

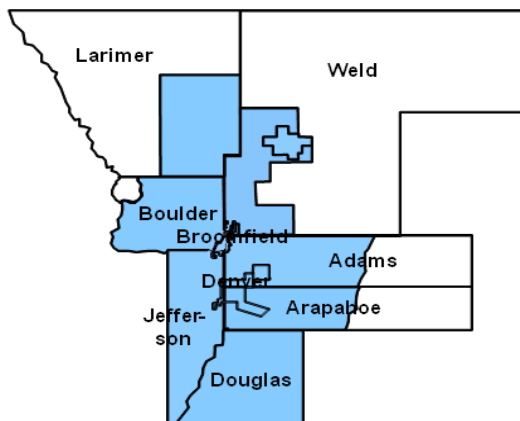


COLORADO

Air Pollution Control Division

Department of Public Health & Environment

Automobile Inspection and Readjustment (AIR) Program Annual Report Calendar Year 2014



July 1, 2015

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Executive Summary

The State of Colorado operates a motor vehicle emissions inspection program in the nine-county Front Range area. This includes all or portions of Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, Jefferson, Larimer, and Weld counties.

The program's purpose is to improve air quality through the detection and repair of excessively emitting vehicles. Mobile source emissions constitute one of the larger categories of controllable emissions that contribute to summertime ozone concentrations. Lowering vehicle emissions by repairing dirty vehicles contributes to a cleaner motor vehicle fleet and improvement in the Colorado Front Range area's air quality.

The Automobile Inspection and Readjustment (AIR) Program consists of an "enhanced" Inspection and Maintenance (I/M) Program that uses a dynamometer-based I/M240 test for model year 1982 and newer light-duty gasoline-powered vehicles and a Two-Speed Idle Test (TSI) for 1981 and older light-duty and all heavy-duty gasoline-powered vehicles. The program also involves a visual inspection and gas cap pressure test to check for required emissions control equipment and evaporative emission leaks along with an inspection for visible smoke. The State enforces the AIR program through denial of vehicle registrations.

Vehicles are exempt from inspection for the first four model years. Newer model year vehicles that undergo ownership change during this period are also exempt from inspection if they have at least 12 months remaining in their four-year exemption period. As a result of these exemptions, approximately 380,000 vehicles were exempt from emissions inspection in 2014.

The I/M network consists of 18 Air Care Colorado emissions testing stations with 97 inspection lanes located throughout the nine-county program area. These centralized testing stations are allowed to inspect all gasoline-powered vehicles regardless of age. There were also two independent test-only stations that are only allowed to inspect 1981 and older gasoline-powered vehicles. Additionally, there were 23 fleet self-inspection stations throughout the program area licensed to test qualifying commercial and governmental fleet vehicles.

The State has developed a clean screen program, called "RapidScreen", to increase motorist convenience and limit the number of vehicles undergoing the traditional I/M inspection. RapidScreen uses Remote Sensing Devices (RSD) to measure tailpipe emissions while a vehicle drives past these devices on the road. There were a total of 24 RSD units operating throughout the nine-county program area in 2014. RSD units observed over 283,000 unique vehicles that met clean screen program requirements. Of these, 238,138 participated in the program.

There were approximately 886,000 initial I/M240 tests and 81,000 Two-Speed Idle (TSI) tests conducted throughout the I/M network in 2014. The I/M240 failure rate was 7.72% with the TSI test failure rate being 8.03 %. Including Clean Screen inspections, the overall failure rate was 6.21%.

The State estimates that the net cost of the total AIR program during 2014 was approximately \$45.5 million. Net cost is a combination of vehicle inspection costs, repair costs, vehicle registration fees, and estimated fuel savings. For ozone precursors, the State estimates the cost-effectiveness of the inspection program to be \$3,773 per ton removed. For carbon monoxide (CO) the cost effectiveness is estimated at \$739 per ton removed.

Introduction

The State of Colorado has maintained an automotive emissions inspection program since 1981. The purpose of this program is to identify and repair high-emitting vehicles. Repair of these vehicles results in lower mobile source emissions and contributes to improvement in the program area's air quality. Mobile sources remain a significant source of controllable emissions that contribute to Front Range summertime ozone levels.

The current Automobile Inspection and Readjustment (AIR) program was authorized by HB93-1340, and began operations on January 1, 1995. It consists of an "enhanced" Inspection and Maintenance (I/M) Program that uses a dynamometer-based I/M240 test for model year 1982 and newer light-duty gasoline-powered vehicles, and a Two-Speed Idle (TSI) test for 1981 and older light-duty and all heavy-duty gasoline-powered vehicles. As part of the program, a visual inspection and gas cap pressure test are conducted on all 1975 and newer vehicles.

The inspection cycle a vehicle receives depends on its age. Model year 1982 and newer vehicles are inspected biennially (every two years), while 1981 and older model year vehicles are inspected annually. For the new vehicles the inspection cycle begins after an exemption period. This allows the newest and cleanest model year vehicles to forgo periodic I/M inspection. The exemption period for new vehicles is four years. Vehicles sold during their exemption period are also exempt from inspection as long as they have a remaining 12 months left on this period. Program enforcement is through denial of vehicle registrations at the County Clerk level.

To further improve motorist convenience, the State administers a remote-sensing based clean screen program called "RapidScreen." RapidScreen monitors vehicle emissions while simultaneously photographing the license plate while a vehicle passes through infrared and ultraviolet beams of light. County Clerks notify owners of vehicles meeting the RapidScreen criteria that their vehicle has passed the inspection process and are excused from their next regularly scheduled I/M240 test.

The current AIR Program covers the nine-county Front Range area, including all or portions of Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, Jefferson, Larimer, and Weld counties. The latter two North Front Range counties began inspecting gasoline-powered motor vehicles since November 1, 2010.

The state contractor for the program is Envirotest Systems Holding Company (Envirotest). They operate and maintain all of the Air Care Colorado vehicle emissions stations, the RapidScreen vans, and handle all of the data and communication services. The Mobile Sources Program in the Air Pollution Control Division at the Colorado Department of Public Health and Environment (CDPHE) designs, administers, and evaluates the program. The Division of Motor Vehicles Emissions at the Colorado Department of Revenue (DOR) regulates the emissions testing facilities and inspectors working in the emissions program areas.

Inspection and Maintenance (I/M) Program

I/M Network

The I/M network consists of 18 Air Care Colorado emissions testing stations with a total of 97 inspection lanes, two independent test-only stations that inspect model year 1981 and older gasoline-powered vehicles, and 23 fleet stations that inspect qualifying commercial and governmental fleet vehicles. Fleet inspection stations are licensed to only test qualifying commercial and governmental fleet vehicles.

The RapidScreen program consists of 24 RSD units within the program area. The vans are rotated among 122 locations throughout the program area, with the primary locations being highway on and off ramps.

The State also staffs six Emissions Technical Centers (ETCs) throughout the AIR program area to help both the motoring public and the repair industry. These centers perform a variety of support functions for the Mobile Sources program, including technical support of vehicle inspection programs, and motor vehicle clean fuels programs.

New Program Developments

In December 2012 the Air Quality Control Commission approved several I/M program changes to be implemented January 2015. The two principal changes are expanding the current four model year exemption to seven model years and adding a pass/fail OBDII testing procedure for vehicles age 8 through 11 (two inspection cycles). The Mobile Sources Program staff completed these changes resulting in a successful implementation of the new program on January 1, 2015.

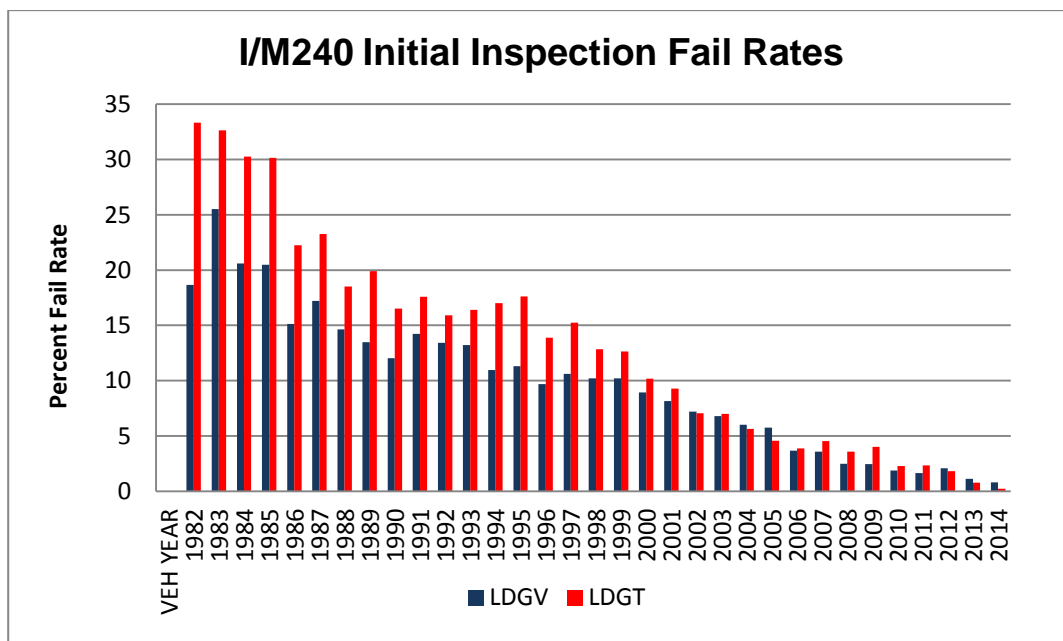
I/M240 Program Results

The I/M240 element of the program uses a 240 second loaded-mode dynamometer test cycle. This test is arguably the most accurate emissions test currently in use for replicating the Federal Test Procedure (FTP) that is used to certify new model year vehicles.

I/M240 – Initial Test Results

In 2014 there were a total of 886,192 initial I/M240 inspections conducted. The large majority of vehicles pass this initial I/M inspection. Vehicles that fail their initial test must undergo repairs and then return to an emissions testing station for additional testing. Vehicles can fail for a number of reasons, including missing or broken emission control equipment, excess exhaust emissions, or evaporative emissions. In 2014, 68,372 vehicles failed their initial I/M240 inspections resulting in an I/M240 initial failure rate of 7.72%. Of these, 31,989 failed for excess exhaust emissions resulting in an exhaust emissions failure rate of 3.61%. Figure 1 shows overall failure rates by model year. Overall failures consist of vehicles with excessive exhaust emissions, gas cap pressure failures, and/or visual equipment test failures.

Figure 1 - I/M240 Initial Inspection Fail Rates (1982-2014)

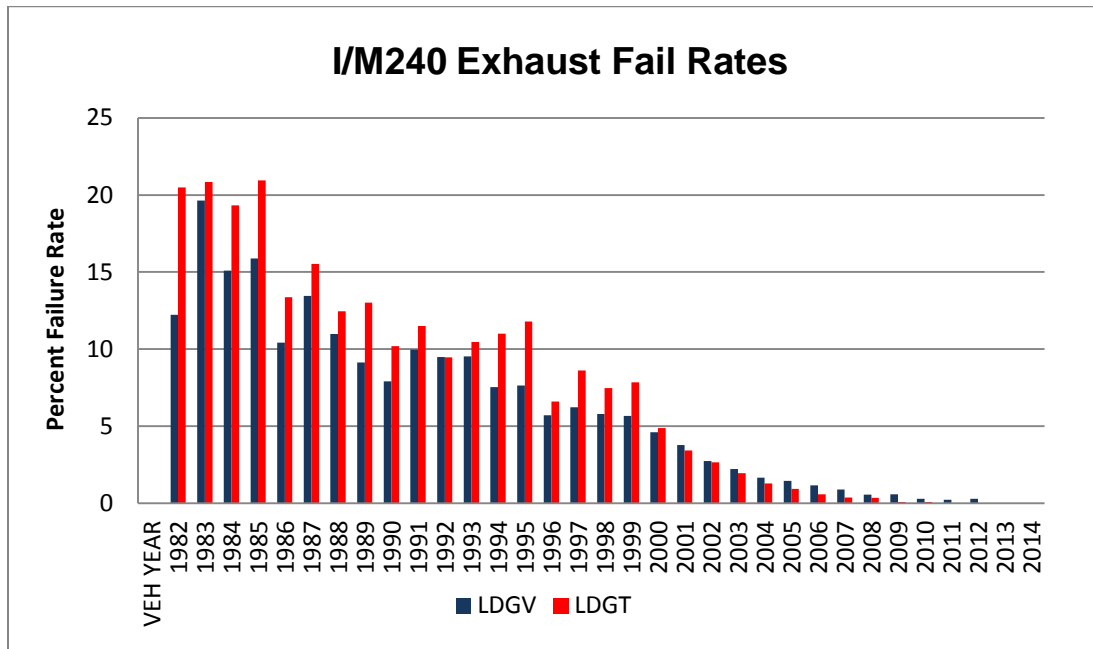


As Figure 1 shows, the highest failure rates are associated with the oldest model year vehicles. This contrasts with the failure rate for the newest model year vehicles, which are significantly lower (as expected). The newest vehicles experience failure rates of 0.5-2.5% even though they are subjected to the most stringent vehicle emissions standards.

Because of these low failure rates, and the high probability that they will pass an emissions test, the state exempts all new vehicles from periodic emissions inspections for the first four model years. As these charts show however, some motorists voluntarily have their exempt vehicles tested, allowing fail rates to be measured for these vehicles.

Figure 2 shows rates of vehicles that fail for excessive exhaust emissions, sorted by model year.

Figure 2 – I/M240 Exhaust Fail Rates (1982-2014)



Emissions failure rates (as shown in Figure 2) follow the same trends as overall I/M240 failure rates. Newer cars and trucks were much cleaner (as expected), with failure rates below 1.0% for the newest vehicles (model year 2006 and newer).

Figures 3, 4, and 5 show the initial exhaust emission results for hydrocarbons (HC), carbon monoxide (CO), and nitrogen oxides (NOx), respectively.

