0184	0.5682	525	8.92%	0.7196	8.3597	1.1151
	LDGT1	6446	0.2512	4.1606	0.7759	5668	87.93%	0.2001	3.2932	0.6398	778	12.07%	0.6235	10.4802	1.7668
	LDGT2	3298	0.2758	3.2493	0.8306	2792	84.66%	0.1891	2.2490	0.6796	506	15.34%	0.7541	8.7687	1.6639
1999 Total		15631	0.2587	3.7176	0.7276	13822	88.43%	0.2025	2.9757	0.6201	1809	11.57%	0.6879	9.3861	1.5489
2000	LDGV	6858	0.2232	3.2950	0.5089	6187	90.22%	0.1533	2.6017	0.4382	671	9.78%	0.8679	9.6875	1.1607
	LDGT1	7009	0.2487	3.5243	0.6933	6158	87.86%	0.1835	2.6721	0.5703	851	12.14%	0.7198	9.6909	1.5840
	LDGT2	3241	0.2608	3.4882	0.6959	2827	87.23%	0.1773	2.5235	0.5826	414	12.77%	0.8308	10.0752	1.4690
2000 Total		17108	0.2408	3.4255	0.6199	15172	88.68%	0.1700	2.6157	0.5187	1936	11.32%	0.7949	9.7719	1.4127
2001	LDGV	8714	0.1668	2.7506	0.3946	8015	91.98%	0.1211	2.3587	0.3428	699	8.02%	0.6909	7.2435	0.9886
	LDGT1	8616	0.1760	3.3555	0.5199	7801	90.54%	0.1459	2.7760	0.4460	815	9.46%	0.4640	8.9024	1.2272
	LDGT2	4467	0.2334	2.9439	0.6197	3978	89.05%	0.1803	2.3161	0.5143	489	10.95%	0.6655	8.0508	1.4769
2001 Total		21797	0.1841	3.0293	0.4903	19794	90.81%	0.1428	2.5146	0.4180	2003	9.19%	0.5924	8.1156	1.2049
2002	LDGV	9259	0.1594	3.3644	0.3841	8414	90.87%	0.1170	2.8716	0.3146	845	9.13%	0.5819	8.2716	1.0770
	LDGT1	9180	0.1711	3.9259	0.4884	8257	89.95%	0.1340	3.1941	0.4032	923	10.05%	0.5026	10.4725	1.2504
	LDGT2	4008	0.2074	2.6301	0.6371	3541	88.35%	0.1621	2.0986	0.5319	467	11.65%	0.5514	6.6601	1.4353

Vehicle		Overall Initial Exhaust Emissions				Pass Initial Test Exhaust Emissions					Pass or Waived Retest Initial Exhaust Emissions				
Year	Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
2002 Total		22447	0.1728	3.4629	0.4720	20212	90.04%	0.1319	2.8679	0.3889	2235	9.96%	0.5428	8.8438	1.2235
2003	LDGV	11656	0.1250	2.1704	0.3158	10783	92.51%	0.0876	1.7619	0.2688	873	7.49%	0.5862	7.2161	0.8958
	LDGT1	11849	0.1455	2.8007	0.4217	10815	91.27%	0.1150	2.1392	0.3478	1034	8.73%	0.4652	9.7197	1.1947
	LDGT2	5293	0.1738	2.3967	0.4567	4807	90.82%	0.1402	1.8737	0.3841	486	9.18%	0.5069	7.5700	1.1749
2003 Total		28798	0.1424	2.4714	0.3853	26405	91.69%	0.1084	1.9368	0.3221	2393	8.31%	0.5178	8.3698	1.0817
2004	LDGV	11182	0.1118	2.0400	0.2737	10378	92.81%	0.0830	1.6582	0.2263	804	7.19%	0.4845	6.9686	0.8862
	LDGT1	12812	0.1327	2.5886	0.3163	11719	91.47%	0.0996	1.9782	0.2521	1093	8.53%	0.4879	9.1339	1.0040
	LDGT2	5902	0.1486	2.4721	0.3523	5387	91.27%	0.1126	1.8878	0.2721	515	8.73%	0.5255	8.5842	1.1911
2004 Total		29896	0.1280	2.3604	0.3075	27484	91.93%	0.0959	1.8397	0.2463	2412	8.07%	0.4948	8.2947	1.0047
2005	LDGV	15344	0.0842	1.5300	0.2156	14322	93.34%	0.0640	1.2976	0.1760	1022	6.66%	0.3680	4.7861	0.7702
	LDGT1	16667	0.1059	1.9718	0.2052	15756	94.53%	0.0875	1.5469	0.1655	911	5.47%	0.4242	9.3205	0.8913
	LDGT2	5706	0.1463	2.1827	0.3019	5255	92.10%	0.1171	1.6948	0.2325	451	7.90%	0.4869	7.8667	1.1108
2005 Total		37717	0.1032	1.8239	0.2240	35333	93.68%	0.0824	1.4678	0.1797	2384	6.32%	0.4119	7.1016	0.8809
2006	LDGV	15039	0.0856	1.8176	0.1759	14357	95.47%	0.0668	1.5865	0.1470	682	4.53%	0.4817	6.6828	0.7846
	LDGT1	14289	0.0870	2.0242	0.2132	13578	95.02%	0.0722	1.7227	0.1771	711	4.98%	0.3695	7.7802	0.9035
	LDGT2	6182	0.1277	1.8111	0.2367	5746	92.95%	0.0934	1.4096	0.1707	436	7.05%	0.5796	7.1016	1.1065
2006 Total		35510	0.0935	1.8996	0.2015	33681	94.85%	0.0735	1.6113	0.1632	1829	5.15%	0.4614	7.2092	0.9075
2007	LDGV	18490	0.0719	1.6413	0.1519	17840	96.48%	0.0586	1.4345	0.1281	650	3.52%	0.4372	7.3158	0.8074
	LDGT1	19147	0.0590	1.6580	0.1598	18276	95.45%	0.0508	1.4175	0.1271	871	4.55%	0.2304	6.7042	0.8465
	LDGT2	7117	0.1142	1.5658	0.1672	6708	94.25%	0.0753	1.1339	0.1263	409	5.75%	0.7522	8.6503	0.8372
2007 Total		44754	0.0731	1.6364	0.1577	42824	95.69%	0.0579	1.3802	0.1274	1930	4.31%	0.4106	7.3226	0.8314
2008	LDGV	15884	0.0764	1.7977	0.1464	15234	95.91%	0.0594	1.5502	0.1221	650	4.09%	0.4747	7.6000	0.7164
	LDGT1	17188	0.0592	1.6460	0.1573	16478	95.87%	0.0508	1.4135	0.1288	710	4.13%	0.2541	7.0418	0.8168
	LDGT2	6497	0.0835	1.8197	0.1508	6054	93.18%	0.0718	1.5136	0.1178	443	6.82%	0.2431	6.0035	0.6018
2008 Total		39569	0.0701	1.7354	0.1519	37766	95.44%	0.0576	1.4847	0.1244	1803	4.56%	0.3310	6.9879	0.7278
2009	LDGV	12509	0.0731	1.8116	0.1428	12064	96.44%	0.0593	1.6108	0.1256	445	3.56%	0.4474	7.2537	0.6093
	LDGT1	9658	0.0629	1.8491	0.1585	9317	96.47%	0.0532	1.6621	0.1328	341	3.53%	0.3297	6.9593	0.8594
	LDGT2	3804	0.0868	1.7044	0.1553	3563	93.66%	0.0707	1.4175	0.1287	241	6.34%	0.3245	5.9464	0.5485
2009 Total		25971	0.0713	1.8098	0.1505	24944	96.05%	0.0586	1.6023	0.1288	1027	3.95%	0.3795	6.8492	0.6781
2010	LDGV	17540	0.0598	1.6653	0.1144	17035	97.12%	0.0507	1.5480	0.1024	505	2.88%	0.3683	5.6233	0.5179
	LDGT1	18217	0.0471	1.3925	0.1153	17718	97.26%	0.0450	1.3367	0.1060	499	2.74%	0.1229	3.3753	0.4439
	LDGT2	7101	0.0663	1.5134	0.1207	6795	95.69%	0.0588	1.3221	0.1056	306	4.31%	0.2325	5.7604	0.4569
2010 Total		42858	0.0555	1.5242	0.1158	41548	96.94%	0.0496	1.4209	0.1045	1310	3.06%	0.2431	4.7991	0.4755
2011	LDGV	13270	0.0677	1.8736	0.1249	12838	96.74%	0.0552	1.7144	0.1041	432	3.26%	0.4396	6.6059	0.7429
	LDGT1	15890	0.0515	1.7115	0.1175	15482	97.43%	0.0480	1.5829	0.1104	408	2.57%	0.1829	6.5888	0.3879
	LDGT2	7144	0.0664	1.4058	0.1063	6705	93.85%	0.0577	1.2524	0.0970	439	6.15%	0.1995	3.7486	0.2474
2011 Total		36304	0.0604	1.7106	0.1180	35025	96.48%	0.0525	1.5678	0.1055	1279	3.52%	0.2753	5.6197	0.4596
2012	LDGV	23518	0.0536	1.6621	0.0964	22821	97.04%	0.0466	1.5695	0.0876	697	2.96%	0.2852	4.6938	0.3870
	LDGT1	22989	0.0469	1.7228	0.0999	22411	97.49%	0.0431	1.6329	0.0943	578	2.51%	0.1942	5.2059	0.3173
	LDGT2	10206	0.0572	1.2374	0.0973	9590	93.96%	0.0516	1.1516	0.0915	616	6.04%	0.1435	2.5735	0.1870
2012 Total		56713	0.0516	1.6103	0.0980	54822	96.67%	0.0461	1.5223	0.0910	1891	3.33%	0.2112	4.1596	0.3006
2013	LDGV	1905	0.0783	2.1576	0.1410	1814	95.22%	0.0561	1.9073	0.1042	91	4.78%	0.5204	7.1478	0.8739
	LDGT1	1268	0.0671	2.5973	0.1391	1218	96.06%	0.0570	2.2206	0.1165	50	3.94%	0.3135	11.7738	0.6890

Vehicle		Overall Initial Exhaust Emissions				Pass Initial Test Exhaust Emissions					Pass or Waived Retest Initial Exhaust Emissions				
Year	Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
	LDGT2	964	0.0864	1.8028	0.1678	887	92.01%	0.0676	1.5097	0.1253	77	7.99%	0.3038	5.1793	0.6572
2013 Total		4137	0.0768	2.2097	0.1467	3919	94.73%	0.0590	1.9147	0.1128	218	5.27%	0.3965	7.5135	0.7550
2014	LDGV	1865	0.0899	2.2928	0.1309	1797	96.35%	0.0466	1.7599	0.0883	68	3.65%	1.2321	16.3767	1.2585
	LDGT1	1670	0.0461	1.9158	0.0950	1629	97.54%	0.0416	1.8074	0.0844	41	2.46%	0.2226	6.2244	0.5150
	LDGT2	1301	0.0701	1.5059	0.1101	1240	95.31%	0.0619	1.3898	0.0866	61	4.69%	0.2362	3.8671	0.5873
2014 Total		4836	0.0694	1.9509	0.1129	4666	96.48%	0.0490	1.6781	0.0865	170	3.52%	0.6313	9.4395	0.8383
2015	LDGV	1277	0.0834	2.2266	0.1590	1203	94.21%	0.0494	1.7261	0.0889	74	5.79%	0.6363	10.3622	1.2977
	LDGT1	1238	0.0458	1.7479	0.1102	1193	96.37%	0.0375	1.5409	0.0846	45	3.63%	0.2661	7.2356	0.7868
	LDGT2	677	0.0890	1.6570	0.1090	653	96.45%	0.0791	1.5235	0.0836	24	3.55%	0.3604	5.2903	0.8004
2015 Total		3192	0.0700	1.9201	0.1294	3049	95.52%	0.0511	1.6103	0.0861	143	4.48%	0.4735	8.5271	1.0534
2016	LDGV	1682	0.0804	1.9607	0.1310	1595	94.83%	0.0405	1.4306	0.0758	87	5.17%	0.8101	11.6784	1.1416
	LDGT1	2190	0.0316	1.4226	0.0674	2126	97.08%	0.0303	1.2796	0.0650	64	2.92%	0.0733	6.1729	0.1478
	LDGT2	1024	0.0850	1.5623	0.1071	991	96.78%	0.0792	1.3746	0.0917	33	3.22%	0.2582	7.2017	0.5690
2016 Total		4896	0.0595	1.6367	0.0975	4712	96.24%	0.0441	1.3507	0.0743	184	3.76%	0.4549	8.9605	0.6932
2017	LDGV	354	0.1212	1.6282	0.0863	347	98.02%	0.0477	1.6019	0.0831	7	1.98%	3.7659	2.9351	0.2444
	LDGT1	324	0.0365	1.4332	0.0627	318	98.15%	0.0365	1.3867	0.0622	6	1.85%	0.0341	3.8957	0.0897
	LDGT2	201	0.0716	1.2184	0.0837	197	98.01%	0.0650	1.2056	0.0753	4	1.99%	0.3955	1.8460	0.4947
2017 Total		879	0.0786	1.4626	0.0770	862	98.07%	0.0475	1.4319	0.0736	17	1.93%	1.6558	3.0179	0.2487
2018	LDGV	59	0.0868	1.4718	0.0742	58	98.31%	0.0419	1.4641	0.0753	1	1.69%	2.6950	1.9175	0.0091
	LDGT1	98	0.0592	1.4334	0.1332	96	97.96%	0.0321	1.0800	0.0647	2	2.04%	1.3585	18.3974	3.4219
	LDGT2	45	0.0662	1.0736	0.0473	45	100.00%	0.0662	1.0736	0.0473	0	0.00%	0.0000	0.0000	0.0000
2018 Total		202	0.0688	1.3645	0.0968	199	98.51%	0.0427	1.1905	0.0639	3	1.49%	1.8040	12.9041	2.2843
2019	LDGV	26	0.0437	1.1881	0.1239	25	96.15%	0.0172	0.6867	0.0471	1	3.85%	0.7068	13.7224	2.0448
	LDGT1	37	0.0227	0.8187	0.0433	35	94.59%	0.0230	0.8249	0.0433	2	5.41%	0.0171	0.7101	0.0449
	LDGT2	7	0.0643	1.1194	0.0424	7	100.00%	0.0643	1.1194	0.0424	0	0.00%	0.0000	0.0000	0.0000
2019 Total		70	0.0346	0.9860	0.0732	67	95.71%	0.0251	0.8041	0.0446	3	4.29%	0.2470	5.0475	0.7115
2020	LDGV	16	0.0198	0.9755	0.0624	16	100.00%	0.0198	0.9755	0.0624	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	6	0.0224	0.6780	0.0409	6	100.00%	0.0224	0.6780	0.0409	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	4	0.1453	1.8599	0.0454	4	100.00%	0.1453	1.8599	0.0454	0	0.00%	0.0000	0.0000	0.0000
2020 Total		26	0.0397	1.0429	0.0548	26	100.00%	0.0397	1.0429	0.0548	0	0.00%	0.0000	0.0000	0.0000
2021	LDGV	13	0.0220	0.5104	0.0440	13	100.00%	0.0220	0.5104	0.0440	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	5	0.0365	1.0012	0.0869	5	100.00%	0.0365	1.0012	0.0869	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	1	0.0271	0.5512	0.0361	1	100.00%	0.0271	0.5512	0.0361	0	0.00%	0.0000	0.0000	0.0000
2021 Total		19	0.0261	0.6417	0.0549	19	100.00%	0.0261	0.6417	0.0549	0	0.00%	0.0000	0.0000	0.0000
2022	LDGV	4	0.0158	0.5742	0.0414	4	100.00%	0.0158	0.5742	0.0414	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	2	0.0195	0.5266	0.0406	2	100.00%	0.0195	0.5266	0.0406	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	1	0.0178	0.2534	0.0361	1	100.00%	0.0178	0.2534	0.0361	0	0.00%	0.0000	0.0000	0.0000
2022 Total		7	0.0172	0.5148	0.0404	7	100.00%	0.0172	0.5148	0.0404	0	0.00%	0.0000	0.0000	0.0000
2023	LDGT2	2	0.0236	0.6476	0.0366	2	100.00%	0.0236	0.6476	0.0366	0	0.00%	0.0000	0.0000	0.0000
2023 Total		2	0.0236	0.6476	0.0366	2	100.00%	0.0236	0.6476	0.0366	0	0.00%	0.0000	0.0000	0.0000
2024	LDGV	1	0.0109	0.3316	0.0412	1	100.00%	0.0109	0.3316	0.0412	0	0.00%	0.0000	0.0000	0.0000
2024 Total		1	0.0109	0.3316	0.0412	1	100.00%	0.0109	0.3316	0.0412	0	0.00%	0.0000	0.0000	0.0000
Grand Total		**530577**	**0.1664**	**2.7362**	**0.3578**	**495716**	**93.43%**	**0.1262**	**2.2014**	**0.2999**	**34861**	**6.57%**	**0.7380**	**10.3401**	**1.1817**

IM240 Fleet Initial Inspection Report - Summary by Veh (V1.01)

Vehicle	Overall Initial Exhaust Emissions				Pass Initial Test Exhaust Emissions					Pass or Waived Retest Initial Exhaust Emissions				
Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
LDGV	213991	0.1385	2.4188	0.2887	201450	94.14%	0.1023	2.0095	0.2456	12541	5.86%	0.7200	8.9929	0.9820
LDGT1	220803	0.1686	2.9362	0.3822	206829	93.67%	0.1326	2.3549	0.3209	13974	6.33%	0.7013	11.5407	1.2899
LDGT2	95783	0.2234	2.9840	0.4559	87437	91.29%	0.1658	2.2806	0.3753	8346	8.71%	0.8265	10.3540	1.3009
Grand Total	**530577**	**0.1664**	**2.7362**	**0.3578**	**495716**	**93.43%**	**0.1262**	**2.2014**	**0.2999**	**34861**	**6.57%**	**0.7380**	**10.3401**	**1.1817**

Appendix B8

I/M240 Fleet Characterization Summary Report

Final Inspection Component

Date
Between 1/1/2023 and 1/1/2024

IM240 Fleet Final Inspection Report (V1.01)

Vehicle		Overall Final Exhaust Emissions				Pass Retest Exhaust Emissions					Waived Exhaust Emissions				
Year	Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
1982	LDGV	110	1.6572	18.2895	1.9640	19	17.27%	1.3753	18.2819	2.1319	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	78	2.4276	34.0280	2.5573	26	33.33%	2.6999	37.9665	2.2076	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	14	2.3055	33.9960	2.1973	3	21.43%	3.4415	36.4786	1.6434	0	0.00%	0.0000	0.0000	0.0000
1982 Total		202	1.9996	25.4553	2.2092	48	23.76%	2.2219	30.0816	2.1424	0	0.00%	0.0000	0.0000	0.0000
1983	LDGV	124	1.2946	12.2738	1.8916	23	18.55%	1.5165	13.0706	2.0617	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	118	2.8027	32.8036	2.3354	24	20.34%	2.3385	30.0922	2.4925	1	0.85%	2.9824	85.9902	2.0369
	LDGT2	38	2.9509	33.4412	2.7218	12	31.58%	2.8130	36.7536	3.0471	0	0.00%	0.0000	0.0000	0.0000
1983 Total		280	2.1549	23.7984	2.1913	59	21.07%	2.1146	24.8115	2.4374	1	0.36%	2.9824	85.9902	2.0369
1984	LDGV	231	1.2282	12.0902	1.6665	45	19.48%	1.2447	14.8432	1.5257	2	0.87%	4.6458	47.7551	1.3562
	LDGT1	214	2.0753	25.0720	2.2991	56	26.17%	2.3593	26.7519	2.3824	4	1.87%	3.9898	96.6382	2.1538
	LDGT2	61	2.2727	31.2801	2.6723	21	34.43%	2.0090	25.2180	2.5503	3	4.92%	4.5680	95.7910	3.7870
1984 Total		506	1.7124	19.8939	2.0553	122	24.11%	1.8879	22.0953	2.0953	9	1.78%	4.3283	85.4929	2.5209
1985	LDGV	314	1.0724	11.0558	1.6765	57	18.15%	1.1933	9.5088	1.7107	4	1.27%	2.5611	57.3898	0.7547
	LDGT1	324	1.8046	19.4780	2.5200	74	22.84%	2.0679	20.7619	2.5654	3	0.93%	7.3421	155.2580	0.6601
	LDGT2	67	1.6682	21.4260	2.7575	25	37.31%	1.6328	19.8942	2.8208	1	1.49%	2.1595	93.2070	2.0277
1985 Total		705	1.4655	15.9120	2.1669	156	22.13%	1.6786	16.5112	2.2941	8	1.13%	4.3037	98.5675	0.8783
1986	LDGV	395	0.9100	7.5852	1.6331	67	16.96%	1.0434	8.6705	1.6902	4	1.01%	3.9658	9.8185	3.1505
	LDGT1	432	1.5974	16.7917	2.3560	80	18.52%	1.7436	21.7835	2.2661	1	0.23%	1.8835	49.7024	0.2670
	LDGT2	95	1.7400	17.9372	2.5831	26	27.37%	1.5084	21.2644	2.3956	2	2.11%	6.1516	6.4372	4.3930
1986 Total		922	1.3176	12.9655	2.0697	173	18.76%	1.4371	16.6270	2.0625	7	0.76%	4.2929	14.5501	3.0935
1987	LDGV	429	0.8097	7.2810	1.4883	58	13.52%	0.8798	8.2513	1.2097	1	0.23%	3.3210	14.0043	4.0672
	LDGT1	486	1.3528	14.4886	2.2339	78	16.05%	1.4986	15.6698	2.3850	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	137	1.8392	13.5531	2.6898	21	15.33%	1.7703	15.5707	2.7207	0	0.00%	0.0000	0.0000	0.0000
1987 Total		1052	1.1947	11.4276	1.9892	157	14.92%	1.3064	12.9159	1.9957	1	0.10%	3.3210	14.0043	4.0672
1988	LDGV	428	0.7229	8.0653	1.3156	69	16.12%	0.7841	7.1565	1.3764	4	0.93%	8.4035	85.8664	2.1089
	LDGT1	531	1.2813	11.3362	2.0056	97	18.27%	1.2736	10.9399	2.1130	1	0.19%	0.7432	53.0241	0.0221
	LDGT2	195	1.4944	12.2114	2.4266	34	17.44%	1.5354	12.9464	2.6043	1	0.51%	2.7815	60.6785	3.7210
1988 Total		1154	1.1102	10.2710	1.8209	200	17.33%	1.1492	9.9758	1.9424	6	0.52%	6.1898	76.1947	2.0298
1989	LDGV	625	0.6309	7.2406	1.3234	99	15.84%	0.6898	7.4450	1.3995	3	0.48%	1.5291	30.0024	1.5712
	LDGT1	827	1.1557	12.0560	1.9086	121	14.63%	1.2111	11.7631	2.1602	4	0.48%	2.8240	56.3093	2.1866
	LDGT2	291	1.4518	11.2901	2.6121	41	14.09%	1.3787	10.7821	2.4689	1	0.34%	1.3199	4.1583	5.2965
1989 Total		1743	1.0169	10.2014	1.8162	261	14.97%	1.0397	9.9711	1.9201	8	0.46%	2.1504	39.9253	2.3446
1990	LDGV	827	0.6114	6.7746	1.3323	113	13.66%	0.6936	6.5256	1.4352	2	0.24%	3.3535	10.9911	1.3468
	LDGT1	759	1.0935	10.4935	1.9427	123	16.21%	1.1959	11.1505	1.8718	4	0.53%	3.6382	47.0437	1.4939
	LDGT2	325	1.3140	12.1344	2.3272	64	19.69%	1.2440	10.7432	2.4374	0	0.00%	0.0000	0.0000	0.0000
1990 Total		1911	0.9224	9.1632	1.7439	300	15.70%	1.0169	9.3216	1.8280	6	0.31%	3.5433	35.0261	1.4448
1991	LDGV	1207	0.5347	6.2356	1.2607	159	13.17%	0.5859	6.1609	1.2778	5	0.41%	5.7682	54.5505	1.4890
	LDGT1	1174	0.8910	9.8993	1.6216	163	13.88%	0.9693	10.7805	1.6531	4	0.34%	2.2966	20.9052	3.1462
	LDGT2	373	1.1347	13.3511	2.1902	82	21.98%	1.1924	12.0504	2.2311	1	0.27%	2.0385	82.6528	0.2815
1991 Total		2754	0.7678	8.7611	1.5404	404	14.67%	0.8637	9.2202	1.6227	10	0.36%	4.0066	43.9026	2.0311

Vehicle		Overall Final Exhaust Emissions				Pass Retest Exhaust Emissions					Waived Exhaust Emissions				
Year	Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
1992	LDGV	1108	0.4963	5.5369	1.2717	131	11.82%	0.5783	5.8656	1.4561	3	0.27%	0.4567	6.1899	3.3974
	LDGT1	1000	0.8535	9.0382	1.5718	141	14.10%	0.9242	8.0803	1.6201	2	0.20%	2.7665	22.3876	3.8478
	LDGT2	580	1.2062	12.5224	2.0926	117	20.17%	1.1700	11.9233	1.8921	3	0.52%	2.6520	48.4492	0.9730
1992 Total		2688	0.7824	8.3467	1.5604	389	14.47%	0.8816	8.4904	1.6467	8	0.30%	1.8574	26.0866	2.6009
1993	LDGV	1453	0.4761	5.4625	1.2447	168	11.56%	0.5571	5.8402	1.3041	6	0.41%	2.4857	57.7931	2.0277
	LDGT1	1635	0.8377	8.9734	1.7284	204	12.48%	0.8958	9.1569	1.8365	2	0.12%	4.2503	56.7994	2.9290
	LDGT2	713	1.2027	12.5671	2.0964	155	21.74%	1.1386	11.3476	1.9590	9	1.26%	2.9424	31.6097	4.1233
1993 Total		3801	0.7679	8.3054	1.6125	527	13.86%	0.8592	8.7439	1.7028	17	0.45%	2.9351	43.8144	3.2432
1994	LDGV	1587	0.3760	4.4458	0.9294	216	13.61%	0.4183	4.7032	1.0680	7	0.44%	3.6650	4.5018	2.1622
	LDGT1	1944	0.7689	7.8747	1.6464	255	13.12%	0.8394	8.4554	1.6237	9	0.46%	1.4913	35.1569	1.7551
	LDGT2	1263	0.9671	10.2380	1.9828	211	16.71%	1.0096	9.9781	1.9956	9	0.71%	2.5996	27.1512	3.6878
1994 Total		4794	0.6910	7.3622	1.4977	682	14.23%	0.7587	7.7381	1.5628	25	0.52%	2.4989	23.6914	2.5649
1995	LDGV	2389	0.3472	4.2033	0.8587	280	11.72%	0.4059	4.7760	0.9262	7	0.29%	1.7569	8.5638	1.2273
	LDGT1	2372	0.7321	7.5634	1.7238	299	12.61%	0.7651	7.9329	1.8239	4	0.17%	1.3951	23.7680	3.6963
	LDGT2	1797	0.9295	9.9693	1.9377	299	16.64%	0.9644	10.1444	1.8791	11	0.61%	3.6736	22.4960	3.9929
1995 Total		6558	0.6460	6.9986	1.4673	878	13.39%	0.7184	7.6793	1.5564	22	0.34%	2.6495	18.2943	3.0590
1996	LDGV	2467	0.2444	3.3076	0.6632	263	10.66%	0.3094	3.9627	0.7568	2	0.08%	0.6657	10.5030	2.0007
	LDGT1	2507	0.3502	4.9117	1.0961	338	13.48%	0.3800	5.1935	1.2493	6	0.24%	0.8649	12.0773	3.6991
	LDGT2	1547	0.4179	5.4351	1.1071	249	16.10%	0.4306	5.5576	1.1660	5	0.32%	1.3820	13.7267	2.8255
1996 Total		6521	0.3262	4.4290	0.9349	850	13.03%	0.3730	4.9193	1.0725	13	0.20%	1.0332	12.4694	3.1018
1997	LDGV	3682	0.2578	3.5079	0.6282	390	10.59%	0.2921	4.0100	0.6806	10	0.27%	0.9459	10.4462	2.0079
	LDGT1	4494	0.3484	4.7411	1.0915	546	12.15%	0.3806	5.3334	1.2304	12	0.27%	1.0002	17.6585	3.0944
	LDGT2	2026	0.3566	4.8879	1.0973	269	13.28%	0.4085	5.6155	1.2260	5	0.25%	1.0367	14.3626	2.7778
1997 Total		10202	0.3173	4.3252	0.9254	1205	11.81%	0.3582	4.9680	1.0515	27	0.26%	0.9868	14.3769	2.6333
1998	LDGV	4263	0.2342	3.3606	0.6090	483	11.33%	0.2616	3.8160	0.6676	12	0.28%	1.0183	7.9407	1.8226
	LDGT1	5113	0.2867	4.1627	0.9147	552	10.80%	0.3206	4.3276	1.0364	7	0.14%	0.7715	8.4358	3.4837
	LDGT2	2068	0.2694	3.6613	0.9909	241	11.65%	0.3514	4.1837	1.1045	8	0.39%	1.2528	22.8277	2.6872
1998 Total		11444	0.2640	3.7733	0.8146	1276	11.15%	0.3041	4.1067	0.9097	27	0.24%	1.0238	12.4800	2.5094
1999	LDGV	5887	0.2149	3.0790	0.5760	518	8.80%	0.2433	3.5732	0.6392	7	0.12%	0.3513	12.9158	1.8472
	LDGT1	6446	0.2050	3.3155	0.6613	762	11.82%	0.2343	3.3643	0.7741	16	0.25%	0.5487	8.9008	2.8883
	LDGT2	3298	0.2049	2.4266	0.7063	492	14.92%	0.2675	3.2651	0.8053	14	0.42%	1.1508	8.3562	2.5378
1999 Total		15631	0.2087	3.0389	0.6387	1772	11.34%	0.2461	3.3978	0.7433	37	0.24%	0.7392	9.4543	2.5587
2000	LDGV	6858	0.1590	2.7008	0.4532	665	9.70%	0.2065	3.4818	0.5852	6	0.09%	0.7164	18.3403	1.3429
	LDGT1	7009	0.1891	2.7919	0.5987	823	11.74%	0.2106	3.3227	0.7460	28	0.40%	0.7919	13.5297	2.5324
	LDGT2	3241	0.1868	2.6617	0.6074	403	12.43%	0.2380	3.4630	0.7419	11	0.34%	0.7707	8.8152	2.0463
2000 Total		17108	0.1766	2.7307	0.5421	1891	11.05%	0.2150	3.4086	0.6886	45	0.26%	0.7766	13.0187	2.2550
2001	LDGV	8714	0.1248	2.4077	0.3529	694	7.96%	0.1656	2.9024	0.4587	5	0.06%	0.3622	12.2941	1.8740
	LDGT1	8616	0.1507	2.8747	0.4595	806	9.35%	0.1866	3.5508	0.5692	9	0.10%	1.0846	27.9205	2.2855
	LDGT2	4467	0.1863	2.4294	0.5398	474	10.61%	0.2258	3.1726	0.6777	15	0.34%	0.5240	8.9641	2.9319
2001 Total		21797	0.1476	2.5968	0.4333	1974	9.06%	0.1887	3.2321	0.5564	29	0.13%	0.6701	15.4212	2.5489
2002	LDGV	9259	0.1225	2.9126	0.3289	830	8.96%	0.1661	3.2136	0.4269	15	0.16%	0.8060	9.2529	2.9745
	LDGT1	9180	0.1396	3.2693	0.4183	908	9.89%	0.1755	3.6935	0.5210	15	0.16%	1.0091	18.9789	2.5132
	LDGT2	4008	0.1683	2.2124	0.5583	460	11.48%	0.2132	3.0048	0.7342	7	0.17%	0.3815	7.7110	2.3827

Vehicle		Overall Final Exhaust Emissions				Pass Retest Exhaust Emissions					Waived Exhaust Emissions				
Year	Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
2002 Total		22447	0.1377	2.9334	0.4065	2198	9.79%	0.1799	3.3681	0.5301	37	0.16%	0.8080	12.9042	2.6756
2003	LDGV	11656	0.0915	1.8147	0.2787	860	7.38%	0.1286	2.3448	0.3722	13	0.11%	0.8636	10.4873	2.2921
	LDGT1	11849	0.1188	2.2146	0.3602	1017	8.58%	0.1488	2.7784	0.4536	17	0.14%	0.7456	16.4390	2.6695
	LDGT2	5293	0.1437	1.9457	0.4008	481	9.09%	0.1756	2.6196	0.5428	5	0.09%	0.4914	6.3647	2.8003
2003 Total		28798	0.1123	2.0033	0.3347	2358	8.19%	0.1469	2.5879	0.4421	35	0.12%	0.7531	12.7892	2.5480
2004	LDGV	11182	0.0870	1.7202	0.2357	797	7.13%	0.1266	2.4865	0.3425	7	0.06%	1.4840	6.3738	1.9828
	LDGT1	12812	0.1029	2.0534	0.2630	1081	8.44%	0.1324	2.7350	0.3597	12	0.09%	0.7078	14.0580	2.1729
	LDGT2	5902	0.1174	1.9723	0.2886	510	8.64%	0.1630	2.7947	0.4373	5	0.08%	0.6078	9.1106	2.7950
2004 Total		29896	0.0998	1.9127	0.2578	2388	7.99%	0.1370	2.6648	0.3705	24	0.08%	0.9133	10.7860	2.2470
2005	LDGV	15344	0.0673	1.3428	0.1850	1012	6.60%	0.1062	1.9071	0.2838	10	0.07%	0.9536	8.9542	3.1299
	LDGT1	16667	0.0899	1.5944	0.1731	903	5.42%	0.1270	2.3029	0.2756	8	0.05%	0.6442	15.2626	3.4037
	LDGT2	5706	0.1212	1.7899	0.2495	445	7.80%	0.1595	2.7621	0.4192	6	0.11%	0.8868	12.9736	2.6239
2005 Total		37717	0.0855	1.5216	0.1895	2360	6.26%	0.1242	2.2198	0.3062	24	0.06%	0.8338	12.0619	3.0946
2006	LDGV	15039	0.0709	1.6215	0.1525	673	4.48%	0.1167	2.2864	0.2471	9	0.06%	3.2805	7.7182	1.8992
	LDGT1	14289	0.0738	1.7567	0.1833	701	4.91%	0.0991	2.2637	0.2684	10	0.07%	0.4980	12.2871	2.6337
	LDGT2	6182	0.0996	1.5005	0.1854	430	6.96%	0.1514	2.4982	0.3480	6	0.10%	2.2821	17.0004	2.6026
2006 Total		35510	0.0771	1.6548	0.1706	1804	5.08%	0.1181	2.3281	0.2794	25	0.07%	1.9279	11.7735	2.3618
2007	LDGV	18490	0.0602	1.4606	0.1313	646	3.49%	0.0985	2.0706	0.2094	4	0.02%	1.0069	19.3441	2.0654
	LDGT1	19147	0.0524	1.4508	0.1315	865	4.52%	0.0820	2.0787	0.2137	6	0.03%	0.4804	12.1649	1.7583
	LDGT2	7117	0.0789	1.2048	0.1386	402	5.65%	0.1172	2.1526	0.2702	7	0.10%	1.3502	14.7156	4.3826
2007 Total		44754	0.0598	1.4157	0.1326	1913	4.27%	0.0950	2.0915	0.2241	17	0.04%	0.9624	14.9044	2.9112
2008	LDGV	15884	0.0618	1.5866	0.1260	641	4.04%	0.1041	2.2629	0.2005	9	0.06%	1.1087	15.0710	1.4146
	LDGT1	17188	0.0520	1.4527	0.1318	701	4.08%	0.0746	2.1756	0.1731	9	0.05%	0.5410	16.9920	2.4008
	LDGT2	6497	0.0746	1.5952	0.1236	440	6.77%	0.1060	2.5449	0.1983	3	0.05%	1.1230	26.9702	0.9965
2008 Total		39569	0.0597	1.5298	0.1282	1782	4.50%	0.0930	2.2982	0.1892	21	0.05%	0.8674	17.5942	1.7775
2009	LDGV	12509	0.0611	1.6408	0.1285	443	3.54%	0.1048	2.4095	0.1946	2	0.02%	1.2534	11.8684	2.4955
	LDGT1	9658	0.0544	1.6818	0.1371	338	3.50%	0.0801	2.1539	0.2144	3	0.03%	0.8970	9.7336	4.5937
	LDGT2	3804	0.0749	1.5017	0.1376	239	6.28%	0.1094	2.5527	0.2199	2	0.05%	3.4766	25.9588	6.2277
2009 Total		25971	0.0606	1.6356	0.1330	1020	3.93%	0.0977	2.3583	0.2071	7	0.03%	1.7358	14.9793	4.4611
2010	LDGV	17540	0.0516	1.5659	0.1038	504	2.87%	0.0791	2.1272	0.1487	1	0.01%	1.6172	24.5956	1.2177
	LDGT1	18217	0.0457	1.3563	0.1080	495	2.72%	0.0669	1.9087	0.1596	4	0.02%	0.4719	20.1494	2.5813
	LDGT2	7101	0.0604	1.3737	0.1091	304	4.28%	0.0851	2.3207	0.1794	2	0.03%	1.8986	32.7894	1.5161
2010 Total		42858	0.0505	1.4450	0.1065	1303	3.04%	0.0758	2.0894	0.1600	7	0.02%	1.0431	24.3960	2.0822
2011	LDGV	13270	0.0565	1.7420	0.1066	431	3.25%	0.0954	2.5585	0.1758	1	0.01%	0.7515	4.4343	1.6912
	LDGT1	15890	0.0485	1.6023	0.1117	407	2.56%	0.0668	2.3189	0.1545	1	0.01%	0.3058	9.4364	3.3816
	LDGT2	7144	0.0581	1.2929	0.0984	438	6.13%	0.0601	1.8141	0.1189	1	0.01%	1.6433	44.7755	0.5070
2011 Total		36304	0.0533	1.5925	0.1072	1276	3.51%	0.0742	2.2266	0.1494	3	0.01%	0.9002	19.5487	1.8599
2012	LDGV	23518	0.0472	1.5845	0.0887	697	2.96%	0.0683	2.0749	0.1241	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	22989	0.0436	1.6508	0.0952	576	2.51%	0.0589	2.3044	0.1204	2	0.01%	0.9250	13.3154	2.9326
	LDGT2	10206	0.0514	1.1688	0.0915	616	6.04%	0.0473	1.4364	0.0912	0	0.00%	0.0000	0.0000	0.0000
2012 Total		56713	0.0465	1.5366	0.0918	1889	3.33%	0.0586	1.9367	0.1122	2	0.00%	0.9250	13.3154	2.9326
2013	LDGV	1905	0.0587	1.9161	0.1088	91	4.78%	0.1097	2.0911	0.2002	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	1268	0.0589	2.3299	0.1201	49	3.86%	0.1036	4.5838	0.2068	1	0.08%	0.3008	24.9342	0.2660