Figure 3 – Average Hydrocarbon (HC) Emissions by Model Year (1982-2014)

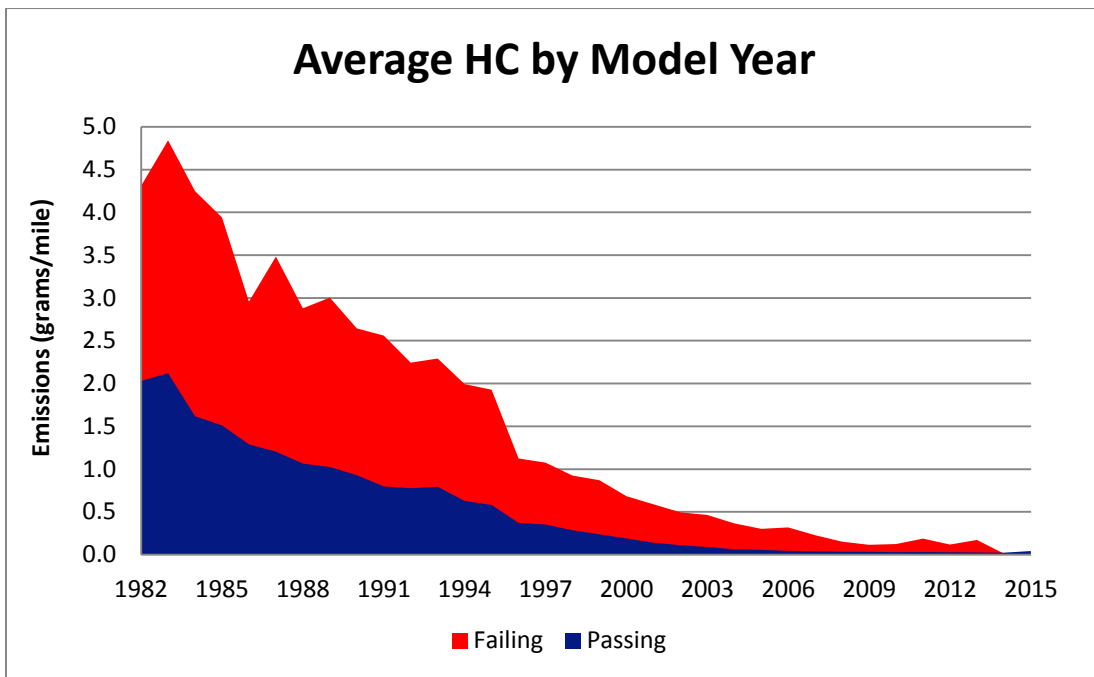


Figure 4 – Average Carbon Monoxide (CO) Emissions by Model Year (1982-2014)

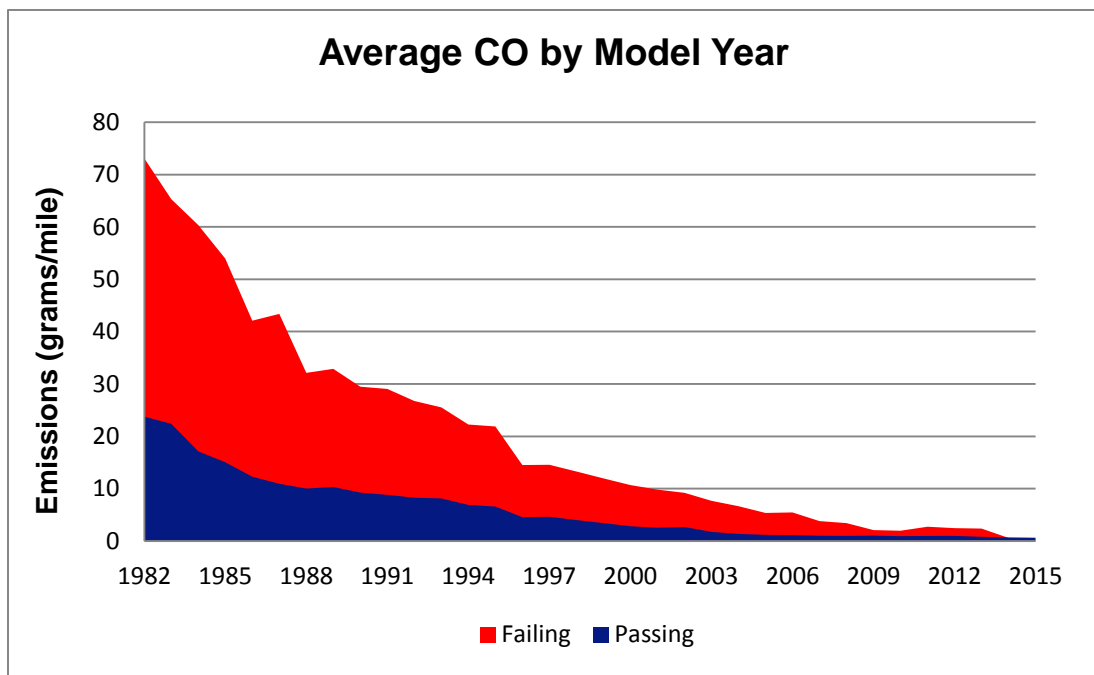
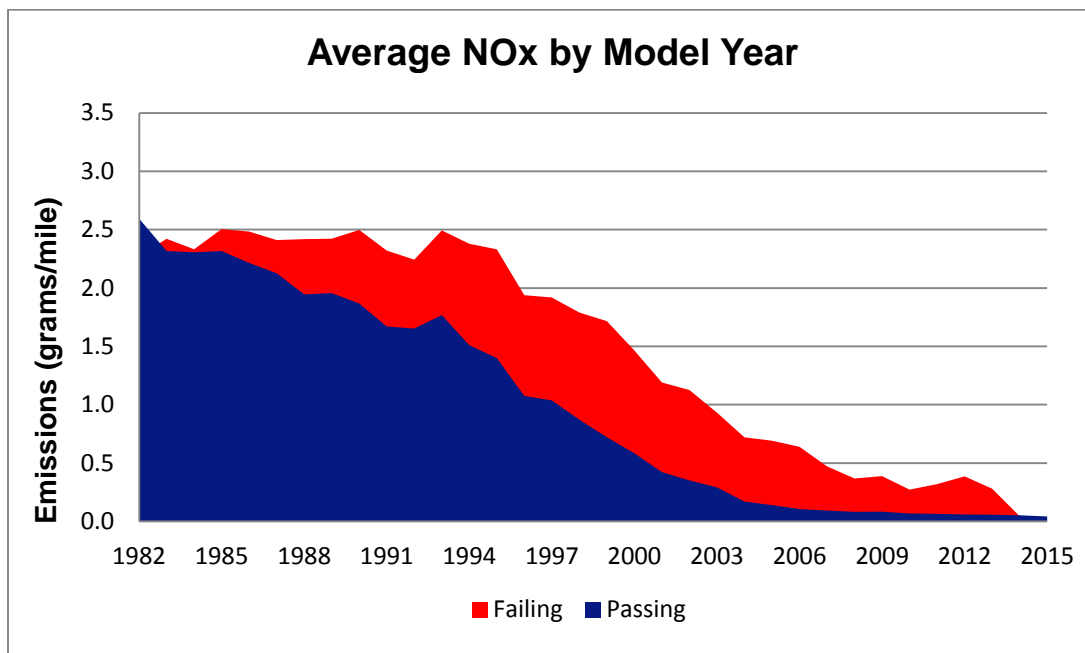


Figure 5 – Average Nitrogen Oxides (NOx) Emissions by Model Year (1982-2014)



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

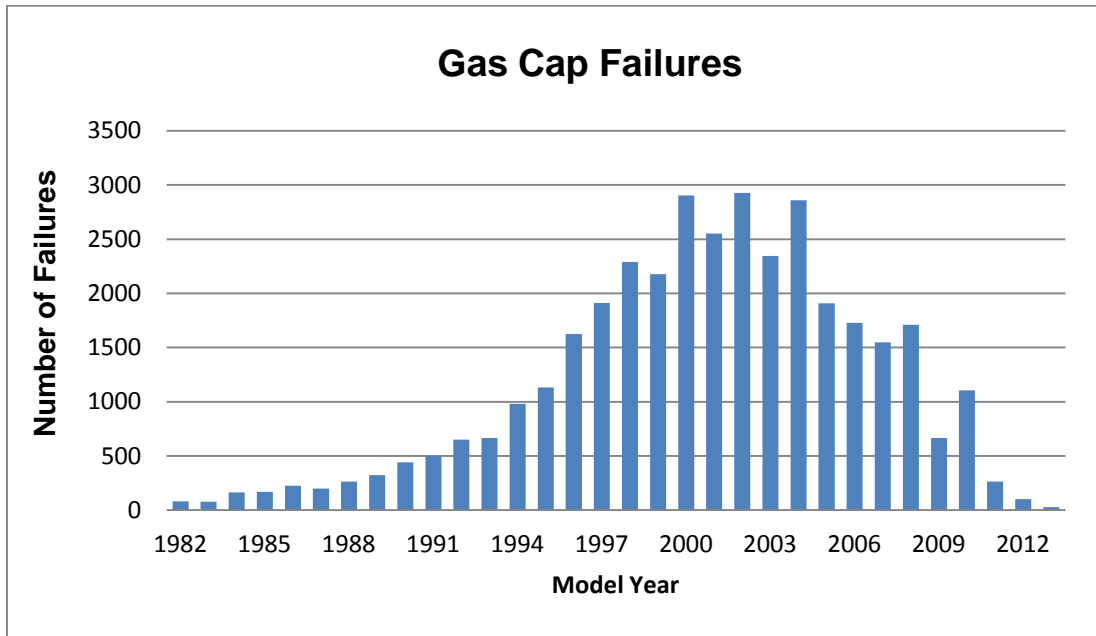
As these figures show, HC, CO, and NOx emissions are highest for the oldest model year vehicles. Average exhaust emissions drop significantly for newer model year vehicles (as expected), with the newest model year vehicles registering a small fraction of the average emissions of the oldest vehicles, in terms of both passing and failing emissions.

I/M240 – Gas Cap Pressure Inspection Results

Another element of the inspection program is a functional test of each vehicle’s gas cap. Program inspectors install each gas cap on a device that pressurizes the cap and measures the decay of that pressure over time. If the pressure decay exceeds the standard, then the cap fails the test and the motorist is required to install a functional cap. There were 36,530 gas cap pressure failures in 2014.

The benefit of this test is the reduction of gasoline vapors venting to the atmosphere, which is a major factor in ground-level ozone formation. EPA’s emissions model, MOVES, estimates that a functional gas cap program removes approximately a ton of hydrocarbons per day. The relative percent contribution of mobile source ozone precursors released through gas cap or fuel system failures is expected to increase in the future as tailpipe emissions continue to be reduced through fleet turnover and the introduction of advanced emissions control technologies. Figure 6 shows the number of gas cap pressure failures by model year.

Figure 6 – Gas Cap Failures by Model Year (1982-2014)



I/M240 – Visual Inspection Results

All 1982 and newer model year vehicles are subjected to a visual inspection of the secondary air injection system, catalytic converter, oxygen sensor, and gas cap. Vehicles model year 1996 and newer with On-Board Diagnostics (OBD) are subjected to a visual inspection only if the vehicle’s Malfunction Indicator Light (MIL, or “Check Engine” light) is commanded on, there is no communication during the OBD inspection, or there are unset system readiness monitors. In 2014, 1,361 vehicles failed for missing or improperly installed catalytic converter(s), 883 vehicles failed for missing or tampered air injection system, 855 vehicles failed for missing or tampered oxygen sensor(s), and 754 vehicles failed for a missing gas cap.

I/M240 – Multiple Retests

Failing vehicles are required to undergo retesting after repairs are made. Of the vehicles that fail their initial I/M240 inspection, some will continue to fail after their initial repair. For calendar year 2014, 64,458 vehicles were given a first I/M240 retest. Of these vehicles, 15,023 failed again, resulting in a 23.31% I/M240 first retest failure rate. While vehicles undergoing retests after repair continue to show elevated failure rates compared to average vehicles undergoing initial testing, further analysis indicates that most vehicles that fail their initial I/M240 test are eventually repaired so that they pass their retest. Additional information on retest activity is available in the “I/M240 Retest Frequency Report” in Appendix G.

I/M240 – Post-Repair Inspection Results

Vehicles that fail their emissions test generally have much higher emissions than vehicles that pass. The improved emissions from repairing these vehicles generate the program’s air quality benefit. Table 1 shows the average emissions from all vehicles that failed their initial I/M240 inspections and received a subsequent retest, average emissions from vehicles that passed a subsequent retest, and the percent reduction by pollutant and vehicle type.

Table 1 – Passed Retest Inspection Results (2014)

Vehicle Type	Failed Initial Inspection			Passed Retest			Percent Reduction		
	HC gpm	CO gpm	NOx gpm	HC gpm	CO gpm	NOx gpm	HC	CO	NOx
Cars	1.20	15.80	1.53	0.31	3.77	0.71	62.14	67.19	40.77
Trucks	1.54	19.97	2.04	0.47	5.65	1.09	54.05	59.17	32.92
TOTAL	1.39	18.10	1.81	0.40	4.82	0.92	57.17	62.36	35.82

I/M240 – Unresolved Vehicles

A concern to any inspection program is “unresolved vehicles” which fail an initial inspection, never receive a passing inspection, and disappear from the system. Approximately 19.35% of failing vehicles in 2014 did not receive a passing retest in that calendar year.

An investigation of unresolved vehicles was performed by the CDPHE in February 2010. In this analysis, staff looked at the long-term trend (over multiple years) for vehicles that were unresolved for calendar year 2007. The results of the analysis indicated that very few vehicles from this group continued to operate within the AIR program area after failing and never passing an I/M inspection.

The study found 8,258 unresolved vehicles in 2007. Of these vehicles 2,400 were eventually repaired and passed an I/M inspection or received a waiver in either 2008 or 2009. Of the remaining 5,858 unresolved vehicles, only 825 were seen by the RapidScreen remote sensing program at some point during 2008 or 2009. This represents only 1.9% of all failing vehicles from 2007. Based on these results, the majority of unresolved vehicles appear to be either repaired, retired, moved out of the program area, or are no longer in operation. Only a limited fraction of these vehicles continue to operate, with the assumption being that most of the RapidScreen-observed unresolved vehicles in 2007 were actually seen early on in 2008.

Two-Speed Idle Test Results

In Colorado, the I/M Program requires non-exempt (i.e., vehicles not registered as collector series, street rods or farm vehicles) 1981 model year and older gasoline-powered vehicles to undergo annual Two-Speed Idle (TSI) testing. Fleet vehicles undergoing fleet self-inspections also undergo annual TSI testing. Heavy-duty gasoline-powered vehicles newer than 1981 model year undergo a TSI inspection, though on a biennial (every two years) basis. The TSI inspection measures vehicle emissions at idle and raised idle. Only hydrocarbon and carbon monoxide emissions are measured, with no engine load placed on the vehicle. These tests only measure vehicle exhaust concentrations, not actual mass of emissions.

Idle – Initial Test Results

In calendar year 2014, 80,533 vehicles underwent a TSI inspection within the program area. Of these vehicles, 6,464 (or 8.03%) failed their initial test with 4,810 (5.97%) failing the exhaust portion of the inspection. Figures 7, 8, and 9 show failure rates by model year along with the average emissions of passing and failing vehicles by pollutant. Vehicles model year 1973 and older were combined with vehicles model year 1974 shown in Figures 7, 8, and 9.

Figure 7 – Initial Idle-Test Failure Rate by Model Year

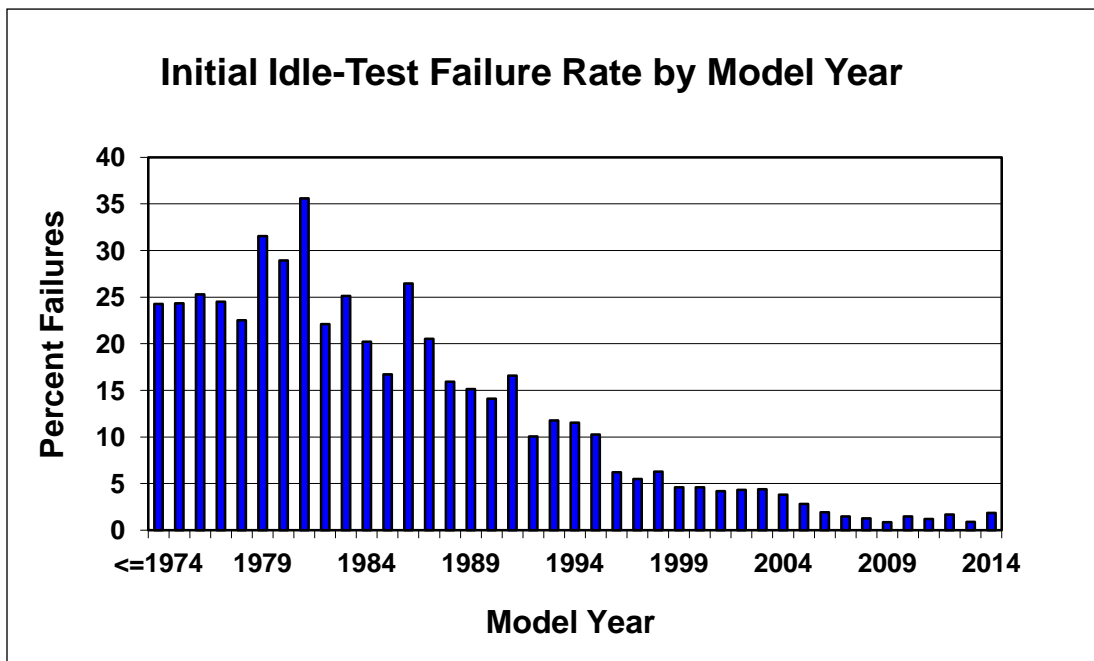


Figure 8 – Idle-Test Mean HC by Model Year

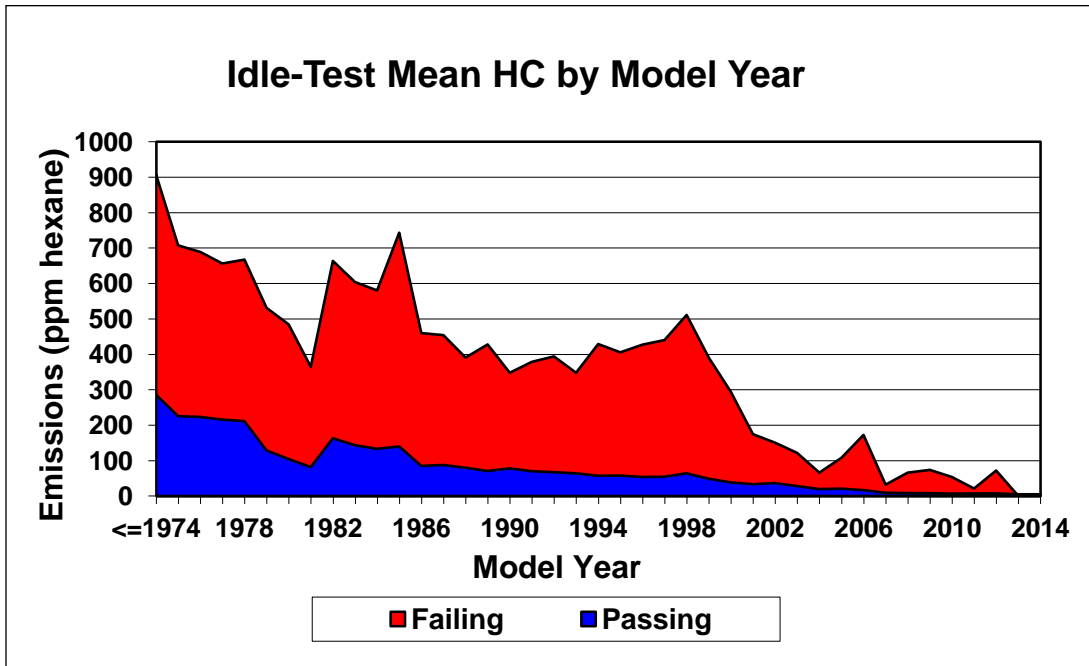
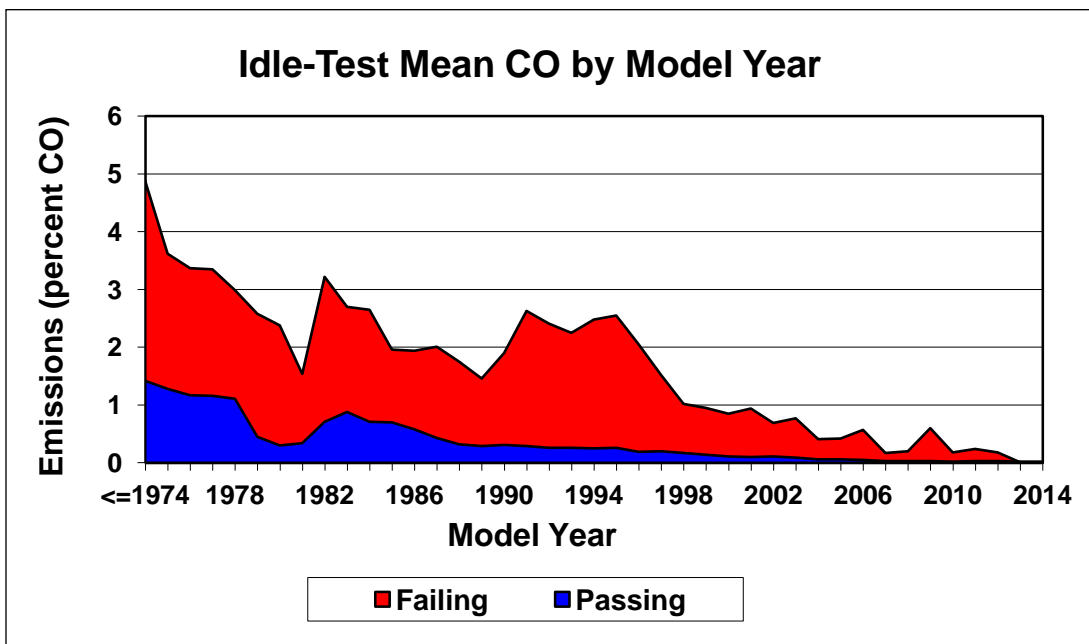


Figure 9 – Idle-Test Mean CO by Model Year



NOx emissions are not measured as part of the idle test protocol. As with the I/M240 portion of the test, most non-exhaust failures were due to missing or malfunctioning gas caps.

Idle – Gas Cap Pressure Inspection Results

One function of the gas cap is to prevent harmful fuel vapors from escaping into the atmosphere. A gas cap pressure inspection is performed to test the gas cap's ability to hold pressurized vapors inside the fuel tank. Idle-tested light-duty vehicles, model year 1975 and newer, are also required to undergo a gas cap pressure inspection. Inspectors installed a vehicle's gas cap on a device that pressurizes the cap and measures the decay of that pressure over time. If the pressure decay exceeds the standard, the cap fails the test and motorists are required to install a functional cap. There were 1,449 gas cap pressure failures during idle tests in 2014.

Idle – Visual Inspection Results

Idle-inspected vehicles undergo the same visual inspection of the secondary air injection system, catalytic converter, oxygen sensor, and gas cap as I/M240-tested vehicles. Of the 6,464 vehicles that failed the idle test in calendar year 2014, 292 of them failed for missing or improperly installed catalytic converter(s), 349 failed for missing or tampered air injection system, 83 failed for missing oxygen sensor(s), and 64 vehicles failed for a missing gas cap.

Idle – Multiple Retests

Failing vehicles are required to undergo retesting after repairs are made. Of the vehicles that failed their initial TSI inspection, some will continue to fail after their initial repair. For calendar year 2014, 5,840 vehicles were given a first idle retest. Of these, 1,664 failed again, resulting in a 28.49% idle first retest failure rate. Additional information on retest activity is available in the "Idle Retest Frequency Report" in Appendix Q.

Idle – Post-Repair Inspection Results

Vehicles that fail their TSI exhaust emissions test generally have much higher emissions than vehicles that pass the test. After failing their emissions tests, vehicles must undergo repairs until passing the test. Table 2 shows the average emissions at idle and raised idle (2500 rpm) from all vehicles that failed their initial TSI inspection and received a subsequent retest, average emissions from vehicles that passed a subsequent retest and the percent reduction by pollutant.

Table 2 – Idle Passed Retest Inspection Results (2014)

Vehicle Type	Failed Initial Idle		Failed Initial 2500		Passed Retest Idle		Passed Retest 2500		% Reduction Idle		% Reduction 2500	
	HC	CO	HC	CO	HC	CO	HC	CO	HC	CO	HC	CO
Car	540.31	2.80	398.39	2.72	158.74	0.59	163.66	1.33	65.29	76.77	50.70	43.31
Truck	533.95	2.37	317.11	1.94	128.74	0.56	116.27	0.90	69.98	71.41	55.50	41.88
Total	535.29	2.46	334.22	2.10	134.63	0.56	125.57	0.99	69.01	72.69	54.36	42.26

Smoking Vehicles

Smoking vehicles, on an individual basis, tend to be gross emitters. They are of concern to not only the State for air quality reasons, but also to nearby motorists exposed to these vehicles. To address smoking vehicles, CDPHE operates a Smoking Vehicle Hotline for motorists to report any excessively smoking vehicles they observe. Once reported, CDPHE provides owners of these vehicles with a brochure informing them that if their vehicle emits smoke during their next regular emissions test, it will fail the test. Although the smoking vehicle program is voluntary, the State encourages smoking vehicle owners to take advantage of the *free* diagnostic services at one of the State-operated Emission Technical Centers.

Vehicle information reported on the hotline is also transferred to Envirotest's 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 test. For calendar year 2014, a total of 781 vehicles failed the visible smoke component of the emissions test with 683 and 98 I/M240 and idle tests respectively.

Waivers

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

There are three types of waivers:

- A Repair Waiver is issued for a vehicle which fails an emissions test, receives emissions-related repairs that meet the cost limit (\$715 for model year 1968 and newer vehicles, and \$75 for 1967 and older vehicles), and then fails a subsequent emissions test. This type of waiver is referenced in C.R.S. 42-4-306(7)(a)(II)(A) and AQCC Regulation No. 11.
- 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.
- 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). Diagnostic waivers are rarely issued.

Waivers are not issued for vehicles that have tampered or missing emissions control equipment, or are visibly smoking. In addition, vehicles that fail the evaporative systems inspection (i.e., gas cap pressure) 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 vehicle may be evaluated by a CDPHE emissions technician 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.

Remote Sensing Program Results

As part of the emissions inspection program, the State operates a remote-sensing based clean screen program (also called "RapidScreen.") This program permits vehicles that are seen two or more times in a year, and meet certain rigorous emissions standards, to pass a remote sensing emissions test as an alternative to the standard inspection at an emissions testing station. For this program, Envirotest (the state contractor) operates a total of 24 RSD systems in the nine-county program area. These vans operated a total of 23,661 active van-hours in calendar year 2014, generating approximately 6.6 million valid records.

According to Colorado's State Implementation Plan (SIP), RSD vehicle observations cannot exceed more than 50% of the emissions-testable fleet. An RSD vehicle observation is defined as any vehicle seen at least twice and qualifies to make a clean/not clean determination. For 2014, the overall RSD-observed fraction of testable vehicles was 38.33%. This was based on 873,931 total I/M eligible vehicles in the fleet, with 334,935 unique eligible vehicles observed by RSD. The number of unique eligible vehicles observed includes both vehicles that did and did not meet clean screen requirements.

Of the 334,935 vehicles observed by RSD, 283,170 were identified as being clean with 238,138 clean screen notices redeemed. The clean screen redeemed numbers were calculated from each individual vehicle that met clean screen requirement whose owner chose to use the passing clean screen status to register their vehicle in lieu of getting a traditional emissions test.

Remote Sensing Average Vehicle Emissions Results

The remote sensing program measures vehicle emissions under actual vehicle operating conditions. While there is variation 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, HC, CO, and NOx. These emissions results are grouped by vehicle model year.

The fleet average emission is shown by the middle green line in each of the charts. It represents the average emissions for the entire post model year 1981 vehicle fleet that is observed through remote sensing. As defined on the charts, the average fleet emissions for all three pollutants (HC, CO, and NOx) show a pronounced downward trend to the newest model year vehicles that are the cleanest portion of the fleet. This is a similar result as seen in the program's IM240 and two-speed idle test results.

The bottom blue line indicates the average emissions by model year for vehicles that meet all the requirements for clean-screened vehicles. It is noticeable that the average emission rates are much lower than the fleet as a whole, reflecting the tighter emissions standards these vehicles are subjected to.

Not shown in these charts is the observation that the percentage of the fleet that meets clean-screen requirements increases substantially as model-year groups become newer (and thus cleaner). This is observed in the overall average fleet emissions lines that converge on to the bottom clean-screen line, and diverge from the non clean-screen vehicle red line (average emission of all vehicles that did not meet the clean screen requirements), as model year groups become newer.