Vehicle		Overall Final Exhaust Emissions				Pass Retest Exhaust Emissions					Waived Exhaust Emissions				
Year	Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
	LDGT2	964	0.0680	1.5580	0.1302	77	7.99%	0.0729	2.1144	0.1867	0	0.00%	0.0000	0.0000	0.0000
2013 Total		4137	0.0609	1.9594	0.1173	217	5.25%	0.0953	2.6623	0.1969	1	0.02%	0.3008	24.9342	0.2660
2014	LDGV	1865	0.0477	1.7804	0.0894	68	3.65%	0.0748	2.3237	0.1187	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	1670	0.0421	1.8327	0.0869	41	2.46%	0.0590	2.8368	0.1843	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	1301	0.0627	1.4231	0.0899	61	4.69%	0.0777	2.0997	0.1556	0	0.00%	0.0000	0.0000	0.0000
2014 Total		4836	0.0498	1.7023	0.0886	170	3.52%	0.0720	2.3671	0.1478	0	0.00%	0.0000	0.0000	0.0000
2015	LDGV	1277	0.0522	1.7916	0.0919	74	5.79%	0.0973	2.8567	0.1411	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	1238	0.0385	1.5884	0.0917	44	3.55%	0.0592	2.7833	0.2233	1	0.08%	0.3315	5.6522	2.7623
	LDGT2	677	0.0804	1.5541	0.0885	24	3.55%	0.1159	2.3871	0.2209	0	0.00%	0.0000	0.0000	0.0000
2015 Total		3192	0.0528	1.6624	0.0911	142	4.45%	0.0886	2.7546	0.1801	1	0.03%	0.3315	5.6522	2.7623
2016	LDGV	1682	0.0432	1.4818	0.0785	87	5.17%	0.0910	2.4209	0.1263	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	2190	0.0305	1.2991	0.0652	64	2.92%	0.0362	1.9485	0.0743	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	1024	0.0803	1.3903	0.0950	32	3.13%	0.0704	1.3792	0.0863	1	0.10%	1.4484	17.3067	3.6578
2016 Total		4896	0.0453	1.3810	0.0760	183	3.74%	0.0683	2.0736	0.1011	1	0.02%	1.4484	17.3067	3.6578
2017	LDGV	354	0.0482	1.6092	0.0826	7	1.98%	0.0719	1.9724	0.0563	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	324	0.0366	1.3867	0.0626	6	1.85%	0.0385	1.3877	0.0826	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	201	0.0669	1.2249	0.0792	4	1.99%	0.1597	2.1738	0.2681	0	0.00%	0.0000	0.0000	0.0000
2017 Total		879	0.0482	1.4393	0.0744	17	1.93%	0.0808	1.8134	0.1154	0	0.00%	0.0000	0.0000	0.0000
2018	LDGV	59	0.0412	1.4436	0.0756	1	1.69%	0.0027	0.2553	0.0931	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	98	0.0339	1.1296	0.0658	2	2.04%	0.1186	3.5088	0.1177	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	45	0.0662	1.0736	0.0473	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2018 Total		202	0.0432	1.2088	0.0645	3	1.49%	0.0800	2.4243	0.1095	0	0.00%	0.0000	0.0000	0.0000
2019	LDGV	26	0.0200	0.7267	0.0468	1	3.85%	0.0919	1.7268	0.0401	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	37	0.0226	0.8088	0.0431	2	5.41%	0.0157	0.5275	0.0409	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	7	0.0643	1.1194	0.0424	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2019 Total		70	0.0258	0.8094	0.0444	3	4.29%	0.0411	0.9273	0.0406	0	0.00%	0.0000	0.0000	0.0000
2020	LDGV	16	0.0198	0.9755	0.0624	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	6	0.0224	0.6780	0.0409	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	4	0.1453	1.8599	0.0454	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2020 Total		26	0.0397	1.0429	0.0548	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2021	LDGV	13	0.0220	0.5104	0.0440	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	5	0.0365	1.0012	0.0869	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	1	0.0271	0.5512	0.0361	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2021 Total		19	0.0261	0.6417	0.0549	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2022	LDGV	4	0.0158	0.5742	0.0414	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	2	0.0195	0.5266	0.0406	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	1	0.0178	0.2534	0.0361	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2022 Total		7	0.0172	0.5148	0.0404	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2023	LDGT2	2	0.0236	0.6476	0.0366	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2023 Total		2	0.0236	0.6476	0.0366	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2024	LDGV	1	0.0109	0.3316	0.0412	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2024 Total		1	0.0109	0.3316	0.0412	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
Grand Total		**530577**	**0.1363**	**2.3195**	**0.3216**	**34350**	**6.47%**	**0.2624**	**3.7616**	**0.6018**	**511**	**0.10%**	**1.5018**	**19.9675**	**2.5444**

Summary by Vehicle Type (V1.01)

Vehicle	Overall Final Exhaust Emissions				Pass Retest Exhaust Emissions					Waived Exhaust Emissions				
Type	Total	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)	Total	Total %	Avg HC(gpm)	Avg CO(gpm)	Avg NOx(gpm)
LDGV	213991	0.1096	2.0870	0.2598	12380	5.79%	0.2055	3.1498	0.4683	161	0.08%	1.8008	17.3326	2.0724
LDGT1	220803	0.1430	2.4837	0.3440	13768	6.24%	0.2840	4.1217	0.6572	206	0.09%	1.1482	22.3498	2.6069
LDGT2	95783	0.1806	2.4606	0.4079	8202	8.56%	0.3121	4.0805	0.7104	144	0.15%	1.6733	19.5054	2.9825
Grand Total	**530577**	**0.1363**	**2.3195**	**0.3216**	**34350**	**6.47%**	**0.2624**	**3.7616**	**0.6018**	**511**	**0.10%**	**1.5018**	**19.9675**	**2.5444**

Appendix B9

I/M240 Fleet Characterization Summary Report

Emissions Reduction Component

Date
Between 1/1/2023 and 1/1/2024

IM240 Fleet Emission Reduction Report (V1.01)

Vehicle		Overall Initial Exhaust Emissions				Overall Final Exhaust Emissions				Emission Reduction					
Year	Type	Total	Avg HC (gpm)	Avg CO(gpm)	Avg NOx (gpm)	Total	Avg HC (gpm)	Avg CO(gpm)	Avg NOx (gpm)	Avg HC (gpm)	% Improvement	Avg CO (gpm)	% Improvement	Avg NOx(gpm)	% Improvement
1982	LDGV	110	1.8295	21.7091	2.0553	110	1.6572	18.2895	1.9640	0.1723	9.42%	3.4196	15.75%	0.0913	4.44%
	LDGT1	78	2.9890	46.8790	2.4969	78	2.4276	34.0280	2.5573	0.5613	18.78%	12.8510	27.41%	-0.0604	-2.42%
	LDGT2	14	2.4691	49.4490	1.9764	14	2.3055	33.9960	2.1973	0.1636	6.63%	15.4530	31.25%	-0.2209	-11.18%
1982 Total		202	2.3216	33.3507	2.2203	202	1.9996	25.4553	2.2092	0.3219	13.87%	7.8954	23.67%	0.0111	0.50%
1983	LDGV	124	1.4277	17.3262	1.8757	124	1.2946	12.2738	1.8916	0.1331	9.33%	5.0524	29.16%	-0.0159	-0.85%
	LDGT1	118	3.3157	36.6644	2.3860	118	2.8027	32.8036	2.3354	0.5131	15.47%	3.8608	10.53%	0.0506	2.12%
	LDGT2	38	3.5105	46.1110	2.6034	38	2.9509	33.4412	2.7218	0.5596	15.94%	12.6698	27.48%	-0.1184	-4.55%
1983 Total		280	2.5060	29.3824	2.1895	280	2.1549	23.7984	2.1913	0.3511	14.01%	5.5840	19.00%	-0.0018	-0.08%
1984	LDGV	231	1.6837	15.2596	1.7415	231	1.2282	12.0902	1.6665	0.4555	27.05%	3.1694	20.77%	0.0750	4.31%
	LDGT1	214	2.3470	34.0639	2.2563	214	2.0753	25.0720	2.2991	0.2717	11.58%	8.9919	26.40%	-0.0427	-1.89%
	LDGT2	61	2.9599	47.4950	2.6939	61	2.2727	31.2801	2.6723	0.6872	23.22%	16.2148	34.14%	0.0216	0.80%
1984 Total		506	2.1181	27.0985	2.0740	506	1.7124	19.8939	2.0553	0.4057	19.15%	7.2045	26.59%	0.0188	0.91%
1985	LDGV	314	1.4145	15.3940	1.6964	314	1.0724	11.0558	1.6765	0.3420	24.18%	4.3382	28.18%	0.0199	1.17%
	LDGT1	324	2.0903	25.4632	2.6322	324	1.8046	19.4780	2.5200	0.2857	13.67%	5.9852	23.51%	0.1121	4.26%
	LDGT2	67	2.2984	32.8271	2.8380	67	1.6682	21.4260	2.7575	0.6302	27.42%	11.4010	34.73%	0.0805	2.84%
1985 Total		705	1.8091	21.6783	2.2349	705	1.4655	15.9120	2.1669	0.3435	18.99%	5.7663	26.60%	0.0681	3.05%
1986	LDGV	395	1.2433	11.4700	1.7330	395	0.9100	7.5852	1.6331	0.3333	26.81%	3.8849	33.87%	0.0998	5.76%
	LDGT1	432	1.7612	21.0039	2.3984	432	1.5974	16.7917	2.3560	0.1638	9.30%	4.2121	20.05%	0.0424	1.77%
	LDGT2	95	2.0803	27.5607	2.6810	95	1.7400	17.9372	2.5831	0.3403	16.36%	9.6235	34.92%	0.0980	3.65%
1986 Total		922	1.5722	17.5950	2.1424	922	1.3176	12.9655	2.0697	0.2546	16.19%	4.6295	26.31%	0.0727	3.39%
1987	LDGV	429	1.0872	10.2590	1.5650	429	0.8097	7.2810	1.4883	0.2775	25.52%	2.9780	29.03%	0.0767	4.90%
	LDGT1	486	1.5841	19.1195	2.2424	486	1.3528	14.4886	2.2339	0.2313	14.60%	4.6308	24.22%	0.0085	0.38%
	LDGT2	137	2.0216	16.1513	2.7021	137	1.8392	13.5531	2.6898	0.1824	9.02%	2.5982	16.09%	0.0123	0.45%
1987 Total		1052	1.4384	15.1197	2.0260	1052	1.1947	11.4276	1.9892	0.2437	16.95%	3.6921	24.42%	0.0368	1.82%
1988	LDGV	428	1.0112	10.2420	1.4177	428	0.7229	8.0653	1.3156	0.2883	28.51%	2.1768	21.25%	0.1021	7.20%
	LDGT1	531	1.5030	14.4454	2.1223	531	1.2813	11.3362	2.0056	0.2217	14.75%	3.1092	21.52%	0.1166	5.50%
	LDGT2	195	1.7288	17.4742	2.4596	195	1.4944	12.2114	2.4266	0.2344	13.56%	5.2628	30.12%	0.0330	1.34%
1988 Total		1154	1.3587	13.3982	1.9180	1154	1.1102	10.2710	1.8209	0.2485	18.29%	3.1273	23.34%	0.0971	5.06%
1989	LDGV	625	0.8884	9.7669	1.4003	625	0.6309	7.2406	1.3234	0.2575	28.98%	2.5264	25.87%	0.0770	5.50%
	LDGT1	827	1.4110	15.6927	1.9572	827	1.1557	12.0560	1.9086	0.2554	18.10%	3.6367	23.17%	0.0486	2.48%
	LDGT2	291	1.7046	13.6169	2.6785	291	1.4518	11.2901	2.6121	0.2528	14.83%	2.3268	17.09%	0.0664	2.48%
1989 Total		1743	1.2727	13.2213	1.8780	1743	1.0169	10.2014	1.8162	0.2557	20.09%	3.0199	22.84%	0.0617	3.29%
1990	LDGV	827	0.7882	8.8092	1.4092	827	0.6114	6.7746	1.3323	0.1768	22.43%	2.0345	23.10%	0.0769	5.46%
	LDGT1	759	1.3437	14.0670	2.0497	759	1.0935	10.4935	1.9427	0.2502	18.62%	3.5735	25.40%	0.1070	5.22%
	LDGT2	325	1.6215	14.6227	2.4671	325	1.3140	12.1344	2.3272	0.3075	18.97%	2.4883	17.02%	0.1399	5.67%
1990 Total		1911	1.1506	11.8861	1.8435	1911	0.9224	9.1632	1.7439	0.2282	19.83%	2.7229	22.91%	0.0996	5.40%
1991	LDGV	1207	0.6657	7.9754	1.3385	1207	0.5347	6.2356	1.2607	0.1311	19.69%	1.7398	21.81%	0.0779	5.82%
	LDGT1	1174	1.0592	12.2886	1.7035	1174	0.8910	9.8993	1.6216	0.1682	15.88%	2.3894	19.44%	0.0819	4.81%
	LDGT2	373	1.4571	15.7154	2.3750	373	1.1347	13.3511	2.1902	0.3225	22.13%	2.3642	15.04%	0.1848	7.78%
1991 Total		2754	0.9407	10.8624	1.6345	2754	0.7678	8.7611	1.5404	0.1728	18.37%	2.1013	19.34%	0.0941	5.76%

Vehicle		Overall Initial Exhaust Emissions				Overall Final Exhaust Emissions				Emission Reduction					
Year	Type	Total	Avg HC (gpm)	Avg CO(gpm)	Avg NOx (gpm)	Total	Avg HC (gpm)	Avg CO(gpm)	Avg NOx (gpm)	Avg HC (gpm)	% Improvement	Avg CO (gpm)	% Improvement	Avg NOx(gpm)	% Improvement
1992	LDGV	1108	0.6028	6.7021	1.3394	1108	0.4963	5.5369	1.2717	0.1065	17.66%	1.1652	17.39%	0.0677	5.05%
	LDGT1	1000	1.0156	10.8053	1.6748	1000	0.8535	9.0382	1.5718	0.1622	15.97%	1.7671	16.35%	0.1030	6.15%
	LDGT2	580	1.5221	14.6714	2.2687	580	1.2062	12.5224	2.0926	0.3159	20.75%	2.1491	14.65%	0.1762	7.76%
1992 Total		2688	0.9547	9.9482	1.6647	2688	0.7824	8.3467	1.5604	0.1724	18.05%	1.6014	16.10%	0.1042	6.26%
1993	LDGV	1453	0.6145	6.7849	1.2963	1453	0.4761	5.4625	1.2447	0.1385	22.53%	1.3224	19.49%	0.0516	3.98%
	LDGT1	1635	1.0169	10.9253	1.8114	1635	0.8377	8.9734	1.7284	0.1792	17.62%	1.9518	17.87%	0.0830	4.58%
	LDGT2	713	1.5334	16.2485	2.2440	713	1.2027	12.5671	2.0964	0.3307	21.56%	3.6815	22.66%	0.1477	6.58%
1993 Total		3801	0.9600	10.3411	1.6957	3801	0.7679	8.3054	1.6125	0.1920	20.00%	2.0357	19.69%	0.0831	4.90%
1994	LDGV	1587	0.4851	5.6466	1.0045	1587	0.3760	4.4458	0.9294	0.1091	22.49%	1.2008	21.27%	0.0751	7.47%
	LDGT1	1944	0.8785	9.4666	1.7175	1944	0.7689	7.8747	1.6464	0.1096	12.48%	1.5919	16.82%	0.0711	4.14%
	LDGT2	1263	1.1537	12.3893	2.0668	1263	0.9671	10.2380	1.9828	0.1866	16.17%	2.1513	17.36%	0.0840	4.06%
1994 Total		4794	0.8207	8.9720	1.5735	4794	0.6910	7.3622	1.4977	0.1297	15.80%	1.6098	17.94%	0.0758	4.82%
1995	LDGV	2389	0.4345	5.1724	0.9246	2389	0.3472	4.2033	0.8587	0.0873	20.09%	0.9691	18.74%	0.0659	7.13%
	LDGT1	2372	0.8550	9.2139	1.7925	2372	0.7321	7.5634	1.7238	0.1229	14.38%	1.6505	17.91%	0.0687	3.83%
	LDGT2	1797	1.1205	12.0456	2.0355	1797	0.9295	9.9693	1.9377	0.1910	17.05%	2.0764	17.24%	0.0978	4.81%
1995 Total		6558	0.7746	8.5176	1.5429	6558	0.6460	6.9986	1.4673	0.1286	16.60%	1.5190	17.83%	0.0756	4.90%
1996	LDGV	2467	0.3040	4.1435	0.7108	2467	0.2444	3.3076	0.6632	0.0596	19.61%	0.8360	20.18%	0.0476	6.70%
	LDGT1	2507	0.4101	5.6775	1.1989	2507	0.3502	4.9117	1.0961	0.0599	14.60%	0.7658	13.49%	0.1028	8.57%
	LDGT2	1547	0.5009	6.3612	1.2229	1547	0.4179	5.4351	1.1071	0.0830	16.57%	0.9261	14.56%	0.1158	9.47%
1996 Total		6521	0.3915	5.2594	1.0199	6521	0.3262	4.4290	0.9349	0.0653	16.67%	0.8304	15.79%	0.0850	8.34%
1997	LDGV	3682	0.3130	4.1378	0.6738	3682	0.2578	3.5079	0.6282	0.0552	17.64%	0.6299	15.22%	0.0456	6.77%
	LDGT1	4494	0.4084	5.6960	1.1768	4494	0.3484	4.7411	1.0915	0.0600	14.69%	0.9549	16.76%	0.0853	7.25%
	LDGT2	2026	0.4408	6.1465	1.1950	2026	0.3566	4.8879	1.0973	0.0842	19.11%	1.2586	20.48%	0.0977	8.17%
1997 Total		10202	0.3804	5.2231	0.9989	10202	0.3173	4.3252	0.9254	0.0631	16.58%	0.8979	17.19%	0.0734	7.35%
1998	LDGV	4263	0.2859	4.0168	0.6392	4263	0.2342	3.3606	0.6090	0.0517	18.09%	0.6562	16.34%	0.0302	4.73%
	LDGT1	5113	0.3317	4.8589	0.9925	5113	0.2867	4.1627	0.9147	0.0450	13.56%	0.6962	14.33%	0.0778	7.84%
	LDGT2	2068	0.3859	4.6143	1.0840	2068	0.2694	3.6613	0.9909	0.1166	30.20%	0.9530	20.65%	0.0931	8.59%
1998 Total		11444	0.3244	4.5010	0.8774	11444	0.2640	3.7733	0.8146	0.0604	18.62%	0.7277	16.17%	0.0628	7.16%
1999	LDGV	5887	0.2573	3.4948	0.6170	5887	0.2149	3.0790	0.5760	0.0423	16.46%	0.4157	11.90%	0.0410	6.65%
	LDGT1	6446	0.2512	4.1606	0.7759	6446	0.2050	3.3155	0.6613	0.0462	18.39%	0.8451	20.31%	0.1146	14.77%
	LDGT2	3298	0.2758	3.2493	0.8306	3298	0.2049	2.4266	0.7063	0.0709	25.71%	0.8228	25.32%	0.1244	14.97%
1999 Total		15631	0.2587	3.7176	0.7276	15631	0.2087	3.0389	0.6387	0.0500	19.31%	0.6787	18.26%	0.0889	12.22%
2000	LDGV	6858	0.2232	3.2950	0.5089	6858	0.1590	2.7008	0.4532	0.0643	28.79%	0.5942	18.03%	0.0556	10.93%
	LDGT1	7009	0.2487	3.5243	0.6933	7009	0.1891	2.7919	0.5987	0.0595	23.93%	0.7324	20.78%	0.0946	13.64%
	LDGT2	3241	0.2608	3.4882	0.6959	3241	0.1868	2.6617	0.6074	0.0739	28.35%	0.8265	23.69%	0.0884	12.71%
2000 Total		17108	0.2408	3.4255	0.6199	17108	0.1766	2.7307	0.5421	0.0641	26.64%	0.6948	20.28%	0.0778	12.55%
2001	LDGV	8714	0.1668	2.7506	0.3946	8714	0.1248	2.4077	0.3529	0.0420	25.19%	0.3428	12.46%	0.0417	10.56%
	LDGT1	8616	0.1760	3.3555	0.5199	8616	0.1507	2.8747	0.4595	0.0253	14.38%	0.4808	14.33%	0.0605	11.63%
	LDGT2	4467	0.2334	2.9439	0.6197	4467	0.1863	2.4294	0.5398	0.0471	20.19%	0.5146	17.48%	0.0799	12.89%
2001 Total		21797	0.1841	3.0293	0.4903	21797	0.1476	2.5968	0.4333	0.0365	19.80%	0.4325	14.28%	0.0569	11.61%
2002	LDGV	9259	0.1594	3.3644	0.3841	9259	0.1225	2.9126	0.3289	0.0369	23.15%	0.4518	13.43%	0.0552	14.37%
	LDGT1	9180	0.1711	3.9259	0.4884	9180	0.1396	3.2693	0.4183	0.0315	18.43%	0.6566	16.73%	0.0701	14.35%
	LDGT2	4008	0.2074	2.6301	0.6371	4008	0.1683	2.2124	0.5583	0.0391	18.86%	0.4177	15.88%	0.0788	12.37%

Vehicle		Overall Initial Exhaust Emissions				Overall Final Exhaust Emissions				Emission Reduction					
Year	Type	Total	Avg HC (gpm)	Avg CO(gpm)	Avg NOx (gpm)	Total	Avg HC (gpm)	Avg CO(gpm)	Avg NOx (gpm)	Avg HC (gpm)	% Improvement	Avg CO (gpm)	% Improvement	Avg NOx(gpm)	% Improvement
2002 Total		22447	0.1728	3.4629	0.4720	22447	0.1377	2.9334	0.4065	0.0351	20.32%	0.5295	15.29%	0.0655	13.88%
2003	LDGV	11656	0.1250	2.1704	0.3158	11656	0.0915	1.8147	0.2787	0.0335	26.77%	0.3558	16.39%	0.0371	11.74%
	LDGT1	11849	0.1455	2.8007	0.4217	11849	0.1188	2.2146	0.3602	0.0268	18.38%	0.5861	20.93%	0.0615	14.58%
	LDGT2	5293	0.1738	2.3967	0.4567	5293	0.1437	1.9457	0.4008	0.0301	17.33%	0.4510	18.82%	0.0559	12.24%
2003 Total		28798	0.1424	2.4714	0.3853	28798	0.1123	2.0033	0.3347	0.0301	21.13%	0.4681	18.94%	0.0506	13.13%
2004	LDGV	11182	0.1118	2.0400	0.2737	11182	0.0870	1.7202	0.2357	0.0249	22.25%	0.3198	15.68%	0.0381	13.90%
	LDGT1	12812	0.1327	2.5886	0.3163	12812	0.1029	2.0534	0.2630	0.0298	22.45%	0.5353	20.68%	0.0533	16.84%
	LDGT2	5902	0.1486	2.4721	0.3523	5902	0.1174	1.9723	0.2886	0.0313	21.03%	0.4998	20.22%	0.0638	18.10%
2004 Total		29896	0.1280	2.3604	0.3075	29896	0.0998	1.9127	0.2578	0.0282	22.06%	0.4477	18.97%	0.0497	16.15%
2005	LDGV	15344	0.0842	1.5300	0.2156	15344	0.0673	1.3428	0.1850	0.0169	20.05%	0.1872	12.23%	0.0305	14.17%
	LDGT1	16667	0.1059	1.9718	0.2052	16667	0.0899	1.5944	0.1731	0.0160	15.10%	0.3773	19.14%	0.0322	15.67%
	LDGT2	5706	0.1463	2.1827	0.3019	5706	0.1212	1.7899	0.2495	0.0251	17.16%	0.3927	17.99%	0.0523	17.34%
2005 Total		37717	0.1032	1.8239	0.2240	37717	0.0855	1.5216	0.1895	0.0177	17.18%	0.3023	16.57%	0.0346	15.42%
2006	LDGV	15039	0.0856	1.8176	0.1759	15039	0.0709	1.6215	0.1525	0.0147	17.12%	0.1961	10.79%	0.0234	13.29%
	LDGT1	14289	0.0870	2.0242	0.2132	14289	0.0738	1.7567	0.1833	0.0132	15.14%	0.2675	13.21%	0.0299	14.04%
	LDGT2	6182	0.1277	1.8111	0.2367	6182	0.0996	1.5005	0.1854	0.0281	22.03%	0.3106	17.15%	0.0513	21.67%
2006 Total		35510	0.0935	1.8996	0.2015	35510	0.0771	1.6548	0.1706	0.0164	17.55%	0.2448	12.88%	0.0309	15.33%
2007	LDGV	18490	0.0719	1.6413	0.1519	18490	0.0602	1.4606	0.1313	0.0117	16.29%	0.1807	11.01%	0.0206	13.57%
	LDGT1	19147	0.0590	1.6580	0.1598	19147	0.0524	1.4508	0.1315	0.0066	11.23%	0.2073	12.50%	0.0283	17.71%
	LDGT2	7117	0.1142	1.5658	0.1672	7117	0.0789	1.2048	0.1386	0.0353	30.89%	0.3611	23.06%	0.0285	17.07%
2007 Total		44754	0.0731	1.6364	0.1577	44754	0.0598	1.4157	0.1326	0.0133	18.17%	0.2207	13.49%	0.0252	15.96%
2008	LDGV	15884	0.0764	1.7977	0.1464	15884	0.0618	1.5866	0.1260	0.0146	19.10%	0.2111	11.75%	0.0204	13.95%
	LDGT1	17188	0.0592	1.6460	0.1573	17188	0.0520	1.4527	0.1318	0.0072	12.12%	0.1933	11.74%	0.0254	16.17%
	LDGT2	6497	0.0835	1.8197	0.1508	6497	0.0746	1.5952	0.1236	0.0089	10.64%	0.2245	12.34%	0.0271	18.00%
2008 Total		39569	0.0701	1.7354	0.1519	39569	0.0597	1.5298	0.1282	0.0104	14.89%	0.2056	11.85%	0.0237	15.61%
2009	LDGV	12509	0.0731	1.8116	0.1428	12509	0.0611	1.6408	0.1285	0.0120	16.42%	0.1708	9.43%	0.0144	10.07%
	LDGT1	9658	0.0629	1.8491	0.1585	9658	0.0544	1.6818	0.1371	0.0086	13.60%	0.1673	9.05%	0.0214	13.51%
	LDGT2	3804	0.0868	1.7044	0.1553	3804	0.0749	1.5017	0.1376	0.0119	13.66%	0.2027	11.89%	0.0177	11.37%
2009 Total		25971	0.0713	1.8098	0.1505	25971	0.0606	1.6356	0.1330	0.0107	15.00%	0.1742	9.62%	0.0175	11.61%
2010	LDGV	17540	0.0598	1.6653	0.1144	17540	0.0516	1.5659	0.1038	0.0082	13.77%	0.0994	5.97%	0.0106	9.24%
	LDGT1	18217	0.0471	1.3925	0.1153	18217	0.0457	1.3563	0.1080	0.0014	3.07%	0.0362	2.60%	0.0073	6.29%
	LDGT2	7101	0.0663	1.5134	0.1207	7101	0.0604	1.3737	0.1091	0.0058	8.82%	0.1396	9.23%	0.0116	9.60%
2010 Total		42858	0.0555	1.5242	0.1158	42858	0.0505	1.4450	0.1065	0.0050	8.93%	0.0792	5.19%	0.0093	8.06%
2011	LDGV	13270	0.0677	1.8736	0.1249	13270	0.0565	1.7420	0.1066	0.0112	16.49%	0.1316	7.02%	0.0183	14.69%
	LDGT1	15890	0.0515	1.7115	0.1175	15890	0.0485	1.6023	0.1117	0.0030	5.76%	0.1092	6.38%	0.0058	4.93%
	LDGT2	7144	0.0664	1.4058	0.1063	7144	0.0581	1.2929	0.0984	0.0083	12.56%	0.1129	8.03%	0.0078	7.38%
2011 Total		36304	0.0604	1.7106	0.1180	36304	0.0533	1.5925	0.1072	0.0070	11.63%	0.1181	6.90%	0.0108	9.14%
2012	LDGV	23518	0.0536	1.6621	0.0964	23518	0.0472	1.5845	0.0887	0.0064	11.98%	0.0776	4.67%	0.0078	8.08%
	LDGT1	22989	0.0469	1.7228	0.0999	22989	0.0436	1.6508	0.0952	0.0033	7.09%	0.0720	4.18%	0.0047	4.71%
	LDGT2	10206	0.0572	1.2374	0.0973	10206	0.0514	1.1688	0.0915	0.0058	10.16%	0.0686	5.55%	0.0058	5.95%
2012 Total		56713	0.0516	1.6103	0.0980	56713	0.0465	1.5366	0.0918	0.0051	9.81%	0.0737	4.58%	0.0062	6.31%
2013	LDGV	1905	0.0783	2.1576	0.1410	1905	0.0587	1.9161	0.1088	0.0196	25.06%	0.2416	11.20%	0.0322	22.82%
	LDGT1	1268	0.0671	2.5973	0.1391	1268	0.0589	2.3299	0.1201	0.0081	12.11%	0.2675	10.30%	0.0190	13.64%