Figure 10 - Remote Sensing Program Results - Average HC Emissions by model year

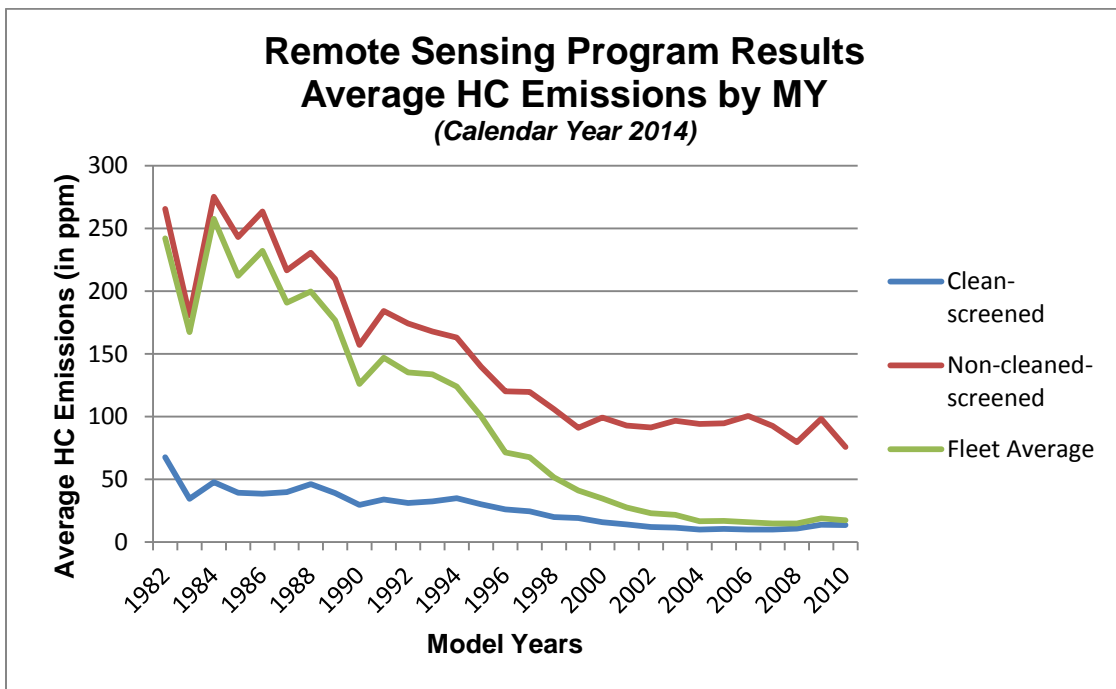


Figure 11 – Remote Sensing Program Results – Average CO Emissions by model year

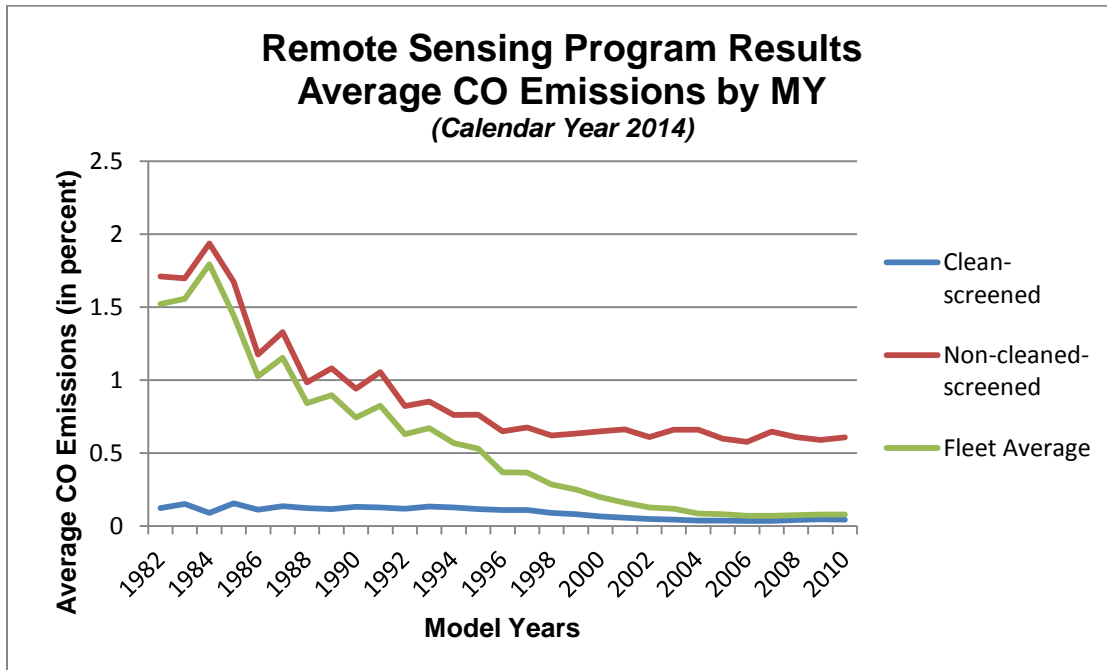
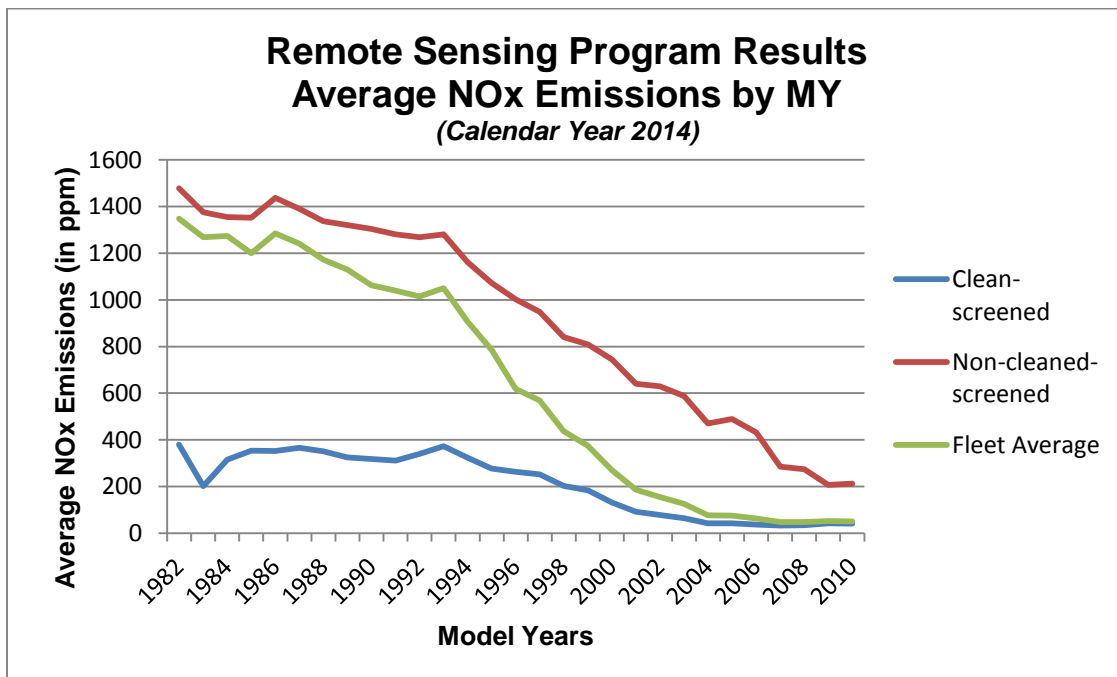


Figure 12 - Remote Sensing Program Results - Average NOx Emissions by model year



Cost-Effectiveness of the I/M Program

The purpose of the I/M Program is to improve air quality by reducing motor vehicle emissions. One way to evaluate the effectiveness of this program is to analyze its cost-effectiveness. Such analyses depend on assumptions made about the control strategy examined. The State typically looks at the program's benefit as measured in tons per day of emissions reduced and the program cost per day to operate, using appropriate methodology typically used in SIP development. A resulting cost per ton may then be obtained.

In looking at the cost of the program, the State examined the cost of the inspection, the number of vehicles inspected, registration fees connected to the operation of the I/M Program, the average cost of repairs for vehicles undergoing repair, and the fuel economy benefit obtained from repairing excessively emitting vehicles.

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 I/M240 emissions inspections and Two Speed Idle (TSI) inspections for 1982 and newer vehicles is \$25 per inspection. Tests for 1981 and older vehicles cost \$15 per test at the state contractor's facilities, and a maximum of \$15 per test at independent pre-82 inspection stations.

Failing vehicles are entitled to a free retest within ten (10) calendar days. Subsequent inspections (third, fifth, etc.) are considered to be new inspections requiring payment. Clean Screen inspections cost \$25 for eligible vehicles whose owners wish to participate in this program, and this fee is then added to the vehicle's registration bill.

In 2014 there were a total of 1,204,863 initial inspections conducted. Of these inspections, 886,192 were initial I/M240 tests, 80,533 were initial TSI tests, and 238,138 were for vehicles that went through the Clean Screen process.

Assuming that certain failing vehicles will undergo more than one paid I/M test before passing, the State estimates that the program's inspection costs amounted to \$30,549,265 in 2014. Table 3 shows overall inspection costs per type of inspection.

Table 3 – Overall Inspection Cost by Test Type (2014)

Test Type	Initial Tests	Est. Total Paid Tests	Cost
I/M240	886,192	906,264	\$22,656,600
Idle	80,533	82,569	\$1,939,215
Clean Screen	238,138	238,138	\$5,953,450
TOTAL	1,204,863	1,226,971	\$30,549,265

Registration Fees

To help fund operations, administration, assisting motorists and industry with program outreach activities, and county registration activities, a \$2.20 vehicle fee is added to I/M program area’s motor vehicle registration fees. This fee is shared between county clerks that administer vehicle registration renewals, and the Colorado Departments of Revenue and Public Health and Environment that design, administer, evaluate, and enforce the program.

With an estimated 2,882,440 I/M-eligible gasoline-powered vehicles registered in the enhanced nine-county I/M Program area, this equates to a total registration-fee cost of \$6,341,369 for the entire program.

Repair Costs

Vehicles that failed their emissions inspection 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. In 2014, the average emissions repair cost for vehicles failing the I/M240 test was \$325.22. For vehicles receiving a TSI inspection, the average repair costs were \$267.52 for model year 1981 and older vehicles, and \$341.66 for model year 1982 and newer vehicles. For vehicles failing the gas cap pressure check element of the I/M inspection, the assumed replacement gas cap cost is \$10.00 each.

In 2014, 68,372 vehicles failed their initial I/M240 inspections with 34,778 failing for either excess emissions and/or visual inspection, and 36,530 failing the gas cap pressure test. Some vehicles failed for both and are included in both the excess emissions/visual failure group and gas cap failure group. For TSI inspections, 6,464 vehicles failed their initial inspection. 5,283 of these vehicles failed the exhaust and/or visual component of the inspection process, and 1,449 vehicles failed the gas cap pressure test. Again, some vehicles fell into both groups. Table 4 details the total repair cost by test type.

Table 4 – Total Repair Costs by Test Type (2014)

Test Type	Excess Emissions/Visual		Gas Cap		TOTAL
	Count	Cost	Count	Cost	
I/M240	34,778	\$11,310,501	36,530	\$365,300	\$11,675,801
Idle	5,283	\$1,598,584	1,449	\$14,490	\$1,613,074
TOTAL	40,061	\$12,909,085	37,979	\$379,790	\$13,288,875

Fuel Savings

Vehicles that received emissions-related repairs demonstrated an estimated 6.34% improvement in fuel economy.

Using this fuel savings estimate, and assuming that the repairs on these vehicles will last for an entire two-year emissions testing cycle, fixing exhaust and gas cap failures results in an estimated savings of 1,368,194 gallons of gasoline. At an average cost of \$3.39 per gallon (Colorado annual average from U.S. Energy Information Administration), vehicles undergoing emission repairs saved an estimated \$4,638,178 as a result of reduced fuel usage.

Overall Program Costs

Overall program costs include inspection fees, vehicle registration fees, repair costs, and fuel economy savings. Table 5 details these costs, and the overall cost of the program.

Table 5 – Overall Program Cost (2014)

Annual I/M Program Cost (dollars)	
Inspection Fees	\$30,549,265
Registration Fees	\$6,341,369
Repair Costs	\$13,288,875
Fuel Economy Savings	-\$4,638,178
Total	\$45,541,331

Emission Benefits

Based on the MOVES model, Colorado's current AIR Program reduces total gaseous hydrocarbon (TGH) emissions by 15.1 tpd, carbon monoxide emissions by 168.9 tpd, and nitrogen oxide emissions by 15.1 tpd. Table 6 details the overall emissions program benefit by pollutant.

Table 6 – Model Program Benefit (2014)

MOVES Emission Inventories and Program Benefit (tons/day)				
	TGH	CO	NO _x	TGH + (1/60)CO + NO _x
No IM	85.11	863.64	148.38	247.88
Current IM	69.97	694.73	133.27	214.82
TPD Benefit	15.14	168.91	15.11	33.07
%Benefit	17.79%	19.56%	10.18%	13.34%

Both total gaseous hydrocarbon and nitrogen oxide emissions are ozone precursors. Carbon monoxide is a weak ozone precursor. The combined TGH +1/60 CO + NO_x ozone precursor reduction would be equal to 33.1 tons per day. The generalized TGH + (1/60) CO + NO_x formula has been used for 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 (RVP) gasoline with a 100% market share for ethanol-blended gasoline.

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 \$45.5 million in 2014. This cost includes inspection costs, repair costs, and registration renewal fees used to fund administrative costs. It does not include the “convenience expense” of motorists’ time or mileage costs.

The State estimates the cost-effectiveness of the inspection program at \$3,773 per ton of removed ozone precursors. For this analysis, the full benefit of NO_x and TGH, and 1/60 benefit of CO are added together. A reduced CO benefit is used because of the lower reactivity of CO for ozone formation. For carbon monoxide, the cost-effectiveness is estimated at \$739 per ton. Table 7 gives the specific breakdown of cost per ton removed by pollutant.

Table 7 – AIR Program Cost Effectiveness (2014)

Cost Benefit Results	
Emission	Cost/Benefit (\$/ton)
HC	8,241
CO	739
NO _x	8,258
TGH + (1/60) CO + NO _x	3,773

2014 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, continues to operate the enhanced Colorado Vehicle Emissions Inspection and Maintenance (I/M) Program, which has been in place since 1995. During 2014, 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.).

2014 Audit Results

Pursuant to C.R.S. 42-5-305(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

DOR performed 240 record audits on all contractor-operated inspection centers and inspection-only facilities. Record audits were 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 9.5 million statewide vehicle registration records; this ensures that county clerks maintain a reasonable level of record accuracy.

Performance Audits

DOR executed overt performance audits pursuant to C.R.S. 42-4-305(6)(b)(I). Performance audits were conducted contemporaneously with equipment audits at enhanced inspection centers, resulting in 577 performance audits completed. Forty-four overt performance audits were completed at independent inspection-only facilities and fleet testing facilities. There were six occasions where a fleet testing facility was placed on administrative hold as a result of equipment failure; therefore, a performance audit was unable to be conducted as scheduled. There were no violations associated with these performance audits.

Equipment Audits

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

During 2014, 194 lane equipment audits were performed on 97 contractor-operated enhanced inspection lanes, 4 equipment audits performed at 2 independent inspection-only stations, and 39 equipment audits performed at 23 fleet inspection stations. There were seven occasions where a fleet testing facility was placed on administrative hold as a result of equipment failure; therefore, an equipment audit was unable to be conducted as scheduled.

There were 98 initial audit deficiencies, 4 of which resulted in the suspension of a testing lane. Upon verification of repair and a passing audit, failing lanes were released within two days of being suspended. The remaining initial audit deficiencies were corrected at the time of the audit and returned to service the same day. Table 1 categorizes the initial audit failures by equipment category.

Table 8 – Audit Failures by Equipment Category (2014)

2014 Initial Equipment Audit Failures by Category	
Analyzer	75
Dynamometer	23

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 tampered to fail the visual emission component inspection. Possible tampers included (but were not limited to) removed or tampered catalytic converters, air injection systems, oxygen sensors, and Check Engine lights.

Throughout 2014, 321 covert inspections were conducted at enhanced inspection centers, resulting in 250 tests conducted properly and 71 tests conducted improperly. There were multiple tests in which more than one emissions control component was not correctly identified; this resulted in 90 emission control component violations. Table 2 categorizes these violations and the number of times components were incorrectly identified. In 48 of the 71 improper tests, the failing vehicles received passing results.

Table 9 – Emission components incorrectly identified as a result of covert vehicles (2014)

Emission Component Tampered	Number of Times Incorrectly Identified
Oxygen Sensor	29
Catalytic Converter	23
Air Injection System	11
Check Engine Light	27

Note: Covert inspection results may have had multiple components incorrectly identified.

Risk-Based Audits

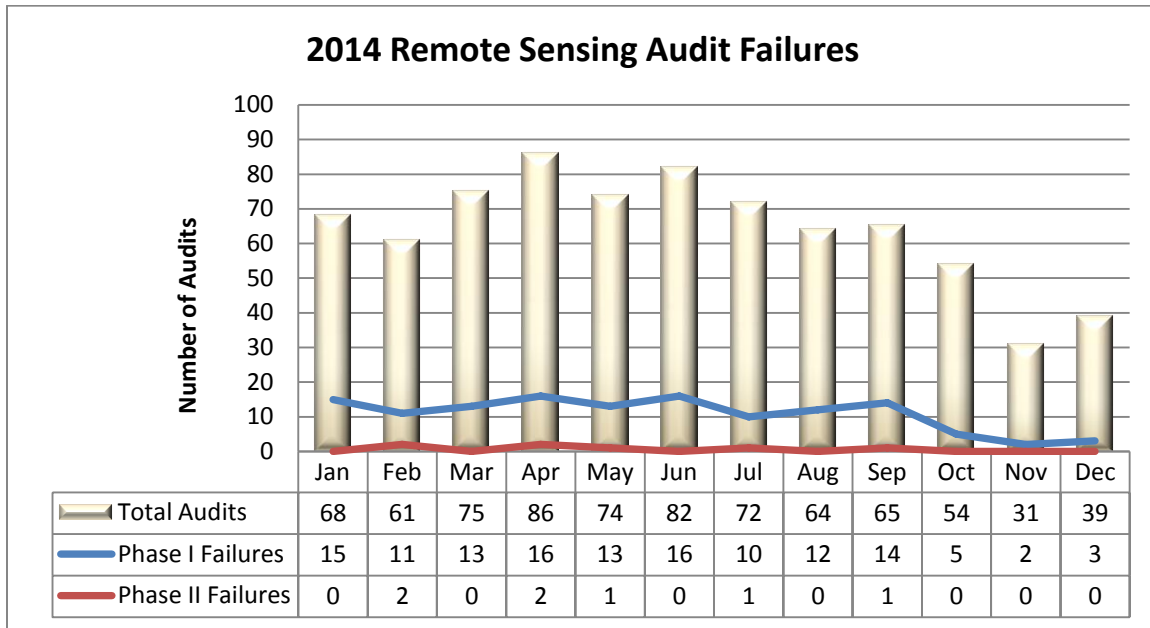
Risk-based audits were prompted by suspicious emissions testing activity, data analysis, or consumer complaints. In 2014 the DOR conducted 528 risk-based equipment audits, resulting in 18 initial failures, one of which resulted in the suspension of a testing lane. A risk-based equipment audit only involves auditing specific pieces of what would, in its entirety, be included in a scheduled equipment audit. Twenty-three risk-based covert audits were conducted, resulting in three violations.

Remote Sensing Audits

Remote Sensing (i.e., Clean Screen, RapidScreen, or RSD) mobile emissions testing equipment audits were also performed by DOR for quality assurance purposes. A Phase I audit includes nine gas readings from three different known gas blends. In the event that a gas reading is outside the allowable tolerance, a Phase II audit was initiated. A Phase II audit includes six additional gas readings from the gas blend that was outside the allowable tolerance.

DOR performed 771 audits in 2014, resulting in 130 Phase I failures, or a 16.9% initial failure rate. All but 8 of the Phase I failures were immediately returned to service after passing a Phase II audit. Figure 1 shows the monthly number of audits completed in relation to Phase I and Phase II remote sensing device audit failures.

Figure 13 – Remote Sensing Audit Failures (2014)



Note: The overall audit result is not a failure unless a secondary audit (Phase II) also fails.

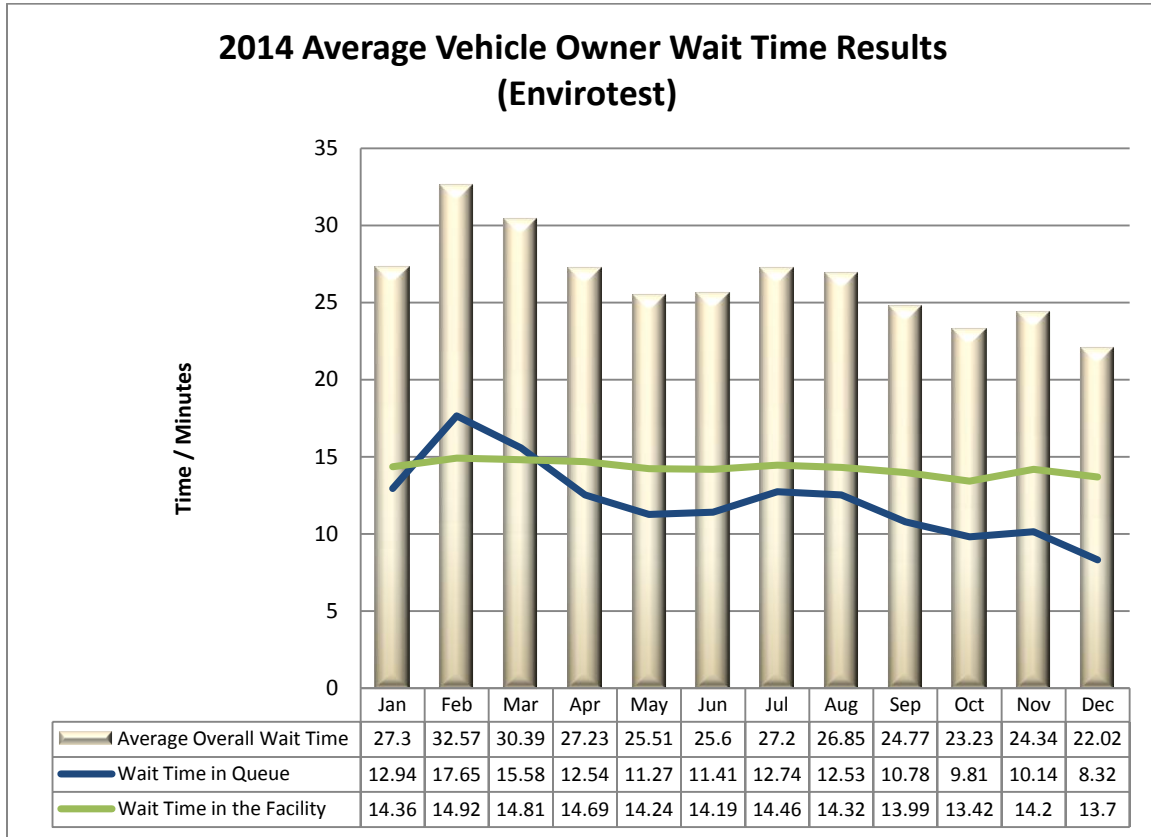
2014 Enforcement Results

Hearing & Fines

In 2014, 183 hearings were conducted as a result of improper vehicle emission inspections. Hearing proceedings resulted in 90 inspectors placed on probation, 25 inspectors suspended, and 8 inspector licenses revoked. Fines totaling \$139,275 were collected as a result of improper vehicle inspections.

Additionally, \$175,025 was collected as a result of wait-time violations. These violations occurred when motorist wait times at contractor inspection centers exceeded 20 minutes when averaged over a two-hour period. The wait-time calculation includes time spent in the queue and test time, whichever is greater, and the days of the month when staffing levels are below 78%. The fines assessed were consistent with C.R.S. and the terms of the contract held with Envirotest. The total of all fines collected in 2014 was \$314,300. Figure 2 shows the average motorist wait time in relation to the amount of time spent in the queue and within the facilities.

Figure 14 - Average Vehicle Owner Wait Time Results (2014, Envirotest only)



Complaints

A total of 374 Vehicle Damage, Procedural and Statutory Non-Compliance complaints were opened against inspection stations operated by Envirotest. DOR involvement in the complaint mitigation process resulted in \$53,332 in refunds to consumers. DOR responded to 25 emissions-related complaints against independent inspection stations and auto dealerships. A total of \$34,793 was refunded to consumers from those proceedings. Table 3 categorizes the 399 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 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 10 – Complaints Opened, by Category (2014)

2014 Complaints Opened by Category	
Vehicle Damage	356
Procedural Claims	18
Statutory Non-Compliance	25

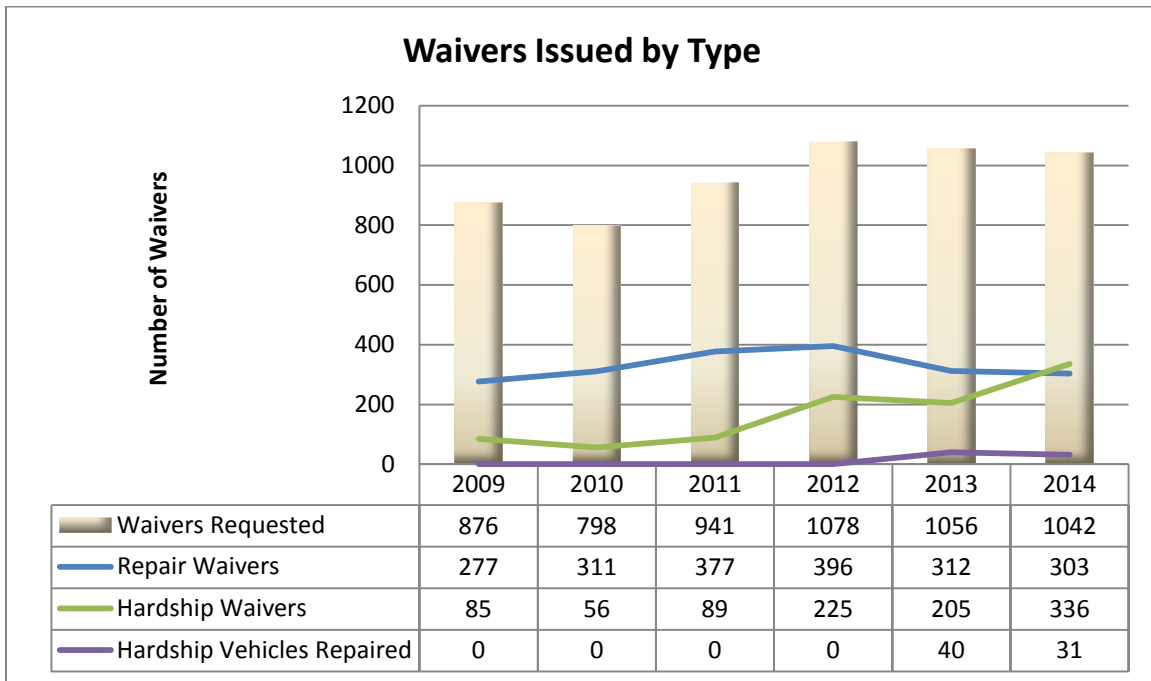
Waivers

In 2014, 1,042 waiver applications were submitted to and processed by DOR. Of the 1,042 applications, 303 resulted in the issuance of Repair Waivers, and 336 resulted in Economic Hardship Waivers.

In 2014, the Colorado Department of Public Health and Environment, Colorado Department of Revenue, and Regional Air Quality Council (RAQC) initiated and operated 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 31 vehicles 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 15 – Waivers Issued by Type (2009 – 2014)



The following program changes influenced the number of emissions waivers issued by DOR:

- November 2010: portions of Larimer and Weld counties were added to the enhanced emissions program.
- January 2012: the allowable emission standards were lowered in Larimer and Weld counties to mirror the standards of the Denver Metro Area. The original standards were less restrictive in the implementation year of the Northern Front Range enhanced program.
- February 2013: The hardship repair program was initiated and has reduced the amount of vehicles that would otherwise receive a hardship waiver.

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

- **Waiver not pursued** - after completing the waiver application, the vehicle owner withdrew the request or did not respond to requests for information or availability.
- **Vehicle passed the 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.
- **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)
- **Vehicle was 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)

➤ **Minimum waiver limits for dollars spent to repair the vehicle had not been met** - 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)

2014 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 who work in those stations. DOR also licenses RapidScreen remote sensing devices and the inspectors who operate them. All RapidScreen testing site licenses are issued 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 and renewed licenses by license type for 2014.

Table 11 – Licenses Issued and Renewed, by Type (2014)

License Type	Number of Initial Licenses	Number of Licenses Renewed
Fleet Inspector	10	16
Independent Inspector	0	1
Contractor Employed Inspectors	244	98
Independent Station	0	0
Fleet Station	0	2
RSD Site	0	165
Total	254	280

Appendix – Additional Reports

In addition to this report, the following detailed data reports are available:

Report	Content
A I/M240 Initial Inspection Report	Initial inspection pass/fail statistics, including average emissions results for overall total, passing and failing inspections by model year and vehicle class.
B I/M240 Initial Failure Report	Initial inspection failure statistics, including average emissions results for inspections which failed for both exhaust and visual components, exhaust only, and visual only by model year and vehicle class.
C I/M240 Initial Exhaust Failure Report	Initial exhaust failure statistics by model year, vehicle class, and pollutant.
D I/M240 Initial Visual Failure Report (Mandatory)	Initial visual mandatory failure statistics by model year, vehicle class, and emissions component.
E I/M240 Initial Visual Failure Report (Advisory)	Initial visual advisory failure statistics by model year, vehicle class, and emissions component.
F I/M240 Retest Pass Reduction Report	Passing retest inspection statistics by model year and vehicle class.
G I/M240 Retest Frequency Report	Retest inspection statistics.
H I/M240 Fleet Characterization Summary Report – Initial Inspection Component	Initial inspection pass/fail statistics from vehicles that passed or failed with a final result of pass or waiver, including average emissions results by model year and vehicle class.
I I/M240 Fleet Characterization Summary Report – Final Inspection Component	Final inspection statistics from vehicles that passed or failed with a final result of pass or waiver, including average emissions results by model year and vehicle class.

J I/M240 Fleet Characterization Summary Report – Emissions Reduction Component	Emissions reduction statistics from vehicles that passed or failed with a final result of pass or waiver by model year and vehicle class.
K Idle Initial Inspection Report Enhanced Area	Initial idle inspection pass/fail statistics, including average emissions results for passing and failing inspections by model year.
L Idle Initial Failure Report Enhanced Area	Initial idle inspection failure statistics, including average emissions results for inspections which failed for both exhaust and visual components, exhaust only, and visual only by model year.
M Idle Initial Exhaust Failure Report Enhanced Area	Initial idle exhaust failure statistics by model year, vehicle class, and pollutant.
N Idle Initial Visual Failure Report (Mandatory)	Idle initial mandatory visual failure statistics by model year, vehicle class, and emissions component.
O Idle Initial Visual Failure Report (Advisory)	Idle initial advisory visual failure statistics by model year, vehicle class, and emissions component.
P Idle Retest Pass Reduction Report	Passing idle retest inspection statistics by model year and vehicle class.
Q Idle Retest Frequency Report	Retest idle inspection statistics.
R I/M Eligible Vehicle Report, Evaluated Vehicles	Clean Screen observations performed in 2013 by model year and vehicle type.

Appendix A

I/M240 Initial Inspection Report

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	327	2.0396	26.3177	2.0769	266	81.35%	1.7186	19.1353	2.0606	61	18.65%	3.4392	57.6375	2.1482
	LDGT1	324	3.1271	41.2626	2.9559	222	68.52%	2.3357	27.3599	3.2080	102	31.48%	4.8496	71.5215	2.4072
	LDGT2	81	3.1127	62.9578	2.4647	48	59.26%	2.3335	32.8891	2.7139	33	40.74%	4.2461	106.6940	2.1022
1982 Total		732	2.6397	36.9871	2.5089	536	73.22%	2.0293	23.7734	2.5943	196	26.78%	4.3091	73.1224	2.2753
1983	LDGV	392	1.9984	24.5252	2.0363	292	74.49%	1.3253	11.8400	2.0529	100	25.51%	3.9637	61.5661	1.9879
	LDGT1	313	3.6111	40.9679	2.4787	218	69.65%	3.0262	33.0998	2.4732	95	30.35%	4.9531	59.0229	2.4914
	LDGT2	119	4.1095	53.4631	3.0240	73	61.34%	2.5910	32.6480	2.9024	46	38.66%	6.5194	86.4958	3.2168
1983 Total		824	2.9158	34.9502	2.3470	583	70.75%	2.1198	22.3951	2.3165	241	29.25%	4.8415	65.3220	2.4209
1984	LDGV	928	1.8201	19.6060	1.9052	737	79.42%	1.3027	11.2160	1.9326	191	20.58%	3.8164	51.9797	1.7993
	LDGT1	740	2.7188	34.1828	2.4678	530	71.62%	1.9287	22.9361	2.4921	210	28.38%	4.7130	62.5672	2.4066
	LDGT2	248	2.7654	42.4457	3.3695	159	64.11%	2.0292	25.2360	3.4103	89	35.89%	4.0806	73.1911	3.2965
1984 Total		1916	2.2896	28.1921	2.3120	1426	74.43%	1.6164	17.1353	2.3053	490	25.57%	4.2486	60.3699	2.3315
1985	LDGV	957	1.5080	16.8802	1.9289	761	79.52%	1.0430	10.4855	1.9153	196	20.48%	3.3138	41.7089	1.9818
	LDGT1	797	2.5422	28.4638	2.6873	588	73.78%	1.9764	18.6093	2.6691	209	26.22%	4.1338	56.1886	2.7387
	LDGT2	268	3.1342	43.6656	2.9592	156	58.21%	2.0273	23.8720	2.9434	112	41.79%	4.6760	71.2351	2.9811
1985 Total		2022	2.1312	24.9963	2.3644	1505	74.43%	1.5097	15.0470	2.3163	517	25.57%	3.9404	53.9588	2.5042
1986	LDGV	1594	1.1311	10.9976	1.8928	1353	84.88%	0.9018	7.7411	1.8585	241	15.12%	2.4179	29.2796	2.0854
	LDGT1	1459	1.9035	21.4946	2.5313	1184	81.15%	1.6282	15.9267	2.5014	275	18.85%	3.0885	45.4669	2.6602
	LDGT2	380	2.4365	33.3586	2.8093	246	64.74%	1.7752	19.8005	2.7956	134	35.26%	3.6507	58.2490	2.8344
1986 Total		3433	1.6038	17.9339	2.2656	2783	81.07%	1.2881	12.2896	2.2148	650	18.93%	2.9558	42.1002	2.4830
1987	LDGV	1494	1.2745	12.6285	1.8417	1237	82.80%	0.8748	7.7927	1.8184	257	17.20%	3.1981	35.9046	1.9540
	LDGT1	1234	1.9295	21.7648	2.3451	970	78.61%	1.4612	14.2544	2.3322	264	21.39%	3.6499	49.3596	2.3924
	LDGT2	370	2.3716	23.2758	3.0258	261	70.54%	1.7956	13.5295	2.8150	109	29.46%	3.7509	46.6132	3.5305
1987 Total		3098	1.6664	17.5393	2.1837	2468	79.66%	1.2027	10.9390	2.1258	630	20.34%	3.4831	43.3956	2.4105
1988	LDGV	2385	1.0537	11.2127	1.6505	2036	85.37%	0.7586	7.9360	1.6054	349	14.63%	2.7749	30.3283	1.9138
	LDGT1	2082	1.5485	15.3570	2.1976	1722	82.71%	1.3057	11.7898	2.1247	360	17.29%	2.7094	32.4201	2.5464
	LDGT2	736	1.8719	17.3115	2.7470	574	77.99%	1.4187	12.2104	2.6133	162	22.01%	3.4775	35.3857	3.2207
1988 Total		5203	1.3674	13.7338	2.0245	4332	83.26%	1.0636	10.0343	1.9454	871	16.74%	2.8785	32.1335	2.4183
1989	LDGV	2485	0.9999	10.8139	1.6965	2150	86.52%	0.7587	7.9463	1.6692	335	13.48%	2.5477	29.2184	1.8711
	LDGT1	2009	1.6053	17.6522	2.1667	1601	79.69%	1.2166	12.7443	2.0614	408	20.31%	3.1305	36.9106	2.5798
	LDGT2	733	1.8900	15.7394	2.8198	595	81.17%	1.4617	12.4409	2.7102	138	18.83%	3.7368	29.9611	3.2923
1989 Total		5227	1.3574	14.1329	2.0347	4346	83.15%	1.0236	10.3291	1.9562	881	16.85%	3.0038	32.8971	2.4219
1990	LDGV	4620	0.8687	9.7061	1.6594	4064	87.97%	0.6880	7.5140	1.5874	556	12.03%	2.1893	25.7294	2.1863
	LDGT1	2697	1.4250	14.5929	2.1453	2265	83.98%	1.1448	10.7759	2.0581	432	16.02%	2.8940	34.6057	2.6024
	LDGT2	1090	1.8060	16.0665	2.7389	897	82.29%	1.4644	13.3155	2.6490	193	17.71%	3.3938	28.8522	3.1569
1990 Total		8407	1.1687	12.0985	1.9553	7226	85.95%	0.9276	9.2566	1.8667	1181	14.05%	2.6439	29.4866	2.4971
1991	LDGV	4980	0.8424	9.4546	1.5745	4271	85.76%	0.6150	6.7981	1.4863	709	14.24%	2.2126	25.4567	2.1055
	LDGT1	2954	1.2601	14.2652	1.8671	2495	84.46%	0.9726	10.8218	1.7790	459	15.54%	2.8227	32.9828	2.3460
	LDGT2	865	1.7676	18.9396	2.5848	652	75.38%	1.3167	14.4759	2.4555	213	24.62%	3.1478	32.6033	2.9808
1991 Total		8799	1.0736	12.0020	1.7720	7418	84.31%	0.7969	8.8263	1.6699	1381	15.69%	2.5596	29.0604	2.3204
1992	LDGV	6965	0.7441	8.7771	1.4826	6031	86.59%	0.5632	6.1638	1.4204	934	13.41%	1.9120	25.6518	1.8845