Vehicle		Overall Initial Exhaust Emissions				Overall Final Exhaust Emissions				Emission Reduction					
Year	Type	Total	Avg HC (gpm)	Avg CO(gpm)	Avg NOx (gpm)	Total	Avg HC (gpm)	Avg CO(gpm)	Avg NOx (gpm)	Avg HC (gpm)	% Improvement	Avg CO (gpm)	% Improvement	Avg NOx(gpm)	% Improvement
	LDGT2	964	0.0864	1.8028	0.1678	964	0.0680	1.5580	0.1302	0.0184	21.34%	0.2448	13.58%	0.0376	22.39%
2013 Total		4137	0.0768	2.2097	0.1467	4137	0.0609	1.9594	0.1173	0.0158	20.61%	0.2503	11.33%	0.0294	20.04%
2014	LDGV	1865	0.0899	2.2928	0.1309	1865	0.0477	1.7804	0.0894	0.0422	46.96%	0.5124	22.35%	0.0416	31.73%
	LDGT1	1670	0.0461	1.9158	0.0950	1670	0.0421	1.8327	0.0869	0.0040	8.72%	0.0832	4.34%	0.0081	8.55%
	LDGT2	1301	0.0701	1.5059	0.1101	1301	0.0627	1.4231	0.0899	0.0074	10.60%	0.0829	5.50%	0.0202	18.39%
2014 Total		4836	0.0694	1.9509	0.1129	4836	0.0498	1.7023	0.0886	0.0197	28.32%	0.2486	12.74%	0.0243	21.50%
2015	LDGV	1277	0.0834	2.2266	0.1590	1277	0.0522	1.7916	0.0919	0.0312	37.46%	0.4349	19.53%	0.0670	42.16%
	LDGT1	1238	0.0458	1.7479	0.1102	1238	0.0385	1.5884	0.0917	0.0073	15.95%	0.1595	9.13%	0.0184	16.73%
	LDGT2	677	0.0890	1.6570	0.1090	677	0.0804	1.5541	0.0885	0.0087	9.74%	0.1029	6.21%	0.0205	18.84%
2015 Total		3192	0.0700	1.9201	0.1294	3192	0.0528	1.6624	0.0911	0.0172	24.52%	0.2577	13.42%	0.0383	29.60%
2016	LDGV	1682	0.0804	1.9607	0.1310	1682	0.0432	1.4818	0.0785	0.0372	46.29%	0.4788	24.42%	0.0525	40.10%
	LDGT1	2190	0.0316	1.4226	0.0674	2190	0.0305	1.2991	0.0652	0.0011	3.43%	0.1235	8.68%	0.0021	3.19%
	LDGT2	1024	0.0850	1.5623	0.1071	1024	0.0803	1.3903	0.0950	0.0047	5.54%	0.1721	11.01%	0.0121	11.27%
2016 Total		4896	0.0595	1.6367	0.0975	4896	0.0453	1.3810	0.0760	0.0142	23.94%	0.2557	15.62%	0.0215	22.07%
2017	LDGV	354	0.1212	1.6282	0.0863	354	0.0482	1.6092	0.0826	0.0730	60.27%	0.0190	1.17%	0.0037	4.31%
	LDGT1	324	0.0365	1.4332	0.0627	324	0.0366	1.3867	0.0626	-0.0001	-0.22%	0.0464	3.24%	0.0001	0.21%
	LDGT2	201	0.0716	1.2184	0.0837	201	0.0669	1.2249	0.0792	0.0047	6.55%	-0.0065	-0.54%	0.0045	5.39%
2017 Total		879	0.0786	1.4626	0.0770	879	0.0482	1.4393	0.0744	0.0305	38.74%	0.0233	1.59%	0.0026	3.35%
2018	LDGV	59	0.0868	1.4718	0.0742	59	0.0412	1.4436	0.0756	0.0456	52.54%	0.0282	1.91%	-0.0014	-1.92%
	LDGT1	98	0.0592	1.4334	0.1332	98	0.0339	1.1296	0.0658	0.0253	42.76%	0.3039	21.20%	0.0674	50.61%
	LDGT2	45	0.0662	1.0736	0.0473	45	0.0662	1.0736	0.0473	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
2018 Total		202	0.0688	1.3645	0.0968	202	0.0432	1.2088	0.0645	0.0256	37.21%	0.1556	11.41%	0.0323	33.35%
2019	LDGV	26	0.0437	1.1881	0.1239	26	0.0200	0.7267	0.0468	0.0237	54.13%	0.4614	38.83%	0.0771	62.21%
	LDGT1	37	0.0227	0.8187	0.0433	37	0.0226	0.8088	0.0431	0.0001	0.35%	0.0099	1.21%	0.0002	0.50%
	LDGT2	7	0.0643	1.1194	0.0424	7	0.0643	1.1194	0.0424	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
2019 Total		70	0.0346	0.9860	0.0732	70	0.0258	0.8094	0.0444	0.0088	25.48%	0.1766	17.91%	0.0288	39.29%
2020	LDGV	16	0.0198	0.9755	0.0624	16	0.0198	0.9755	0.0624	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
	LDGT1	6	0.0224	0.6780	0.0409	6	0.0224	0.6780	0.0409	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
	LDGT2	4	0.1453	1.8599	0.0454	4	0.1453	1.8599	0.0454	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
2020 Total		26	0.0397	1.0429	0.0548	26	0.0397	1.0429	0.0548	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
2021	LDGV	13	0.0220	0.5104	0.0440	13	0.0220	0.5104	0.0440	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
	LDGT1	5	0.0365	1.0012	0.0869	5	0.0365	1.0012	0.0869	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
	LDGT2	1	0.0271	0.5512	0.0361	1	0.0271	0.5512	0.0361	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
2021 Total		19	0.0261	0.6417	0.0549	19	0.0261	0.6417	0.0549	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
2022	LDGV	4	0.0158	0.5742	0.0414	4	0.0158	0.5742	0.0414	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
	LDGT1	2	0.0195	0.5266	0.0406	2	0.0195	0.5266	0.0406	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
	LDGT2	1	0.0178	0.2534	0.0361	1	0.0178	0.2534	0.0361	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
2022 Total		7	0.0172	0.5148	0.0404	7	0.0172	0.5148	0.0404	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
2023	LDGT2	2	0.0236	0.6476	0.0366	2	0.0236	0.6476	0.0366	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
2023 Total		2	0.0236	0.6476	0.0366	2	0.0236	0.6476	0.0366	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
2024	LDGV	1	0.0109	0.3316	0.0412	1	0.0109	0.3316	0.0412	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
2024 Total		1	0.0109	0.3316	0.0412	1	0.0109	0.3316	0.0412	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
Grand Total		**530577**	**0.1664**	**2.7362**	**0.3578**	**530577**	**0.1363**	**2.3195**	**0.3216**	**0.0301**	**18.06%**	**0.4166**	**15.23%**	**0.0362**	**10.13%**

IM240 Fleet Emission Reduction Report -Summary by Veh (V1.01)

Vehicle	Overall Initial Exhaust Emissions				Overall Final Exhaust Emissions				Emission Reduction					
Type	Total	Avg HC (gpm)	Avg CO(gpm)	Avg NOx (gpm)	Total	Avg HC (gpm)	Avg CO(gpm)	Avg NOx (gpm)	Avg HC (gpm)	% Improvement	Avg CO (gpm)	% Improvement	Avg NOx(gpm)	% Improvement
LDGV	213991	0.1385	2.4188	0.2887	213991	0.1096	2.0870	0.2598	0.0289	20.90%	0.3318	13.72%	0.0289	10.01%
LDGT1	220803	0.1686	2.9362	0.3822	220803	0.1430	2.4837	0.3440	0.0256	15.18%	0.4525	15.41%	0.0382	10.00%
LDGT2	95783	0.2234	2.9840	0.4559	95783	0.1806	2.4606	0.4079	0.0428	19.15%	0.5234	17.54%	0.0480	10.54%
Grand Total	**530577**	**0.1664**	**2.7362**	**0.3578**	**530577**	**0.1363**	**2.3195**	**0.3216**	**0.0301**	**18.06%**	**0.4166**	**15.23%**	**0.0362**	**10.13%**

Appendix C1

Idle Initial Inspection Report

Date
Between 1/1/2023 and 1/1/2024

Idle Initial Failure Report (V1.03)

Vehicle		Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Year	Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
1974	HDGV	0	0.00%	0.00	0.00	0.00	0.00	3	7.69%	1352.87	6.30	1381.83	5.26	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	27	23.89%	844.46	5.46	806.05	4.57	2	1.77%	210.40	0.91	180.50	2.19
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	11	16.67%	1464.97	3.89	1340.63	5.03	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	101	38.26%	938.22	5.47	776.50	5.29	4	1.52%	296.68	1.26	350.85	1.71
1974 Total		0	0.00%	0.00	0.00	0.00	0.00	142	29.46%	968.64	5.37	838.60	5.13	6	1.24%	267.92	1.14	294.07	1.87
1975	HDGV	0	0.00%	0.00	0.00	0.00	0.00	1	10.00%	192.20	6.39	226.60	9.42	2	20.00%	247.65	3.66	117.35	1.27
	LDGT1	1	9.09%	646.40	0.14	235.30	2.51	3	27.27%	766.50	3.42	745.00	1.87	1	9.09%	215.00	0.37	197.20	1.12
	LDGT2	2	15.38%	1220.40	5.78	1670.15	4.13	3	23.08%	742.87	6.70	746.97	7.07	1	7.69%	70.40	1.74	69.50	1.75
	LDGV	2	12.50%	297.70	5.23	161.10	2.93	3	18.75%	570.00	3.94	439.40	4.44	1	6.25%	316.60	1.99	378.90	1.91
1975 Total		5	10.00%	736.52	4.43	779.56	3.32	10	20.00%	643.03	4.86	602.07	4.95	5	10.00%	219.46	2.28	176.06	1.46
1976	HDGV	1	2.86%	468.80	6.19	577.20	7.21	4	11.43%	926.48	2.92	704.08	2.26	3	8.57%	213.37	1.94	132.87	1.95
	LDGT1	1	2.04%	164.40	4.62	495.30	4.09	19	38.78%	636.49	3.95	498.57	3.08	5	10.20%	181.64	0.42	81.00	0.87
	LDGT2	2	1.59%	801.80	6.68	163.25	3.33	23	18.25%	973.99	5.39	541.85	4.96	14	11.11%	260.91	2.14	347.49	2.66
	LDGV	4	3.08%	1033.98	3.86	478.20	1.73	47	36.15%	728.61	4.49	561.71	4.60	6	4.62%	110.22	0.29	140.13	1.79
1976 Total		8	2.35%	796.59	4.95	413.98	3.11	93	27.35%	780.66	4.54	550.02	4.28	28	8.24%	209.37	1.42	232.47	2.08
1977	HDGV	0	0.00%	0.00	0.00	0.00	0.00	10	15.87%	1150.68	5.54	1242.54	4.68	3	4.76%	171.97	0.38	442.70	2.58
	LDGT1	3	5.56%	208.00	2.51	466.10	4.69	18	33.33%	644.18	2.94	469.04	2.68	2	3.70%	232.15	0.76	88.80	0.71
	LDGT2	6	3.26%	882.60	4.80	406.23	1.93	33	17.93%	849.24	5.67	721.94	4.71	31	16.85%	269.27	2.06	256.14	2.51
	LDGV	7	4.38%	336.60	2.91	314.57	3.20	51	31.87%	682.27	3.95	517.71	3.46	4	2.50%	139.78	0.69	260.55	2.26
1977 Total		16	3.47%	517.24	3.54	377.36	3.00	112	24.30%	767.16	4.44	634.78	3.81	40	8.68%	247.17	1.73	262.21	2.40
1978	HDGV	1	2.50%	818.20	5.72	802.10	5.94	5	12.50%	1333.38	5.07	833.42	5.34	2	5.00%	157.95	2.36	381.65	1.79
	LDGT1	4	5.48%	290.03	2.22	205.55	2.61	34	46.58%	644.26	3.45	587.39	3.49	3	4.11%	210.87	0.60	139.73	1.77
	LDGT2	7	3.18%	1031.93	4.74	725.94	2.89	29	13.18%	915.94	5.87	712.86	4.13	29	13.18%	418.15	1.54	297.88	1.61
	LDGV	6	3.28%	571.33	2.67	429.33	3.49	54	29.51%	717.40	3.23	641.62	3.49	5	2.73%	77.34	0.30	136.20	2.51
1978 Total		18	3.49%	701.66	3.54	515.66	3.20	122	23.64%	768.91	3.98	651.30	3.72	39	7.56%	345.17	1.35	269.28	1.75
1979	HDGV	0	0.00%	0.00	0.00	0.00	0.00	11	20.37%	997.18	4.67	884.75	4.33	2	3.70%	102.15	2.05	86.85	1.38
	LDGT1	3	2.97%	569.43	3.99	846.00	2.71	32	31.68%	573.61	3.45	495.11	3.68	8	7.92%	90.73	0.29	234.59	2.23
	LDGT2	10	7.09%	647.88	4.73	512.12	4.32	48	34.04%	663.66	4.13	511.86	3.00	8	5.67%	147.48	0.29	186.83	1.37
	LDGV	10	4.69%	800.91	4.00	846.75	3.65	83	38.97%	566.03	3.97	444.34	3.69	2	0.94%	60.35	0.16	37.30	0.26
1979 Total		23	4.52%	706.74	4.30	701.16	3.82	174	34.18%	619.96	3.96	500.15	3.54	20	3.93%	111.53	0.45	180.98	1.61
1980	HDGV	0	0.00%	0.00	0.00	0.00	0.00	4	14.81%	734.55	4.14	736.45	4.38	1	3.70%	158.40	0.40	401.70	10.16
	LDGT1	6	8.11%	807.53	3.52	330.25	3.48	16	21.62%	403.88	2.78	263.18	3.32	1	1.35%	55.80	1.25	103.80	2.00
	LDGT2	1	2.70%	1541.90	0.91	841.60	2.60	9	24.32%	533.63	3.02	519.36	3.05	2	5.41%	302.80	0.13	196.30	0.27
	LDGV	4	3.33%	682.23	3.53	478.80	3.23	24	20.00%	704.95	3.18	685.71	3.16	5	4.17%	99.20	0.33	157.66	1.63
1980 Total		11	4.26%	828.73	3.29	430.75	3.31	53	20.54%	585.94	3.11	533.73	3.28	9	3.49%	146.20	0.39	187.38	2.32
1981	HDGV	0	0.00%	0.00	0.00	0.00	0.00	15	31.91%	895.45	3.09	770.53	2.28	1	2.13%	21.80	0.18	26.80	0.22
	LDGT1	8	8.00%	536.98	2.80	402.30	3.81	46	46.00%	367.57	2.63	297.31	2.54	6	6.00%	119.92	0.30	96.10	0.52
	LDGT2	2	5.26%	255.40	3.89	161.40	2.14	16	42.11%	439.97	2.99	343.51	3.21	1	2.63%	22.80	0.00	15.90	0.04
	LDGV	4	3.77%	408.40	3.12	463.30	4.65	35	33.02%	437.39	2.45	369.29	3.55	3	2.83%	57.13	0.04	59.90	0.16
1981 Total		14	4.81%	463.98	3.04	385.31	3.81	112	38.49%	467.67	2.69	389.78	2.92	11	3.78%	85.05	0.19	72.64	0.35
1982	HDGV	0	0.00%	0.00	0.00	0.00	0.00	9	19.57%	713.84	2.72	572.17	2.34	0	0.00%	0.00	0.00	0.00	0.00

Vehicle		Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Year	Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	1	100.00%	79.20	0.20	62.30	0.75
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	100.00%	2000.00	7.21	1909.80	7.59	0	0.00%	0.00	0.00	0.00	0.00
1982 Total		0	0.00%	0.00	0.00	0.00	0.00	10	20.83%	842.46	3.17	705.93	2.86	1	2.08%	79.20	0.20	62.30	0.75
1983	HDGV	1	1.75%	574.20	5.62	327.20	4.60	19	33.33%	642.53	3.77	457.60	2.68	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	3	37.50%	194.43	2.46	172.47	2.18	0	0.00%	0.00	0.00	0.00	0.00
1983 Total		1	1.52%	574.20	5.62	327.20	4.60	22	33.33%	581.43	3.59	418.72	2.61	0	0.00%	0.00	0.00	0.00	0.00
1984	HDGV	1	1.01%	666.50	0.18	889.40	0.50	14	14.14%	953.27	2.42	660.15	1.85	1	1.01%	546.10	0.77	595.50	0.66
	LDGT1	1	33.33%	115.00	1.98	163.60	2.89	2	66.67%	1073.45	3.69	1127.90	5.19	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	100.00%	924.10	0.09	1008.60	0.15	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	277.30	4.45	158.60	2.44	1	33.33%	13.50	0.00	31.70	0.12
1984 Total		2	1.89%	390.75	1.08	526.50	1.70	18	16.98%	927.45	2.55	703.62	2.16	2	1.89%	279.80	0.39	313.60	0.39
1985	HDGV	0	0.00%	0.00	0.00	0.00	0.00	16	16.67%	843.06	3.69	717.01	2.49	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	2	50.00%	1069.50	4.80	1082.10	5.89	2	50.00%	310.85	0.76	210.75	0.76	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	100.00%	352.90	0.07	401.70	0.07	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	20.00%	1977.30	0.61	2000.00	8.50	0	0.00%	0.00	0.00	0.00	0.00
1985 Total		2	1.89%	1069.50	4.80	1082.10	5.89	20	18.87%	822.04	3.06	714.77	2.50	0	0.00%	0.00	0.00	0.00	0.00
1986	HDGV	0	0.00%	0.00	0.00	0.00	0.00	34	37.78%	565.29	2.45	422.36	2.20	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	11.11%	394.90	0.85	300.10	1.73	0	0.00%	0.00	0.00	0.00	0.00
1986 Total		0	0.00%	0.00	0.00	0.00	0.00	35	34.31%	560.42	2.40	418.87	2.18	0	0.00%	0.00	0.00	0.00	0.00
1987	HDGV	1	0.97%	756.70	9.96	756.40	9.88	24	23.30%	723.98	2.72	523.68	1.96	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	2	100.00%	551.00	2.20	968.15	1.24	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
1987 Total		1	0.91%	756.70	9.96	756.40	9.88	26	23.64%	717.06	2.70	557.87	1.91	0	0.00%	0.00	0.00	0.00	0.00
1988	HDGV	0	0.00%	0.00	0.00	0.00	0.00	20	14.18%	506.67	3.22	389.85	2.01	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	50.00%	371.80	0.02	1337.30	0.16	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	2	100.00%	868.50	1.22	919.60	1.27	0	0.00%	0.00	0.00	0.00	0.00
1988 Total		0	0.00%	0.00	0.00	0.00	0.00	23	15.44%	532.27	2.90	477.11	1.87	0	0.00%	0.00	0.00	0.00	0.00
1989	HDGV	0	0.00%	0.00	0.00	0.00	0.00	23	8.88%	509.11	2.08	543.80	2.23	1	0.39%	130.70	0.52	109.20	0.56
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	50.00%	312.10	7.11	221.40	7.89	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	6	35.29%	645.73	4.14	749.98	4.40	1	5.88%	3.10	0.00	4.80	0.00
1989 Total		0	0.00%	0.00	0.00	0.00	0.00	30	10.75%	529.87	2.66	574.29	2.85	2	0.72%	66.90	0.26	57.00	0.28
1990	HDGV	0	0.00%	0.00	0.00	0.00	0.00	22	8.98%	416.02	2.08	287.58	1.38	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	20.00%	201.90	0.20	285.40	0.19	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	50.00%	1068.80	7.99	408.20	2.50	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	5	38.46%	190.46	1.02	241.14	2.01	0	0.00%	0.00	0.00	0.00	0.00
1990 Total		0	0.00%	0.00	0.00	0.00	0.00	29	10.94%	392.26	2.03	283.66	1.49	0	0.00%	0.00	0.00	0.00	0.00
1991	HDGV	0	0.00%	0.00	0.00	0.00	0.00	35	13.16%	409.69	2.75	351.85	2.96	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	2	33.33%	581.75	2.21	544.30	1.10	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	2	50.00%	177.80	2.58	291.15	3.59	0	0.00%	0.00	0.00	0.00	0.00

Vehicle		Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Year	Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	3	15.00%	400.03	1.33	279.50	0.56	0	0.00%	0.00	0.00	0.00	0.00
1991 Total		0	0.00%	0.00	0.00	0.00	0.00	42	14.19%	406.15	2.61	352.96	2.73	0	0.00%	0.00	0.00	0.00	0.00
1992	HDGV	0	0.00%	0.00	0.00	0.00	0.00	33	9.30%	372.40	2.75	336.81	2.75	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	237.80	1.47	259.90	1.41	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	2	28.57%	182.50	1.72	386.65	2.34	0	0.00%	0.00	0.00	0.00	0.00
1992 Total		0	0.00%	0.00	0.00	0.00	0.00	36	9.78%	358.11	2.65	337.44	2.69	0	0.00%	0.00	0.00	0.00	0.00
1993	HDGV	2	0.50%	846.60	1.63	824.75	0.62	34	8.48%	546.96	3.27	526.27	2.97	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	20.00%	404.20	1.16	377.50	1.39	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	2	18.18%	181.90	0.57	339.50	0.49	0	0.00%	0.00	0.00	0.00	0.00
1993 Total		2	0.48%	846.60	1.63	824.75	0.62	37	8.81%	523.37	3.07	512.16	2.79	0	0.00%	0.00	0.00	0.00	0.00
1994	HDGV	1	0.20%	1217.00	1.19	307.80	0.77	49	9.84%	446.94	2.95	430.41	3.07	1	0.20%	27.10	0.38	27.10	0.37
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	10.00%	235.80	0.61	201.00	0.84	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	3	14.29%	895.10	1.95	699.27	2.92	1	4.76%	87.20	0.30	124.80	0.66
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	4	14.29%	184.28	0.62	354.18	1.13	2	7.14%	116.30	0.44	118.25	0.44
1994 Total		1	0.18%	1217.00	1.19	307.80	0.77	57	10.23%	448.39	2.69	435.18	2.88	4	0.72%	86.73	0.39	97.10	0.48
1995	HDGV	0	0.00%	0.00	0.00	0.00	0.00	71	9.78%	462.75	3.14	428.61	3.61	1	0.14%	107.50	0.88	139.40	1.47
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	2	33.33%	330.95	0.86	339.75	1.02	1	16.67%	10.60	0.00	11.40	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	3	13.04%	318.80	0.10	318.13	2.19	0	0.00%	0.00	0.00	0.00	0.00
1995 Total		0	0.00%	0.00	0.00	0.00	0.00	76	9.90%	453.60	2.96	421.91	3.49	2	0.26%	59.05	0.44	75.40	0.74
1996	HDGV	2	0.27%	1446.20	7.20	1494.70	10.37	50	6.83%	539.17	2.64	421.26	1.84	1	0.14%	108.50	0.25	442.30	0.81
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	2	50.00%	322.45	1.31	306.25	0.55	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	14.29%	1129.80	0.76	1252.00	0.67	1	14.29%	38.90	0.02	39.90	0.03
1996 Total		2	0.27%	1446.20	7.20	1494.70	10.37	53	7.10%	542.19	2.55	432.60	1.77	2	0.27%	73.70	0.14	241.10	0.42
1997	HDGV	0	0.00%	0.00	0.00	0.00	0.00	54	5.48%	455.35	2.18	325.22	1.84	1	0.10%	108.30	0.47	87.40	0.51
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	536.10	7.34	673.00	6.97	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	3	42.86%	323.67	1.60	175.17	1.70	0	0.00%	0.00	0.00	0.00	0.00
1997 Total		0	0.00%	0.00	0.00	0.00	0.00	58	5.79%	449.93	2.24	323.46	1.92	1	0.10%	108.30	0.47	87.40	0.51
1998	HDGV	0	0.00%	0.00	0.00	0.00	0.00	49	6.97%	871.04	1.57	706.48	1.43	3	0.43%	104.27	0.33	111.17	0.45
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	20.00%	255.30	0.05	216.20	0.04	1	20.00%	188.20	0.29	213.80	0.45
	LDGT2	1	50.00%	276.40	0.44	331.60	0.42	1	50.00%	1292.60	1.36	1390.50	1.38	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
1998 Total		1	0.14%	276.40	0.44	331.60	0.42	51	7.14%	867.16	1.53	710.28	1.40	4	0.56%	125.25	0.32	136.83	0.45
1999	HDGV	0	0.00%	0.00	0.00	0.00	0.00	74	4.93%	601.63	1.28	476.00	1.26	1	0.07%	140.50	0.63	324.50	0.86
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
1999 Total		0	0.00%	0.00	0.00	0.00	0.00	74	4.90%	601.63	1.28	476.00	1.26	1	0.07%	140.50	0.63	324.50	0.86
2000	HDGV	0	0.00%	0.00	0.00	0.00	0.00	75	5.11%	719.33	1.75	640.99	1.96	12	0.82%	103.62	0.31	106.95	0.65
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	14.29%	439.30	0.16	451.50	0.16	0	0.00%	0.00	0.00	0.00	0.00

Vehicle		Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Year	Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	20.00%	258.90	0.60	273.90	1.43	0	0.00%	0.00	0.00	0.00	0.00
2000 Total		0	0.00%	0.00	0.00	0.00	0.00	77	5.19%	709.71	1.72	633.77	1.93	12	0.81%	103.62	0.31	106.95	0.65
2001	HDGV	0	0.00%	0.00	0.00	0.00	0.00	37	2.06%	640.63	1.15	651.32	1.04	10	0.56%	120.20	0.39	120.80	0.35
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2001 Total		0	0.00%	0.00	0.00	0.00	0.00	37	2.05%	640.63	1.15	651.32	1.04	10	0.55%	120.20	0.39	120.80	0.35
2002	HDGV	1	0.07%	1315.40	0.73	928.00	1.63	44	2.93%	664.41	1.56	680.14	1.77	7	0.47%	106.74	0.23	43.80	0.20
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	1	20.00%	4.50	0.00	5.10	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	359.00	4.18	410.80	4.14	0	0.00%	0.00	0.00	0.00	0.00
2002 Total		1	0.07%	1315.40	0.73	928.00	1.63	45	2.98%	657.62	1.62	674.16	1.82	8	0.53%	93.96	0.20	38.96	0.18
2003	HDGV	0	0.00%	0.00	0.00	0.00	0.00	27	1.50%	580.04	2.21	552.25	2.14	8	0.45%	81.54	0.19	76.96	0.45
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2003 Total		0	0.00%	0.00	0.00	0.00	0.00	27	1.49%	580.04	2.21	552.25	2.14	8	0.44%	81.54	0.19	76.96	0.45
2004	HDGV	0	0.00%	0.00	0.00	0.00	0.00	20	1.23%	820.41	2.28	976.15	2.99	6	0.37%	47.20	0.14	51.32	0.15
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	1	12.50%	2.50	0.00	3.30	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2004 Total		0	0.00%	0.00	0.00	0.00	0.00	20	1.22%	820.41	2.28	976.15	2.99	7	0.43%	40.81	0.12	44.46	0.13
2005	HDGV	1	0.06%	1222.80	0.26	1304.70	0.15	15	0.96%	637.20	2.04	556.69	2.12	5	0.32%	78.22	0.24	64.12	0.27
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	2	25.00%	228.30	0.85	216.90	0.81	1	12.50%	0.90	0.00	1.00	0.00
2005 Total		1	0.06%	1222.80	0.26	1304.70	0.15	17	1.07%	589.09	1.90	516.72	1.96	6	0.38%	65.33	0.20	53.60	0.23
2006	HDGV	0	0.00%	0.00	0.00	0.00	0.00	26	1.52%	599.19	0.89	592.85	0.96	5	0.29%	128.12	0.44	105.42	0.57
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	2	33.33%	30.95	0.06	24.70	0.06
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	9.00	0.01	260.40	0.31	1	33.33%	77.60	0.04	120.70	0.13
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2006 Total		0	0.00%	0.00	0.00	0.00	0.00	27	1.57%	577.33	0.86	580.54	0.93	8	0.47%	97.51	0.30	87.15	0.39
2007	HDGV	0	0.00%	0.00	0.00	0.00	0.00	9	0.60%	512.92	1.32	500.52	1.02	1	0.07%	5.00	0.00	2.40	0.03
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	1	5.88%	0.60	0.00	4.70	0.08
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2007 Total		0	0.00%	0.00	0.00	0.00	0.00	9	0.59%	512.92	1.32	500.52	1.02	2	0.13%	2.80	0.00	3.55	0.06
2008	HDGV	0	0.00%	0.00	0.00	0.00	0.00	14	0.92%	507.77	2.57	519.22	2.97	2	0.13%	75.25	0.19	88.10	0.17
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	259.90	1.23	280.70	0.83	0	0.00%	0.00	0.00	0.00	0.00
2008 Total		0	0.00%	0.00	0.00	0.00	0.00	15	0.97%	491.25	2.48	503.32	2.82	2	0.13%	75.25	0.19	88.10	0.17
2009	HDGV	0	0.00%	0.00	0.00	0.00	0.00	1	0.12%	331.20	0.77	121.20	0.71	4	0.48%	18.43	0.03	20.93	0.03
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00

Vehicle		Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Year	Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2009 Total		0	0.00%	0.00	0.00	0.00	0.00	1	0.12%	331.20	0.77	121.20	0.71	4	0.47%	18.43	0.03	20.93	0.03
2010	HDGV	0	0.00%	0.00	0.00	0.00	0.00	7	0.84%	660.67	3.95	172.80	1.66	1	0.12%	1.70	0.00	3.80	0.01
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2010 Total		0	0.00%	0.00	0.00	0.00	0.00	7	0.81%	660.67	3.95	172.80	1.66	1	0.12%	1.70	0.00	3.80	0.01
2011	HDGV	0	0.00%	0.00	0.00	0.00	0.00	9	0.68%	407.97	1.48	341.02	1.62	1	0.08%	1.80	0.00	5.90	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2011 Total		0	0.00%	0.00	0.00	0.00	0.00	9	0.68%	407.97	1.48	341.02	1.62	1	0.08%	1.80	0.00	5.90	0.00
2012	HDGV	0	0.00%	0.00	0.00	0.00	0.00	5	0.28%	244.66	3.31	262.06	3.24	7	0.40%	42.79	0.09	113.09	0.21
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2012 Total		0	0.00%	0.00	0.00	0.00	0.00	5	0.28%	244.66	3.31	262.06	3.24	7	0.39%	42.79	0.09	113.09	0.21
2013	HDGV	0	0.00%	0.00	0.00	0.00	0.00	4	0.30%	241.38	2.76	98.05	1.74	5	0.38%	32.24	0.11	37.32	0.28
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	50.00%	11.80	0.21	39.70	1.37	0	0.00%	0.00	0.00	0.00	0.00
2013 Total		0	0.00%	0.00	0.00	0.00	0.00	5	0.38%	195.46	2.25	86.38	1.66	5	0.38%	32.24	0.11	37.32	0.28
2014	HDGV	0	0.00%	0.00	0.00	0.00	0.00	8	0.43%	521.96	2.39	439.95	2.10	4	0.21%	40.93	0.07	63.86	0.21
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2014 Total		0	0.00%	0.00	0.00	0.00	0.00	8	0.43%	521.96	2.39	439.95	2.10	4	0.21%	40.93	0.07	63.86	0.21
2015	HDGV	0	0.00%	0.00	0.00	0.00	0.00	6	0.31%	415.44	1.21	291.65	1.36	5	0.26%	21.70	0.01	19.58	0.09
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2015 Total		0	0.00%	0.00	0.00	0.00	0.00	6	0.31%	415.44	1.21	291.65	1.36	5	0.26%	21.70	0.01	19.58	0.09
2016	HDGV	0	0.00%	0.00	0.00	0.00	0.00	7	0.21%	525.97	1.91	494.84	2.09	2	0.06%	2.25	0.01	74.28	0.30
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	1167.50	2.16	518.50	3.52	0	0.00%	0.00	0.00	0.00	0.00
2016 Total		0	0.00%	0.00	0.00	0.00	0.00	8	0.24%	606.16	1.95	497.80	2.27	2	0.06%	2.25	0.01	74.28	0.30
2017	HDGV	0	0.00%	0.00	0.00	0.00	0.00	1	0.18%	592.50	0.00	468.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2017 Total		0	0.00%	0.00	0.00	0.00	0.00	1	0.18%	592.50	0.00	468.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2018	HDGV	0	0.00%	0.00	0.00	0.00	0.00	1	0.44%	0.00	0.00	119.00	0.66	1	0.44%	1.40	0.02	1.70	0.03
2018 Total		0	0.00%	0.00	0.00	0.00	0.00	1	0.44%	0.00	0.00	119.00	0.66	1	0.44%	1.40	0.02	1.70	0.03
2019	HDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2019 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00

Vehicle		Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Year	Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
2020	HDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	1	1.79%	0.00	0.00	0.20	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2020 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	1	1.75%	0.00	0.00	0.20	0.00
2021	HDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2021 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2022	HDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2022 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2023	HDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2023 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
Grand Total		**109**	**0.28%**	**696.50**	**3.74**	**555.97**	**3.48**	**1,840**	**4.66%**	**637.09**	**3.06**	**543.86**	**2.91**	**271**	**0.69%**	**165.36**	**0.81**	**166.45**	**1.22**

Idle Initial Failure Report - Summary by Veh (V1.03)

Vehicle	Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
HDGV	12	0.03%	968.77	3.96	877.64	4.39	999	2.75%	603.34	2.38	525.47	2.23	111	0.31%	89.77	0.41	103.84	0.58
LDGT1	29	3.80%	541.32	3.04	448.86	3.63	214	28.01%	562.89	3.33	495.31	3.17	35	4.58%	126.01	0.38	125.85	1.15
LDGT2	31	3.19%	824.12	4.62	574.29	3.13	185	19.03%	793.05	4.56	624.40	3.85	89	9.16%	294.93	1.61	266.56	1.98
LDGV	37	2.57%	624.41	3.49	520.24	3.35	442	30.76%	687.82	3.90	575.22	3.93	36	2.51%	116.32	0.45	158.41	1.43
Grand Total	**109**	**0.28%**	**696.50**	**3.74**	**555.97**	**3.48**	**1,840**	**4.66%**	**637.09**	**3.06**	**543.86**	**2.91**	**271**	**0.69%**	**165.36**	**0.81**	**166.45**	**1.22**

Appendix C2

Idle Initial Failure Report

Date
Between 1/1/2023 and 1/1/2024

Idle Initial Failure Report (V1.03)

Vehicle		Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Year	Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
1974	HDGV	0	0.00%	0.00	0.00	0.00	0.00	3	7.69%	1352.87	6.30	1381.83	5.26	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	27	23.89%	844.46	5.46	806.05	4.57	2	1.77%	210.40	0.91	180.50	2.19
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	11	16.67%	1464.97	3.89	1340.63	5.03	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	101	38.26%	938.22	5.47	776.50	5.29	4	1.52%	296.68	1.26	350.85	1.71
1974 Total		0	0.00%	0.00	0.00	0.00	0.00	142	29.46%	968.64	5.37	838.60	5.13	6	1.24%	267.92	1.14	294.07	1.87
1975	HDGV	0	0.00%	0.00	0.00	0.00	0.00	1	10.00%	192.20	6.39	226.60	9.42	2	20.00%	247.65	3.66	117.35	1.27
	LDGT1	1	9.09%	646.40	0.14	235.30	2.51	3	27.27%	766.50	3.42	745.00	1.87	1	9.09%	215.00	0.37	197.20	1.12
	LDGT2	2	15.38%	1220.40	5.78	1670.15	4.13	3	23.08%	742.87	6.70	746.97	7.07	1	7.69%	70.40	1.74	69.50	1.75
	LDGV	2	12.50%	297.70	5.23	161.10	2.93	3	18.75%	570.00	3.94	439.40	4.44	1	6.25%	316.60	1.99	378.90	1.91
1975 Total		5	10.00%	736.52	4.43	779.56	3.32	10	20.00%	643.03	4.86	602.07	4.95	5	10.00%	219.46	2.28	176.06	1.46
1976	HDGV	1	2.86%	468.80	6.19	577.20	7.21	4	11.43%	926.48	2.92	704.08	2.26	3	8.57%	213.37	1.94	132.87	1.95
	LDGT1	1	2.04%	164.40	4.62	495.30	4.09	19	38.78%	636.49	3.95	498.57	3.08	5	10.20%	181.64	0.42	81.00	0.87
	LDGT2	2	1.59%	801.80	6.68	163.25	3.33	23	18.25%	973.99	5.39	541.85	4.96	14	11.11%	260.91	2.14	347.49	2.66
	LDGV	4	3.08%	1033.98	3.86	478.20	1.73	47	36.15%	728.61	4.49	561.71	4.60	6	4.62%	110.22	0.29	140.13	1.79
1976 Total		8	2.35%	796.59	4.95	413.98	3.11	93	27.35%	780.66	4.54	550.02	4.28	28	8.24%	209.37	1.42	232.47	2.08
1977	HDGV	0	0.00%	0.00	0.00	0.00	0.00	10	15.87%	1150.68	5.54	1242.54	4.68	3	4.76%	171.97	0.38	442.70	2.58
	LDGT1	3	5.56%	208.00	2.51	466.10	4.69	18	33.33%	644.18	2.94	469.04	2.68	2	3.70%	232.15	0.76	88.80	0.71
	LDGT2	6	3.26%	882.60	4.80	406.23	1.93	33	17.93%	849.24	5.67	721.94	4.71	31	16.85%	269.27	2.06	256.14	2.51
	LDGV	7	4.38%	336.60	2.91	314.57	3.20	51	31.87%	682.27	3.95	517.71	3.46	4	2.50%	139.78	0.69	260.55	2.26
1977 Total		16	3.47%	517.24	3.54	377.36	3.00	112	24.30%	767.16	4.44	634.78	3.81	40	8.68%	247.17	1.73	262.21	2.40
1978	HDGV	1	2.50%	818.20	5.72	802.10	5.94	5	12.50%	1333.38	5.07	833.42	5.34	2	5.00%	157.95	2.36	381.65	1.79
	LDGT1	4	5.48%	290.03	2.22	205.55	2.61	34	46.58%	644.26	3.45	587.39	3.49	3	4.11%	210.87	0.60	139.73	1.77
	LDGT2	7	3.18%	1031.93	4.74	725.94	2.89	29	13.18%	915.94	5.87	712.86	4.13	29	13.18%	418.15	1.54	297.88	1.61
	LDGV	6	3.28%	571.33	2.67	429.33	3.49	54	29.51%	717.40	3.23	641.62	3.49	5	2.73%	77.34	0.30	136.20	2.51
1978 Total		18	3.49%	701.66	3.54	515.66	3.20	122	23.64%	768.91	3.98	651.30	3.72	39	7.56%	345.17	1.35	269.28	1.75
1979	HDGV	0	0.00%	0.00	0.00	0.00	0.00	11	20.37%	997.18	4.67	884.75	4.33	2	3.70%	102.15	2.05	86.85	1.38
	LDGT1	3	2.97%	569.43	3.99	846.00	2.71	32	31.68%	573.61	3.45	495.11	3.68	8	7.92%	90.73	0.29	234.59	2.23
	LDGT2	10	7.09%	647.88	4.73	512.12	4.32	48	34.04%	663.66	4.13	511.86	3.00	8	5.67%	147.48	0.29	186.83	1.37
	LDGV	10	4.69%	800.91	4.00	846.75	3.65	83	38.97%	566.03	3.97	444.34	3.69	2	0.94%	60.35	0.16	37.30	0.26
1979 Total		23	4.52%	706.74	4.30	701.16	3.82	174	34.18%	619.96	3.96	500.15	3.54	20	3.93%	111.53	0.45	180.98	1.61
1980	HDGV	0	0.00%	0.00	0.00	0.00	0.00	4	14.81%	734.55	4.14	736.45	4.38	1	3.70%	158.40	0.40	401.70	10.16
	LDGT1	6	8.11%	807.53	3.52	330.25	3.48	16	21.62%	403.88	2.78	263.18	3.32	1	1.35%	55.80	1.25	103.80	2.00
	LDGT2	1	2.70%	1541.90	0.91	841.60	2.60	9	24.32%	533.63	3.02	519.36	3.05	2	5.41%	302.80	0.13	196.30	0.27
	LDGV	4	3.33%	682.23	3.53	478.80	3.23	24	20.00%	704.95	3.18	685.71	3.16	5	4.17%	99.20	0.33	157.66	1.63
1980 Total		11	4.26%	828.73	3.29	430.75	3.31	53	20.54%	585.94	3.11	533.73	3.28	9	3.49%	146.20	0.39	187.38	2.32
1981	HDGV	0	0.00%	0.00	0.00	0.00	0.00	15	31.91%	895.45	3.09	770.53	2.28	1	2.13%	21.80	0.18	26.80	0.22
	LDGT1	8	8.00%	536.98	2.80	402.30	3.81	46	46.00%	367.57	2.63	297.31	2.54	6	6.00%	119.92	0.30	96.10	0.52
	LDGT2	2	5.26%	255.40	3.89	161.40	2.14	16	42.11%	439.97	2.99	343.51	3.21	1	2.63%	22.80	0.00	15.90	0.04
	LDGV	4	3.77%	408.40	3.12	463.30	4.65	35	33.02%	437.39	2.45	369.29	3.55	3	2.83%	57.13	0.04	59.90	0.16
1981 Total		14	4.81%	463.98	3.04	385.31	3.81	112	38.49%	467.67	2.69	389.78	2.92	11	3.78%	85.05	0.19	72.64	0.35
1982	HDGV	0	0.00%	0.00	0.00	0.00	0.00	9	19.57%	713.84	2.72	572.17	2.34	0	0.00%	0.00	0.00	0.00	0.00