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	3758	1.0943	11.8830	1.8319	3240	86.22%	0.9191	9.8784	1.7375	518	13.78%	2.1898	24.4212	2.4220
	LDGT2	1698	1.7565	17.8940	2.5774	1348	79.39%	1.3802	13.9264	2.4853	350	20.61%	3.2059	33.1751	2.9320
1992 Total		12421	0.9884	10.9631	1.7380	10619	85.49%	0.7755	8.2826	1.6523	1802	14.51%	2.2432	26.7593	2.2425
1993	LDGV	7080	0.7344	8.2291	1.5493	6145	86.79%	0.5630	5.8204	1.4699	935	13.21%	1.8610	24.0595	2.0713
	LDGT1	4647	1.1649	12.2275	2.1264	3960	85.22%	0.9483	9.7934	2.0153	687	14.78%	2.4135	26.2586	2.7665
	LDGT2	1671	1.7657	16.9746	2.5507	1322	79.11%	1.3859	14.0503	2.4097	349	20.89%	3.2045	28.0515	3.0848
1993 Total		13398	1.0124	10.7067	1.8744	11427	85.29%	0.7917	8.1493	1.7677	1971	14.71%	2.2915	25.5329	2.4931
1994	LDGV	9570	0.5747	6.6276	1.2521	8520	89.03%	0.4362	5.0494	1.1839	1050	10.97%	1.6986	19.4337	1.8050
	LDGT1	6996	0.9335	10.1548	1.8676	6004	85.82%	0.7569	8.0947	1.7435	992	14.18%	2.0024	22.6229	2.6183
	LDGT2	3238	1.2945	13.9201	2.2447	2489	76.87%	0.9645	10.3557	2.0580	749	23.13%	2.3911	25.7647	2.8653
1994 Total		19804	0.8191	9.0660	1.6318	17013	85.91%	0.6266	6.9004	1.5093	2791	14.09%	1.9924	22.2662	2.3786
1995	LDGV	12066	0.5586	6.4402	1.1116	10701	88.69%	0.4217	4.8484	1.0394	1365	11.31%	1.6317	18.9185	1.6770
	LDGT1	7109	0.9168	10.5061	1.9083	6037	84.92%	0.7094	7.9477	1.7624	1072	15.08%	2.0850	24.9133	2.7298
	LDGT2	3581	1.2029	13.2229	2.2055	2771	77.38%	0.9069	10.3910	2.0009	810	22.62%	2.2156	22.9106	2.9054
1995 Total		22756	0.7719	8.7777	1.5326	19509	85.73%	0.5797	6.5948	1.3997	3247	14.27%	1.9270	21.8936	2.3310
1996	LDGV	15143	0.3914	4.8128	0.8957	13676	90.31%	0.3179	3.8226	0.8281	1467	9.69%	1.0767	14.0440	1.5260
	LDGT1	9466	0.4894	6.4079	1.5001	8167	86.28%	0.3997	5.1610	1.3759	1299	13.72%	1.0531	14.2479	2.2805
	LDGT2	4138	0.6330	7.5365	1.4592	3547	85.72%	0.5058	6.0768	1.3346	591	14.28%	1.3962	16.2975	2.2072
1996 Total		28747	0.4585	5.7301	1.1758	25390	88.32%	0.3705	4.5680	1.0751	3357	11.68%	1.1238	14.5196	1.9379
1997	LDGV	16925	0.4030	5.1459	0.8651	15127	89.38%	0.3252	4.0164	0.7962	1798	10.62%	1.0573	14.6491	1.4444
	LDGT1	11813	0.4447	6.4093	1.4241	10061	85.17%	0.3679	5.1571	1.2871	1752	14.83%	0.8853	13.6003	2.2105
	LDGT2	4518	0.5981	7.5265	1.5040	3779	83.64%	0.4091	5.7369	1.3328	739	16.36%	1.5650	16.6777	2.3798
1997 Total		33256	0.4443	5.9181	1.1505	28967	87.10%	0.3510	4.6370	1.0367	4289	12.90%	1.0745	14.5702	1.9185
1998	LDGV	21999	0.3021	4.4479	0.7099	19751	89.78%	0.2420	3.4758	0.6438	2248	10.22%	0.8303	12.9883	1.2904
	LDGT1	17263	0.3869	5.4798	1.1835	15187	87.97%	0.3209	4.5148	1.0681	2076	12.03%	0.8700	12.5393	2.0284
	LDGT2	6179	0.4778	6.2487	1.3559	5245	84.88%	0.3373	4.5670	1.1590	934	15.12%	1.2672	15.6925	2.4613
1998 Total		45441	0.3582	5.0848	0.9777	40183	88.43%	0.2842	4.0109	0.8714	5258	11.57%	0.9236	13.2914	1.7898
1999	LDGV	21764	0.2698	3.9471	0.6818	19544	89.80%	0.2173	3.1750	0.6015	2220	10.20%	0.7318	10.7441	1.3881
	LDGT1	15456	0.3018	4.6621	0.9181	13699	88.63%	0.2464	3.7704	0.8064	1757	11.37%	0.7342	11.6141	1.7883
	LDGT2	7494	0.4389	5.2340	1.1080	6353	84.77%	0.2766	3.4945	0.9046	1141	15.23%	1.3427	14.9198	2.2406
1999 Total		44714	0.3092	4.4099	0.8349	39596	88.55%	0.2369	3.4323	0.7210	5118	11.45%	0.8688	11.9737	1.7156
2000	LDGV	30916	0.2080	3.2716	0.5398	28151	91.06%	0.1617	2.5874	0.4658	2765	8.94%	0.6791	10.2374	1.2923
	LDGT1	21753	0.2468	3.6984	0.7901	19649	90.33%	0.2160	3.0794	0.7070	2104	9.67%	0.5338	9.4800	1.5659
	LDGT2	8277	0.3102	4.4271	0.8265	7326	88.51%	0.2181	3.0896	0.7079	951	11.49%	1.0199	14.7304	1.7405
2000 Total		60946	0.2357	3.5809	0.6680	55126	90.45%	0.1885	2.8295	0.5840	5820	9.55%	0.6823	10.6977	1.4644
2001	LDGV	26111	0.1557	2.8773	0.4084	23979	91.83%	0.1194	2.2930	0.3450	2132	8.17%	0.5646	9.4495	1.1224
	LDGT1	17725	0.1689	3.3712	0.5184	16195	91.37%	0.1334	2.7366	0.4579	1530	8.63%	0.5444	10.0883	1.1588
	LDGT2	7391	0.2755	3.8207	0.7046	6589	89.15%	0.2198	3.0261	0.6163	802	10.85%	0.7328	10.3488	1.4304
2001 Total		51227	0.1775	3.1843	0.4892	46763	91.29%	0.1384	2.5499	0.4223	4464	8.71%	0.5879	9.8300	1.1902
2002	LDGV	33337	0.1255	2.8703	0.3368	30936	92.80%	0.0989	2.5155	0.2781	2401	7.20%	0.4680	7.4412	1.0934
	LDGT1	25540	0.1308	3.5912	0.4129	23897	93.57%	0.1048	3.0032	0.3669	1643	6.43%	0.5089	12.1443	1.0826

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	8235	0.2058	2.9298	0.6661	7500	91.07%	0.1724	2.3860	0.6013	735	8.93%	0.5471	8.4795	1.3270
2002 Total		67112	0.1374	3.1519	0.4062	62333	92.88%	0.1100	2.6869	0.3510	4779	7.12%	0.4943	9.2178	1.1256
2003	LDGV	25420	0.0967	1.9197	0.2862	23691	93.20%	0.0724	1.5897	0.2391	1729	6.80%	0.4287	6.4407	0.9312
	LDGT1	17293	0.1120	2.3205	0.3498	16135	93.30%	0.0905	1.8741	0.3172	1158	6.70%	0.4109	8.5410	0.8044
	LDGT2	6956	0.1863	2.6723	0.4826	6417	92.25%	0.1444	2.0683	0.4216	539	7.75%	0.6846	9.8633	1.2088
2003 Total		49669	0.1145	2.1646	0.3359	46243	93.10%	0.0887	1.7553	0.2917	3426	6.90%	0.4629	7.6891	0.9320
2004	LDGV	30175	0.0776	1.5728	0.1957	28362	93.99%	0.0552	1.2743	0.1581	1813	6.01%	0.4277	6.2428	0.7840
	LDGT1	25845	0.0748	1.7778	0.1999	24458	94.63%	0.0615	1.4512	0.1758	1387	5.37%	0.3084	7.5379	0.6244
	LDGT2	10666	0.0929	1.7250	0.2238	9997	93.73%	0.0782	1.4408	0.1888	669	6.27%	0.3116	5.9717	0.7469
2004 Total		66686	0.0790	1.6766	0.2018	62817	94.20%	0.0614	1.3697	0.1699	3869	5.80%	0.3649	6.6602	0.7204
2005	LDGV	23433	0.0625	1.4029	0.1698	22086	94.25%	0.0461	1.1379	0.1379	1347	5.75%	0.3308	5.7474	0.6939
	LDGT1	19330	0.0612	1.2758	0.1424	18510	95.76%	0.0554	1.1448	0.1252	820	4.24%	0.1929	4.2325	0.5318
	LDGT2	6650	0.1075	1.7663	0.2336	6283	94.48%	0.0886	1.4874	0.1866	367	5.52%	0.4314	6.5411	1.0386
2005 Total		49413	0.0680	1.4021	0.1677	46879	94.87%	0.0554	1.1875	0.1394	2534	5.13%	0.3008	5.3722	0.6914
2006	LDGV	29801	0.0544	1.3991	0.1273	28712	96.35%	0.0406	1.1875	0.1034	1089	3.65%	0.4198	6.9791	0.7576
	LDGT1	22165	0.0426	1.2090	0.1155	21368	96.40%	0.0391	1.1263	0.1041	797	3.60%	0.1369	3.4266	0.4214
	LDGT2	8856	0.0790	1.2442	0.1488	8452	95.44%	0.0637	1.0435	0.1201	404	4.56%	0.3973	5.4420	0.7482
2006 Total		60822	0.0537	1.3073	0.1262	58532	96.23%	0.0434	1.1443	0.1061	2290	3.77%	0.3174	5.4715	0.6389
2007	LDGV	21266	0.0473	1.2107	0.1161	20502	96.41%	0.0361	1.0680	0.0936	764	3.59%	0.3487	5.0397	0.7210
	LDGT1	16330	0.0354	1.1318	0.1011	15588	95.46%	0.0336	1.0484	0.0952	742	4.54%	0.0729	2.8846	0.2240
	LDGT2	7673	0.0607	0.8882	0.1033	7325	95.46%	0.0500	0.7833	0.0867	348	4.54%	0.2867	3.0965	0.4520
2007 Total		45269	0.0453	1.1276	0.1085	43415	95.90%	0.0375	1.0129	0.0930	1854	4.10%	0.2267	3.8125	0.4716
2008	LDGV	31210	0.0390	1.1525	0.0969	30440	97.53%	0.0333	1.0596	0.0843	770	2.47%	0.2661	4.8239	0.5941
	LDGT1	24238	0.0294	0.9468	0.0872	23491	96.92%	0.0287	0.9236	0.0832	747	3.08%	0.0506	1.6753	0.2109
	LDGT2	10798	0.0441	1.0642	0.0824	10294	95.33%	0.0402	0.9249	0.0739	504	4.67%	0.1232	3.9106	0.2550
2008 Total		66246	0.0363	1.0628	0.0910	64225	96.95%	0.0327	0.9883	0.0823	2021	3.05%	0.1508	3.4324	0.3679
2009	LDGV	13440	0.0376	1.1518	0.1043	13109	97.54%	0.0332	1.0988	0.0882	331	2.46%	0.2083	3.2499	0.7405
	LDGT1	7108	0.0285	1.0464	0.0837	6852	96.40%	0.0285	1.0430	0.0820	256	3.60%	0.0311	1.1376	0.1288
	LDGT2	3632	0.0375	0.8068	0.0671	3457	95.18%	0.0365	0.7806	0.0654	175	4.82%	0.0579	1.3249	0.1003
2009 Total		24180	0.0349	1.0690	0.0926	23418	96.85%	0.0323	1.0355	0.0830	762	3.15%	0.1142	2.0981	0.3879
2010	LDGV	27712	0.0329	1.0966	0.0795	27193	98.13%	0.0295	1.0651	0.0723	519	1.87%	0.2123	2.7467	0.4598
	LDGT1	20879	0.0252	0.8560	0.0678	20446	97.93%	0.0248	0.8482	0.0666	433	2.07%	0.0437	1.2279	0.1260
	LDGT2	10062	0.0358	0.7854	0.0603	9787	97.27%	0.0345	0.7596	0.0578	275	2.73%	0.0813	1.7038	0.1495
2010 Total		58653	0.0307	0.9576	0.0721	57426	97.91%	0.0287	0.9358	0.0678	1227	2.09%	0.1234	1.9770	0.2724
2011	LDGV	9291	0.0325	1.1099	0.0763	9140	98.37%	0.0292	1.0641	0.0693	151	1.63%	0.2328	3.8848	0.5006
	LDGT1	4248	0.0263	0.9523	0.0631	4179	98.38%	0.0260	0.9347	0.0618	69	1.62%	0.0420	2.0209	0.1374
	LDGT2	2149	0.0442	0.7151	0.0565	2068	96.23%	0.0372	0.6956	0.0534	81	3.77%	0.2241	1.2137	0.1373
2011 Total		15688	0.0324	1.0132	0.0700	15387	98.08%	0.0294	0.9794	0.0652	301	1.92%	0.1867	2.7387	0.3196
2012	LDGV	3972	0.0294	1.1108	0.0701	3890	97.94%	0.0272	1.0773	0.0612	82	2.06%	0.1349	2.7010	0.4920
	LDGT1	1245	0.0279	0.9415	0.0623	1231	98.88%	0.0266	0.9294	0.0594	14	1.12%	0.1462	2.0100	0.3216
	LDGT2	803	0.0339	0.6910	0.0495	780	97.14%	0.0338	0.6546	0.0496	23	2.86%	0.0362	1.9248	0.0467