Vehicle		Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Year	Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	1	100.00%	79.20	0.20	62.30	0.75
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	100.00%	2000.00	7.21	1909.80	7.59	0	0.00%	0.00	0.00	0.00	0.00
1982 Total		0	0.00%	0.00	0.00	0.00	0.00	10	20.83%	842.46	3.17	705.93	2.86	1	2.08%	79.20	0.20	62.30	0.75
1983	HDGV	1	1.75%	574.20	5.62	327.20	4.60	19	33.33%	642.53	3.77	457.60	2.68	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	3	37.50%	194.43	2.46	172.47	2.18	0	0.00%	0.00	0.00	0.00	0.00
1983 Total		1	1.52%	574.20	5.62	327.20	4.60	22	33.33%	581.43	3.59	418.72	2.61	0	0.00%	0.00	0.00	0.00	0.00
1984	HDGV	1	1.01%	666.50	0.18	889.40	0.50	14	14.14%	953.27	2.42	660.15	1.85	1	1.01%	546.10	0.77	595.50	0.66
	LDGT1	1	33.33%	115.00	1.98	163.60	2.89	2	66.67%	1073.45	3.69	1127.90	5.19	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	100.00%	924.10	0.09	1008.60	0.15	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	277.30	4.45	158.60	2.44	1	33.33%	13.50	0.00	31.70	0.12
1984 Total		2	1.89%	390.75	1.08	526.50	1.70	18	16.98%	927.45	2.55	703.62	2.16	2	1.89%	279.80	0.39	313.60	0.39
1985	HDGV	0	0.00%	0.00	0.00	0.00	0.00	16	16.67%	843.06	3.69	717.01	2.49	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	2	50.00%	1069.50	4.80	1082.10	5.89	2	50.00%	310.85	0.76	210.75	0.76	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	100.00%	352.90	0.07	401.70	0.07	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	20.00%	1977.30	0.61	2000.00	8.50	0	0.00%	0.00	0.00	0.00	0.00
1985 Total		2	1.89%	1069.50	4.80	1082.10	5.89	20	18.87%	822.04	3.06	714.77	2.50	0	0.00%	0.00	0.00	0.00	0.00
1986	HDGV	0	0.00%	0.00	0.00	0.00	0.00	34	37.78%	565.29	2.45	422.36	2.20	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	11.11%	394.90	0.85	300.10	1.73	0	0.00%	0.00	0.00	0.00	0.00
1986 Total		0	0.00%	0.00	0.00	0.00	0.00	35	34.31%	560.42	2.40	418.87	2.18	0	0.00%	0.00	0.00	0.00	0.00
1987	HDGV	1	0.97%	756.70	9.96	756.40	9.88	24	23.30%	723.98	2.72	523.68	1.96	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	2	100.00%	551.00	2.20	968.15	1.24	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
1987 Total		1	0.91%	756.70	9.96	756.40	9.88	26	23.64%	717.06	2.70	557.87	1.91	0	0.00%	0.00	0.00	0.00	0.00
1988	HDGV	0	0.00%	0.00	0.00	0.00	0.00	20	14.18%	506.67	3.22	389.85	2.01	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	50.00%	371.80	0.02	1337.30	0.16	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	2	100.00%	868.50	1.22	919.60	1.27	0	0.00%	0.00	0.00	0.00	0.00
1988 Total		0	0.00%	0.00	0.00	0.00	0.00	23	15.44%	532.27	2.90	477.11	1.87	0	0.00%	0.00	0.00	0.00	0.00
1989	HDGV	0	0.00%	0.00	0.00	0.00	0.00	23	8.88%	509.11	2.08	543.80	2.23	1	0.39%	130.70	0.52	109.20	0.56
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	50.00%	312.10	7.11	221.40	7.89	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	6	35.29%	645.73	4.14	749.98	4.40	1	5.88%	3.10	0.00	4.80	0.00
1989 Total		0	0.00%	0.00	0.00	0.00	0.00	30	10.75%	529.87	2.66	574.29	2.85	2	0.72%	66.90	0.26	57.00	0.28
1990	HDGV	0	0.00%	0.00	0.00	0.00	0.00	22	8.98%	416.02	2.08	287.58	1.38	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	20.00%	201.90	0.20	285.40	0.19	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	50.00%	1068.80	7.99	408.20	2.50	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	5	38.46%	190.46	1.02	241.14	2.01	0	0.00%	0.00	0.00	0.00	0.00
1990 Total		0	0.00%	0.00	0.00	0.00	0.00	29	10.94%	392.26	2.03	283.66	1.49	0	0.00%	0.00	0.00	0.00	0.00
1991	HDGV	0	0.00%	0.00	0.00	0.00	0.00	35	13.16%	409.69	2.75	351.85	2.96	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	2	33.33%	581.75	2.21	544.30	1.10	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	2	50.00%	177.80	2.58	291.15	3.59	0	0.00%	0.00	0.00	0.00	0.00

Vehicle		Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Year	Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	3	15.00%	400.03	1.33	279.50	0.56	0	0.00%	0.00	0.00	0.00	0.00
1991 Total		0	0.00%	0.00	0.00	0.00	0.00	42	14.19%	406.15	2.61	352.96	2.73	0	0.00%	0.00	0.00	0.00	0.00
1992	HDGV	0	0.00%	0.00	0.00	0.00	0.00	33	9.30%	372.40	2.75	336.81	2.75	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	237.80	1.47	259.90	1.41	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	2	28.57%	182.50	1.72	386.65	2.34	0	0.00%	0.00	0.00	0.00	0.00
1992 Total		0	0.00%	0.00	0.00	0.00	0.00	36	9.78%	358.11	2.65	337.44	2.69	0	0.00%	0.00	0.00	0.00	0.00
1993	HDGV	2	0.50%	846.60	1.63	824.75	0.62	34	8.48%	546.96	3.27	526.27	2.97	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	20.00%	404.20	1.16	377.50	1.39	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	2	18.18%	181.90	0.57	339.50	0.49	0	0.00%	0.00	0.00	0.00	0.00
1993 Total		2	0.48%	846.60	1.63	824.75	0.62	37	8.81%	523.37	3.07	512.16	2.79	0	0.00%	0.00	0.00	0.00	0.00
1994	HDGV	1	0.20%	1217.00	1.19	307.80	0.77	49	9.84%	446.94	2.95	430.41	3.07	1	0.20%	27.10	0.38	27.10	0.37
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	10.00%	235.80	0.61	201.00	0.84	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	3	14.29%	895.10	1.95	699.27	2.92	1	4.76%	87.20	0.30	124.80	0.66
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	4	14.29%	184.28	0.62	354.18	1.13	2	7.14%	116.30	0.44	118.25	0.44
1994 Total		1	0.18%	1217.00	1.19	307.80	0.77	57	10.23%	448.39	2.69	435.18	2.88	4	0.72%	86.73	0.39	97.10	0.48
1995	HDGV	0	0.00%	0.00	0.00	0.00	0.00	71	9.78%	462.75	3.14	428.61	3.61	1	0.14%	107.50	0.88	139.40	1.47
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	2	33.33%	330.95	0.86	339.75	1.02	1	16.67%	10.60	0.00	11.40	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	3	13.04%	318.80	0.10	318.13	2.19	0	0.00%	0.00	0.00	0.00	0.00
1995 Total		0	0.00%	0.00	0.00	0.00	0.00	76	9.90%	453.60	2.96	421.91	3.49	2	0.26%	59.05	0.44	75.40	0.74
1996	HDGV	2	0.27%	1446.20	7.20	1494.70	10.37	50	6.83%	539.17	2.64	421.26	1.84	1	0.14%	108.50	0.25	442.30	0.81
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	2	50.00%	322.45	1.31	306.25	0.55	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	14.29%	1129.80	0.76	1252.00	0.67	1	14.29%	38.90	0.02	39.90	0.03
1996 Total		2	0.27%	1446.20	7.20	1494.70	10.37	53	7.10%	542.19	2.55	432.60	1.77	2	0.27%	73.70	0.14	241.10	0.42
1997	HDGV	0	0.00%	0.00	0.00	0.00	0.00	54	5.48%	455.35	2.18	325.22	1.84	1	0.10%	108.30	0.47	87.40	0.51
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	536.10	7.34	673.00	6.97	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	3	42.86%	323.67	1.60	175.17	1.70	0	0.00%	0.00	0.00	0.00	0.00
1997 Total		0	0.00%	0.00	0.00	0.00	0.00	58	5.79%	449.93	2.24	323.46	1.92	1	0.10%	108.30	0.47	87.40	0.51
1998	HDGV	0	0.00%	0.00	0.00	0.00	0.00	49	6.97%	871.04	1.57	706.48	1.43	3	0.43%	104.27	0.33	111.17	0.45
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	20.00%	255.30	0.05	216.20	0.04	1	20.00%	188.20	0.29	213.80	0.45
	LDGT2	1	50.00%	276.40	0.44	331.60	0.42	1	50.00%	1292.60	1.36	1390.50	1.38	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
1998 Total		1	0.14%	276.40	0.44	331.60	0.42	51	7.14%	867.16	1.53	710.28	1.40	4	0.56%	125.25	0.32	136.83	0.45
1999	HDGV	0	0.00%	0.00	0.00	0.00	0.00	74	4.93%	601.63	1.28	476.00	1.26	1	0.07%	140.50	0.63	324.50	0.86
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
1999 Total		0	0.00%	0.00	0.00	0.00	0.00	74	4.90%	601.63	1.28	476.00	1.26	1	0.07%	140.50	0.63	324.50	0.86
2000	HDGV	0	0.00%	0.00	0.00	0.00	0.00	75	5.11%	719.33	1.75	640.99	1.96	12	0.82%	103.62	0.31	106.95	0.65
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	1	14.29%	439.30	0.16	451.50	0.16	0	0.00%	0.00	0.00	0.00	0.00

Vehicle		Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Year	Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	20.00%	258.90	0.60	273.90	1.43	0	0.00%	0.00	0.00	0.00	0.00
2000 Total		0	0.00%	0.00	0.00	0.00	0.00	77	5.19%	709.71	1.72	633.77	1.93	12	0.81%	103.62	0.31	106.95	0.65
2001	HDGV	0	0.00%	0.00	0.00	0.00	0.00	37	2.06%	640.63	1.15	651.32	1.04	10	0.56%	120.20	0.39	120.80	0.35
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2001 Total		0	0.00%	0.00	0.00	0.00	0.00	37	2.05%	640.63	1.15	651.32	1.04	10	0.55%	120.20	0.39	120.80	0.35
2002	HDGV	1	0.07%	1315.40	0.73	928.00	1.63	44	2.93%	664.41	1.56	680.14	1.77	7	0.47%	106.74	0.23	43.80	0.20
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	1	20.00%	4.50	0.00	5.10	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	359.00	4.18	410.80	4.14	0	0.00%	0.00	0.00	0.00	0.00
2002 Total		1	0.07%	1315.40	0.73	928.00	1.63	45	2.98%	657.62	1.62	674.16	1.82	8	0.53%	93.96	0.20	38.96	0.18
2003	HDGV	0	0.00%	0.00	0.00	0.00	0.00	27	1.50%	580.04	2.21	552.25	2.14	8	0.45%	81.54	0.19	76.96	0.45
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2003 Total		0	0.00%	0.00	0.00	0.00	0.00	27	1.49%	580.04	2.21	552.25	2.14	8	0.44%	81.54	0.19	76.96	0.45
2004	HDGV	0	0.00%	0.00	0.00	0.00	0.00	20	1.23%	820.41	2.28	976.15	2.99	6	0.37%	47.20	0.14	51.32	0.15
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	1	12.50%	2.50	0.00	3.30	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2004 Total		0	0.00%	0.00	0.00	0.00	0.00	20	1.22%	820.41	2.28	976.15	2.99	7	0.43%	40.81	0.12	44.46	0.13
2005	HDGV	1	0.06%	1222.80	0.26	1304.70	0.15	15	0.96%	637.20	2.04	556.69	2.12	5	0.32%	78.22	0.24	64.12	0.27
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	2	25.00%	228.30	0.85	216.90	0.81	1	12.50%	0.90	0.00	1.00	0.00
2005 Total		1	0.06%	1222.80	0.26	1304.70	0.15	17	1.07%	589.09	1.90	516.72	1.96	6	0.38%	65.33	0.20	53.60	0.23
2006	HDGV	0	0.00%	0.00	0.00	0.00	0.00	26	1.52%	599.19	0.89	592.85	0.96	5	0.29%	128.12	0.44	105.42	0.57
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	2	33.33%	30.95	0.06	24.70	0.06
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	9.00	0.01	260.40	0.31	1	33.33%	77.60	0.04	120.70	0.13
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2006 Total		0	0.00%	0.00	0.00	0.00	0.00	27	1.57%	577.33	0.86	580.54	0.93	8	0.47%	97.51	0.30	87.15	0.39
2007	HDGV	0	0.00%	0.00	0.00	0.00	0.00	9	0.60%	512.92	1.32	500.52	1.02	1	0.07%	5.00	0.00	2.40	0.03
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	1	5.88%	0.60	0.00	4.70	0.08
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2007 Total		0	0.00%	0.00	0.00	0.00	0.00	9	0.59%	512.92	1.32	500.52	1.02	2	0.13%	2.80	0.00	3.55	0.06
2008	HDGV	0	0.00%	0.00	0.00	0.00	0.00	14	0.92%	507.77	2.57	519.22	2.97	2	0.13%	75.25	0.19	88.10	0.17
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	259.90	1.23	280.70	0.83	0	0.00%	0.00	0.00	0.00	0.00
2008 Total		0	0.00%	0.00	0.00	0.00	0.00	15	0.97%	491.25	2.48	503.32	2.82	2	0.13%	75.25	0.19	88.10	0.17
2009	HDGV	0	0.00%	0.00	0.00	0.00	0.00	1	0.12%	331.20	0.77	121.20	0.71	4	0.48%	18.43	0.03	20.93	0.03
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00

Vehicle		Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Year	Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2009 Total		0	0.00%	0.00	0.00	0.00	0.00	1	0.12%	331.20	0.77	121.20	0.71	4	0.47%	18.43	0.03	20.93	0.03
2010	HDGV	0	0.00%	0.00	0.00	0.00	0.00	7	0.84%	660.67	3.95	172.80	1.66	1	0.12%	1.70	0.00	3.80	0.01
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2010 Total		0	0.00%	0.00	0.00	0.00	0.00	7	0.81%	660.67	3.95	172.80	1.66	1	0.12%	1.70	0.00	3.80	0.01
2011	HDGV	0	0.00%	0.00	0.00	0.00	0.00	9	0.68%	407.97	1.48	341.02	1.62	1	0.08%	1.80	0.00	5.90	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2011 Total		0	0.00%	0.00	0.00	0.00	0.00	9	0.68%	407.97	1.48	341.02	1.62	1	0.08%	1.80	0.00	5.90	0.00
2012	HDGV	0	0.00%	0.00	0.00	0.00	0.00	5	0.28%	244.66	3.31	262.06	3.24	7	0.40%	42.79	0.09	113.09	0.21
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2012 Total		0	0.00%	0.00	0.00	0.00	0.00	5	0.28%	244.66	3.31	262.06	3.24	7	0.39%	42.79	0.09	113.09	0.21
2013	HDGV	0	0.00%	0.00	0.00	0.00	0.00	4	0.30%	241.38	2.76	98.05	1.74	5	0.38%	32.24	0.11	37.32	0.28
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	1	50.00%	11.80	0.21	39.70	1.37	0	0.00%	0.00	0.00	0.00	0.00
2013 Total		0	0.00%	0.00	0.00	0.00	0.00	5	0.38%	195.46	2.25	86.38	1.66	5	0.38%	32.24	0.11	37.32	0.28
2014	HDGV	0	0.00%	0.00	0.00	0.00	0.00	8	0.43%	521.96	2.39	439.95	2.10	4	0.21%	40.93	0.07	63.86	0.21
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2014 Total		0	0.00%	0.00	0.00	0.00	0.00	8	0.43%	521.96	2.39	439.95	2.10	4	0.21%	40.93	0.07	63.86	0.21
2015	HDGV	0	0.00%	0.00	0.00	0.00	0.00	6	0.31%	415.44	1.21	291.65	1.36	5	0.26%	21.70	0.01	19.58	0.09
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2015 Total		0	0.00%	0.00	0.00	0.00	0.00	6	0.31%	415.44	1.21	291.65	1.36	5	0.26%	21.70	0.01	19.58	0.09
2016	HDGV	0	0.00%	0.00	0.00	0.00	0.00	7	0.21%	525.97	1.91	494.84	2.09	2	0.06%	2.25	0.01	74.28	0.30
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	1	33.33%	1167.50	2.16	518.50	3.52	0	0.00%	0.00	0.00	0.00	0.00
2016 Total		0	0.00%	0.00	0.00	0.00	0.00	8	0.24%	606.16	1.95	497.80	2.27	2	0.06%	2.25	0.01	74.28	0.30
2017	HDGV	0	0.00%	0.00	0.00	0.00	0.00	1	0.18%	592.50	0.00	468.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT1	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2017 Total		0	0.00%	0.00	0.00	0.00	0.00	1	0.18%	592.50	0.00	468.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2018	HDGV	0	0.00%	0.00	0.00	0.00	0.00	1	0.44%	0.00	0.00	119.00	0.66	1	0.44%	1.40	0.02	1.70	0.03
2018 Total		0	0.00%	0.00	0.00	0.00	0.00	1	0.44%	0.00	0.00	119.00	0.66	1	0.44%	1.40	0.02	1.70	0.03
2019	HDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2019 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00

Vehicle		Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Year	Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
2020	HDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	1	1.79%	0.00	0.00	0.20	0.00
	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2020 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	1	1.75%	0.00	0.00	0.20	0.00
2021	HDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2021 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2022	HDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2022 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2023	HDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT2	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2023 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
Grand Total		**109**	**0.28%**	**696.50**	**3.74**	**555.97**	**3.48**	**1,840**	**4.66%**	**637.09**	**3.06**	**543.86**	**2.91**	**271**	**0.69%**	**165.36**	**0.81**	**166.45**	**1.22**

Idle Initial Failure Report - Summary by Veh (V1.03)

Vehicle	Failure for Both Exhaust and Other						Failure for Exhaust Only						Failure for Other					
Type	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC	Avg CO	Avg HC 2500 rpm	Avg CO 2500 rpm
HDGV	12	0.03%	968.77	3.96	877.64	4.39	999	2.75%	603.34	2.38	525.47	2.23	111	0.31%	89.77	0.41	103.84	0.58
LDGT1	29	3.80%	541.32	3.04	448.86	3.63	214	28.01%	562.89	3.33	495.31	3.17	35	4.58%	126.01	0.38	125.85	1.15
LDGT2	31	3.19%	824.12	4.62	574.29	3.13	185	19.03%	793.05	4.56	624.40	3.85	89	9.16%	294.93	1.61	266.56	1.98
LDGV	37	2.57%	624.41	3.49	520.24	3.35	442	30.76%	687.82	3.90	575.22	3.93	36	2.51%	116.32	0.45	158.41	1.43
Grand Total	**109**	**0.28%**	**696.50**	**3.74**	**555.97**	**3.48**	**1,840**	**4.66%**	**637.09**	**3.06**	**543.86**	**2.91**	**271**	**0.69%**	**165.36**	**0.81**	**166.45**	**1.22**

Appendix C3

Idle Initial Exhaust Failure Report

Date
Between 1/1/2023 and 1/1/2024

Idle Initial Exhaust Failure Report (V1.01)

Vehicle		Overall Exhaust Failures						HC Failures						CO Failures					
Year	Type	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total %	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm
1974	LDGV	101	96.19%	1094.43	5.82	878.52	5.64	45	44.55%	1493.97	5.75	1153.00	5.70	90	89.11%	894.65	5.86	741.28	5.61
	LDGT	27	93.10%	1017.07	5.49	897.96	5.01	12	44.44%	1462.68	4.87	1107.08	5.01	24	88.89%	794.27	5.80	793.40	5.01
	HDGT	14	100.00%	1428.91	5.13	1382.94	5.29	11	78.57%	1583.77	3.73	1579.76	4.69	6	42.86%	1144.98	7.68	1022.10	6.39
1974 Total		142	95.95%	1109.86	5.70	927.86	5.49	68	47.89%	1502.98	5.27	1213.93	5.41	120	84.51%	887.09	5.94	765.75	5.53
1975	LDGV	5	83.33%	588.13	4.74	452.25	4.31	1	20.00%	1223.40	6.19	1073.10	6.71	5	100.00%	461.08	4.45	328.08	3.83
	LDGT	4	80.00%	736.48	2.60	617.58	2.03	2	50.00%	1191.75	0.66	1065.25	1.91	2	50.00%	281.20	4.54	169.90	2.15
	HDGT	6	66.67%	905.21	6.46	989.54	6.71	3	50.00%	1160.03	6.16	1369.50	5.36	5	83.33%	752.32	6.63	761.56	7.52
1975 Total		15	75.00%	762.02	5.03	727.78	4.87	6	40.00%	1181.17	4.33	1218.68	4.43	12	80.00%	552.45	5.38	482.33	5.09
1976	LDGV	51	89.47%	894.95	5.23	657.19	4.74	22	43.14%	1312.63	5.84	964.77	4.87	47	92.16%	699.43	4.94	513.22	4.68
	LDGT	20	80.00%	668.36	4.32	542.97	3.17	9	45.00%	1012.91	3.72	780.78	3.06	16	80.00%	474.56	4.65	409.21	3.24
	HDGT	30	63.83%	957.98	5.46	504.24	4.54	16	53.33%	1285.02	3.65	660.67	3.30	18	60.00%	667.28	7.07	365.18	5.64
1976 Total		101	78.29%	867.44	5.11	594.25	4.38	47	46.53%	1245.84	4.69	826.01	3.99	81	80.20%	647.87	5.36	459.78	4.61
1977	LDGV	58	93.55%	740.44	4.35	551.74	3.90	36	62.07%	909.48	4.27	685.25	3.86	49	84.48%	616.25	4.41	453.66	3.94
	LDGT	21	91.30%	649.46	3.58	444.51	3.05	12	57.14%	809.47	2.91	481.52	2.21	14	66.67%	512.31	4.16	412.79	3.78
	HDGT	49	59.04%	965.79	5.73	780.12	4.41	22	44.90%	1392.49	3.54	1082.24	2.85	33	67.35%	681.33	7.19	578.71	5.45
1977 Total		128	76.19%	800.86	4.69	610.62	3.94	70	54.69%	1044.14	3.81	775.09	3.26	96	75.00%	623.47	5.33	490.69	4.43
1978	LDGV	60	92.31%	795.90	3.76	701.19	3.83	37	61.67%	974.89	3.22	807.89	3.05	41	68.33%	634.37	4.24	604.90	4.54
	LDGT	38	92.68%	720.40	3.69	648.05	3.84	18	47.37%	1016.26	3.54	874.82	3.67	32	84.21%	553.98	3.78	520.50	3.93
	HDGT	42	57.53%	1092.65	5.89	774.98	4.41	20	47.62%	1486.89	4.24	1087.03	3.33	32	76.19%	846.26	6.92	579.95	5.09
1978 Total		140	78.21%	860.66	4.35	707.75	4.00	75	53.57%	1121.35	3.57	898.39	3.27	105	75.00%	674.45	4.92	571.57	4.52
1979	LDGV	93	97.89%	675.67	4.45	553.13	4.19	53	56.99%	855.65	4.40	707.15	4.22	79	84.95%	554.92	4.49	449.81	4.17
	LDGT	93	85.32%	710.85	4.62	552.34	3.61	55	59.14%	904.14	4.44	706.37	3.48	75	80.65%	569.10	4.76	439.38	3.70
	HDGT	11	84.62%	1174.49	5.88	1004.77	4.99	7	63.64%	1380.73	4.87	1232.63	4.86	8	72.73%	994.03	6.77	805.40	5.10
1979 Total		197	90.78%	719.19	4.61	577.22	3.96	115	58.38%	910.80	4.45	738.77	3.91	162	82.23%	583.17	4.72	462.54	4.00
1980	LDGV	28	84.85%	833.33	4.05	754.24	3.49	14	50.00%	1164.19	3.93	882.10	3.19	23	82.14%	631.94	4.13	676.42	3.67
	LDGT	32	91.43%	690.70	3.29	410.87	3.34	15	46.88%	969.40	2.93	514.16	2.59	26	81.25%	529.91	3.49	351.28	3.76
	HDGT	4	80.00%	791.62	4.80	852.50	5.11	3	75.00%	881.70	4.34	883.97	4.58	3	75.00%	701.53	5.25	821.03	5.64
1980 Total		64	87.67%	760.73	3.73	593.66	3.53	32	50.00%	1046.40	3.50	709.80	3.04	52	81.25%	584.94	3.87	522.19	3.83
1981	LDGV	39	92.86%	573.25	4.00	481.63	4.29	23	58.97%	614.70	3.62	550.44	4.15	21	53.85%	527.85	4.42	406.26	4.45
	LDGT	72	91.14%	538.54	4.01	378.58	3.29	39	54.17%	626.47	3.81	430.13	3.08	45	62.50%	462.33	4.18	333.90	3.48
	HDGT	15	93.75%	998.02	3.73	860.13	2.43	9	60.00%	1240.77	2.30	1154.43	1.57	9	60.00%	755.28	5.17	565.82	3.29
1981 Total		126	91.97%	605.65	3.97	469.00	3.49	71	56.35%	700.53	3.56	560.91	3.23	75	59.52%	515.83	4.37	381.99	3.73
1982	LDGV	1	100.00%	2000.00	7.21	1909.80	7.59	1	100.00%	2000.00	7.21	1909.80	7.59	1	100.00%	2000.00	7.21	1909.80	7.59
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	9	100.00%	760.10	3.04	529.94	2.49	5	55.56%	1123.66	1.73	899.08	2.18	5	55.56%	396.54	4.35	160.80	2.80
1982 Total		10	90.91%	966.75	3.74	759.92	3.34	6	60.00%	1269.72	2.64	1067.53	3.09	6	60.00%	663.78	4.83	452.30	3.60
1983	LDGV	3	100.00%	203.53	2.70	189.30	2.52	2	66.67%	239.80	2.22	207.20	2.09	2	66.67%	167.25	3.19	171.40	2.94
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	20	100.00%	779.99	4.03	517.99	2.91	6	30.00%	1314.18	2.67	926.03	2.06	17	85.00%	591.45	4.51	373.97	3.21
1983 Total		23	100.00%	694.59	3.83	469.29	2.85	8	34.78%	1045.59	2.56	746.33	2.07	19	82.61%	546.79	4.37	352.65	3.18
1984	LDGV	1	50.00%	277.30	4.45	158.60	2.44	1	100.00%	277.30	4.45	158.60	2.44	1	100.00%	277.30	4.45	158.60	2.44

Vehicle		Overall Exhaust Failures						HC Failures						CO Failures					
Year	Type	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total %	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm
	LDGT	4	100.00%	1259.78	4.03	1293.05	4.34	2	50.00%	1462.05	3.56	1504.30	3.66	2	50.00%	1057.50	4.51	1081.80	5.03
	HDGT	15	93.75%	993.66	2.99	660.28	1.82	13	86.67%	1027.22	1.79	733.22	1.03	4	26.67%	884.58	6.88	423.23	4.36
1984 Total		20	90.91%	977.65	3.30	726.70	2.31	16	80.00%	1034.71	2.18	793.69	1.45	7	35.00%	847.23	5.86	573.59	4.28
1985	LDGV	1	100.00%	1977.30	0.61	2000.00	8.50	1	100.00%	1977.30	0.61	2000.00	8.50	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	5	100.00%	769.26	2.97	754.34	3.27	4	80.00%	743.65	2.42	705.80	2.41	3	60.00%	803.40	3.70	819.07	4.43
	HDGT	16	100.00%	941.15	4.45	687.84	2.94	10	62.50%	1234.51	3.17	950.76	2.30	10	62.50%	647.79	5.73	424.92	3.57
1985 Total		22	100.00%	935.18	3.94	751.33	3.22	15	68.18%	1153.13	2.80	955.39	2.74	13	59.09%	683.70	5.26	515.88	3.77
1986	LDGV	1	100.00%	394.90	0.85	300.10	1.73	1	100.00%	394.90	0.85	300.10	1.73	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	34	100.00%	629.15	2.97	458.19	2.60	26	76.47%	686.69	2.08	503.64	1.87	17	50.00%	541.16	4.33	388.69	3.72
1986 Total		35	100.00%	623.83	2.92	454.60	2.58	27	77.14%	675.88	2.03	496.10	1.86	17	48.57%	541.16	4.33	388.69	3.72
1987	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	2	100.00%	551.00	2.20	778.30	1.65	1	50.00%	551.00	2.20	778.30	1.65	1	50.00%	551.00	2.20	778.30	1.65
	HDGT	25	100.00%	818.88	4.08	581.96	3.08	22	88.00%	803.01	2.92	587.14	2.25	11	44.00%	850.63	6.39	571.61	4.73
1987 Total		27	100.00%	803.57	3.97	593.18	3.00	23	85.19%	792.05	2.89	595.45	2.23	12	44.44%	825.66	6.04	588.83	4.47
1988	LDGV	2	100.00%	1001.03	1.37	1067.70	1.43	2	100.00%	868.50	1.22	919.60	1.27	1	50.00%	1266.10	1.67	1363.90	1.76
	LDGT	1	100.00%	371.80	0.02	1337.30	0.16	1	100.00%	371.80	0.02	1337.30	0.16	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	20	100.00%	553.62	3.66	388.01	2.28	13	65.00%	702.05	3.19	541.57	2.05	15	75.00%	424.98	4.07	254.93	2.48
1988 Total		23	100.00%	589.88	3.34	481.40	2.13	16	69.57%	702.21	2.75	638.56	1.83	16	69.57%	477.55	3.92	324.24	2.44
1989	LDGV	6	85.71%	1195.80	8.06	1291.70	7.15	3	50.00%	1195.80	8.06	1291.70	7.15	3	50.00%	1195.80	8.06	1291.70	7.15
	LDGT	1	100.00%	312.10	7.11	221.40	7.89	1	100.00%	312.10	7.11	221.40	7.89	1	100.00%	312.10	7.11	221.40	7.89
	HDGT	23	95.83%	547.28	2.43	572.77	2.74	19	82.61%	567.05	1.81	630.23	2.44	11	47.83%	513.13	3.51	473.53	3.26
1989 Total		30	93.75%	637.30	3.57	667.79	3.70	23	76.67%	637.98	2.86	698.73	3.29	15	50.00%	636.26	4.66	620.35	4.35
1990	LDGV	5	100.00%	208.70	1.36	220.40	1.76	1	20.00%	391.20	1.13	412.20	1.17	2	40.00%	117.45	1.48	124.50	2.05
	LDGT	2	100.00%	1068.80	7.99	408.20	2.50	1	50.00%	1068.80	7.99	408.20	2.50	1	50.00%	1068.80	7.99	408.20	2.50
	HDGT	22	100.00%	406.25	2.50	276.72	1.62	16	72.73%	506.35	1.79	354.30	1.17	10	45.45%	246.09	3.63	152.58	2.34
1990 Total		29	100.00%	429.88	2.74	279.75	1.69	18	62.07%	531.20	2.10	360.51	1.24	13	44.83%	289.58	3.63	167.92	2.31
1991	LDGV	3	100.00%	478.90	1.75	286.83	0.53	3	100.00%	400.03	1.33	279.50	0.56	1	33.33%	715.50	3.00	308.80	0.42
	LDGT	4	100.00%	483.73	3.12	479.87	2.40	3	75.00%	483.73	3.12	479.87	2.40	3	75.00%	483.73	3.12	479.87	2.40
	HDGT	35	100.00%	452.15	2.97	365.47	3.06	17	48.57%	620.25	2.12	517.25	2.89	25	71.43%	337.84	3.56	262.26	3.18
1991 Total		42	100.00%	457.85	2.90	372.62	2.79	23	54.76%	573.72	2.14	481.37	2.52	29	69.05%	365.96	3.49	286.38	3.00
1992	LDGV	2	100.00%	217.30	3.22	370.30	4.62	0	0.00%	0.00	0.00	0.00	0.00	1	50.00%	217.30	3.22	370.30	4.62
	LDGT	1	100.00%	237.80	1.47	259.90	1.41	1	100.00%	237.80	1.47	259.90	1.41	1	100.00%	237.80	1.47	259.90	1.41
	HDGT	33	100.00%	424.83	2.93	378.65	3.08	16	48.48%	580.40	2.25	486.11	2.41	24	72.73%	321.12	3.38	307.01	3.53
1992 Total		36	100.00%	411.31	2.87	372.93	3.04	17	47.22%	560.25	2.20	472.81	2.35	26	72.22%	313.92	3.30	307.63	3.49
1993	LDGV	2	100.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	1	100.00%	404.20	1.16	377.50	1.39	1	100.00%	404.20	1.16	377.50	1.39	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	36	100.00%	611.85	3.66	600.24	3.41	22	61.11%	809.90	3.12	804.92	3.20	26	72.22%	444.28	4.11	427.05	3.59
1993 Total		39	100.00%	607.62	3.61	595.69	3.37	23	58.97%	792.26	3.04	786.34	3.12	26	66.67%	444.28	4.11	427.05	3.59
1994	LDGV	4	66.67%	311.80	1.11	403.25	0.57	1	25.00%	427.20	0.61	453.30	0.61	1	25.00%	196.40	1.61	353.20	0.53
	LDGT	4	80.00%	830.25	2.64	627.58	4.10	3	75.00%	926.13	1.99	675.27	3.02	1	25.00%	542.60	4.61	484.50	7.33
	HDGT	50	98.04%	501.87	3.54	477.96	3.73	35	70.00%	581.95	2.99	545.34	3.21	32	64.00%	414.28	4.13	404.27	4.30
1994 Total		58	93.55%	514.66	3.42	484.11	3.67	39	67.24%	604.46	2.86	552.98	3.13	34	58.62%	411.65	4.07	405.12	4.28
1995	LDGV	3	100.00%	476.45	0.15	453.00	0.19	2	66.67%	476.45	0.15	453.00	0.19	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	2	66.67%	300.37	1.09	308.57	1.31	2	100.00%	330.95	0.86	339.75	1.02	1	50.00%	239.20	1.55	246.20	1.88