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)
2012 Total		6020	0.0297	1.0198	0.0658	5901	98.02%	0.0279	0.9906	0.0593	119	1.98%	0.1172	2.4697	0.3859
2013	LDGV	1875	0.0259	0.8893	0.0643	1854	98.88%	0.0236	0.8645	0.0607	21	1.12%	0.2313	3.0786	0.3824
	LDGT1	708	0.0232	0.8499	0.0502	705	99.58%	0.0232	0.8492	0.0502	3	0.42%	0.0347	1.0245	0.0454
	LDGT2	481	0.0330	0.5489	0.0539	475	98.75%	0.0330	0.5477	0.0540	6	1.25%	0.0289	0.6447	0.0419
2013 Total		3064	0.0264	0.8267	0.0594	3034	99.02%	0.0250	0.8113	0.0572	30	0.98%	0.1712	2.3864	0.2806
2014	LDGV	507	0.0214	0.7424	0.0576	503	99.21%	0.0215	0.7433	0.0577	4	0.79%	0.0110	0.6401	0.0438
	LDGT1	271	0.0199	0.7141	0.0492	270	99.63%	0.0199	0.7152	0.0492	1	0.37%	0.0108	0.4131	0.0492
	LDGT2	160	0.0294	0.5591	0.0431	160	100.00%	0.0294	0.5591	0.0431	0	0.00%	0.0000	0.0000	0.0000
2014 Total		938	0.0224	0.7030	0.0527	933	99.47%	0.0224	0.7036	0.0527	5	0.53%	0.0110	0.5947	0.0449
2015	LDGV	36	0.0365	0.6357	0.0430	36	100.00%	0.0365	0.6357	0.0430	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	23	0.0479	0.6319	0.0423	23	100.00%	0.0479	0.6319	0.0423	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	2	0.0554	0.8894	0.0349	2	100.00%	0.0554	0.8894	0.0349	0	0.00%	0.0000	0.0000	0.0000
2015 Total		61	0.0414	0.6426	0.0424	61	100.00%	0.0414	0.6426	0.0424	0	0.00%	0.0000	0.0000	0.0000
Overall Total		886192	0.2629	3.6870	0.5718	817820	92.28%	0.1937	2.7774	0.4925	68372	7.72%	1.0911	14.5679	1.5195

Records 1 - 102 (All Records)

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	440176	0.2182	3.1940	0.4763	409246	92.97%	0.1618	2.4470	0.4151	30930	7.03%	0.9645	13.0785	1.2857
LDGT1	315818	0.2819	4.0333	0.6370	291147	92.19%	0.2147	3.0870	0.5543	24671	7.81%	1.0760	15.2008	1.6133
LDGT2	130198	0.3680	4.5139	0.7364	117427	90.19%	0.2528	3.1611	0.6094	12771	9.81%	1.4269	16.9524	1.9043
Overall Total	886192	0.2629	3.6870	0.5718	817820	92.28%	0.1937	2.7774	0.4925	68372	7.72%	1.0911	14.5679	1.5195

Appendix B

I/M240 Initial Failure Report

Initial Failure Report (V1.01)

Vehicle		Failure for Both Exhaust and Visual					Failure for Exhaust Only					Failure for Visual Only				
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	4	1.22%	5.8103	76.1970	2.6927	36	11.01%	4.2968	78.6998	2.0618	7	2.14%	1.2571	16.3876	1.7511
	LDGT1	9	2.78%	10.2525	137.8792	2.3138	45	13.89%	6.5584	104.9027	1.8076	12	3.70%	2.3795	26.8459	3.1033
	LDGT2	2	2.47%	6.1911	174.9404	1.3496	27	33.33%	4.5164	114.3452	2.1348	1	1.23%	0.0156	0.3844	0.0020
1982 Total		15	2.05%	8.5264	126.3721	2.2863	108	14.75%	5.2941	98.5290	1.9741	20	2.73%	1.8684	21.8624	2.4750
1983	LDGV	11	2.81%	3.6730	68.2974	2.5208	66	16.84%	4.9151	77.1709	1.8920	7	1.79%	1.7669	19.8234	2.4985
	LDGT1	8	2.56%	6.9786	92.2171	2.1357	43	13.74%	6.5107	81.1045	2.4550	15	4.79%	3.6815	35.9471	2.7685
	LDGT2	7	5.88%	5.7030	88.3404	4.3052	32	26.89%	7.6338	97.3293	2.9484	2	1.68%	1.9402	47.3793	2.1374
1983 Total		26	3.16%	5.2367	81.0535	2.8827	141	17.11%	6.0187	82.9454	2.3035	24	2.91%	2.9780	32.1970	2.6371
1984	LDGV	12	1.29%	5.7141	80.5372	1.2144	128	13.79%	4.5778	65.5370	1.7516	14	1.51%	1.7015	14.4823	2.2232
	LDGT1	25	3.38%	6.8542	82.6609	2.8481	101	13.65%	6.3352	89.6833	2.1293	23	3.11%	2.6596	32.1651	2.8158
	LDGT2	7	2.82%	6.9421	127.6916	3.5191	58	23.39%	4.4897	86.6824	3.4432	6	2.42%	2.4416	26.8932	2.6850
1984 Total		44	2.30%	6.5573	89.2457	2.5093	287	14.98%	5.1784	78.3077	2.2264	43	2.24%	2.3172	25.6723	2.6046
1985	LDGV	13	1.36%	8.4031	71.0276	2.3952	139	14.52%	3.5114	48.6930	1.9434	7	0.73%	1.0040	11.6540	1.5293
	LDGT1	15	1.88%	6.8662	90.0897	3.0184	122	15.31%	4.9805	73.5978	2.5502	11	1.38%	2.6835	18.3541	3.9895
	LDGT2	13	4.85%	6.5231	113.5680	3.2759	73	27.24%	5.1169	79.5819	2.8870	10	3.73%	2.8353	32.7405	2.9110
1985 Total		41	2.03%	7.2447	91.4899	2.9025	334	16.52%	4.3989	64.5411	2.3713	28	1.38%	2.3178	21.8171	2.9893
1986	LDGV	14	0.88%	4.4658	47.9043	2.6362	152	9.54%	2.9301	37.7167	2.1862	18	1.13%	1.3378	11.5211	1.9146
	LDGT1	9	0.62%	4.8653	65.1093	4.6240	146	10.01%	3.9713	67.1000	2.4276	32	2.19%	1.9999	21.5914	2.5352
	LDGT2	4	1.05%	7.9609	83.3980	4.5074	87	22.89%	4.2255	74.9321	2.9220	11	2.89%	2.4828	25.2831	2.6276
1986 Total		27	0.79%	5.1168	58.8976	3.5760	385	11.21%	3.6176	57.2692	2.4440	61	1.78%	1.8916	19.2855	2.3688
1987	LDGV	19	1.27%	5.0604	44.0899	2.2464	182	12.18%	3.6877	43.5048	1.9290	9	0.60%	1.2292	10.0089	1.9890
	LDGT1	12	0.97%	4.0296	48.5672	3.0169	165	13.37%	4.7105	67.7006	2.3209	21	1.70%	1.5045	14.3405	2.4395
	LDGT2	10	2.70%	5.1699	72.8333	3.6953	62	16.76%	4.7104	62.1588	3.7903	9	2.43%	1.9991	13.2999	2.1953
1987 Total		41	1.32%	4.7854	52.4109	2.8253	409	13.20%	4.2553	56.0937	2.3693	39	1.26%	1.5551	13.1008	2.2792
1988	LDGV	15	0.63%	7.0651	41.9403	2.8721	247	10.36%	3.2035	37.3104	1.9496	18	0.75%	0.8767	9.1043	1.6601
	LDGT1	7	0.34%	2.5660	40.0134	3.1312	242	11.62%	3.3018	41.1237	2.6660	12	0.58%	1.4575	11.9376	2.5583
	LDGT2	5	0.68%	4.6350	52.7229	2.8128	97	13.18%	4.6186	48.2910	3.5820	12	1.63%	1.4012	11.9013	2.8946
1988 Total		27	0.52%	5.4487	43.4375	2.9283	586	11.26%	3.4783	40.7028	2.5156	42	0.81%	1.1925	10.7130	2.2694
1989	LDGV	11	0.44%	4.0394	43.2278	2.1821	216	8.69%	3.3059	38.8028	1.9052	12	0.48%	0.9780	9.0054	1.8507
	LDGT1	14	0.70%	3.5755	33.3272	3.6507	253	12.59%	4.0101	50.0022	2.7457	19	0.95%	1.7843	14.5583	2.6109
	LDGT2	3	0.41%	4.1597	17.8665	4.0452	87	11.87%	4.8970	40.2922	3.5642	8	1.09%	1.3709	11.1013	1.9913
1989 Total		28	0.54%	3.8203	35.5602	3.1160	556	10.64%	3.8753	44.1320	2.5473	39	0.75%	1.4514	12.1406	2.2499
1990	LDGV	16	0.35%	3.9018	17.7671	3.1202	349	7.55%	2.8732	35.7133	2.4140	31	0.67%	0.9503	9.0985	1.7280
	LDGT1	16	0.59%	4.1596	62.5064	2.8650	260	9.64%	3.8224	46.8884	2.9060	22	0.82%	1.3331	11.6267	2.1977
	LDGT2	7	0.64%	4.6487	57.4189	3.9191	103	9.45%	4.8495	39.3793	3.5035	8	0.73%	1.3837	11.2342	2.0538
1990 Total		39	0.46%	4.1416	43.2387	3.1589	712	8.47%	3.5057	40.3244	2.7513	61	0.73%	1.1452	10.2904	1.9401
1991	LDGV	24	0.48%	4.1143	44.7265	2.6323	472	9.48%	2.8143	32.5995	2.3373	18	0.36%	0.9080	9.9009	1.8407
	LDGT1	8	0.27%	3.6957	52.1301	3.0004	277	9.38%	3.9343	46.3624	2.5777	21	0.71%	1.3410	12.1506	2.2087
	LDGT2	6	0.69%	5.1819	77.1446	2.6558	148	17.11%	3.7518	38.0496	3.1646	2	0.23%	1.3099	17.6713	2.4371
1991 Total		38	0.43%	4.1947	51.4038	2.7135	897	10.19%	3.3149	37.7488	2.5480	41	0.47%	1.1494	11.4322	2.0583
1992	LDGV	15	0.22%	2.8716	28.1818	2.6329	645	9.26%	2.4404	33.7897	2.0303	33	0.47%	0.7246	6.1982	1.6777
	LDGT1	7	0.19%	3.0126	19.9958	3.8966	262	6.97%	3.2791	38.1449	2.9426	13	0.35%	0.9855	9.6732	1.7790
	LDGT2	11	0.65%	3.1896	28.8534	3.7804	236	13.90%	3.9943	41.9819	3.0780	6	0.35%	1.5711	11.4298	3.0596
1992 Total		33	0.27%	3.0075	26.6692	3.2835	1143	9.20%	2.9535	36.4795	2.4557	52	0.42%	0.8875	7.6706	1.8625
1993	LDGV	27	0.38%	2.7217	21.3518	3.1678	648	9.15%	2.3130	31.2460	2.2152	34	0.48%	0.6578	6.4059	1.5574
	LDGT1	16	0.34%	3.5616	48.2109	3.7195	396	8.52%	3.3675	36.7972	3.1845	24	0.52%	1.2370	12.2823	1.9695