Vehicle		Overall Exhaust Failures						HC Failures						CO Failures					
Year	Type	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total %	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm
	HDGT	71	98.61%	534.31	3.58	480.40	4.16	39	54.93%	686.92	3.23	620.64	3.89	56	78.87%	428.03	3.82	382.74	4.35
1995 Total		76	97.44%	526.14	3.43	474.70	4.00	43	56.58%	660.57	2.98	599.78	3.58	57	75.00%	424.72	3.78	380.34	4.31
1996	LDGV	1	50.00%	1129.80	0.76	1252.00	0.67	1	100.00%	1129.80	0.76	1252.00	0.67	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	2	100.00%	356.40	1.63	332.57	0.61	2	100.00%	322.45	1.31	306.25	0.55	1	50.00%	424.30	2.26	385.20	0.72
	HDGT	52	98.11%	640.77	3.25	510.21	2.46	37	71.15%	712.04	2.65	587.46	2.20	32	61.54%	558.36	3.93	420.88	2.76
1996 Total		55	96.49%	635.78	3.14	513.07	2.36	40	72.73%	703.00	2.54	590.02	2.08	33	60.00%	554.29	3.88	419.80	2.70
1997	LDGV	3	100.00%	323.67	1.60	175.17	1.70	1	33.33%	629.40	0.55	166.40	0.73	2	66.67%	170.80	2.13	179.55	2.19
	LDGT	1	100.00%	536.10	7.34	673.00	6.97	1	100.00%	536.10	7.34	673.00	6.97	1	100.00%	536.10	7.34	673.00	6.97
	HDGT	54	98.18%	498.44	2.66	371.75	2.30	41	75.93%	540.79	1.88	379.09	1.75	25	46.30%	428.98	3.93	359.70	3.20
1997 Total		58	98.31%	492.11	2.74	371.93	2.41	43	74.14%	542.74	1.98	380.98	1.85	28	48.28%	414.36	3.92	358.03	3.26
1998	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	3	75.00%	779.23	0.80	832.20	0.81	3	100.00%	608.10	0.62	646.10	0.61	1	33.33%	1292.60	1.36	1390.50	1.38
	HDGT	49	94.23%	914.64	1.98	740.51	1.79	49	100.00%	859.88	1.54	706.48	1.43	9	18.37%	1212.80	4.36	925.74	3.78
1998 Total		52	92.86%	905.91	1.90	746.42	1.73	52	100.00%	845.35	1.49	703.00	1.38	10	19.23%	1220.78	4.06	972.22	3.54
1999	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	74	98.67%	642.53	1.59	501.85	1.60	70	94.59%	626.53	1.23	495.07	1.24	17	22.97%	708.38	3.09	529.76	3.08
1999 Total		74	98.67%	642.53	1.59	501.85	1.60	70	94.59%	626.53	1.23	495.07	1.24	17	22.97%	708.38	3.09	529.76	3.08
2000	LDGV	1	100.00%	258.90	0.60	273.90	1.43	1	100.00%	258.90	0.60	273.90	1.43	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	1	100.00%	439.30	0.16	451.50	0.16	1	100.00%	439.30	0.16	451.50	0.16	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	75	86.21%	742.93	2.26	665.24	2.46	72	96.00%	738.92	1.69	659.43	1.90	16	21.33%	761.02	4.78	691.38	5.01
2000 Total		77	86.52%	734.18	2.21	658.51	2.43	74	96.10%	728.38	1.66	651.41	1.87	16	20.78%	761.02	4.78	691.38	5.01
2001	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	37	78.72%	686.07	1.43	677.62	1.22	34	91.89%	680.56	1.06	694.69	1.00	7	18.92%	712.79	3.26	594.73	2.30
2001 Total		37	78.72%	686.07	1.43	677.62	1.22	34	91.89%	680.56	1.06	694.69	1.00	7	18.92%	712.79	3.26	594.73	2.30
2002	LDGV	1	100.00%	359.00	4.18	410.80	4.14	1	100.00%	359.00	4.18	410.80	4.14	1	100.00%	359.00	4.18	410.80	4.14
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	45	86.54%	748.37	1.97	780.23	2.18	41	91.11%	726.29	1.44	734.74	1.61	12	26.67%	823.82	3.77	935.63	4.13
2002 Total		46	85.19%	734.21	2.05	766.79	2.25	42	91.30%	717.54	1.51	727.03	1.67	13	28.26%	788.06	3.80	895.26	4.13
2003	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	27	77.14%	642.33	2.61	612.72	2.51	20	74.07%	719.71	1.96	705.76	2.18	12	44.44%	513.38	3.70	457.65	3.07
2003 Total		27	77.14%	642.33	2.61	612.72	2.51	20	74.07%	719.71	1.96	705.76	2.18	12	44.44%	513.38	3.70	457.65	3.07
2004	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	20	76.92%	952.25	2.91	1115.79	3.80	17	85.00%	951.81	2.24	1094.76	3.03	9	45.00%	953.08	4.17	1155.50	5.24
2004 Total		20	74.07%	952.25	2.91	1115.79	3.80	17	85.00%	951.81	2.24	1094.76	3.03	9	45.00%	953.08	4.17	1155.50	5.24
2005	LDGV	2	66.67%	259.80	1.59	201.10	1.46	1	50.00%	259.80	1.59	201.10	1.46	1	50.00%	259.80	1.59	201.10	1.46
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	16	76.19%	739.65	2.48	629.84	2.62	14	87.50%	745.95	1.88	667.49	1.99	5	31.25%	722.00	4.18	524.42	4.41
2005 Total		18	75.00%	693.95	2.40	589.00	2.51	15	83.33%	713.54	1.86	636.39	1.95	6	33.33%	644.97	3.75	470.53	3.92
2006	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	1	25.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	26	83.87%	666.30	1.13	693.36	1.17	26	100.00%	599.19	0.89	592.85	0.96	2	7.69%	1538.65	4.30	2000.00	3.90

Vehicle		Overall Exhaust Failures						HC Failures						CO Failures					
Year	Type	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total %	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm
2006 Total		27	77.14%	666.30	1.13	693.36	1.17	26	96.30%	599.19	0.89	592.85	0.96	2	7.41%	1538.65	4.30	2000.00	3.90
2007	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	9	90.00%	590.58	1.97	543.70	1.46	9	100.00%	512.92	1.32	500.52	1.02	2	22.22%	940.05	4.87	738.00	3.46
2007 Total		9	81.82%	590.58	1.97	543.70	1.46	9	100.00%	512.92	1.32	500.52	1.02	2	22.22%	940.05	4.87	738.00	3.46
2008	LDGV	1	100.00%	259.90	1.23	280.70	0.83	1	100.00%	259.90	1.23	280.70	0.83	1	100.00%	259.90	1.23	280.70	0.83
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	14	87.50%	596.15	3.32	614.42	3.77	8	57.14%	744.64	2.64	749.05	2.82	8	57.14%	447.66	4.01	479.79	4.73
2008 Total		15	88.24%	558.79	3.09	577.34	3.45	9	60.00%	690.78	2.48	697.01	2.60	9	60.00%	426.80	3.70	457.67	4.30
2009	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	1	20.00%	331.20	0.77	121.20	0.71	1	100.00%	331.20	0.77	121.20	0.71	0	0.00%	0.00	0.00	0.00	0.00
2009 Total		1	20.00%	331.20	0.77	121.20	0.71	1	100.00%	331.20	0.77	121.20	0.71	0	0.00%	0.00	0.00	0.00	0.00
2010	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	7	87.50%	751.68	4.96	188.21	2.08	4	57.14%	976.48	4.67	246.90	2.37	5	71.43%	571.84	5.19	141.26	1.85
2010 Total		7	87.50%	751.68	4.96	188.21	2.08	4	57.14%	976.48	4.67	246.90	2.37	5	71.43%	571.84	5.19	141.26	1.85
2011	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	9	90.00%	410.95	1.70	381.66	1.99	6	66.67%	500.50	1.06	394.82	1.29	4	44.44%	276.63	2.65	361.93	3.05
2011 Total		9	90.00%	410.95	1.70	381.66	1.99	6	66.67%	500.50	1.06	394.82	1.29	4	44.44%	276.63	2.65	361.93	3.05
2012	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	5	41.67%	280.97	3.40	299.92	3.32	2	40.00%	398.80	2.19	413.90	2.16	4	80.00%	222.05	4.00	242.93	3.90
2012 Total		5	41.67%	280.97	3.40	299.92	3.32	2	40.00%	398.80	2.19	413.90	2.16	4	80.00%	222.05	4.00	242.93	3.90
2013	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	1	100.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	4	44.44%	268.98	3.23	103.08	1.61	2	50.00%	398.70	2.84	106.45	0.65	3	75.00%	182.50	3.49	100.83	2.24
2013 Total		5	50.00%	268.98	3.23	103.08	1.61	2	40.00%	398.70	2.84	106.45	0.65	3	60.00%	182.50	3.49	100.83	2.24
2014	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	8	61.54%	514.91	2.54	491.81	2.64	5	62.50%	773.38	1.00	662.50	1.73	4	50.00%	191.83	4.46	278.45	3.77
2014 Total		8	61.54%	514.91	2.54	491.81	2.64	5	62.50%	773.38	1.00	662.50	1.73	4	50.00%	191.83	4.46	278.45	3.77
2015	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	6	50.00%	454.43	1.46	404.06	2.02	5	83.33%	487.86	0.96	329.30	1.35	2	33.33%	370.85	2.71	590.95	3.71
2015 Total		6	50.00%	454.43	1.46	404.06	2.02	5	83.33%	487.86	0.96	329.30	1.35	2	33.33%	370.85	2.71	590.95	3.71
2016	LDGV	1	100.00%	1167.50	2.16	518.50	3.52	1	100.00%	1167.50	2.16	518.50	3.52	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	7	63.64%	487.46	2.58	447.58	2.91	6	85.71%	588.27	1.80	553.82	2.09	3	42.86%	285.83	4.14	235.10	4.55
2016 Total		8	66.67%	555.46	2.54	454.67	2.97	7	87.50%	671.01	1.85	548.77	2.29	3	37.50%	285.83	4.14	235.10	4.55
2017	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	1	100.00%	592.50	0.00	468.00	0.00	1	100.00%	592.50	0.00	468.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2017 Total		1	100.00%	592.50	0.00	468.00	0.00	1	100.00%	592.50	0.00	468.00	0.00	0	0.00%	0.00	0.00	0.00	0.00

Vehicle		Overall Exhaust Failures						HC Failures						CO Failures					
Year	Type	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total %	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm
2018	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	1	50.00%	358.00	1.42	119.00	0.66	1	100.00%	358.00	1.42	119.00	0.66	0	0.00%	0.00	0.00	0.00	0.00
2018 Total		1	50.00%	358.00	1.42	119.00	0.66	1	100.00%	358.00	1.42	119.00	0.66	0	0.00%	0.00	0.00	0.00	0.00
2019	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2019 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2020	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2020 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2021	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2021 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2022	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2022 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2023	LDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
	HDGT	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2023 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2024	LDGV	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
2024 Total		0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00	0	0.00%	0.00	0.00	0.00	0.00
Grand Total		**1,949**	**87.63%**	**725.87**	**3.70**	**599.63**	**3.38**	**1,266**	**64.96%**	**839.35**	**2.83**	**693.18**	**2.69**	**1,182**	**60.65%**	**604.32**	**4.62**	**499.43**	**4.11**

Summary by Vehicle Type (V1.01)

Vehicle Type	Overall Exhaust Failures						HC Failures						CO Failures					
	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total %	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm
LDGV	479	93.01%	812.13	4.58	662.57	4.36	256	53.44%	1013.35	4.29	810.32	4.11	373	77.87%	674.02	4.77	561.16	4.53
LDGT	343	87.50%	689.78	4.08	547.10	3.51	189	55.10%	862.12	3.67	657.88	3.15	251	73.18%	560.01	4.39	463.68	3.78
HDGT	1,127	85.57%	698.04	3.17	587.68	2.89	821	72.85%	779.86	2.18	664.77	2.15	558	49.51%	577.67	4.62	474.25	3.98
Grand Total	**1,949**	**87.63%**	**725.87**	**3.70**	**599.63**	**3.38**	**1,266**	**64.96%**	**839.35**	**2.83**	**693.18**	**2.69**	**1,182**	**60.65%**	**604.32**	**4.62**	**499.43**	**4.11**

Appendix C4

Idle Initial Failure for Other Report

Date

Between 1/1/2023 and 1/1/2024

Idle Initial Failure for Other Report (V1.03)

Vehicle		Other Overall					CAT				AIS				O2				Gas Cap				Opacity			
Year	Type	Total	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %
1974	HDGV	39	39	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	39	100.00	0	0.00
	LDGT1	113	111	98.23	2	1.77	0	0.00	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	111	98.23	2	1.77
	LDGT2	66	66	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	66	100.00	0	0.00
	LDGV	264	260	98.48	4	1.52	0	0.00	0	0.00	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	260	98.48	4	1.52
1974 Total		482	476	98.76	6	1.24	0	0.00	0	0.00	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	476	98.76	6	1.24
1975	HDGV	10	8	80.00	2	20.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	7	87.50	1	12.50	9	90.00	1	10.00
	LDGT1	11	9	81.82	2	18.18	0	0.00	0	0.00	3	100.00	0	0.00	0	0.00	0	0.00	7	87.50	1	12.50	10	90.91	1	9.09
	LDGT2	13	10	76.92	3	23.08	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	10	83.33	2	16.67	12	92.31	1	7.69
	LDGV	16	13	81.25	3	18.75	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9	75.00	3	25.00	16	100.00	0	0.00
1975 Total		50	40	80.00	10	20.00	2	100.00	0	0.00	3	100.00	0	0.00	0	0.00	0	0.00	33	82.50	7	17.50	47	94.00	3	6.00
1976	HDGV	35	31	88.57	4	11.43	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	23	88.46	3	11.54	34	97.14	1	2.86
	LDGT1	49	43	87.76	6	12.24	3	100.00	0	0.00	2	100.00	0	0.00	0	0.00	0	0.00	32	84.21	6	15.79	49	100.00	0	0.00
	LDGT2	126	110	87.30	16	12.70	0	0.00	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	68	80.95	16	19.05	124	98.41	2	1.59
	LDGV	130	120	92.31	10	7.69	13	100.00	0	0.00	8	100.00	0	0.00	0	0.00	0	0.00	75	88.24	10	11.76	130	100.00	0	0.00
1976 Total		340	304	89.41	36	10.59	16	100.00	0	0.00	11	100.00	0	0.00	0	0.00	0	0.00	198	84.98	35	15.02	337	99.12	3	0.88
1977	HDGV	63	60	95.24	3	4.76	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	39	92.86	3	7.14	63	100.00	0	0.00
	LDGT1	54	49	90.74	5	9.26	1	100.00	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	38	88.37	5	11.63	54	100.00	0	0.00
	LDGT2	184	147	79.89	37	20.11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	91	71.65	36	28.35	183	99.46	1	0.54
	LDGV	160	149	93.13	11	6.88	18	100.00	0	0.00	10	100.00	0	0.00	0	0.00	0	0.00	105	91.30	10	8.70	159	99.38	1	0.63
1977 Total		461	405	87.85	56	12.15	19	100.00	0	0.00	11	100.00	0	0.00	0	0.00	0	0.00	273	83.49	54	16.51	459	99.57	2	0.43
1978	HDGV	40	37	92.50	3	7.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	21	87.50	3	12.50	40	100.00	0	0.00
	LDGT1	73	66	90.41	7	9.59	14	100.00	0	0.00	2	100.00	0	0.00	0	0.00	0	0.00	39	84.78	7	15.22	73	100.00	0	0.00
	LDGT2	220	184	83.64	36	16.36	8	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	125	78.62	34	21.38	218	99.09	2	0.91
	LDGV	183	172	93.99	11	6.01	21	100.00	0	0.00	13	100.00	0	0.00	0	0.00	0	0.00	124	91.85	11	8.15	183	100.00	0	0.00
1978 Total		516	459	88.95	57	11.05	43	100.00	0	0.00	15	100.00	0	0.00	0	0.00	0	0.00	309	84.89	55	15.11	514	99.61	2	0.39
1979	HDGV	54	52	96.30	2	3.70	1	100.00	0	0.00	3	100.00	0	0.00	0	0.00	0	0.00	36	94.74	2	5.26	54	100.00	0	0.00
	LDGT1	101	90	89.11	11	10.89	12	100.00	0	0.00	7	100.00	0	0.00	0	0.00	0	0.00	70	86.42	11	13.58	100	99.01	1	0.99
	LDGT2	141	123	87.23	18	12.77	25	96.15	1	0.71	10	100.00	0	0.00	0	0.00	0	0.00	83	84.69	15	15.31	138	97.87	3	2.13
	LDGV	213	201	94.37	12	5.63	22	100.00	0	0.00	13	100.00	0	0.00	0	0.00	0	0.00	146	93.59	10	6.41	211	99.06	2	0.94
1979 Total		509	466	91.55	43	8.45	60	98.36	1	0.20	33	100.00	0	0.00	0	0.00	0	0.00	335	89.81	38	10.19	503	98.82	6	1.18
1980	HDGV	27	26	96.30	1	3.70	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	21	95.45	1	4.55	27	100.00	0	0.00
	LDGT1	74	67	90.54	7	9.46	4	100.00	0	0.00	5	100.00	0	0.00	0	0.00	0	0.00	54	88.52	7	11.48	73	98.65	1	1.35
	LDGT2	37	34	91.89	3	8.11	9	100.00	0	0.00	4	100.00	0	0.00	0	0.00	0	0.00	19	86.36	3	13.64	37	100.00	0	0.00
	LDGV	120	111	92.50	9	7.50	14	100.00	0	0.00	11	100.00	0	0.00	3	100.00	0	0.00	80	89.89	9	10.11	120	100.00	0	0.00
1980 Total		258	238	92.25	20	7.75	27	100.00	0	0.00	20	100.00	0	0.00	3	100.00	0	0.00	174	89.69	20	10.31	257	99.61	1	0.39
1981	HDGV	47	46	97.87	1	2.13	0	0.00	0	0.00	3	100.00	0	0.00	0	0.00	0	0.00	3	75.00	1	25.00	47	100.00	0	0.00
	LDGT1	100	86	86.00	14	14.00	3	100.00	0	0.00	2	100.00	0	0.00	0	0.00	0	0.00	71	83.53	14	16.47	99	99.00	1	1.00
	LDGT2	38	35	92.11	3	7.89	8	100.00	0	0.00	7	100.00	0	0.00	0	0.00	0	0.00	27	90.00	3	10.00	38	100.00	0	0.00
	LDGV	106	99	93.40	7	6.60	17	94.44	1	0.94	12	92.31	1	7.69	14	93.33	1	6.67	70	93.33	5	6.67	104	98.11	2	1.89
1981 Total		291	266	91.41	25	8.59	28	96.55	1	0.34	24	96.00	1	4.00	14	93.33	1	6.67	171	88.14	23	11.86	288	98.97	3	1.03
1982	HDGV	46	46	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	46	100.00	0	0.00
	LDGT2	1	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	1	100.00	0	0.00
	LDGV	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00
1982 Total		48	47	97.92	1	2.08	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	50.00	1	50.00	48	100.00	0	0.00
1983	HDGV	57	56	98.25	1	1.75	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	56	98.25	1	1.75
	LDGT1	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	1	100.00	0	0.00
	LDGV	8	8	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	8	100.00	0	0.00	8	100.00	0	0.00
1983 Total		66	65	98.48	1	1.52	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	10	100.00	0	0.00	65	98.48	1	1.52
1984	HDGV	99	97	97.98	2	2.02	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	50.00	1	50.00	97	97.98	2	2.02
	LDGT1	3	2	66.67	1	33.33	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	66.67	1	33.33	3	100.00	0	0.00
	LDGT2	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	1	100.00	0	0.00
	LDGV	3	2	66.67	1	33.33	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	50.00	1	50.00	3	100.00	0	0.00

Vehicle		Other Overall					CAT				AIS				O2				Gas Cap				Opacity			
Year	Type	Total	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %
1984 Total		106	102	96.23	4	3.77	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	5	62.50	3	37.50	104	98.11	2	1.89
1985	HDGV	96	96	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	96	100.00	0	0.00
	LDGT1	4	2	50.00	2	50.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	66.67	1	33.33	3	75.00	1	25.00
	LDGT2	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	1	100.00	0	0.00
	LDGV	5	5	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	5	100.00	0	0.00
1985 Total		106	104	98.11	2	1.89	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	7	87.50	1	12.50	105	99.06	1	0.94
1986	HDGV	90	90	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	90	100.00	0	0.00
	LDGT1	2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	2	100.00	0	0.00
	LDGT2	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	1	100.00	0	0.00
	LDGV	9	9	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	8	100.00	0	0.00	9	100.00	0	0.00
1986 Total		102	102	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	13	100.00	0	0.00	102	100.00	0	0.00
1987	HDGV	103	102	99.03	1	0.97	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	102	99.03	1	0.97
	LDGT1	2	2	100.00	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	2	100.00	0	0.00	2	100.00	0	0.00
	LDGV	5	5	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	5	100.00	0	0.00
1987 Total		110	109	99.09	1	0.91	1	100.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	7	100.00	0	0.00	109	99.09	1	0.91
1988	HDGV	141	141	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	141	100.00	0	0.00
	LDGT1	2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	2	100.00	0	0.00
	LDGT2	4	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	4	100.00	0	0.00
	LDGV	2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	2	100.00	0	0.00
1988 Total		149	149	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	12	100.00	0	0.00	149	100.00	0	0.00
1989	HDGV	259	258	99.61	1	0.39	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	258	99.61	1	0.39
	LDGT1	2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	2	100.00	0	0.00
	LDGT2	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	1	100.00	0	0.00
	LDGV	17	16	94.12	1	5.88	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	10	90.91	1	9.09	17	100.00	0	0.00
1989 Total		279	277	99.28	2	0.72	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16	94.12	1	5.88	278	99.64	1	0.36
1990	HDGV	245	245	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	245	100.00	0	0.00
	LDGT1	5	5	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	5	100.00	0	0.00
	LDGT2	2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	2	100.00	0	0.00
	LDGV	13	13	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	10	100.00	0	0.00	13	100.00	0	0.00
1990 Total		265	265	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	17	100.00	0	0.00	265	100.00	0	0.00
1991	HDGV	266	266	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	266	100.00	0	0.00
	LDGT1	6	6	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	100.00	0	0.00	6	100.00	0	0.00
	LDGT2	4	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	4	100.00	0	0.00
	LDGV	20	20	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	18	100.00	0	0.00	20	100.00	0	0.00
1991 Total		296	296	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	32	100.00	0	0.00	296	100.00	0	0.00
1992	HDGV	355	355	100.00	0	0.00	1	100.00	0	0.00	1	100.00	0	0.00	1	100.00	0	0.00	5	100.00	0	0.00	355	100.00	0	0.00
	LDGT1	3	3	100.00	0	0.00	2	100.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
	LDGT2	3	3	100.00	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
	LDGV	7	7	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	5	100.00	0	0.00	7	100.00	0	0.00
1992 Total		368	368	100.00	0	0.00	4	100.00	0	0.00	1	100.00	0	0.00	4	100.00	0	0.00	16	100.00	0	0.00	368	100.00	0	0.00
1993	HDGV	401	399	99.50	2	0.50	1	100.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	2	100.00	0	0.00	399	99.50	2	0.50
	LDGT1	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
	LDGT2	5	5	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	5	100.00	0	0.00	5	100.00	0	0.00
	LDGV	11	11	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	8	100.00	0	0.00	11	100.00	0	0.00
1993 Total		420	418	99.52	2	0.48	1	100.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	18	100.00	0	0.00	418	99.52	2	0.48
1994	HDGV	498	496	99.60	2	0.40	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	496	99.60	2	0.40
	LDGT1	10	10	100.00	0	0.00	4	100.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	9	100.00	0	0.00	10	100.00	0	0.00
	LDGT2	21	20	95.24	1	4.76	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	20	95.24	1	4.76	21	100.00	0	0.00
	LDGV	28	26	92.86	2	7.14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	25	92.59	2	7.41	28	100.00	0	0.00
1994 Total		557	552	99.10	5	0.90	4	100.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	56	94.92	3	5.08	555	99.64	2	0.36
1995	HDGV	726	725	99.86	1	0.14	3	100.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00	3	75.00	1	25.00	726	100.00	0	0.00
	LDGT1	6	5	83.33	1	16.67	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	80.00	1	20.00	6	100.00	0	0.00
	LDGT2	13	13	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	13	100.00	0	0.00	13	100.00	0	0.00
	LDGV	23	23	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	19	100.00	0	0.00	23	100.00	0	0.00
1995 Total		768	766	99.74	2	0.26	3	100.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00	39	95.12	2	4.88	768	100.00	0	0.00
1996	HDGV	732	729	99.59	3	0.41	2	100.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	5	100.00	0	0.00	729	99.59	3	0.41

Vehicle		Other Overall					CAT				AIS				O2				Gas Cap				Opacity			
Year	Type	Total	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %
	LDGT1	4	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	4	100.00	0	0.00
	LDGT2	4	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	4	100.00	0	0.00
	LDGV	7	6	85.71	1	14.29	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	100.00	0	0.00	6	85.71	1	14.29
1996 Total		747	743	99.46	4	0.54	2	100.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	19	100.00	0	0.00	743	99.46	4	0.54
1997	HDGV	986	985	99.90	1	0.10	13	100.00	0	0.00	1	100.00	0	0.00	13	100.00	0	0.00	1	100.00	0	0.00	985	99.90	1	0.10
	LDGT1	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
	LDGT2	6	6	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	100.00	0	0.00	6	100.00	0	0.00
	LDGV	7	7	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	100.00	0	0.00	7	100.00	0	0.00
1997 Total		1,002	1001	99.90	1	0.10	13	100.00	0	0.00	1	100.00	0	0.00	13	100.00	0	0.00	16	100.00	0	0.00	1001	99.90	1	0.10
1998	HDGV	703	700	99.57	3	0.43	8	100.00	0	0.00	0	0.00	0	0.00	8	100.00	0	0.00	7	77.78	2	22.22	702	99.86	1	0.14
	LDGT1	5	4	80.00	1	20.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	80.00	1	20.00	5	100.00	0	0.00
	LDGT2	2	1	50.00	1	50.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	50.00	1	50.00	2	100.00	0	0.00
	LDGV	4	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	4	100.00	0	0.00
1998 Total		714	709	99.30	5	0.70	8	100.00	0	0.00	0	0.00	0	0.00	8	100.00	0	0.00	16	80.00	4	20.00	713	99.86	1	0.14
1999	HDGV	1,501	1500	99.93	1	0.07	1	100.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	12	100.00	0	0.00	1500	99.93	1	0.07
	LDGT1	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
	LDGT2	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
	LDGV	4	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	4	100.00	0	0.00
1999 Total		1,511	1510	99.93	1	0.07	1	100.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	22	100.00	0	0.00	1510	99.93	1	0.07
2000	HDGV	1,468	1456	99.18	12	0.82	9	90.00	1	0.07	0	0.00	0	0.00	9	90.00	1	10.00	40	78.43	11	21.57	1468	100.00	0	0.00
	LDGT1	7	7	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	100.00	0	0.00	7	100.00	0	0.00
	LDGT2	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
	LDGV	5	5	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	5	100.00	0	0.00
2000 Total		1,483	1471	99.19	12	0.81	9	90.00	1	0.07	0	0.00	0	0.00	9	90.00	1	10.00	53	82.81	11	17.19	1483	100.00	0	0.00
2001	HDGV	1,798	1788	99.44	10	0.56	6	100.00	0	0.00	0	0.00	0	0.00	6	100.00	0	0.00	25	83.33	5	16.67	1793	99.72	5	0.28
	LDGT1	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
	LDGV	2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	2	100.00	0	0.00
2001 Total		1,803	1793	99.45	10	0.55	6	100.00	0	0.00	0	0.00	0	0.00	6	100.00	0	0.00	30	85.71	5	14.29	1798	99.72	5	0.28
2002	HDGV	1,500	1492	99.47	8	0.53	7	100.00	0	0.00	0	0.00	0	0.00	7	100.00	0	0.00	43	87.76	6	12.24	1498	99.87	2	0.13
	LDGT1	5	4	80.00	1	20.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	80.00	1	20.00	5	100.00	0	0.00
	LDGT2	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	1	100.00	0	0.00
	LDGV	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
2002 Total		1,509	1500	99.40	9	0.60	7	100.00	0	0.00	0	0.00	0	0.00	7	100.00	0	0.00	51	87.93	7	12.07	1507	99.87	2	0.13
2003	HDGV	1,797	1789	99.55	8	0.45	14	100.00	0	0.00	0	0.00	0	0.00	14	100.00	0	0.00	46	88.46	6	11.54	1795	99.89	2	0.11
	LDGT1	10	10	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	10	100.00	0	0.00	10	100.00	0	0.00
	LDGT2	6	6	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	100.00	0	0.00	6	100.00	0	0.00
	LDGV	5	5	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	5	100.00	0	0.00
2003 Total		1,818	1810	99.56	8	0.44	14	100.00	0	0.00	0	0.00	0	0.00	14	100.00	0	0.00	66	91.67	6	8.33	1816	99.89	2	0.11
2004	HDGV	1,625	1619	99.63	6	0.37	21	100.00	0	0.00	1	100.00	0	0.00	21	100.00	0	0.00	7	63.64	4	36.36	1623	99.88	2	0.12
	LDGT1	8	7	87.50	1	12.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	7	87.50	1	12.50	8	100.00	0	0.00
	LDGT2	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
	LDGV	4	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	4	100.00	0	0.00
2004 Total		1,640	1633	99.57	7	0.43	21	100.00	0	0.00	1	100.00	0	0.00	21	100.00	0	0.00	21	80.77	5	19.23	1638	99.88	2	0.12
2005	HDGV	1,565	1559	99.62	6	0.38	11	100.00	0	0.00	0	0.00	0	0.00	11	100.00	0	0.00	7	70.00	3	30.00	1562	99.81	3	0.19
	LDGT1	13	13	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	13	100.00	0	0.00	13	100.00	0	0.00
	LDGT2	5	5	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	5	100.00	0	0.00	5	100.00	0	0.00
	LDGV	8	7	87.50	1	12.50	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	7	87.50	1	12.50	8	100.00	0	0.00
2005 Total		1,591	1584	99.56	7	0.44	11	100.00	0	0.00	0	0.00	0	0.00	11	100.00	0	0.00	32	88.89	4	11.11	1588	99.81	3	0.19
2006	HDGV	1,706	1701	99.71	5	0.29	21	100.00	0	0.00	0	0.00	0	0.00	20	100.00	0	0.00	4	57.14	3	42.86	1704	99.88	2	0.12
	LDGT1	6	4	66.67	2	33.33	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	66.67	2	33.33	6	100.00	0	0.00
	LDGT2	3	2	66.67	1	33.33	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	2	66.67	1	33.33
	LDGV	4	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	4	100.00	0	0.00
2006 Total		1,719	1711	99.53	8	0.47	21	100.00	0	0.00	0	0.00	0	0.00	20	100.00	0	0.00	14	73.68	5	26.32	1716	99.83	3	0.17
2007	HDGV	1,508	1507	99.93	1	0.07	26	100.00	0	0.00	2	100.00	0	0.00	26	100.00	0	0.00	3	100.00	0	0.00	1507	99.93	1	0.07
	LDGT1	17	16	94.12	1	5.88	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16	94.12	1	5.88	17	100.00	0	0.00
	LDGT2	6	6	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	100.00	0	0.00	6	100.00	0	0.00

Vehicle		Other Overall					CAT				AIS				O2				Gas Cap				Opacity			
Year	Type	Total	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %
	LDGV	5	5	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	5	100.00	0	0.00	5	100.00	0	0.00
2007 Total		1,536	1534	99.87	2	0.13	26	100.00	0	0.00	2	100.00	0	0.00	26	100.00	0	0.00	30	96.77	1	3.23	1535	99.93	1	0.07
2008	HDGV	1,519	1517	99.87	2	0.13	20	100.00	0	0.00	1	100.00	0	0.00	20	100.00	0	0.00	5	83.33	1	16.67	1518	99.93	1	0.07
	LDGT1	9	9	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9	100.00	0	0.00	9	100.00	0	0.00
	LDGT2	8	8	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	8	100.00	0	0.00	8	100.00	0	0.00
	LDGV	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
2008 Total		1,539	1537	99.87	2	0.13	20	100.00	0	0.00	1	100.00	0	0.00	20	100.00	0	0.00	25	96.15	1	3.85	1538	99.94	1	0.06
2009	HDGV	842	838	99.52	4	0.48	34	100.00	0	0.00	3	100.00	0	0.00	34	100.00	0	0.00	12	85.71	2	14.29	840	99.76	2	0.24
	LDGT1	4	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00	0	0.00	4	100.00	0	0.00
	LDGT2	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
	LDGV	6	6	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	100.00	0	0.00	6	100.00	0	0.00
2009 Total		855	851	99.53	4	0.47	34	100.00	0	0.00	3	100.00	0	0.00	34	100.00	0	0.00	25	92.59	2	7.41	853	99.77	2	0.23
2010	HDGV	836	835	99.88	1	0.12	23	100.00	0	0.00	4	100.00	0	0.00	23	100.00	0	0.00	9	100.00	0	0.00	835	99.88	1	0.12
	LDGT1	8	8	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	100.00	0	0.00	8	100.00	0	0.00
	LDGT2	13	13	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	11	100.00	0	0.00	13	100.00	0	0.00
	LDGV	8	8	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	5	100.00	0	0.00	8	100.00	0	0.00
2010 Total		865	864	99.88	1	0.12	23	100.00	0	0.00	4	100.00	0	0.00	23	100.00	0	0.00	31	100.00	0	0.00	864	99.88	1	0.12
2011	HDGV	1,314	1313	99.92	1	0.08	27	100.00	0	0.00	0	0.00	0	0.00	27	100.00	0	0.00	2	66.67	1	33.33	1314	100.00	0	0.00
	LDGT1	9	9	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9	100.00	0	0.00	9	100.00	0	0.00
	LDGT2	2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	2	100.00	0	0.00
	LDGV	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
2011 Total		1,328	1327	99.92	1	0.08	27	100.00	0	0.00	0	0.00	0	0.00	27	100.00	0	0.00	16	94.12	1	5.88	1328	100.00	0	0.00
2012	HDGV	1,765	1758	99.60	7	0.40	17	100.00	0	0.00	0	0.00	0	0.00	17	100.00	0	0.00	2	50.00	2	50.00	1760	99.72	5	0.28
	LDGT1	12	12	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	11	100.00	0	0.00	12	100.00	0	0.00
	LDGT2	11	11	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9	100.00	0	0.00	11	100.00	0	0.00
	LDGV	6	6	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	100.00	0	0.00	6	100.00	0	0.00
2012 Total		1,794	1787	99.61	7	0.39	17	100.00	0	0.00	0	0.00	0	0.00	17	100.00	0	0.00	28	93.33	2	6.67	1789	99.72	5	0.28
2013	HDGV	1,316	1311	99.62	5	0.38	46	100.00	0	0.00	2	100.00	0	0.00	46	100.00	0	0.00	2	66.67	1	33.33	1312	99.70	4	0.30
	LDGT1	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	1	100.00	0	0.00
	LDGT2	2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	2	100.00	0	0.00
2013 Total		1,319	1314	99.62	5	0.38	46	100.00	0	0.00	2	100.00	0	0.00	46	100.00	0	0.00	4	80.00	1	20.00	1315	99.70	4	0.30
2014	HDGV	1,867	1863	99.79	4	0.21	45	100.00	0	0.00	3	100.00	0	0.00	45	100.00	0	0.00	3	50.00	3	50.00	1866	99.95	1	0.05
	LDGT1	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
	LDGT2	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	3	100.00	0	0.00
	LDGV	4	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	4	100.00	0	0.00
2014 Total		1,877	1873	99.79	4	0.21	45	100.00	0	0.00	3	100.00	0	0.00	45	100.00	0	0.00	12	80.00	3	20.00	1876	99.95	1	0.05
2015	HDGV	1,909	1904	99.74	5	0.26	68	100.00	0	0.00	0	0.00	0	0.00	68	100.00	0	0.00	1	16.67	5	83.33	1909	100.00	0	0.00
	LDGT1	2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	2	100.00	0	0.00
	LDGT2	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	3	100.00	0	0.00
	LDGV	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	1	100.00	0	0.00
2015 Total		1,915	1910	99.74	5	0.26	68	100.00	0	0.00	0	0.00	0	0.00	68	100.00	0	0.00	6	54.55	5	45.45	1915	100.00	0	0.00
2016	HDGV	3,291	3289	99.94	2	0.06	85	100.00	0	0.00	3	100.00	0	0.00	85	100.00	0	0.00	6	75.00	2	25.00	3291	100.00	0	0.00
	LDGT1	7	7	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	7	100.00	0	0.00	7	100.00	0	0.00
	LDGT2	2	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	2	100.00	0	0.00
	LDGV	3	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	3	100.00	0	0.00
2016 Total		3,303	3301	99.94	2	0.06	85	100.00	0	0.00	3	100.00	0	0.00	85	100.00	0	0.00	16	88.89	2	11.11	3303	100.00	0	0.00
2017	HDGV	554	554	100.00	0	0.00	25	100.00	0	0.00	0	0.00	0	0.00	25	100.00	0	0.00	4	100.00	0	0.00	554	100.00	0	0.00
	LDGT1	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	1	100.00	0	0.00
2017 Total		555	555	100.00	0	0.00	25	100.00	0	0.00	0	0.00	0	0.00	25	100.00	0	0.00	5	100.00	0	0.00	555	100.00	0	0.00
2018	HDGV	225	224	99.56	1	0.44	9	100.00	0	0.00	0	0.00	0	0.00	9	100.00	0	0.00	0	0.00	1	100.00	225	100.00	0	0.00
2018 Total		225	224	99.56	1	0.44	9	100.00	0	0.00	0	0.00	0	0.00	9	100.00	0	0.00	0	0.00	1	100.00	225	100.00	0	0.00
2019	HDGV	164	164	100.00	0	0.00	11	100.00	0	0.00	4	100.00	0	0.00	11	100.00	0	0.00	22	100.00	0	0.00	164	100.00	0	0.00
2019 Total		164	164	100.00	0	0.00	11	100.00	0	0.00	4	100.00	0	0.00	11	100.00	0	0.00	22	100.00	0	0.00	164	100.00	0	0.00
2020	HDGV	56	55	98.21	1	1.79	2	100.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	29	96.67	1	3.33	56	100.00	0	0.00
	LDGV	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	1	100.00	0	0.00
2020 Total		57	56	98.25	1	1.75	2	100.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	30	96.77	1	3.23	57	100.00	0	0.00

Vehicle		Other Overall					CAT				AIS				O2				Gas Cap				Opacity			
Year	Type	Total	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %
2021	HDGV	44	44	100.00	0	0.00	2	100.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	27	100.00	0	0.00	44	100.00	0	0.00
2021 Total		44	44	100.00	0	0.00	2	100.00	0	0.00	0	0.00	0	0.00	2	100.00	0	0.00	27	100.00	0	0.00	44	100.00	0	0.00
2022	HDGV	34	34	100.00	0	0.00	3	100.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	24	100.00	0	0.00	34	100.00	0	0.00
2022 Total		34	34	100.00	0	0.00	3	100.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00	24	100.00	0	0.00	34	100.00	0	0.00
2023	HDGV	11	11	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	7	100.00	0	0.00	11	100.00	0	0.00
	LDGT2	1	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	1	100.00	0	0.00
2023 Total		12	12	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	8	100.00	0	0.00	12	100.00	0	0.00
Grand Total		**39,506**	**39126**	**99.04**	**380**	**0.96**	**764**	**99.61**	**3**	**0.01**	**148**	**99.33**	**1**	**0.67**	**585**	**99.66**	**2**	**0.34**	**2,391**	**88.52**	**310**	**11.48**	**39431**	**99.81**	**75**	**0.19**

Idle Initial Failure for Other Report - Summary by Veh (V1.03)

Vehicle	Visual Overall					CAT				AIS				O2				Gas Cap				Opacity			
Type	Total	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %	Pass	Pass %	Fail	Fail %
HDGV	36,333	36210	99.66	123	0.34	562	99.82	1	0.00	34	100.00	0	0.00	560	99.82	1	0.18	537	87.75	75	12.25	36285	99.87	48	0.13
LDGT1	764	700	91.62	64	8.38	44	100.00	0	0.00	23	100.00	0	0.00	7	100.00	0	0.00	483	88.95	60	11.05	757	99.08	7	0.92
LDGT2	972	852	87.65	120	12.35	51	98.08	1	0.10	22	100.00	0	0.00	1	100.00	0	0.00	560	83.33	112	16.67	962	98.97	10	1.03
LDGV	1,437	1364	94.92	73	5.08	107	99.07	1	0.07	69	98.57	1	1.43	17	94.44	1	5.56	811	92.79	63	7.21	1427	99.30	10	0.70
Grand Total	**39,506**	**39126**	**99.04**	**380**	**0.96**	**764**	**99.61**	**3**	**0.01**	**148**	**99.33**	**1**	**0.67**	**585**	**99.66**	**2**	**0.34**	**2,391**	**88.52**	**310**	**11.48**	**39431**	**99.81**	**75**	**0.19**

Appendix C5

Idle Retest Pass Reduction Report

Date
Between 1/1/2023 and 1/1/2024

Idle Retest Pass Reduction Report (V1.01)

Vehicle		Initial Exhaust Emissions					Passing Retest Exhaust Emissions						Emission Reductions								Average Repair Costs
Year	Type	Total	Avg HC Idle	Avg CO Idle	Avg HC2500 rpm	Avg CO2500 rpm	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC2500 rpm	Avg CO2500 rpm	Avg HC Idle	Avg HC % Idle	Avg CO Idle	Avg CO % Idle	Avg HC2500 rpm	Avg HC% 2500rpm	Avg CO2500 rpm	Avg CO% 2500rpm	
1974	LDGV	58	883.87	5.31	607.78	4.84	33	56.90%	311.81	1.77	295.03	2.93	375.38	54.63%	2.94	62.45%	180.64	37.98%	1.57	34.87%	0.00
	LDGT	23	1042.86	5.04	767.10	3.42	9	39.13%	200.32	1.65	156.30	1.87	716.78	78.16%	3.16	65.73%	441.63	73.86%	1.02	35.23%	0.00
	HDGT	16	1308.79	5.36	940.19	4.99	11	68.75%	285.31	2.53	308.36	3.14	1052.60	78.68%	3.71	59.48%	627.70	67.06%	2.03	39.21%	0.00
1974 Total		97	991.66	5.26	700.39	4.53	53	54.64%	287.38	1.90	274.24	2.79	573.91	66.63%	3.14	62.22%	317.74	53.67%	1.57	35.97%	0.00
1975	LDGV	7	333.80	3.71	243.43	2.60	3	42.86%	347.00	0.29	114.10	1.36	54.07	13.48%	5.13	94.59%	23.53	17.10%	1.25	47.77%	0.00
	LDGT	4	585.18	0.30	225.78	2.16	2	50.00%	171.25	0.49	140.35	3.82	301.30	63.76%	-0.13	-36.11%	75.90	35.10%	-2.01	-110.47%	0.00
	HDGT	9	551.26	5.58	473.14	5.75	7	77.78%	246.76	3.52	184.23	3.45	246.59	49.98%	1.71	32.76%	211.73	53.47%	1.53	30.72%	0.00
1975 Total		20	481.93	3.87	343.27	3.93	12	60.00%	259.23	2.21	159.38	2.99	207.58	44.47%	2.26	50.60%	142.04	47.12%	0.87	22.54%	0.00
1976	LDGV	99	804.06	4.90	573.54	4.23	47	47.47%	195.80	0.72	178.71	1.91	444.72	69.43%	3.35	82.28%	298.48	62.55%	2.07	52.03%	493.00
	LDGT	34	930.19	3.54	602.26	3.19	13	38.24%	223.54	0.78	163.89	1.58	307.66	57.92%	1.86	70.57%	242.61	59.68%	0.90	36.29%	9.00
	HDGT	69	909.51	4.27	682.69	3.35	42	60.87%	309.14	2.02	249.36	2.23	412.56	57.17%	2.18	51.95%	203.21	44.90%	1.40	38.62%	0.00
1976 Total		202	861.31	4.46	615.66	3.75	102	50.50%	246.00	1.26	205.92	2.00	414.01	62.73%	2.68	67.99%	252.13	55.04%	1.65	45.17%	251.00
1977	LDGV	82	700.33	3.79	469.84	3.41	30	36.59%	125.19	0.54	164.62	0.88	416.53	76.89%	2.63	82.89%	250.59	60.35%	1.86	67.79%	525.00
	LDGT	33	586.78	2.72	451.18	2.17	11	33.33%	152.51	0.49	129.75	1.42	258.61	62.90%	1.63	77.09%	95.25	42.33%	0.55	28.05%	0.00
	HDGT	111	834.24	4.27	649.79	3.74	78	70.27%	291.42	2.17	297.82	2.77	394.91	57.54%	1.73	44.35%	249.10	45.55%	0.79	22.12%	0.00
1977 Total		226	749.52	3.87	555.50	3.39	119	52.65%	236.67	1.61	248.70	2.17	387.76	62.10%	1.95	54.83%	235.25	48.61%	1.04	32.30%	525.00
1978	LDGV	85	693.89	3.11	598.44	3.91	37	43.53%	139.61	0.40	167.95	2.13	504.15	78.31%	2.35	85.34%	343.54	67.16%	0.87	28.98%	0.00
	LDGT	48	787.69	3.94	618.19	4.28	21	43.75%	164.22	0.49	212.88	1.51	441.81	72.90%	2.91	85.58%	210.53	49.72%	1.54	50.44%	0.00
	HDGT	103	874.30	4.18	616.22	3.26	72	69.90%	375.94	1.91	297.26	2.11	374.61	49.91%	1.75	47.84%	219.49	42.47%	0.66	23.78%	842.00
1978 Total		236	791.71	3.75	610.21	3.70	130	55.08%	274.48	1.25	246.83	2.02	422.33	60.61%	2.11	62.74%	253.35	50.65%	0.86	29.89%	842.00
1979	LDGV	146	632.51	4.08	526.83	3.80	61	41.78%	120.40	0.41	110.84	1.05	365.34	75.21%	2.76	87.08%	282.11	71.79%	1.91	64.45%	310.00
	LDGT	168	738.19	3.66	580.25	3.26	77	45.83%	122.62	0.41	187.46	1.69	441.33	78.26%	2.82	87.29%	217.09	53.66%	1.02	37.73%	235.00
	HDGT	27	893.71	4.31	771.87	3.75	16	59.26%	301.88	0.92	233.75	1.91	539.33	64.11%	3.35	78.50%	452.36	65.93%	1.52	44.24%	0.00
1979 Total		341	705.26	3.89	572.55	3.53	154	45.16%	140.37	0.46	161.92	1.46	421.41	75.01%	2.85	86.03%	267.29	62.27%	1.43	49.42%	272.50
1980	LDGV	42	986.53	4.57	696.75	4.15	18	42.86%	98.49	0.23	109.06	1.70	438.65	81.66%	3.26	93.52%	253.47	69.92%	1.60	48.59%	0.00
	LDGT	67	682.16	3.14	464.19	3.55	29	43.28%	147.58	0.38	192.79	1.53	470.72	76.13%	2.82	88.04%	230.57	54.46%	1.85	54.70%	0.00
	HDGT	7	348.24	2.31	342.71	3.82	6	85.71%	233.90	1.44	237.77	3.02	120.12	33.93%	0.63	30.51%	113.08	32.23%	0.80	20.97%	0.00
1980 Total		116	772.21	3.61	541.06	3.78	53	45.69%	140.68	0.45	169.44	1.76	420.14	74.91%	2.72	85.85%	225.05	57.05%	1.65	48.40%	0.00
1981	LDGV	75	430.91	2.41	424.18	3.15	28	37.33%	92.88	0.23	59.16	0.22	152.84	62.20%	1.34	85.28%	187.02	75.97%	2.34	91.32%	0.00
	LDGT	125	368.44	1.97	259.49	2.17	45	36.00%	72.80	0.19	69.06	0.37	206.29	73.91%	1.12	85.74%	135.08	66.17%	1.32	78.21%	268.50
	HDGT	26	975.52	4.53	747.42	3.03	14	53.85%	254.88	1.05	214.49	1.69	591.09	69.87%	2.65	71.61%	389.85	64.51%	0.85	33.31%	0.00
1981 Total		226	459.01	2.41	370.28	2.59	87	38.50%	108.56	0.34	89.28	0.53	251.01	69.81%	1.44	80.88%	192.79	68.35%	1.57	74.62%	268.50
1982	LDGV	4	931.33	5.22	886.58	4.96	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	LDGT	3	726.27	6.53	87.37	1.40	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	HDGT	12	931.26	1.91	720.98	2.32	10	83.33%	141.70	0.77	81.67	0.44	745.05	84.02%	1.32	63.19%	612.03	88.23%	1.77	80.24%	0.00
1982 Total		19	898.91	3.34	655.80	2.73	10	52.63%	141.70	0.77	81.67	0.44	745.05	84.02%	1.32	63.19%	612.03	88.23%	1.77	80.24%	0.00
1983	LDGV	8	851.09	1.39	832.28	1.08	3	37.50%	73.93	0.14	75.87	0.14	710.23	90.57%	1.21	89.63%	683.33	90.01%	0.89	86.73%	0.00
	LDGT	1	468.30	0.48	105.00	0.46	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	HDGT	37	805.24	3.75	600.54	2.99	14	37.84%	152.52	1.22	94.97	1.14	657.54	81.17%	2.72	69.08%	471.31	83.23%	1.68	59.64%	0.00

Vehicle		Initial Exhaust Emissions					Passing Retest Exhaust Emissions						Emission Reductions								Average Repair Costs
Year	Type	Total	Avg HC Idle	Avg CO Idle	Avg HC2500 rpm	Avg CO2500 rpm	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC2500 rpm	Avg CO2500 rpm	Avg HC Idle	Avg HC % Idle	Avg CO Idle	Avg CO % Idle	Avg HC2500 rpm	Avg HC% 2500rpm	Avg CO2500 rpm	Avg CO% 2500rpm	
1983 Total		46	805.89	3.27	630.07	2.60	17	36.96%	138.65	1.03	91.60	0.96	666.84	82.79%	2.46	70.48%	508.72	84.74%	1.54	61.60%	0.00
1984	LDGV	2	145.40	2.23	95.15	1.28	2	100.00%	24.85	0.12	37.90	0.39	120.55	82.91%	2.11	94.83%	57.25	60.17%	0.90	69.92%	0.00
	LDGT	1	2000.00	7.03	2000.00	7.16	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	HDGT	27	851.33	2.05	493.46	1.53	16	59.26%	196.93	0.89	141.50	1.10	516.82	72.41%	0.80	47.36%	232.81	62.20%	-0.12	-12.79%	0.00
1984 Total		30	842.56	2.23	517.12	1.70	18	60.00%	177.81	0.80	129.99	1.02	472.79	72.67%	0.95	54.06%	213.31	62.13%	-0.01	-1.10%	0.00
1985	LDGV	1	521.40	5.64	521.90	5.68	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	LDGT	3	559.67	4.35	410.17	4.24	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	HDGT	23	810.56	4.55	508.60	2.71	9	39.13%	252.97	0.95	148.53	1.31	330.99	56.68%	1.55	61.84%	396.16	72.73%	0.11	7.91%	0.00
1985 Total		27	771.97	4.57	498.16	2.99	9	33.33%	252.97	0.95	148.53	1.31	330.99	56.68%	1.55	61.84%	396.16	72.73%	0.11	7.91%	0.00
1986	LDGV	2	274.55	2.01	150.05	0.87	1	50.00%	140.90	0.04	138.10	0.04	-140.90	0.00%	-0.04	0.00%	-138.10	0.00%	-0.04	0.00%	0.00
	LDGT	11	1443.86	5.83	652.21	4.42	3	27.27%	126.07	0.46	94.10	0.68	881.33	87.49%	3.57	88.66%	370.57	79.75%	1.65	70.88%	0.00
	HDGT	52	612.76	2.38	368.33	2.11	21	40.38%	108.88	0.69	102.29	0.81	497.78	82.05%	0.69	50.29%	271.18	72.61%	0.43	34.93%	0.00
1986 Total		65	743.00	2.95	409.66	2.46	25	38.46%	112.22	0.63	102.74	0.76	518.26	82.20%	1.01	61.48%	266.73	72.19%	0.56	42.40%	0.00
1987	LDGV	1	197.90	1.70	228.20	1.71	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	LDGT	12	1067.63	4.53	632.38	2.32	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	HDGT	39	600.26	2.03	292.18	1.27	19	48.72%	142.27	0.47	191.62	1.44	478.53	77.08%	2.06	81.46%	211.76	52.50%	0.47	24.47%	0.00
1987 Total		52	700.38	2.60	369.46	1.52	19	36.54%	142.27	0.47	191.62	1.44	478.53	77.08%	2.06	81.46%	211.76	52.50%	0.47	24.47%	0.00
1988	LDGV	2	492.90	0.86	475.30	0.78	1	50.00%	144.10	0.71	152.00	0.74	348.80	70.76%	0.15	17.44%	323.30	68.02%	0.04	5.13%	0.00
	LDGT	1	371.80	0.02	1337.30	0.16	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	HDGT	54	625.47	3.68	442.14	2.35	24	44.44%	127.59	0.76	135.47	0.85	527.75	80.53%	2.17	74.06%	324.73	70.56%	1.06	55.72%	0.00
1988 Total		57	616.37	3.52	459.01	2.26	25	43.86%	128.25	0.76	136.13	0.84	520.59	80.23%	2.09	73.38%	324.67	70.46%	1.02	54.87%	0.00
1989	LDGV	8	578.68	3.83	861.39	4.26	6	75.00%	74.17	0.40	62.90	0.38	574.20	88.56%	3.74	90.41%	676.18	91.49%	3.75	90.86%	0.00
	LDGT	5	893.08	3.44	528.64	1.89	4	80.00%	47.25	0.24	46.25	0.06	818.60	94.54%	2.34	90.71%	565.45	92.44%	1.47	96.08%	0.00
	HDGT	40	687.72	2.35	666.02	2.23	20	50.00%	132.20	0.54	148.24	0.52	410.74	75.65%	1.18	68.63%	316.27	68.09%	0.79	60.23%	0.00
1989 Total		53	690.63	2.67	682.55	2.51	30	56.60%	109.26	0.47	117.57	0.43	497.81	82.00%	1.85	79.70%	421.48	78.19%	1.47	77.35%	0.00
1990	LDGV	15	427.65	2.33	418.31	2.87	6	40.00%	96.67	0.33	85.72	0.35	342.22	77.97%	1.11	77.05%	323.73	79.07%	1.78	83.49%	0.00
	LDGT	5	929.08	7.50	398.34	3.13	2	40.00%	41.15	0.02	39.35	0.05	678.35	94.28%	6.76	99.78%	344.20	89.74%	4.02	98.77%	0.00
	HDGT	42	539.02	2.95	309.68	1.80	19	45.24%	139.08	0.53	200.50	1.07	288.34	67.46%	1.70	76.25%	52.56	20.77%	0.49	31.38%	0.00
1990 Total		62	543.53	3.17	343.11	2.16	27	43.55%	122.40	0.45	163.06	0.84	329.20	72.90%	1.94	81.29%	134.43	45.19%	1.04	55.36%	0.00
1991	LDGV	7	472.27	1.75	352.43	0.95	2	28.57%	84.55	0.02	106.80	0.02	227.30	72.89%	0.47	96.88%	238.40	69.06%	0.43	96.59%	0.00
	LDGT	11	366.74	2.33	405.47	2.15	3	27.27%	73.77	0.18	60.60	0.55	238.20	76.35%	0.85	82.74%	253.93	80.73%	2.37	81.05%	548.00
	HDGT	62	423.73	2.95	297.57	2.33	26	41.94%	98.81	0.54	89.86	0.66	283.11	74.13%	2.22	80.38%	165.91	64.87%	1.48	69.02%	291.50
1991 Total		80	420.14	2.76	317.21	2.19	31	38.75%	95.46	0.47	88.12	0.61	275.16	74.24%	1.97	80.69%	179.10	67.02%	1.50	71.01%	377.00
1992	LDGV	7	482.06	3.40	489.43	4.30	2	28.57%	58.10	0.04	61.90	0.03	843.60	93.56%	5.15	99.32%	860.85	93.29%	5.98	99.50%	0.00
	LDGT	15	549.39	2.40	475.85	1.81	2	13.33%	95.20	0.11	101.25	0.23	421.80	81.59%	4.64	97.68%	373.95	78.69%	4.39	95.12%	0.00
	HDGT	58	490.62	3.35	284.09	2.74	28	48.28%	103.46	0.43	94.07	0.64	403.12	79.58%	2.72	86.34%	223.77	70.40%	1.91	74.95%	0.00
1992 Total		80	500.89	3.18	338.01	2.70	32	40.00%	100.11	0.39	92.51	0.58	431.82	81.18%	2.99	88.59%	272.98	74.69%	2.32	80.13%	0.00
1993	LDGV	3	314.53	0.80	329.77	0.81	2	66.67%	116.80	0.28	137.35	0.34	164.60	58.49%	0.41	59.56%	182.20	57.02%	0.39	53.47%	0.00
	LDGT	5	555.82	1.25	306.62	1.44	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
	HDGT	70	616.35	3.35	505.66	2.78	33	47.14%	118.03	0.62	140.37	0.85	450.55	79.24%	2.37	79.11%	321.56	69.61%	1.26	59.62%	125.00
1993 Total		78	600.87	3.12	486.14	2.62	35	44.87%	117.96	0.60	140.20	0.82	434.21	78.64%	2.25	78.84%	313.59	69.10%	1.21	59.50%	125.00
1994	LDGV	4	278.63	0.73	177.78	0.67	4	100.00%	83.80	0.25	82.00	0.49	194.83	69.92%	0.47	65.17%	95.78	53.87%	0.19	27.61%	0.00
	LDGT	12	263.97	1.36	274.03	1.35	3	25.00%	140.43	0.40	112.70	0.52	34.00	19.49%	0.10	20.67%	86.90	43.54%	0.16	23.65%	0.00

Vehicle		Initial Exhaust Emissions					Passing Retest Exhaust Emissions						Emission Reductions								Average Repair Costs
Year	Type	Total	Avg HC Idle	Avg CO Idle	Avg HC2500 rpm	Avg CO2500 rpm	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC2500 rpm	Avg CO2500 rpm	Avg HC Idle	Avg HC % Idle	Avg CO Idle	Avg CO % Idle	Avg HC2500 rpm	Avg HC% 2500rpm	Avg CO2500 rpm	Avg CO% 2500rpm	
	HDGT	70	535.91	3.15	356.01	2.71	42	60.00%	116.94	0.54	104.80	1.02	375.28	76.24%	2.08	79.29%	217.27	67.46%	1.31	56.37%	358.00
1994 Total		86	485.99	2.79	336.28	2.43	49	56.98%	115.67	0.51	103.42	0.94	339.65	74.60%	1.83	78.16%	199.37	65.84%	1.15	54.97%	358.00
1995	LDGV	4	202.05	0.19	235.38	1.98	3	75.00%	38.97	0.02	62.90	0.08	114.60	74.63%	0.18	88.33%	129.20	67.26%	2.51	96.79%	0.00
	LDGT	5	337.12	1.99	522.60	3.72	4	80.00%	78.13	0.31	60.00	0.30	224.03	74.14%	1.82	85.66%	539.25	89.99%	3.36	91.87%	0.00
	HDGT	108	600.95	3.29	347.54	3.17	56	51.85%	135.04	0.76	116.08	1.18	412.25	75.33%	2.12	73.64%	210.12	64.41%	1.54	56.75%	428.00
1995 Total		117	576.04	3.13	351.19	3.16	63	53.85%	126.86	0.69	109.99	1.07	386.13	75.27%	2.01	74.30%	227.17	67.38%	1.71	61.47%	428.00
1996	LDGV	3	463.50	0.32	443.93	0.24	2	66.67%	113.80	0.13	87.20	0.21	556.60	83.03%	0.32	70.79%	558.75	86.50%	0.15	41.43%	0.00
	LDGT	2	324.85	1.34	306.25	0.55	1	50.00%	16.20	0.01	24.60	0.01	212.80	92.93%	0.33	97.06%	202.70	89.18%	0.37	97.37%	0.00
	HDGT	78	600.62	2.98	400.71	2.27	30	38.46%	112.70	0.52	121.38	0.77	459.65	80.31%	1.67	76.41%	262.38	68.37%	1.33	63.23%	0.00
1996 Total		83	589.02	2.85	399.99	2.15	33	39.76%	109.84	0.48	116.37	0.71	458.05	80.66%	1.55	76.44%	278.53	70.53%	1.23	63.19%	0.00
1997	LDGV	4	353.95	1.66	213.60	1.39	2	50.00%	55.95	0.07	40.65	0.25	221.95	79.87%	1.60	95.80%	233.40	85.17%	1.47	85.67%	0.00
	HDGT	83	729.24	2.47	443.74	1.89	39	46.99%	113.63	0.47	90.49	0.63	421.44	78.76%	2.09	81.54%	231.00	71.85%	1.41	69.17%	0.00
1997 Total		87	711.98	2.43	433.16	1.87	41	47.13%	110.81	0.45	88.06	0.61	411.71	78.79%	2.07	81.99%	231.12	72.41%	1.41	69.85%	0.00
1998	LDGT	5	285.64	0.38	184.68	0.38	2	40.00%	119.60	0.54	131.35	0.52	153.70	56.24%	-0.03	-7.00%	66.30	33.54%	-0.05	-10.75%	0.00
	HDGT	101	1091.77	1.77	771.65	1.60	48	47.52%	142.15	0.32	142.03	0.48	762.27	84.28%	1.32	80.44%	509.51	78.20%	0.85	63.75%	0.00
1998 Total		106	1053.75	1.70	743.97	1.54	50	47.17%	141.25	0.33	141.60	0.48	737.93	83.93%	1.27	79.34%	491.79	77.64%	0.81	62.68%	0.00
1999	LDGV	1	193.30	0.31	223.60	0.33	1	100.00%	149.10	0.29	155.80	0.30	44.20	22.87%	0.02	6.45%	67.80	30.32%	0.03	9.09%	0.00
	HDGT	120	773.74	1.35	474.97	1.00	63	52.50%	140.03	0.36	100.03	0.45	507.10	78.36%	0.78	68.19%	333.91	76.95%	0.55	54.64%	0.00
1999 Total		121	768.95	1.34	472.89	0.99	64	52.89%	140.18	0.36	100.90	0.45	499.87	78.10%	0.77	67.92%	329.75	76.57%	0.54	54.40%	0.00
2000	LDGV	4	555.60	3.58	509.33	3.48	3	75.00%	41.67	0.09	51.90	0.23	597.17	93.48%	4.17	97.81%	535.90	91.17%	3.93	94.55%	0.00
	LDGT	4	446.90	0.67	205.83	0.58	2	50.00%	113.45	0.09	79.65	0.10	220.60	66.04%	0.15	61.70%	223.45	73.72%	0.26	72.86%	0.00
	HDGT	128	844.84	1.89	600.11	1.85	68	53.13%	107.50	0.35	96.45	0.45	543.45	83.49%	1.25	77.91%	307.40	76.12%	1.02	69.37%	1546.00
2000 Total		136	824.63	1.90	585.84	1.86	73	53.68%	104.96	0.34	94.16	0.43	536.81	83.65%	1.34	79.93%	314.49	76.96%	1.11	72.18%	1546.00
2001	LDGT	1	13.60	0.08	7.40	0.00	1	100.00%	9.50	0.01	6.70	0.00	4.10	30.15%	0.07	87.50%	0.70	9.46%	0.00	0.00%	0.00
	HDGT	56	537.17	0.84	415.65	0.74	41	73.21%	100.57	0.36	101.80	0.56	336.86	77.01%	0.42	53.72%	266.25	72.34%	0.22	27.96%	0.00
2001 Total		57	527.98	0.82	408.49	0.72	42	73.68%	98.40	0.35	99.53	0.54	328.94	76.97%	0.41	53.81%	259.93	72.31%	0.21	27.96%	0.00
2002	LDGT	4	227.23	1.31	121.65	0.85	3	75.00%	90.07	0.37	104.43	0.48	109.60	54.89%	0.62	62.84%	28.30	21.32%	0.21	29.95%	0.00
	HDGT	54	622.68	1.59	509.81	1.53	40	74.07%	114.76	0.43	121.80	0.51	488.48	80.98%	1.13	72.53%	389.73	76.19%	1.06	67.53%	0.00
2002 Total		58	595.41	1.57	483.04	1.48	43	74.14%	113.03	0.42	120.59	0.51	462.05	80.34%	1.09	72.09%	364.51	75.14%	1.00	66.33%	0.00
2003	LDGT	2	129.75	1.59	48.20	0.65	2	100.00%	44.15	0.10	45.40	0.38	85.60	65.97%	1.50	94.03%	2.80	5.81%	0.27	41.09%	0.00
	HDGT	44	644.49	1.87	589.35	2.29	34	77.27%	83.50	0.31	66.19	0.47	475.30	85.06%	1.35	81.27%	407.49	86.03%	1.27	72.83%	0.00
2003 Total		46	622.11	1.85	565.82	2.22	36	78.26%	81.32	0.30	65.03	0.47	453.65	84.80%	1.36	81.95%	385.01	85.55%	1.22	72.16%	0.00
2004	LDGT	1	3.50	0.00	3.30	0.00	1	100.00%	2.50	0.00	2.60	0.00	1.00	28.57%	0.00		0.70	21.21%	0.00	0.00%	0.00
	HDGT	22	867.27	2.20	893.85	2.64	18	81.82%	69.80	0.18	128.01	0.59	619.63	89.88%	1.24	87.53%	611.17	82.68%	0.98	62.52%	0.00
2004 Total		23	829.72	2.10	855.13	2.53	19	82.61%	66.26	0.17	121.41	0.56	587.07	89.86%	1.17	87.53%	579.04	82.67%	0.93	62.52%	0.00
2005	LDGV	5	153.26	0.76	128.02	0.63	4	80.00%	46.68	0.03	51.48	0.04	74.35	61.43%	0.47	93.97%	58.28	53.10%	0.38	90.00%	728.00
	HDGT	26	625.50	1.75	451.33	1.49	20	76.92%	99.45	0.28	94.68	0.39	513.28	83.77%	1.43	83.50%	387.82	80.38%	1.19	75.26%	0.00
2005 Total		31	549.33	1.59	399.18	1.35	24	77.42%	90.65	0.24	87.48	0.33	440.13	82.92%	1.27	84.08%	332.90	79.19%	1.06	76.01%	728.00
2006	LDGT	3	48.90	0.15	103.27	0.14	3	100.00%	24.30	0.02	73.53	0.15	24.60	50.31%	0.13	86.96%	29.73	28.79%	-0.01	-4.65%	0.00
	HDGT	28	458.61	0.77	306.76	0.65	20	71.43%	117.92	0.26	73.91	0.27	346.28	74.60%	0.63	70.81%	237.57	76.27%	0.44	61.70%	1026.00
2006 Total		31	418.96	0.71	287.07	0.60	23	74.19%	105.71	0.23	73.87	0.26	304.32	74.22%	0.57	71.22%	210.46	74.02%	0.38	59.74%	1026.00
2007	LDGT	1	1.30	0.00	4.70	0.08	1	100.00%	3.30	0.01	15.60	0.07	-2.00	-153.85%	-0.01		-10.90	-231.91%	0.01	12.50%	0.00
	HDGT	13	423.63	0.90	419.48	0.79	12	92.31%	104.83	0.36	93.93	0.33	312.33	74.87%	0.61	63.24%	319.40	77.28%	0.51	60.49%	0.00

Vehicle		Initial Exhaust Emissions					Passing Retest Exhaust Emissions						Emission Reductions								Average Repair Costs
Year	Type	Total	Avg HC Idle	Avg CO Idle	Avg HC2500 rpm	Avg CO2500 rpm	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC2500 rpm	Avg CO2500 rpm	Avg HC Idle	Avg HC % Idle	Avg CO Idle	Avg CO % Idle	Avg HC2500 rpm	Avg HC% 2500rpm	Avg CO2500 rpm	Avg CO% 2500rpm	
2007 Total		14	393.46	0.84	389.85	0.74	13	92.86%	97.02	0.33	87.90	0.31	288.15	74.81%	0.56	63.16%	293.99	76.98%	0.47	60.12%	0.00
2008	HDGT	18	823.69	4.92	672.62	5.01	12	66.67%	103.68	0.49	90.51	0.43	419.47	80.18%	2.06	80.69%	314.42	77.65%	1.89	81.54%	0.00
2008 Total		18	823.69	4.92	672.62	5.01	12	66.67%	103.68	0.49	90.51	0.43	419.47	80.18%	2.06	80.69%	314.42	77.65%	1.89	81.54%	0.00
2009	HDGT	7	378.19	0.19	217.16	0.25	6	85.71%	41.95	0.09	45.57	0.10	218.12	83.87%	0.10	52.25%	98.18	68.30%	0.12	54.69%	0.00
2009 Total		7	378.19	0.19	217.16	0.25	6	85.71%	41.95	0.09	45.57	0.10	218.12	83.87%	0.10	52.25%	98.18	68.30%	0.12	54.69%	0.00
2010	LDGV	1	0.00	0.00	0.00	0.00	1	100.00%	20.20	0.18	27.00	0.15	-20.20	0.00%	-0.18	0.00%	-27.00	0.00%	-0.15	0.00%	0.00
	HDGT	10	699.07	2.13	238.21	1.12	7	70.00%	30.26	0.12	21.36	0.14	352.69	92.10%	2.43	95.29%	114.99	84.34%	0.73	83.93%	0.00
2010 Total		11	635.52	1.94	216.55	1.02	8	72.73%	29.00	0.13	22.06	0.14	306.08	91.35%	2.10	94.29%	97.24	81.51%	0.62	81.48%	0.00
2011	HDGT	10	422.17	1.57	216.12	1.39	8	80.00%	103.69	0.35	93.10	0.41	352.85	77.29%	1.05	74.93%	107.38	53.56%	0.79	66.04%	0.00
2011 Total		10	422.17	1.57	216.12	1.39	8	80.00%	103.69	0.35	93.10	0.41	352.85	77.29%	1.05	74.93%	107.38	53.56%	0.79	66.04%	0.00
2012	HDGT	10	219.19	1.45	236.04	1.53	10	100.00%	84.34	0.23	107.08	0.27	134.85	61.52%	1.21	83.91%	128.96	54.63%	1.26	82.23%	0.00
2012 Total		10	219.19	1.45	236.04	1.53	10	100.00%	84.34	0.23	107.08	0.27	134.85	61.52%	1.21	83.91%	128.96	54.63%	1.26	82.23%	0.00
2013	LDGT	1	11.80	0.21	39.70	1.37	1	100.00%	7.70	0.00	34.20	0.27	4.10	34.75%	0.21	100.00%	5.50	13.85%	1.10	80.29%	0.00
	HDGT	17	187.06	2.20	83.45	1.65	10	58.82%	29.34	0.32	34.48	0.50	152.51	83.87%	1.69	84.25%	41.16	54.42%	0.79	61.13%	0.00
2013 Total		18	177.32	2.09	81.02	1.64	11	61.11%	27.37	0.29	34.45	0.48	139.02	83.55%	1.56	84.41%	37.92	52.39%	0.82	62.97%	0.00
2014	HDGT	18	243.57	1.90	155.04	1.48	13	72.22%	46.48	0.38	59.95	0.63	178.84	79.37%	1.42	78.97%	48.76	44.85%	0.62	49.75%	0.00
2014 Total		18	243.57	1.90	155.04	1.48	13	72.22%	46.48	0.38	59.95	0.63	178.84	79.37%	1.42	78.97%	48.76	44.85%	0.62	49.75%	0.00
2015	HDGT	8	260.44	0.63	230.91	0.84	7	87.50%	50.23	0.07	46.66	0.03	183.99	78.55%	0.54	88.44%	186.10	79.95%	0.86	96.80%	0.00
2015 Total		8	260.44	0.63	230.91	0.84	7	87.50%	50.23	0.07	46.66	0.03	183.99	78.55%	0.54	88.44%	186.10	79.95%	0.86	96.80%	0.00
2016	LDGV	1	1167.50	2.16	518.50	3.52	1	100.00%	751.80	0.64	332.20	3.23	415.70	35.61%	1.52	70.37%	186.30	35.93%	0.29	8.24%	0.00
	HDGT	7	471.36	1.04	467.20	1.01	6	85.71%	49.27	0.01	72.50	0.03	366.95	88.16%	1.20	99.18%	337.62	82.32%	1.15	97.18%	0.00
2016 Total		8	558.38	1.18	473.61	1.33	7	87.50%	149.63	0.10	109.60	0.49	373.91	71.42%	1.25	92.58%	316.00	74.25%	1.03	67.67%	0.00
2017	HDGT	1	592.50	0.00	468.00	0.00	1	100.00%	89.60	0.08	80.80	0.06	502.90	84.88%	-0.08		387.20	82.74%	-0.06	0.00%	0.00
2017 Total		1	592.50	0.00	468.00	0.00	1	100.00%	89.60	0.08	80.80	0.06	502.90	84.88%	-0.08		387.20	82.74%	-0.06	0.00%	0.00
2018	HDGT	1	1.60	0.03	1.70	0.03	1	100.00%	1.80	0.01	2.00	0.01	-0.20	-12.50%	0.02	66.67%	-0.30	-17.65%	0.02	66.67%	0.00
2018 Total		1	1.60	0.03	1.70	0.03	1	100.00%	1.80	0.01	2.00	0.01	-0.20	-12.50%	0.02	66.67%	-0.30	-17.65%	0.02	66.67%	0.00
Grand Total		**3219**	**686.92**	**3.03**	**500.73**	**2.70**	**1645**	**51.10%**	**152.59**	**0.70**	**145.60**	**1.13**	**423.49**	**73.51%**	**1.88**	**72.81%**	**273.14**	**65.23%**	**1.17**	**50.78%**	**484.50**

Summary by Vehicle Type (V1.01)

	Initial Exhaust Emissions					Passing Retest Exhaust Emissions						Emission Reductions								Average Repair Costs
Vehicle Type	Total	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm	Avg HC Idle	Avg HC % Idle	Avg CO Idle	Avg CO% Idle	Avg HC 2500 rpm	Avg HC% 2500 rpm	Avg CO 2500 rpm	Avg CO% 2500 rpm	
LDGV	681	670.39	3.74	529.85	3.66	303	44.49%	149.50	0.56	144.42	1.36	378.94	71.71%	2.55	82.01%	272.71	65.38%	1.74	56.19%	514.00
LDGT	616	650.20	3.10	472.85	2.86	245	39.77%	122.07	0.41	144.85	1.20	373.33	75.36%	2.20	84.27%	208.89	59.05%	1.22	50.33%	265.80
HDGT	1922	704.54	2.76	499.35	2.31	1097	57.08%	160.26	0.80	146.09	1.05	446.99	73.61%	1.62	66.79%	287.61	66.32%	0.99	48.64%	592.89
Grand Total	**3219**	**686.92**	**3.03**	**500.73**	**2.70**	**1645**	**51.10%**	**152.59**	**0.70**	**145.60**	**1.13**	**423.49**	**73.51%**	**1.88**	**72.81%**	**273.14**	**65.23%**	**1.17**	**50.78%**	**484.50**

Appendix C6

Idle Retest Frequency Report

Date
Between 1/1/2023 and 1/1/2024

Idle Retest Frequency Report (V1.01)

Vehicle			Avg Retest	Retest #1				Retest #2				Retest #3				Retest #4				Retest >= #5			
Year	Type	Total	#	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt %	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%
1974	LDGV	58	1.5	40	68.97%	23	57.50%	12	20.69%	7	58.33%	3	5.17%	1	33.33%	2	3.45%	1	50.00%	1	2	1	100.00%
	LDGT	23	1.6	14	60.87%	6	42.86%	6	26.09%	2	33.33%	2	8.70%	0	0.00%	1	4.35%	1	100.00%	0	0	0	0.00%
	HDGT	16	1.7	10	62.50%	7	70.00%	3	18.75%	1	33.33%	2	12.50%	2	100.00%	1	6.25%	1	100.00%	0	0	0	0.00%
1974 Total		97	1.5	64	65.98%	36	56.25%	21	21.65%	10	47.62%	7	7.22%	3	42.86%	4	4.12%	3	75.00%	1	1	1	100.00%
1975	LDGV	7	1.0	5	71.43%	3	60.00%	1	14.29%	0	0.00%	1	14.29%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	4	2.0	2	50.00%	1	50.00%	1	25.00%	0	0.00%	1	25.00%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	9	1.3	7	77.78%	5	71.43%	2	22.22%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
1975 Total		20	1.3	14	70.00%	9	64.29%	4	20.00%	2	50.00%	2	10.00%	1	50.00%	0	0.00%	0	0.00%	0	0	0	0.00%
1976	LDGV	99	1.7	55	55.56%	29	52.73%	25	25.25%	9	36.00%	12	12.12%	5	41.67%	4	4.04%	1	25.00%	3	3	3	100.00%
	LDGT	34	2.4	10	29.41%	4	40.00%	11	32.35%	6	54.55%	4	11.76%	0	0.00%	5	14.71%	1	20.00%	4	12	2	50.00%
	HDGT	69	1.3	44	63.77%	31	70.45%	13	18.84%	8	61.54%	5	7.25%	3	60.00%	2	2.90%	0	0.00%	5	7	0	0.00%
1976 Total		202	1.6	109	53.96%	64	58.72%	49	24.26%	23	46.94%	21	10.40%	8	38.10%	11	5.45%	2	18.18%	12	6	5	41.67%
1977	LDGV	82	1.7	43	52.44%	20	46.51%	13	15.85%	4	30.77%	10	12.20%	2	20.00%	7	8.54%	4	57.14%	9	11	0	0.00%
	LDGT	33	2.3	16	48.48%	6	37.50%	8	24.24%	2	25.00%	3	9.09%	1	33.33%	2	6.06%	1	50.00%	4	12	1	25.00%
	HDGT	111	1.3	81	72.97%	61	75.31%	20	18.02%	13	65.00%	5	4.50%	2	40.00%	3	2.70%	0	0.00%	2	2	2	100.00%
1977 Total		226	1.5	140	61.95%	87	62.14%	41	18.14%	19	46.34%	18	7.96%	5	27.78%	12	5.31%	5	41.67%	15	7	3	20.00%
1978	LDGV	85	1.7	48	56.47%	23	47.92%	17	20.00%	6	35.29%	12	14.12%	6	50.00%	3	3.53%	1	33.33%	5	6	1	20.00%
	LDGT	48	1.7	27	56.25%	10	37.04%	15	31.25%	8	53.33%	5	10.42%	2	40.00%	1	2.08%	1	100.00%	0	0	0	0.00%
	HDGT	103	1.3	75	72.82%	55	73.33%	18	17.48%	12	66.67%	6	5.83%	3	50.00%	3	2.91%	1	33.33%	1	1	1	100.00%
1978 Total		236	1.5	150	63.56%	88	58.67%	50	21.19%	26	52.00%	23	9.75%	11	47.83%	7	2.97%	3	42.86%	6	3	2	33.33%
1979	LDGV	146	2.0	79	54.11%	34	43.04%	35	23.97%	16	45.71%	15	10.27%	6	40.00%	6	4.11%	0	0.00%	11	8	5	45.45%
	LDGT	168	1.8	88	52.38%	49	55.68%	35	20.83%	12	34.29%	23	13.69%	6	26.09%	14	8.33%	6	42.86%	8	5	4	50.00%
	HDGT	27	1.9	16	59.26%	8	50.00%	6	22.22%	5	83.33%	2	7.41%	1	50.00%	2	7.41%	1	50.00%	1	4	1	100.00%
1979 Total		341	1.9	183	53.67%	91	49.73%	76	22.29%	33	43.42%	40	11.73%	13	32.50%	22	6.45%	7	31.82%	20	6	10	50.00%
1980	LDGV	42	1.6	23	54.76%	14	60.87%	9	21.43%	2	22.22%	4	9.52%	0	0.00%	4	9.52%	0	0.00%	2	5	2	100.00%
	LDGT	67	2.2	26	38.81%	13	50.00%	19	28.36%	8	42.11%	9	13.43%	1	11.11%	9	13.43%	5	55.56%	4	6	2	50.00%
	HDGT	7	1.3	5	71.43%	4	80.00%	2	28.57%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
1980 Total		116	1.9	54	46.55%	31	57.41%	30	25.86%	12	40.00%	13	11.21%	1	7.69%	13	11.21%	5	38.46%	6	5	4	66.67%
1981	LDGV	75	1.9	34	45.33%	16	47.06%	17	22.67%	7	41.18%	9	12.00%	2	22.22%	5	6.67%	1	20.00%	10	13	2	20.00%
	LDGT	125	2.2	61	48.80%	23	37.70%	28	22.40%	10	35.71%	14	11.20%	5	35.71%	9	7.20%	1	11.11%	13	10	6	46.15%
	HDGT	26	1.7	15	57.69%	10	66.67%	5	19.23%	0	0.00%	4	15.38%	3	75.00%	1	3.85%	0	0.00%	1	4	1	100.00%
1981 Total		226	2.0	110	48.67%	49	44.55%	50	22.12%	17	34.00%	27	11.95%	10	37.04%	15	6.64%	2	13.33%	24	11	9	37.50%
1982	LDGV	4	0.0	1	25.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	25.00%	0	0.00%	2	50	0	0.00%
	LDGT	3	0.0	2	66.67%	0	0.00%	1	33.33%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	12	1.2	10	83.33%	8	80.00%	2	16.67%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
1982 Total		19	1.2	13	68.42%	8	61.54%	3	15.79%	2	66.67%	0	0.00%	0	0.00%	1	5.26%	0	0.00%	2	11	0	0.00%
1983	LDGV	8	3.0	2	25.00%	0	0.00%	3	37.50%	1	33.33%	2	25.00%	1	50.00%	1	12.50%	1	100.00%	0	0	0	0.00%
	LDGT	1	0.0	0	0.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	37	1.8	18	48.65%	8	44.44%	10	27.03%	4	40.00%	4	10.81%	1	25.00%	2	5.41%	0	0.00%	3	8	1	33.33%

Vehicle			Avg Retest	Retest #1				Retest #2				Retest #3				Retest #4				Retest >= #5			
Year	Type	Total	#	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt %	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%
1983 Total		46	2.0	20	43.48%	8	40.00%	14	30.43%	5	35.71%	6	13.04%	2	33.33%	3	6.52%	1	33.33%	3	7	1	33.33%
1984	LDGV	2	1.0	2	100.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	1	0.0	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	27	1.6	16	59.26%	10	62.50%	6	22.22%	4	66.67%	3	11.11%	1	33.33%	2	7.41%	1	50.00%	0	0	0	0.00%
1984 Total		30	1.5	19	63.33%	12	63.16%	6	20.00%	4	66.67%	3	10.00%	1	33.33%	2	6.67%	1	50.00%	0	0	0	0.00%
1985	LDGV	1	0.0	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	3	0.0	1	33.33%	0	0.00%	1	33.33%	0	0.00%	0	0.00%	0	0.00%	1	33.33%	0	0.00%	0	0	0	0.00%
	HDGT	23	1.9	11	47.83%	5	45.45%	3	13.04%	2	66.67%	4	17.39%	0	0.00%	4	17.39%	2	50.00%	1	4	0	0.00%
1985 Total		27	1.9	13	48.15%	5	38.46%	4	14.81%	2	50.00%	4	14.81%	0	0.00%	5	18.52%	2	40.00%	1	4	0	0.00%
1986	LDGV	2	1.0	2	100.00%	1	50.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	11	3.7	3	27.27%	0	0.00%	3	27.27%	2	66.67%	1	9.09%	0	0.00%	1	9.09%	0	0.00%	3	27	1	33.33%
	HDGT	52	1.6	27	51.92%	12	44.44%	15	28.85%	5	33.33%	7	13.46%	4	57.14%	1	1.92%	0	0.00%	2	4	0	0.00%
1986 Total		65	1.8	32	49.23%	13	40.63%	18	27.69%	7	38.89%	8	12.31%	4	50.00%	2	3.08%	0	0.00%	5	8	1	20.00%
1987	LDGV	1	0.0	0	0.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	12	0.0	4	33.33%	0	0.00%	3	25.00%	0	0.00%	2	16.67%	0	0.00%	2	16.67%	0	0.00%	1	8	0	0.00%
	HDGT	39	1.9	18	46.15%	10	55.56%	12	30.77%	4	33.33%	6	15.38%	3	50.00%	2	5.13%	1	50.00%	1	3	1	100.00%
1987 Total		52	1.9	22	42.31%	10	45.45%	16	30.77%	4	25.00%	8	15.38%	3	37.50%	4	7.69%	1	25.00%	2	4	1	50.00%
1988	LDGV	2	2.0	1	50.00%	0	0.00%	1	50.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	1	0.0	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	54	2.3	24	44.44%	13	54.17%	11	20.37%	2	18.18%	9	16.67%	4	44.44%	5	9.26%	3	60.00%	5	9	2	40.00%
1988 Total		57	2.3	26	45.61%	13	50.00%	12	21.05%	3	25.00%	9	15.79%	4	44.44%	5	8.77%	3	60.00%	5	9	2	40.00%
1989	LDGV	8	1.3	6	75.00%	5	83.33%	1	12.50%	0	0.00%	1	12.50%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	5	1.8	2	40.00%	2	100.00%	2	40.00%	1	50.00%	1	20.00%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	40	1.6	25	62.50%	12	48.00%	9	22.50%	5	55.56%	4	10.00%	2	50.00%	1	2.50%	1	100.00%	1	3	0	0.00%
1989 Total		53	1.6	33	62.26%	19	57.58%	12	22.64%	6	50.00%	6	11.32%	4	66.67%	1	1.89%	1	100.00%	1	2	0	0.00%
1990	LDGV	15	2.7	5	33.33%	3	60.00%	3	20.00%	1	33.33%	2	13.33%	0	0.00%	2	13.33%	1	50.00%	3	20	1	33.33%
	LDGT	5	2.5	2	40.00%	1	50.00%	1	20.00%	0	0.00%	1	20.00%	0	0.00%	1	20.00%	1	100.00%	0	0	0	0.00%
	HDGT	42	1.7	21	50.00%	11	52.38%	10	23.81%	4	40.00%	6	14.29%	2	33.33%	4	9.52%	2	50.00%	1	2	0	0.00%
1990 Total		62	2.0	28	45.16%	15	53.57%	14	22.58%	5	35.71%	9	14.52%	2	22.22%	7	11.29%	4	57.14%	4	6	1	25.00%
1991	LDGV	7	1.5	3	42.86%	1	33.33%	2	28.57%	1	50.00%	2	28.57%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	11	2.7	4	36.36%	0	0.00%	3	27.27%	1	33.33%	4	36.36%	2	50.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	62	1.8	33	53.23%	16	48.48%	15	24.19%	4	26.67%	7	11.29%	3	42.86%	4	6.45%	0	0.00%	3	5	3	100.00%
1991 Total		80	1.9	40	50.00%	17	42.50%	20	25.00%	6	30.00%	13	16.25%	5	38.46%	4	5.00%	0	0.00%	3	4	3	100.00%
1992	LDGV	7	3.5	3	42.86%	0	0.00%	1	14.29%	0	0.00%	2	28.57%	1	50.00%	1	14.29%	1	100.00%	0	0	0	0.00%
	LDGT	15	4.5	2	13.33%	0	0.00%	2	13.33%	0	0.00%	2	13.33%	0	0.00%	2	13.33%	1	50.00%	7	47	1	14.29%
	HDGT	58	2.0	29	50.00%	15	51.72%	14	24.14%	8	57.14%	7	12.07%	2	28.57%	3	5.17%	1	33.33%	5	9	2	40.00%
1992 Total		80	2.2	34	42.50%	15	44.12%	17	21.25%	8	47.06%	11	13.75%	3	27.27%	6	7.50%	3	50.00%	12	15	3	25.00%
1993	LDGV	3	1.5	2	66.67%	1	50.00%	1	33.33%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	5	0.0	3	60.00%	0	0.00%	2	40.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	70	1.9	35	50.00%	18	51.43%	18	25.71%	9	50.00%	9	12.86%	2	22.22%	5	7.14%	3	60.00%	3	4	1	33.33%
1993 Total		78	1.9	40	51.28%	19	47.50%	21	26.92%	10	47.62%	9	11.54%	2	22.22%	5	6.41%	3	60.00%	3	4	1	33.33%
1994	LDGV	4	1.0	4	100.00%	4	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%

Vehicle			Avg Retest	Retest #1				Retest #2				Retest #3				Retest #4				Retest >= #5			
Year	Type	Total	#	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt %	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%
	LDGT	12	1.3	8	66.67%	2	25.00%	3	25.00%	1	33.33%	1	8.33%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	70	1.6	43	61.43%	26	60.47%	16	22.86%	10	62.50%	7	10.00%	3	42.86%	3	4.29%	2	66.67%	1	1	1	100.00%
1994 Total		86	1.6	55	63.95%	32	58.18%	19	22.09%	11	57.89%	8	9.30%	3	37.50%	3	3.49%	2	66.67%	1	1	1	100.00%
1995	LDGV	4	1.3	3	75.00%	2	66.67%	1	25.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	5	1.0	4	80.00%	4	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	20.00%	0	0.00%	0	0	0	0.00%
	HDGT	108	1.6	63	58.33%	35	55.56%	25	23.15%	14	56.00%	10	9.26%	4	40.00%	6	5.56%	0	0.00%	4	4	3	75.00%
1995 Total		117	1.6	70	59.83%	41	58.57%	26	22.22%	15	57.69%	10	8.55%	4	40.00%	7	5.98%	0	0.00%	4	3	3	75.00%
1996	LDGV	3	1.5	2	66.67%	1	50.00%	1	33.33%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	2	1.0	2	100.00%	1	50.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	78	2.0	38	48.72%	20	52.63%	15	19.23%	3	20.00%	9	11.54%	1	11.11%	6	7.69%	3	50.00%	10	13	3	30.00%
1996 Total		83	2.0	42	50.60%	22	52.38%	16	19.28%	4	25.00%	9	10.84%	1	11.11%	6	7.23%	3	50.00%	10	12	3	30.00%
1997	LDGV	4	2.5	3	75.00%	1	33.33%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	25.00%	1	100.00%	0	0	0	0.00%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	83	1.7	49	59.04%	25	51.02%	20	24.10%	10	50.00%	5	6.02%	1	20.00%	3	3.61%	2	66.67%	6	7	1	16.67%
1997 Total		87	1.7	52	59.77%	26	50.00%	20	22.99%	10	50.00%	5	5.75%	1	20.00%	4	4.60%	3	75.00%	6	7	1	16.67%
1998	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	5	1.0	5	100.00%	2	40.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	101	1.9	52	51.49%	29	55.77%	24	23.76%	10	41.67%	10	9.90%	3	30.00%	6	5.94%	2	33.33%	9	9	4	44.44%
1998 Total		106	1.8	57	53.77%	31	54.39%	24	22.64%	10	41.67%	10	9.43%	3	30.00%	6	5.66%	2	33.33%	9	8	4	44.44%
1999	LDGV	1	1.0	1	100.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	120	1.6	73	60.83%	44	60.27%	24	20.00%	10	41.67%	12	10.00%	6	50.00%	6	5.00%	0	0.00%	5	4	3	60.00%
1999 Total		121	1.5	74	61.16%	45	60.81%	24	19.83%	10	41.67%	12	9.92%	6	50.00%	6	4.96%	0	0.00%	5	4	3	60.00%
2000	LDGV	4	1.0	4	100.00%	3	75.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	4	1.0	3	75.00%	2	66.67%	1	25.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	128	1.4	80	62.50%	55	68.75%	20	15.63%	6	30.00%	12	9.38%	3	25.00%	7	5.47%	2	28.57%	9	7	2	22.22%
2000 Total		136	1.4	87	63.97%	60	68.97%	21	15.44%	6	28.57%	12	8.82%	3	25.00%	7	5.15%	2	28.57%	9	7	2	22.22%
2001	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	1	1.0	1	100.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	56	1.2	47	83.93%	36	76.60%	6	10.71%	2	33.33%	2	3.57%	2	100.00%	1	1.79%	1	100.00%	0	0	0	0.00%
2001 Total		57	1.2	48	84.21%	37	77.08%	6	10.53%	2	33.33%	2	3.51%	2	100.00%	1	1.75%	1	100.00%	0	0	0	0.00%
2002	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	4	2.7	2	50.00%	1	50.00%	1	25.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	25	1	100.00%
	HDGT	54	1.3	42	77.78%	33	78.57%	9	16.67%	5	55.56%	2	3.70%	1	50.00%	1	1.85%	1	100.00%	0	0	0	0.00%
2002 Total		58	1.3	44	75.86%	34	77.27%	10	17.24%	6	60.00%	2	3.45%	1	50.00%	1	1.72%	1	100.00%	1	2	1	100.00%
2003	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	2	1.0	2	100.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	44	1.3	33	75.00%	28	84.85%	6	13.64%	3	50.00%	4	9.09%	2	50.00%	1	2.27%	1	100.00%	0	0	0	0.00%
2003 Total		46	1.3	35	76.09%	30	85.71%	6	13.04%	3	50.00%	4	8.70%	2	50.00%	1	2.17%	1	100.00%	0	0	0	0.00%
2004	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	1	1.0	1	100.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	22	1.2	19	86.36%	16	84.21%	2	9.09%	1	50.00%	0	0.00%	0	0.00%	1	4.55%	1	100.00%	0	0	0	0.00%

Vehicle			Avg Retest	Retest #1				Retest #2				Retest #3				Retest #4				Retest >= #5			
Year	Type	Total	#	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt %	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%
2004 Total		23	1.2	20	86.96%	17	85.00%	2	8.70%	1	50.00%	0	0.00%	0	0.00%	1	4.35%	1	100.00%	0	0	0	0.00%
2005	LDGV	5	1.3	4	80.00%	3	75.00%	1	20.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	26	1.3	20	76.92%	15	75.00%	5	19.23%	4	80.00%	1	3.85%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2005 Total		31	1.3	24	77.42%	18	75.00%	6	19.35%	5	83.33%	1	3.23%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2006	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	3	1.0	3	100.00%	3	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	28	1.3	22	78.57%	16	72.73%	4	14.29%	2	50.00%	2	7.14%	2	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2006 Total		31	1.3	25	80.65%	19	76.00%	4	12.90%	2	50.00%	2	6.45%	2	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2007	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	1	1.0	1	100.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	13	1.3	11	84.62%	10	90.91%	1	7.69%	1	100.00%	0	0.00%	0	0.00%	1	7.69%	1	100.00%	0	0	0	0.00%
2007 Total		14	1.3	12	85.71%	11	91.67%	1	7.14%	1	100.00%	0	0.00%	0	0.00%	1	7.14%	1	100.00%	0	0	0	0.00%
2008	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	18	1.4	13	72.22%	10	76.92%	2	11.11%	1	50.00%	1	5.56%	0	0.00%	1	5.56%	0	0.00%	1	6	1	100.00%
2008 Total		18	1.4	13	72.22%	10	76.92%	2	11.11%	1	50.00%	1	5.56%	0	0.00%	1	5.56%	0	0.00%	1	6	1	100.00%
2009	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	7	1.2	6	85.71%	5	83.33%	1	14.29%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2009 Total		7	1.2	6	85.71%	5	83.33%	1	14.29%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2010	LDGV	1	1.0	1	100.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	10	1.4	7	70.00%	6	85.71%	1	10.00%	0	0.00%	1	10.00%	0	0.00%	1	10.00%	1	100.00%	0	0	0	0.00%
2010 Total		11	1.4	8	72.73%	7	87.50%	1	9.09%	0	0.00%	1	9.09%	0	0.00%	1	9.09%	1	100.00%	0	0	0	0.00%
2011	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	10	1.0	9	90.00%	8	88.89%	1	10.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2011 Total		10	1.0	9	90.00%	8	88.89%	1	10.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2012	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	10	1.0	10	100.00%	10	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2012 Total		10	1.0	10	100.00%	10	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2013	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	1	2.0	0	0.00%	0	0.00%	1	100.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	17	1.4	12	70.59%	8	66.67%	3	17.65%	1	33.33%	1	5.88%	0	0.00%	1	5.88%	1	100.00%	0	0	0	0.00%
2013 Total		18	1.5	12	66.67%	8	66.67%	4	22.22%	2	50.00%	1	5.56%	0	0.00%	1	5.56%	1	100.00%	0	0	0	0.00%
2014	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	18	1.4	13	72.22%	10	76.92%	3	16.67%	1	33.33%	2	11.11%	2	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2014 Total		18	1.4	13	72.22%	10	76.92%	3	16.67%	1	33.33%	2	11.11%	2	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2015	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%

Vehicle			Avg Retest	Retest #1				Retest #2				Retest #3				Retest #4				Retest >= #5			
Year	Type	Total	#	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt %	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	8	1.0	8	100.00%	7	87.50%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2015 Total		8	1.0	8	100.00%	7	87.50%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2016	LDGV	1	1.0	1	100.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	7	1.2	6	85.71%	5	83.33%	1	14.29%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2016 Total		8	1.1	7	87.50%	6	85.71%	1	12.50%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2017	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	1	1.0	1	100.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2017 Total		1	1.0	1	100.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2018	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	1	1.0	1	100.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2018 Total		1	1.0	1	100.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2019	LDGV	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2019 Total		0	0.0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
Overall Total		**3,219**	**1.6**	**1877**	**58.31%**	**1105**	**58.87%**	**676**	**21.00%**	**296**	**43.79%**	**319**	**9.91%**	**113**	**35.42%**	**176**	**5.47%**	**65**	**36.93%**	**171**	**5**	**66**	**38.60%**

Idle Retest Frequency Report (V1.01)

Vehicle		Avg Retest	Retest #1				Retest #2				Retest #3				Retest #4				Retest >= #5			
Type	Total	#	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt %	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%
LDGV	681	1.7	378	55.51%	192	50.79%	145	21.29%	59	40.69%	75	11.01%	25	33.33%	37	5.43%	12	32.43%	46	7	15	32.61%
LDGT	616	2.0	301	48.86%	135	44.85%	148	24.03%	55	37.16%	73	11.85%	19	26.03%	49	7.95%	18	36.73%	45	7	18	40.00%
HDGT	1,922	1.5	1198	62.33%	778	64.94%	383	19.93%	182	47.52%	171	8.90%	69	40.35%	90	4.68%	35	38.89%	80	4	33	41.25%
Overall Total	**3,219**	**1.6**	**1877**	**58.31%**	**1105**	**58.87%**	**676**	**21.00%**	**296**	**43.79%**	**319**	**9.91%**	**113**	**35.42%**	**176**	**5.47%**	**65**	**36.93%**	**171**	**5**	**66**	**38.60%**

Appendix D1

I/M Eligible Vehicle Report

Evaluated Vehicles

Colorado

I/M Eligible Vehicle Report, Evaluated Vehicles Ver2022-04

Tuesday, 09-April-2024

Report Start: **Jan, 2023** Report Period: **Year**

County: **All Counties**

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria: No 0 Hits	No 1 Hit	No 2+ Hits	Yes 1 Hit	Yes 2+ Hits		Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh.	Invalid Spd/Acc
1982																
	P	4	0	2	0	0	2	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			0.00%	50.00%	0.00%	0.00%	50.00%	**Not Clean:**	2	100.00%	0.5000	20.7500	1,457.5000	389.50	50.00%	0
	T	7	0	6	0	0	1	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			0.00%	85.71%	0.00%	0.00%	14.29%	**Not Clean:**	1	100.00%	3.0000	4,078.0000	900.0000	4.00	14.29%	0
	U	189	189	0	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			100.00%	0.00%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 1982		**200**	**189**	**8**	**0**	**0**	**3**	**Clean:**	**0**	**0.00%**	**0.0000**	**0.0000**	**0.0000**	**0.00**		
			94.50%	4.00%	0.00%	0.00%	1.50%	**Not Clean:**	**3**	**100.00%**	**1.3333**	**1,373.1667**	**1,271.6667**	**261.00**	**1.50%**	**0**
1983																
	P	3	0	1	0	0	2	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			0.00%	33.33%	0.00%	0.00%	66.67%	**Not Clean:**	2	100.00%	1.5000	219.7500	1,212.2500	-66.50	66.67%	0
	T	15	0	8	0	0	7	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			0.00%	53.33%	0.00%	0.00%	46.67%	**Not Clean:**	7	100.00%	1.2857	111.5000	2,236.5714	167.64	46.67%	0
	U	317	317	0	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			100.00%	0.00%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 1983		**335**	**317**	**9**	**0**	**0**	**9**	**Clean:**	**0**	**0.00%**	**0.0000**	**0.0000**	**0.0000**	**0.00**		
			94.63%	2.69%	0.00%	0.00%	2.69%	**Not Clean:**	**9**	**100.00%**	**1.3333**	**135.5556**	**2,008.9444**	**115.61**	**2.69%**	**0**
1984																
	P	9	0	5	0	0	4	**Clean:**	1	25.00%	0.0000	102.0000	471.5000	361.50		
			0.00%	55.56%	0.00%	0.00%	44.44%	**Not Clean:**	3	75.00%	1.8333	83.5000	1,112.5000	-90.67	44.44%	1
	T	11	0	9	0	0	2	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			0.00%	81.82%	0.00%	0.00%	18.18%	**Not Clean:**	2	100.00%	0.5000	63.2500	3,279.7500	1.25	18.18%	0
	U	463	462	1	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.78%	0.22%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 1984		**483**	**462**	**15**	**0**	**0**	**6**	**Clean:**	**1**	**16.67%**	**0.0000**	**102.0000**	**471.5000**	**361.50**		
			95.65%	3.11%	0.00%	0.00%	1.24%	**Not Clean:**	**5**	**83.33%**	**1.3000**	**75.4000**	**1,979.4000**	**-53.90**	**1.24%**	**1**

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria						Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh.	Invalid Spd/Acc
			No			Yes										
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits									
1985																
	P	20	0	15	0	0	5	**Clean:**	1	20.00%	0.0000	19.5000	452.5000	1.50		
			0.00%	75.00%	0.00%	0.00%	25.00%	**Not Clean:**	4	80.00%	1.1250	189.7500	1,529.5000	-270.00	25.00%	0
	T	24	0	12	0	0	12	**Clean:**	3	25.00%	0.1667	40.3333	323.1667	0.67		
			0.00%	50.00%	0.00%	0.00%	50.00%	**Not Clean:**	9	75.00%	1.7778	97.9444	1,785.8889	87.06	50.00%	0
	U	677	676	1	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.85%	0.15%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 1985		**721**	**676**	**28**	**0**	**0**	**17**	**Clean:**	**4**	**23.53%**	**0.1250**	**35.1250**	**355.5000**	**0.88**		
			93.76%	3.88%	0.00%	0.00%	2.36%	**Not Clean:**	**13**	**76.47%**	**1.5769**	**126.1923**	**1,707.0000**	**-22.81**	**2.36%**	**0**
1986																
	P	28	0	15	0	1	12	**Clean:**	3	23.08%	0.0000	30.0000	218.5000	261.50		
			0.00%	53.57%	0.00%	3.57%	42.86%	**Not Clean:**	10	76.92%	1.6000	268.5500	905.5000	289.85	46.43%	1
	T	39	0	20	0	1	18	**Clean:**	3	15.79%	0.0000	27.0000	85.8333	129.83		
			0.00%	51.28%	0.00%	2.56%	46.15%	**Not Clean:**	16	84.21%	1.8750	543.4688	1,487.7188	122.44	48.72%	2
	U	738	738	0	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			100.00%	0.00%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 1986		**805**	**738**	**35**	**0**	**2**	**30**	**Clean:**	**6**	**18.75%**	**0.0000**	**28.5000**	**152.1667**	**195.67**		
			91.68%	4.35%	0.00%	0.25%	3.73%	**Not Clean:**	**26**	**81.25%**	**1.7692**	**437.7308**	**1,263.7885**	**186.83**	**3.98%**	**3**
1987																
	P	33	0	16	0	1	16	**Clean:**	6	35.29%	0.0833	22.6667	286.0833	50.83		
			0.00%	48.48%	0.00%	3.03%	48.48%	**Not Clean:**	11	64.71%	1.2727	152.6364	1,249.0455	-187.36	51.52%	2
	T	48	0	30	0	0	18	**Clean:**	4	22.22%	0.1250	35.3750	576.2500	0.50		
			0.00%	62.50%	0.00%	0.00%	37.50%	**Not Clean:**	14	77.78%	1.9643	573.1429	1,317.5000	28.82	37.50%	0
	U	926	926	0	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			100.00%	0.00%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 1987		**1,007**	**926**	**46**	**0**	**1**	**34**	**Clean:**	**10**	**28.57%**	**0.1000**	**27.7500**	**402.1500**	**30.70**		
			91.96%	4.57%	0.00%	0.10%	3.38%	**Not Clean:**	**25**	**71.43%**	**1.6600**	**388.1200**	**1,287.3800**	**-66.30**	**3.48%**	**2**
1988																
	P	31	0	18	0	0	13	**Clean:**	5	38.46%	0.1000	13.7000	167.6000	-376.90		
			0.00%	58.06%	0.00%	0.00%	41.94%	**Not Clean:**	8	61.54%	1.2500	256.3750	796.0000	145.94	41.94%	2
	T	64	0	35	0	0	29	**Clean:**	5	17.24%	0.1000	33.1000	292.7000	33.90		
			0.00%	54.69%	0.00%	0.00%	45.31%	**Not Clean:**	24	82.76%	0.8750	151.3750	1,472.0833	14.29	45.31%	2
	U	1,064	1,063	0	0	0	1	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.91%	0.00%	0.00%	0.00%	0.09%	**Not Clean:**	1	100.00%	0.5000	43.5000	1,678.0000	2.00	0.09%	0
Total For 1988		**1,159**	**1,063**	**53**	**0**	**0**	**43**	**Clean:**	**10**	**23.26%**	**0.1000**	**23.4000**	**230.1500**	**-171.50**		
			91.72%	4.57%	0.00%	0.00%	3.71%	**Not Clean:**	**33**	**76.74%**	**0.9545**	**173.5606**	**1,314.4242**	**45.83**	**3.71%**	**4**

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria						Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh.	Invalid Spd/Acc
			No			Yes										
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits									
1989																
	P	67	0	30	0	2	35	**Clean:**	9	24.32%	0.0000	18.7778	280.1667	-0.50		
			0.00%	44.78%	0.00%	2.99%	52.24%	**Not Clean:**	28	75.68%	1.1429	147.9643	1,128.3929	89.46	55.22%	5
	T	99	0	63	0	0	36	**Clean:**	7	19.44%	0.0714	30.7143	344.9286	56.29		
			0.00%	63.64%	0.00%	0.00%	36.36%	**Not Clean:**	29	80.56%	1.2759	124.7069	1,411.4655	68.03	36.36%	1
	U	1,654	1,653	0	0	0	1	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.94%	0.00%	0.00%	0.00%	0.06%	**Not Clean:**	1	100.00%	0.5000	58.0000	1,717.0000	-34.50	0.06%	0
Total For 1989		**1,820**	**1,653**	**93**	**0**	**2**	**72**	**Clean:**	**16**	**21.62%**	**0.0313**	**24.0000**	**308.5000**	**24.34**		
			90.82%	5.11%	0.00%	0.11%	3.96%	**Not Clean:**	**58**	**78.38%**	**1.1983**	**134.7845**	**1,280.0776**	**76.61**	**4.07%**	**6**
1990																
	P	78	0	35	0	4	39	**Clean:**	13	30.23%	0.0385	25.8462	196.3077	-19.00		
			0.00%	44.87%	0.00%	5.13%	50.00%	**Not Clean:**	30	69.77%	1.2667	158.8833	1,307.9500	71.97	55.13%	4
	T	132	0	76	0	0	56	**Clean:**	7	12.50%	0.0714	43.7857	420.0714	111.93		
			0.00%	57.58%	0.00%	0.00%	42.42%	**Not Clean:**	49	87.50%	0.9796	357.3571	1,400.3265	54.47	42.42%	1
	U	1,699	1,697	2	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.88%	0.12%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 1990		**1,909**	**1,697**	**113**	**0**	**4**	**95**	**Clean:**	**20**	**20.20%**	**0.0500**	**32.1250**	**274.6250**	**26.83**		
			88.89%	5.92%	0.00%	0.21%	4.98%	**Not Clean:**	**79**	**79.80%**	**1.0886**	**281.9873**	**1,365.2468**	**61.11**	**5.19%**	**5**
1991																
	P	149	0	80	0	1	68	**Clean:**	22	31.88%	0.0682	30.2727	234.0227	80.93		
			0.00%	53.69%	0.00%	0.67%	45.64%	**Not Clean:**	47	68.12%	0.8830	124.2234	1,352.9043	-169.67	46.31%	11
	T	189	0	114	0	1	74	**Clean:**	14	18.67%	0.0714	39.2857	233.5714	84.11		
			0.00%	60.32%	0.00%	0.53%	39.15%	**Not Clean:**	61	81.33%	1.4672	178.0984	1,305.1066	15.04	39.68%	3
	U	2,458	2,457	0	0	0	1	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.96%	0.00%	0.00%	0.00%	0.04%	**Not Clean:**	1	100.00%	5.5000	376.5000	28.0000	0.50	0.04%	0
Total For 1991		**2,796**	**2,457**	**194**	**0**	**2**	**143**	**Clean:**	**36**	**24.83%**	**0.0694**	**33.7778**	**233.8472**	**82.17**		
			87.88%	6.94%	0.00%	0.07%	5.11%	**Not Clean:**	**109**	**75.17%**	**1.2523**	**156.6881**	**1,314.0000**	**-64.74**	**5.19%**	**14**
1992																
	P	140	0	78	0	5	57	**Clean:**	20	32.26%	0.1250	26.8500	255.7750	56.58		
			0.00%	55.71%	0.00%	3.57%	40.71%	**Not Clean:**	42	67.74%	0.7024	139.1905	1,367.5000	11.77	44.29%	13
	T	168	0	73	0	11	84	**Clean:**	28	29.47%	0.0357	30.7857	221.0357	14.50		
			0.00%	43.45%	0.00%	6.55%	50.00%	**Not Clean:**	67	70.53%	0.8209	211.2388	1,342.0075	69.79	56.55%	1
	U	2,439	2,439	0	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			100.00%	0.00%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 1992		**2,747**	**2,439**	**151**	**0**	**16**	**141**	**Clean:**	**48**	**30.57%**	**0.0729**	**29.1458**	**235.5104**	**32.03**		
			88.79%	5.50%	0.00%	0.58%	5.13%	**Not Clean:**	**109**	**69.43%**	**0.7752**	**183.4771**	**1,351.8303**	**47.44**	**5.72%**	**14**

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria						Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh.	Invalid Spd/Acc
			No			Yes										
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits									
1993																
	P	195	0	100	0	6	89	**Clean:**	31	32.63%	0.0323	22.1290	255.1290	28.27		
			0.00%	51.28%	0.00%	3.08%	45.64%	**Not Clean:**	64	67.37%	0.7578	128.4766	1,135.1719	17.46	48.72%	10
	T	335	0	149	0	19	167	**Clean:**	50	26.88%	0.0300	23.0600	215.1800	-13.90		
			0.00%	44.48%	0.00%	5.67%	49.85%	**Not Clean:**	136	73.12%	0.8676	164.4044	1,204.0772	34.52	55.52%	10
	U	3,433	3,429	3	0	0	1	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.88%	0.09%	0.00%	0.00%	0.03%	**Not Clean:**	1	100.00%	0.5000	112.5000	1,109.0000	777.00	0.03%	0
Total For 1993		**3,963**	**3,429**	**252**	**0**	**25**	**257**	**Clean:**	**81**	**28.72%**	**0.0309**	**22.7037**	**230.4691**	**2.24**		
			86.53%	6.36%	0.00%	0.63%	6.48%	**Not Clean:**	**201**	**71.28%**	**0.8308**	**152.7065**	**1,181.6642**	**32.78**	**7.12%**	**20**
1994																
	P	231	0	99	0	20	112	**Clean:**	66	50.00%	0.0758	24.5758	260.2348	-71.80		
			0.00%	42.86%	0.00%	8.66%	48.48%	**Not Clean:**	66	50.00%	0.8561	123.6364	1,092.6818	-146.67	57.14%	21
	T	458	0	196	1	22	239	**Clean:**	65	24.90%	0.0385	29.5154	213.4308	36.55		
			0.00%	42.79%	0.22%	4.80%	52.18%	**Not Clean:**	196	75.10%	0.7321	200.1505	1,149.2857	35.84	56.99%	4
	U	4,216	4,214	1	0	0	1	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.95%	0.02%	0.00%	0.00%	0.02%	**Not Clean:**	1	100.00%	1.0000	271.5000	1,986.0000	777.00	0.02%	0
Total For 1994		**4,905**	**4,214**	**296**	**1**	**42**	**352**	**Clean:**	**131**	**33.25%**	**0.0573**	**27.0267**	**237.0115**	**-18.03**		
			85.91%	6.03%	0.02%	0.86%	7.18%	**Not Clean:**	**263**	**66.75%**	**0.7643**	**181.2205**	**1,138.2624**	**-7.14**	**8.03%**	**25**
1995																
	P	319	0	118	0	56	145	**Clean:**	112	55.72%	0.0268	18.1875	146.2232	27.04		
			0.00%	36.99%	0.00%	17.55%	45.45%	**Not Clean:**	89	44.28%	1.1124	133.6404	798.7865	-48.81	63.01%	44
	T	659	0	292	0	27	340	**Clean:**	96	26.16%	0.0417	23.1146	220.4479	12.93		
			0.00%	44.31%	0.00%	4.10%	51.59%	**Not Clean:**	271	73.84%	0.7694	176.5554	1,289.4705	32.10	55.69%	8
	U	5,868	5,866	0	0	0	2	**Clean:**	2	100.00%	0.0000	9.7500	223.7500	158.75		
			99.97%	0.00%	0.00%	0.00%	0.03%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.03%	1
Total For 1995		**6,846**	**5,866**	**410**	**0**	**83**	**487**	**Clean:**	**210**	**36.84%**	**0.0333**	**20.3595**	**180.8929**	**21.84**		
			85.69%	5.99%	0.00%	1.21%	7.11%	**Not Clean:**	**360**	**63.16%**	**0.8542**	**165.9458**	**1,168.1625**	**12.09**	**8.33%**	**53**
1996																
	P	383	0	132	0	60	191	**Clean:**	156	62.15%	0.0128	15.7692	149.8333	-71.52		
			0.00%	34.46%	0.00%	15.67%	49.87%	**Not Clean:**	95	37.85%	0.8211	174.4421	894.0579	-40.31	65.54%	55
	T	734	0	256	2	78	398	**Clean:**	227	47.69%	0.0639	19.5022	193.6233	27.63		
			0.00%	34.88%	0.27%	10.63%	54.22%	**Not Clean:**	249	52.31%	0.7410	109.8353	1,163.6104	44.13	64.85%	22
	U	5,573	5,573	0	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			100.00%	0.00%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 1996		**6,690**	**5,573**	**388**	**2**	**138**	**589**	**Clean:**	**383**	**52.68%**	**0.0431**	**17.9817**	**175.7872**	**-12.76**		
			83.30%	5.80%	0.03%	2.06%	8.80%	**Not Clean:**	**344**	**47.32%**	**0.7631**	**127.6773**	**1,089.1701**	**20.81**	**10.87%**	**77**

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria						Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh.	Invalid Spd/Acc
			No			Yes										
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits									
1997																
	P	609	0	170	0	135	304	**Clean:**	276	62.87%	0.0272	12.3243	102.8225	-81.26		
			0.00%	27.91%	0.00%	22.17%	49.92%	**Not Clean:**	163	37.13%	1.1350	143.6380	824.6196	30.69	72.09%	91
	T	1,251	0	514	0	109	628	**Clean:**	380	51.56%	0.0513	17.9263	198.7461	20.54		
			0.00%	41.09%	0.00%	8.71%	50.20%	**Not Clean:**	357	48.44%	0.6961	111.5938	1,151.8193	59.10	58.91%	27
	U	8,835	8,832	2	0	0	1	**Clean:**	1	100.00%	0.5000	11.0000	63.5000	-1.00		
			99.97%	0.02%	0.00%	0.00%	0.01%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.01%	0
Total For 1997		**10,695**	**8,832**	**686**	**0**	**244**	**933**	**Clean:**	**657**	**55.82%**	**0.0419**	**15.5624**	**158.2435**	**-22.26**		
			82.58%	6.41%	0.00%	2.28%	8.72%	**Not Clean:**	**520**	**44.18%**	**0.8337**	**121.6385**	**1,049.2548**	**50.20**	**11.01%**	**118**
1998																
	P	780	0	263	0	152	365	**Clean:**	346	66.92%	0.0231	13.5665	117.5506	-16.57		
			0.00%	33.72%	0.00%	19.49%	46.79%	**Not Clean:**	171	33.08%	0.9591	135.6491	828.8772	-150.94	66.28%	119
	T	1,497	0	607	1	115	774	**Clean:**	507	57.03%	0.0503	17.6213	212.9941	7.53		
			0.00%	40.55%	0.07%	7.68%	51.70%	**Not Clean:**	382	42.97%	0.6374	115.7461	1,151.6479	60.92	59.39%	39
	U	9,083	9,082	1	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.99%	0.01%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 1998		**11,360**	**9,082**	**871**	**1**	**267**	**1,139**	**Clean:**	**853**	**60.67%**	**0.0393**	**15.9766**	**174.2796**	**-2.24**		
			79.95%	7.67%	0.01%	2.35%	10.03%	**Not Clean:**	**553**	**39.33%**	**0.7369**	**121.9005**	**1,051.8400**	**-4.59**	**12.38%**	**158**
1999																
	P	997	0	314	0	238	445	**Clean:**	496	72.62%	0.0111	12.1643	93.5181	-5.48		
			0.00%	31.49%	0.00%	23.87%	44.63%	**Not Clean:**	187	27.38%	0.9733	137.1230	751.1631	11.30	68.51%	172
	T	2,287	0	784	4	324	1,175	**Clean:**	1,008	67.24%	0.0258	12.7019	154.2059	14.48		
			0.00%	34.28%	0.17%	14.17%	51.38%	**Not Clean:**	491	32.76%	0.6222	99.6232	1,050.2495	61.58	65.54%	100
	U	13,937	13,936	0	0	0	1	**Clean:**	1	100.00%	0.0000	0.0000	83.5000	1.00		
			99.99%	0.00%	0.00%	0.00%	0.01%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.01%	0
Total For 1999		**17,221**	**13,936**	**1098**	**4**	**562**	**1,621**	**Clean:**	**1,505**	**68.94%**	**0.0209**	**12.5163**	**134.1581**	**7.89**		
			80.92%	6.38%	0.02%	3.26%	9.41%	**Not Clean:**	**678**	**31.06%**	**0.7190**	**109.9661**	**967.7581**	**47.72**	**12.68%**	**272**
2000																
	P	1,273	0	332	0	355	586	**Clean:**	726	77.15%	0.0207	10.3567	81.6488	-1.04		
			0.00%	26.08%	0.00%	27.89%	46.03%	**Not Clean:**	215	22.85%	1.0698	111.6581	756.7581	39.76	73.92%	238
	T	2,682	0	804	1	455	1,422	**Clean:**	1,290	68.73%	0.0233	12.8845	133.0632	11.63		
			0.00%	29.98%	0.04%	16.96%	53.02%	**Not Clean:**	587	31.27%	0.6882	119.8169	1,000.7555	54.21	69.99%	100
	U	14,225	14,218	3	0	0	4	**Clean:**	2	50.00%	0.0000	2.5000	13.2500	1.50		
			99.95%	0.02%	0.00%	0.00%	0.03%	**Not Clean:**	2	50.00%	0.5000	80.2500	493.5000	1.00	0.03%	0
Total For 2000		**18,180**	**14,218**	**1139**	**1**	**810**	**2,012**	**Clean:**	**2,018**	**71.51%**	**0.0223**	**11.9648**	**114.4475**	**7.06**		
			78.21%	6.27%	0.01%	4.46%	11.07%	**Not Clean:**	**804**	**28.49%**	**0.7898**	**117.5367**	**934.2456**	**50.22**	**15.52%**	**338**

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria: No 0 Hits	No 1 Hit	No 2+ Hits	Yes 1 Hit	Yes 2+ Hits		Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh.	Invalid Spd/Acc
2001																
	P	1,720	0	385	0	571	764	**Clean:**	1,059	79.33%	0.0113	9.1265	56.7483	3.25		
			0.00%	22.38%	0.00%	33.20%	44.42%	**Not Clean:**	276	20.67%	0.9638	111.9728	752.6214	31.28	77.62%	327
	T	3,832	0	844	5	1,052	1,931	**Clean:**	2,375	79.62%	0.0194	11.5842	94.8579	10.84		
			0.00%	22.03%	0.13%	27.45%	50.39%	**Not Clean:**	608	20.38%	0.8100	89.7590	912.2714	19.76	77.84%	170
	U	19,287	19,283	3	0	0	1	**Clean:**	1	100.00%	0.0000	4.5000	7.0000	1.50		
			99.98%	0.02%	0.00%	0.00%	0.01%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.01%	0
Total For 2001		**24,839**	**19,283**	**1232**	**5**	**1,623**	**2,696**	**Clean:**	**3,435**	**79.53%**	**0.0169**	**10.8245**	**83.0833**	**8.50**		
			77.63%	4.96%	0.02%	6.53%	10.85%	**Not Clean:**	**884**	**20.47%**	**0.8580**	**96.6946**	**862.4259**	**23.35**	**17.39%**	**497**
2002																
	P	1,954	0	296	0	781	877	**Clean:**	1,284	77.44%	0.0132	7.1908	43.5452	-13.73		
			0.00%	15.15%	0.00%	39.97%	44.88%	**Not Clean:**	374	22.56%	0.8690	122.2861	702.1925	-76.59	84.85%	349
	T	4,087	0	820	9	1,068	2,190	**Clean:**	2,576	79.07%	0.0200	11.2737	98.0887	6.36		
			0.00%	20.06%	0.22%	26.13%	53.58%	**Not Clean:**	682	20.93%	0.7016	104.6928	845.6496	39.70	79.72%	177
	U	18,276	18,275	1	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.99%	0.01%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 2002		**24,317**	**18,275**	**1117**	**9**	**1,849**	**3,067**	**Clean:**	**3,860**	**78.52%**	**0.0177**	**9.9155**	**79.9452**	**-0.32**		
			75.15%	4.59%	0.04%	7.60%	12.61%	**Not Clean:**	**1,056**	**21.48%**	**0.7609**	**110.9238**	**794.8419**	**-1.49**	**20.22%**	**526**
2003																
	P	2,524	0	209	0	1,157	1,158	**Clean:**	1,926	83.20%	0.0091	7.3079	45.0558	-14.73		
			0.00%	8.28%	0.00%	45.84%	45.88%	**Not Clean:**	389	16.80%	0.8740	113.6722	745.9229	-31.83	91.72%	541
	T	5,421	0	620	4	1,976	2,821	**Clean:**	3,983	83.03%	0.0163	8.9804	61.8859	2.25		
			0.00%	11.44%	0.07%	36.45%	52.04%	**Not Clean:**	814	16.97%	0.8372	111.9091	855.1708	34.73	88.49%	274
	U	24,617	24,616	1	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			100.00%	0.00%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 2003		**32,562**	**24,616**	**830**	**4**	**3,133**	**3,979**	**Clean:**	**5,909**	**83.08%**	**0.0140**	**8.4353**	**56.4002**	**-3.29**		
			75.60%	2.55%	0.01%	9.62%	12.22%	**Not Clean:**	**1,203**	**16.92%**	**0.8491**	**112.4792**	**819.8446**	**13.20**	**21.84%**	**815**
2004																
	P	2,452	0	148	0	1,208	1,096	**Clean:**	1,934	83.94%	0.0111	6.6251	32.2342	-11.98		
			0.00%	6.04%	0.00%	49.27%	44.70%	**Not Clean:**	370	16.06%	0.9905	85.4054	736.6284	-120.59	93.96%	511
	T	5,966	0	461	11	2,383	3,111	**Clean:**	4,729	86.08%	0.0118	8.0366	47.6540	3.45		
			0.00%	7.73%	0.18%	39.94%	52.15%	**Not Clean:**	765	13.92%	0.8255	103.8660	774.7340	56.11	92.09%	296
	U	23,183	23,179	1	0	0	3	**Clean:**	2	66.67%	0.0000	23.2500	68.7500	2.75		
			99.98%	0.00%	0.00%	0.00%	0.01%	**Not Clean:**	1	33.33%	1.0000	16.0000	33.5000	2.00	0.01%	0
Total For 2004		**31,601**	**23,179**	**610**	**11**	**3,591**	**4,210**	**Clean:**	**6,665**	**85.44%**	**0.0116**	**7.6316**	**43.1860**	**-1.03**		
			73.35%	1.93%	0.03%	11.36%	13.32%	**Not Clean:**	**1,136**	**14.56%**	**0.8794**	**97.7760**	**761.6703**	**-1.49**	**24.69%**	**807**

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria						Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh.	Invalid Spd/Acc
			No			Yes										
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits									
2005																
	P	3,652	0	198	0	1,822	1,632	**Clean:**	3,000	86.86%	0.0098	6.4687	30.7933	-4.16		
			0.00%	5.42%	0.00%	49.89%	44.69%	**Not Clean:**	454	13.14%	0.8645	107.6927	650.5441	-55.36	94.58%	790
	T	7,610	0	485	12	3,251	3,862	**Clean:**	6,353	89.32%	0.0098	7.5611	37.5278	2.04		
			0.00%	6.37%	0.16%	42.72%	50.75%	**Not Clean:**	760	10.68%	0.8987	88.7263	693.4493	40.65	93.47%	442
	U	30,804	30,801	1	0	0	2	**Clean:**	2	100.00%	0.0000	5.2500	167.7500	1.00		
			99.99%	0.00%	0.00%	0.00%	0.01%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.01%	0
Total For 2005		**42,066**	**30,801**	**684**	**12**	**5,073**	**5,496**	**Clean:**	**9,355**	**88.51%**	**0.0098**	**7.2103**	**35.3960**	**0.05**		
			73.22%	1.63%	0.03%	12.06%	13.07%	**Not Clean:**	**1,214**	**11.49%**	**0.8859**	**95.8192**	**677.4040**	**4.75**	**25.12%**	**1232**
2006																
	P	3,427	0	142	0	1,816	1,469	**Clean:**	2,929	89.16%	0.0101	6.5266	24.3824	-18.41		
			0.00%	4.14%	0.00%	52.99%	42.87%	**Not Clean:**	356	10.84%	0.9157	94.6390	575.5772	3.90	95.86%	742
	T	6,955	0	254	15	3,091	3,595	**Clean:**	5,995	89.66%	0.0083	7.2438	36.1378	3.05		
			0.00%	3.65%	0.22%	44.44%	51.69%	**Not Clean:**	691	10.34%	0.8307	77.7873	700.7395	51.06	96.13%	381
	U	26,912	26,910	1	0	0	1	**Clean:**	1	100.00%	0.0000	66.5000	406.5000	1.00		
			99.99%	0.00%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 2006		**37,294**	**26,910**	**397**	**15**	**4,907**	**5,065**	**Clean:**	**8,925**	**89.50%**	**0.0089**	**7.0151**	**32.3214**	**-3.99**		
			72.16%	1.06%	0.04%	13.16%	13.58%	**Not Clean:**	**1,047**	**10.50%**	**0.8596**	**83.5172**	**658.1819**	**35.02**	**26.74%**	**1123**
2007																
	P	4,780	0	179	0	2,558	2,043	**Clean:**	4,181	90.87%	0.0065	6.6040	22.5898	-17.19		
			0.00%	3.74%	0.00%	53.51%	42.74%	**Not Clean:**	420	9.13%	0.9583	104.3893	538.5476	-123.52	96.26%	1050
	T	10,097	0	395	18	4,554	5,130	**Clean:**	8,843	91.32%	0.0085	7.1758	30.7657	0.79		
			0.00%	3.91%	0.18%	45.10%	50.81%	**Not Clean:**	841	8.68%	0.8597	77.2265	559.1938	27.87	95.91%	598
	U	36,842	36,837	2	0	0	3	**Clean:**	2	66.67%	0.0000	7.2500	0.5000	-0.75		
			99.99%	0.01%	0.00%	0.00%	0.01%	**Not Clean:**	1	33.33%	0.0000	28.5000	1,017.5000	777.00	0.01%	0
Total For 2007		**51,719**	**36,837**	**576**	**18**	**7,112**	**7,176**	**Clean:**	**13,026**	**91.17%**	**0.0079**	**6.9923**	**28.1368**	**-4.98**		
			71.23%	1.11%	0.03%	13.75%	13.87%	**Not Clean:**	**1,262**	**8.83%**	**0.8918**	**86.2278**	**552.6858**	**-21.92**	**27.63%**	**1648**
2008																
	P	3,998	0	352	0	1,905	1,741	**Clean:**	3,292	90.29%	0.0085	7.2216	25.8442	-21.53		
			0.00%	8.80%	0.00%	47.65%	43.55%	**Not Clean:**	354	9.71%	1.0494	73.3220	476.8828	-192.21	91.20%	878
	T	8,897	0	538	17	3,676	4,666	**Clean:**	7,516	90.10%	0.0148	7.5773	30.0396	1.80		
			0.00%	6.05%	0.19%	41.32%	52.44%	**Not Clean:**	826	9.90%	0.9201	57.8929	442.2197	24.91	93.76%	469
	U	29,634	29,633	1	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			100.00%	0.00%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 2008		**42,529**	**29,633**	**891**	**17**	**5,581**	**6,407**	**Clean:**	**10,808**	**90.16%**	**0.0129**	**7.4690**	**28.7617**	**-5.31**		
			69.68%	2.10%	0.04%	13.12%	15.07%	**Not Clean:**	**1,180**	**9.84%**	**0.9589**	**62.5216**	**452.6186**	**-40.23**	**28.19%**	**1347**

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria: No 0 Hits	No 1 Hit	No 2+ Hits	Yes 1 Hit	Yes 2+ Hits		Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh.	Invalid Spd/Acc
2009																
	P	3,118	0	398	0	1,352	1,368	**Clean:**	2,466	90.66%	0.0101	7.1519	25.7332	-35.17		
			0.00%	12.76%	0.00%	43.36%	43.87%	**Not Clean:**	254	9.34%	1.0256	80.3465	423.1594	-47.39	87.24%	669
	T	4,614	0	595	13	1,603	2,403	**Clean:**	3,608	90.06%	0.0122	7.6983	32.1019	4.37		
			0.00%	12.90%	0.28%	34.74%	52.08%	**Not Clean:**	398	9.94%	0.9485	73.8430	378.9033	18.05	86.82%	259
	U	17,183	17,182	1	0	0	0	**Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.99%	0.01%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 2009		**24,915**	**17,182**	**994**	**13**	**2,955**	**3,771**	**Clean:**	**6,074**	**90.31%**	**0.0114**	**7.4765**	**29.5162**	**-11.68**		
			68.96%	3.99%	0.05%	11.86%	15.14%	**Not Clean:**	**652**	**9.69%**	**0.9785**	**76.3765**	**396.1442**	**-7.45**	**27.00%**	**928**
2010																
	P	5,213	0	527	0	2,467	2,219	**Clean:**	4,347	92.77%	0.0075	6.5902	21.3566	-25.31		
			0.00%	10.11%	0.00%	47.32%	42.57%	**Not Clean:**	339	7.23%	0.9587	56.3142	257.2522	-24.88	89.89%	1203
	T	11,066	0	617	14	4,746	5,689	**Clean:**	9,649	92.47%	0.0077	7.0091	25.7864	2.83		
			0.00%	5.58%	0.13%	42.89%	51.41%	**Not Clean:**	786	7.53%	0.9726	61.9873	294.0617	10.06	94.30%	609
	U	35,312	35,306	3	0	0	3	**Clean:**	2	66.67%	0.0000	0.2500	48.7500	387.25		
			99.98%	0.01%	0.00%	0.00%	0.01%	**Not Clean:**	1	33.33%	0.0000	32.0000	566.5000	-2.00	0.01%	1
Total For 2010		**51,591**	**35,306**	**1147**	**14**	**7,213**	**7,911**	**Clean:**	**13,998**	**92.55%**	**0.0076**	**6.8781**	**24.4140**	**-5.85**		
			68.43%	2.22%	0.03%	13.98%	15.33%	**Not Clean:**	**1,126**	**7.45%**	**0.9676**	**60.2527**	**283.2216**	**-0.47**	**29.32%**	**1813**
2011																
	P	3,379	0	484	0	1,389	1,506	**Clean:**	2,610	90.16%	0.0088	7.4161	22.9887	-23.57		
			0.00%	14.32%	0.00%	41.11%	44.57%	**Not Clean:**	285	9.84%	1.0158	110.8544	418.2702	-62.99	85.68%	729
	T	8,168	0	365	23	3,374	4,406	**Clean:**	7,107	91.35%	0.0108	7.2662	26.2606	3.83		
			0.00%	4.47%	0.28%	41.31%	53.94%	**Not Clean:**	673	8.65%	1.1137	57.1895	263.1233	31.61	95.25%	446
	U	23,224	23,221	2	0	0	1	**Clean:**	1	100.00%	0.0000	44.0000	0.0000	1.00		
			99.99%	0.01%	0.00%	0.00%	0.00%	**Not Clean:**	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%	0
Total For 2011		**34,771**	**23,221**	**851**	**23**	**4,763**	**5,913**	**Clean:**	**9,718**	**91.03%**	**0.0102**	**7.3102**	**25.3791**	**-3.53**		
			66.78%	2.45%	0.07%	13.70%	17.01%	**Not Clean:**	**958**	**8.97%**	**1.0846**	**73.1545**	**309.2787**	**3.46**	**30.70%**	**1175**
2012																
	P	7,976	0	883	0	3,660	3,433	**Clean:**	6,517	91.88%	0.0087	6.6485	21.6023	-14.74		
			0.00%	11.07%	0.00%	45.89%	43.04%	**Not Clean:**	576	8.12%	0.9679	58.2075	279.6840	-41.83	88.93%	1829
	T	15,851	0	719	52	6,737	8,343	**Clean:**	13,853	91.86%	0.0084	7.1142	24.4170	1.34		
			0.00%	4.54%	0.33%	42.50%	52.63%	**Not Clean:**	1,227	8.14%	1.0693	61.8904	227.3325	33.97	95.14%	865
	U	47,514	47,503	4	0	0	7	**Clean:**	5	71.43%	0.0000	3.0000	19.3000	-1.70		
			99.98%	0.01%	0.00%	0.00%	0.01%	**Not Clean:**	2	28.57%	1.0000	2.2500	43.7500	-52.50	0.01%	1
Total For 2012		**71,341**	**47,503**	**1606**	**52**	**10,397**	**11,783**	**Clean:**	**20,375**	**91.86%**	**0.0085**	**6.9642**	**23.5155**	**-3.80**		
			66.59%	2.25%	0.07%	14.57%	16.52%	**Not Clean:**	**1,805**	**8.14%**	**1.0368**	**60.6490**	**243.8352**	**9.68**	**31.09%**	**2695**

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria: No 0 Hits	No 1 Hit	No 2+ Hits	Yes 1 Hit	Yes 2+ Hits		Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh.	Invalid Spd/Acc
2013																
	P	5,004	0	669	0	2,075	2,260	**Clean:**	3,898	89.92%	0.0130	6.7855	23.6975	-31.06		
			0.00%	13.37%	0.00%	41.47%	45.16%	**Not Clean:**	437	10.08%	1.0526	84.5641	399.5114	11.10	86.63%	1120
	T	9,019	0	453	18	3,841	4,707	**Clean:**	7,756	90.73%	0.0114	7.2154	25.8854	1.22		
			0.00%	5.02%	0.20%	42.59%	52.19%	**Not Clean:**	792	9.27%	1.0271	48.0751	237.2860	28.45	94.78%	499
	U	27,481	27,477	1	0	0	3	**Clean:**	1	33.33%	0.0000	0.0000	37.0000	0.00		
			99.99%	0.00%	0.00%	0.00%	0.01%	**Not Clean:**	2	66.67%	0.5000	5.5000	12.0000	1.25	0.01%	0
Total For 2013		**41,504**	**27,477**	**1123**	**18**	**5,916**	**6,970**	**Clean:**	**11,655**	**90.45%**	**0.0119**	**7.0710**	**25.1546**	**-9.58**		
			66.20%	2.71%	0.04%	14.25%	16.79%	**Not Clean:**	**1,231**	**9.55%**	**1.0353**	**60.9594**	**294.5093**	**22.25**	**31.05%**	**1619**
2014																
	P	9,410	0	857	0	4,460	4,093	**Clean:**	7,899	92.35%	0.0096	6.5027	20.9053	-16.23		
			0.00%	9.11%	0.00%	47.40%	43.50%	**Not Clean:**	654	7.65%	0.9472	58.0833	283.0398	-25.65	90.89%	2298
	T	25,754	0	1616	49	10,468	13,621	**Clean:**	22,403	93.00%	0.0103	7.1472	24.5834	3.61		
			0.00%	6.27%	0.19%	40.65%	52.89%	**Not Clean:**	1,686	7.00%	1.1412	54.9786	210.0291	21.10	93.53%	1478
	U	64,816	64,794	12	0	0	10	**Clean:**	9	90.00%	0.0000	16.2222	43.6111	35.50		
			99.97%	0.02%	0.00%	0.00%	0.02%	**Not Clean:**	1	10.00%	0.5000	0.0000	49.5000	2.00	0.02%	3
Total For 2014		**99,980**	**64,794**	**2485**	**49**	**14,928**	**17,724**	**Clean:**	**30,311**	**92.83%**	**0.0101**	**6.9819**	**23.6305**	**-1.55**		
			64.81%	2.49%	0.05%	14.93%	17.73%	**Not Clean:**	**2,341**	**7.17%**	**1.0867**	**55.8225**	**230.3573**	**8.03**	**32.66%**	**3779**
2015																
	P	2,193	0	239	0	1,058	896	**Clean:**	1,775	90.84%	0.0073	6.0369	20.2287	-27.56		
			0.00%	10.90%	0.00%	48.24%	40.86%	**Not Clean:**	179	9.16%	0.9693	63.6453	345.5475	-48.25	89.10%	515
	T	5,648	0	56	27	2,609	2,956	**Clean:**	5,139	92.35%	0.0085	6.6076	21.9050	1.80		
			0.00%	0.99%	0.48%	46.19%	52.34%	**Not Clean:**	426	7.65%	0.9495	63.7101	232.3732	36.27	98.53%	320
	U	14,925	14,920	1	0	0	4	**Clean:**	3	75.00%	0.0000	3.0000	8.6667	-79.17		
			99.97%	0.01%	0.00%	0.00%	0.03%	**Not Clean:**	1	25.00%	2.5000	1.0000	0.0000	-42.50	0.03%	1
Total For 2015		**22,766**	**14,920**	**296**	**27**	**3,667**	**3,856**	**Clean:**	**6,917**	**91.94%**	**0.0082**	**6.4596**	**21.4691**	**-5.77**		
			65.54%	1.30%	0.12%	16.11%	16.94%	**Not Clean:**	**606**	**8.06%**	**0.9579**	**63.5875**	**265.4191**	**11.17**	**33.04%**	**836**
2016																
	P	13,192	0	1519	0	5,860	5,813	**Clean:**	10,786	92.40%	0.0087	6.9363	21.5804	-15.55		
			0.00%	11.51%	0.00%	44.42%	44.06%	**Not Clean:**	887	7.60%	1.1601	69.4002	297.6883	-70.96	88.49%	3292
	T	42,408	0	725	92	19,320	22,271	**Clean:**	38,785	93.25%	0.0062	6.8517	21.1093	1.89		
			0.00%	1.71%	0.22%	45.56%	52.52%	**Not Clean:**	2,806	6.75%	1.0693	68.5816	184.3118	11.27	98.07%	2447
	U	96,901	96,879	10	0	0	12	**Clean:**	10	83.33%	0.0000	24.2000	39.2500	40.50		
			99.98%	0.01%	0.00%	0.00%	0.01%	**Not Clean:**	2	16.67%	0.2500	24.0000	572.7500	0.25	0.01%	1
Total For 2016		**152,501**	**96,879**	**2254**	**92**	**25,180**	**28,096**	**Clean:**	**49,581**	**93.06%**	**0.0068**	**6.8736**	**21.2155**	**-1.89**		
			63.53%	1.48%	0.06%	16.51%	18.42%	**Not Clean:**	**3,695**	**6.94%**	**1.0907**	**68.7540**	**211.7386**	**-8.48**	**34.93%**	**5740**

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria						Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh.	Invalid Spd/Acc
			No			Yes										
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits									
Overall Total		880,138	614,583	22978	388	110,086	132,103	Clean:	216,601	89.43%	0.0100	7.3874	31.6179	-3.23		
			69.83%	2.61%	0.04%	12.51%	15.01%	Not Clean:	25,588	10.57%	0.9505	86.5224	541.5306	6.39	27.52%	27690