Vehicle		Failure for Both Exhaust and Visual					Failure for Exhaust Only					Failure for Visual Only				
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	13	0.78%	5.3689	36.9625	3.8174	236	14.12%	3.8785	33.5827	3.3442	9	0.54%	1.4810	14.7062	2.6704
1993 Total		56	0.42%	3.5762	32.6497	3.4762	1280	9.55%	2.9279	33.3942	2.7232	67	0.50%	0.9759	9.6258	1.8545
1994	LDGV	34	0.36%	3.3303	17.2202	3.2340	686	7.17%	2.2043	26.2300	2.0153	50	0.52%	0.5241	5.8582	1.3484
	LDGT1	23	0.33%	3.7688	23.3584	4.4305	576	8.23%	2.7290	32.2772	3.0515	42	0.60%	0.8451	9.5359	1.9084
	LDGT2	20	0.62%	3.5803	33.5397	4.1490	507	15.66%	2.9749	32.3036	3.1425	19	0.59%	1.0857	9.9004	2.1155
1994 Total		77	0.39%	3.5262	23.2925	3.8290	1769	8.93%	2.5960	29.9397	2.6758	111	0.56%	0.7417	7.9417	1.6916
1995	LDGV	29	0.24%	2.4409	17.1529	2.6325	893	7.40%	2.1928	25.8921	1.9342	67	0.56%	0.4917	5.3494	1.1583
	LDGT1	17	0.24%	3.4742	43.1822	3.6052	696	9.79%	2.7377	33.1457	3.2281	32	0.45%	0.7928	8.7203	1.7051
	LDGT2	17	0.47%	3.6590	27.7983	3.7414	530	14.80%	2.7883	28.8353	3.3139	19	0.53%	0.9259	10.0736	2.5488
1995 Total		63	0.28%	3.0484	27.0492	3.1942	2119	9.31%	2.5207	29.0107	2.7043	118	0.52%	0.6432	7.0242	1.5305
1996	LDGV	45	0.30%	2.6043	22.1027	2.4836	819	5.41%	1.5201	20.8675	1.9249	92	0.61%	0.4152	4.5748	0.9502
	LDGT1	25	0.26%	1.7223	17.3889	4.0223	582	6.15%	1.7891	24.2079	3.0888	51	0.54%	0.4657	5.4774	1.7041
	LDGT2	10	0.24%	1.7464	14.1461	5.1049	280	6.77%	2.2800	27.1176	3.0779	24	0.58%	0.6150	6.4958	1.4145
1996 Total		80	0.28%	2.2214	19.6351	3.2921	1681	5.85%	1.7398	23.0651	2.5199	167	0.58%	0.4593	5.1265	1.2471
1997	LDGV	46	0.27%	2.2635	26.0165	2.3643	1006	5.94%	1.5275	21.8385	1.8388	92	0.54%	0.4290	4.5737	1.0019
	LDGT1	27	0.23%	1.4864	19.4779	4.3554	909	7.69%	1.3006	20.8590	2.9651	51	0.43%	0.4017	5.0547	1.5320
	LDGT2	16	0.35%	5.2615	20.3882	3.4483	453	10.03%	2.0950	22.8527	2.9244	15	0.33%	0.4714	6.5908	1.7225
1997 Total		89	0.27%	2.5667	23.0210	3.1632	2368	7.12%	1.5490	21.6565	2.4788	158	0.48%	0.4242	4.9205	1.2414
1998	LDGV	36	0.16%	1.9378	19.0537	2.3832	1236	5.62%	1.2336	20.0085	1.7350	111	0.50%	0.3132	3.6159	0.7161
	LDGT1	17	0.10%	1.5581	22.9714	3.8705	1104	6.40%	1.2776	19.0884	2.7831	53	0.31%	0.4609	5.8127	1.4134
	LDGT2	16	0.26%	4.4342	19.6028	3.9740	616	9.97%	1.6123	20.6276	2.9949	15	0.24%	0.3739	5.6560	1.5444
1998 Total		69	0.15%	2.4231	20.1463	3.1185	2956	6.51%	1.3289	19.7939	2.3890	179	0.39%	0.3620	4.4373	0.9919
1999	LDGV	50	0.23%	1.7813	15.6984	2.1324	1184	5.44%	1.1038	16.6879	1.9783	87	0.40%	0.2930	3.6414	0.6578
	LDGT1	21	0.14%	1.9651	14.0389	4.3571	953	6.17%	1.0764	17.7490	2.4975	60	0.39%	0.3386	4.3214	0.9072
	LDGT2	24	0.32%	3.4942	30.5242	3.7160	801	10.69%	1.6896	18.7163	2.6849	13	0.17%	0.2724	3.6837	1.0097
1999 Total		95	0.21%	2.2546	19.0770	3.0242	2938	6.57%	1.2546	17.5851	2.3394	160	0.36%	0.3084	3.8998	0.7800
2000	LDGV	63	0.20%	1.3348	14.9227	2.6121	1360	4.40%	1.1311	17.3385	1.9883	177	0.57%	0.2355	3.0660	0.5549
	LDGT1	15	0.07%	1.8923	18.6750	3.4201	957	4.40%	0.8187	16.4976	2.4470	55	0.25%	0.3214	3.5628	0.7895
	LDGT2	16	0.19%	4.9637	52.6359	4.3644	477	5.76%	1.6103	23.8866	2.5643	18	0.22%	0.2919	4.7429	0.7056
2000 Total		94	0.15%	2.0414	21.9407	3.0393	2794	4.58%	1.1059	18.1684	2.2438	250	0.41%	0.2585	3.2960	0.6174
2001	LDGV	64	0.25%	2.1022	21.3230	2.2600	919	3.52%	1.0026	17.3472	1.9963	158	0.61%	0.2195	3.6583	0.4526
	LDGT1	20	0.11%	4.6709	40.6636	2.7056	523	2.95%	1.1109	22.4980	2.2970	63	0.36%	0.2700	4.0696	0.5875
	LDGT2	8	0.11%	0.9802	10.9759	5.0114	310	4.19%	1.4639	20.8714	2.4836	29	0.39%	0.2716	3.5982	0.7771
2001 Total		92	0.18%	2.5631	24.6277	2.5961	1752	3.42%	1.1165	19.5084	2.1723	250	0.49%	0.2383	3.7550	0.5242
2002	LDGV	54	0.16%	1.1987	15.0976	3.1490	855	2.56%	1.0461	15.4337	2.3200	138	0.41%	0.2000	3.8246	0.4720
	LDGT1	16	0.06%	1.0354	20.0003	3.2891	603	2.36%	1.1625	27.4078	2.1869	40	0.16%	0.1895	3.9756	0.5572
	LDGT2	3	0.04%	1.3661	10.4336	3.9238	272	3.30%	1.1181	17.7010	2.3973	23	0.28%	0.2246	2.9211	0.6363
2002 Total		73	0.11%	1.1698	15.9805	3.2116	1730	2.58%	1.0980	19.9638	2.2858	201	0.30%	0.2008	3.7513	0.5077
2003	LDGV	39	0.15%	1.7152	14.8494	3.0537	524	2.06%	1.0831	16.4993	2.2640	108	0.42%	0.1620	2.4595	0.3799
	LDGT1	8	0.05%	1.6016	14.7650	3.6449	277	1.60%	1.3471	28.7757	2.0790	22	0.13%	0.1570	2.6721	0.4407
	LDGT2	13	0.19%	2.5826	26.4969	4.2356	171	2.46%	1.5906	23.9213	2.4613	13	0.19%	0.1774	2.7052	0.6030
2003 Total		60	0.12%	1.8880	17.3618	3.3886	972	1.96%	1.2476	21.3035	2.2460	143	0.29%	0.1626	2.5145	0.4096
2004	LDGV	47	0.16%	2.1390	23.2163	3.6452	452	1.50%	1.2762	18.4352	2.2223	85	0.28%	0.1488	2.3868	0.2624
	LDGT1	8	0.03%	1.4383	21.7961	2.7676	320	1.24%	1.0315	26.2827	1.9405	43	0.17%	0.1740	3.2662	0.3237
	LDGT2	5	0.05%	1.9848	19.9239	5.6976	131	1.23%	1.0738	22.3651	2.6024	20	0.19%	0.1500	2.6178	0.3228
2004 Total		60	0.09%	2.0327	22.7526	3.6992	903	1.35%	1.1601	21.7863	2.1776	148	0.22%	0.1563	2.6735	0.2884
2005	LDGV	41	0.17%	1.5814	21.5274	3.0021	297	1.27%	1.1128	19.0421	2.1914	58	0.25%	0.1212	2.4518	0.2965

Vehicle		Failure for Both Exhaust and Visual					Failure for Exhaust Only					Failure for Visual Only				
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	7	0.04%	0.9907	9.6606	4.1063	124	0.64%	0.8125	19.0119	2.3973	34	0.18%	0.1219	2.0062	0.2938
	LDGT2	1	0.02%	1.6694	32.5861	4.7333	108	1.62%	1.1954	17.8776	2.9307	10	0.15%	0.3245	2.9210	0.4747
2005 Total		49	0.10%	1.4989	20.0578	3.1952	529	1.07%	1.0593	18.7973	2.3906	102	0.21%	0.1413	2.3493	0.3131
2006	LDGV	30	0.10%	2.9996	22.2393	2.8960	313	1.05%	1.0473	19.1694	2.0672	51	0.17%	0.1469	2.2539	0.2635
	LDGT1	5	0.02%	1.4057	14.5568	4.4817	90	0.41%	0.7249	19.0080	2.4858	28	0.13%	0.0786	1.9840	0.1516
	LDGT2	5	0.06%	3.8224	22.4597	3.6703	79	0.89%	1.5017	22.5126	3.0314	10	0.11%	0.2074	2.3759	0.3008
2006 Total		40	0.07%	2.9032	21.3066	3.1910	482	0.79%	1.0615	19.6872	2.3034	89	0.15%	0.1322	2.1827	0.2325
2007	LDGV	12	0.06%	3.6705	32.4598	3.3031	178	0.84%	1.1012	15.0610	2.5333	39	0.18%	0.1278	2.1668	0.3240
	LDGT1	2	0.01%	1.2361	9.8756	4.4388	54	0.33%	0.5196	24.7205	1.9049	10	0.06%	0.0336	0.8330	0.0477
	LDGT2	3	0.04%	1.8427	22.6557	6.9392	29	0.38%	2.6427	25.6242	3.5151	6	0.08%	0.2225	1.9574	0.4627
2007 Total		17	0.04%	3.0615	28.0727	4.0784	261	0.58%	1.1522	18.2332	2.5124	55	0.12%	0.1210	1.9015	0.2889
2008	LDGV	14	0.04%	1.7299	23.8565	3.2615	157	0.50%	0.9926	16.6044	2.2873	29	0.09%	0.1522	2.4253	0.2625
	LDGT1	0	0.00%	0.0000	0.0000	0.0000	53	0.22%	0.3134	10.9230	2.1072	11	0.05%	0.0343	1.3645	0.1076
	LDGT2	2	0.02%	1.2530	21.1076	2.5057	69	0.64%	0.5346	18.1887	1.1983	4	0.04%	0.0446	0.8472	0.1497
2008 Total		16	0.02%	1.6703	23.5128	3.1670	279	0.42%	0.7503	15.9170	1.9838	44	0.07%	0.1130	2.0166	0.2135
2009	LDGV	7	0.05%	2.4668	21.3218	4.2665	70	0.52%	0.5740	7.8175	2.6896	12	0.09%	0.1241	2.7859	0.1873
	LDGT1	1	0.01%	0.1566	2.1968	3.0840	4	0.06%	0.0347	1.0799	3.5613	9	0.13%	0.0192	0.5778	0.1017
	LDGT2	1	0.03%	0.9885	16.1394	1.3752	1	0.03%	1.4731	38.7643	1.2043	0	0.00%	0.0000	0.0000	0.0000
2009 Total		9	0.04%	2.0458	18.6210	3.8139	75	0.31%	0.5572	7.8708	2.7163	21	0.09%	0.0791	1.8396	0.1506
2010	LDGV	11	0.04%	1.6310	13.2639	3.1014	70	0.25%	1.0525	9.3534	2.3066	20	0.07%	0.1521	3.0200	0.2642
	LDGT1	0	0.00%	0.0000	0.0000	0.0000	12	0.06%	0.5281	12.5879	2.4067	13	0.06%	0.0406	1.6217	0.0514
	LDGT2	1	0.01%	2.7361	28.7935	7.1032	11	0.11%	0.9614	21.8339	1.6721	13	0.13%	0.0358	1.3601	0.0432
2010 Total		12	0.02%	1.7231	14.5580	3.4349	93	0.16%	0.9740	11.2469	2.2445	46	0.08%	0.0878	2.1557	0.1416
2011	LDGV	3	0.03%	3.1670	26.1312	3.6600	18	0.19%	1.2006	18.8528	2.1887	7	0.08%	0.0363	1.4207	0.0969
	LDGT1	0	0.00%	0.0000	0.0000	0.0000	2	0.05%	0.4988	25.6357	1.8372	2	0.05%	0.0192	0.9671	0.0685
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	2	0.09%	7.4685	8.2749	3.6354	6	0.28%	0.0303	0.5035	0.0459
2011 Total		3	0.02%	3.1670	26.1312	3.6600	22	0.14%	1.7066	18.5078	2.2882	15	0.10%	0.0316	0.9933	0.0727
2012	LDGV	2	0.05%	1.4294	12.6702	3.3983	9	0.23%	0.7003	11.2471	2.9630	8	0.20%	0.0283	0.8394	0.0503
	LDGT1	0	0.00%	0.0000	0.0000	0.0000	1	0.08%	0.9268	10.4219	2.0302	2	0.16%	0.3138	1.7087	0.3975
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	1	0.12%	0.1252	25.2056	0.0262	1	0.12%	0.0191	0.3570	0.0364
2012 Total		2	0.03%	1.4294	12.6702	3.3983	11	0.18%	0.6686	12.4410	2.6112	11	0.18%	0.0794	0.9536	0.1122
2013	LDGV	0	0.00%	0.0000	0.0000	0.0000	2	0.11%	2.0919	20.2612	3.1181	3	0.16%	0.0389	1.8657	0.0654
	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
2013 Total		0	0.00%	0.0000	0.0000	0.0000	2	0.07%	2.0919	20.2612	3.1181	3	0.10%	0.0389	1.8657	0.0654
2014	LDGV	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	1	0.20%	0.0134	0.3322	0.0418
	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
2014 Total		0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	1	0.11%	0.0134	0.3322	0.0418
2015	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
2015 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		1415	0.16%	3.0938	32.0088	3.1604	30574	3.45%	1.9430	26.5631	2.4227	2789	0.31%	0.5223	5.9184	1.0049

Records 1 - 102 (All Records)

Summary by Vehicle Type (V1.01)

Vehicle	Failure for Both Exhaust and Visual					Failure for Exhaust Only					Failure for Visual Only				
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)
LDGV	808	0.18%	2.6162	24.9053	2.7412	14328	3.26%	1.6972	23.5351	2.0398	1601	0.36%	0.3542	4.2763	0.7435
LDGT1	358	0.11%	3.4435	40.2961	3.5558	10152	3.21%	2.0089	29.4302	2.6679	846	0.27%	0.7481	8.1795	1.3464
LDGT2	249	0.19%	4.1408	43.1444	3.9519	6094	4.68%	2.4112	28.9061	2.9144	342	0.26%	0.7507	8.0119	1.3842
Grand Total	1415	0.16%	3.0938	32.0088	3.1604	30574	3.45%	1.9430	26.5631	2.4227	2789	0.31%	0.5223	5.9184	1.0049

Appendix C

I/M240 Initial Exhaust Failure Report

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	26	65.00%	5.8448	96.1347	1.5403	28	70.00%	5.0274	105.6439	1.1560	7	17.50%	1.7750	8.5181	6.0906
	LDGT1	20	37.04%	12.8939	136.0915	1.8975	47	87.04%	7.0094	121.5639	1.4273	4	7.41%	4.9921	45.9564	7.0860
	LDGT2	7	24.14%	8.1702	154.5595	1.8904	26	89.66%	4.6221	128.1614	1.5618	2	6.90%	1.8620	24.2077	9.2117
1982 Total		53	43.09%	8.8120	118.9292	1.7214	101	82.11%	5.8454	118.8488	1.3867	13	10.57%	2.7783	22.4514	6.8770
1983	LDGV	41	53.25%	7.0097	102.9869	1.3743	57	74.03%	4.7749	96.3590	1.1290	15	19.48%	2.4520	17.2885	5.4390
	LDGT1	18	35.29%	12.3831	93.0230	2.0524	36	70.59%	4.8417	105.4185	1.1789	8	15.69%	3.6785	13.1092	7.7059
	LDGT2	13	33.33%	15.0532	126.2723	2.4859	26	66.67%	6.7532	126.7494	1.9323	8	20.51%	3.1178	24.8893	7.4245
1983 Total		72	43.11%	9.8054	104.7003	1.7445	119	71.26%	5.2273	105.7396	1.3196	31	18.56%	2.9403	18.1715	6.5364
1984	LDGV	77	55.00%	6.9104	80.6935	1.6795	107	76.43%	4.1273	82.3519	1.2261	12	8.57%	5.4473	15.7752	5.6757
	LDGT1	59	46.83%	10.2919	107.5389	1.8075	101	80.16%	6.8879	103.8377	1.4122	15	11.90%	2.2671	15.6391	7.3575
	LDGT2	22	33.85%	8.6971	134.2441	2.6628	52	80.00%	5.1419	110.6992	2.3371	14	21.54%	2.5261	18.8890	8.0835
1984 Total		158	47.73%	8.4219	98.1745	1.8642	260	78.55%	5.4026	96.3678	1.5206	41	12.39%	3.2863	16.7887	7.1132
1985	LDGV	85	55.92%	5.8828	66.2859	1.6213	116	76.32%	4.0183	63.4659	1.4514	17	11.18%	1.3266	9.3965	6.0468
	LDGT1	66	48.18%	7.7537	89.4307	2.2954	103	75.18%	5.2335	94.0634	1.6800	19	13.87%	2.8331	18.6365	7.3093
	LDGT2	36	41.86%	9.4224	115.1120	2.2136	67	77.91%	5.9918	104.0579	1.8893	16	18.60%	2.1592	19.0802	7.9113
1985 Total		187	49.87%	7.2246	83.8543	1.9732	286	76.27%	4.9183	83.9946	1.6363	52	13.87%	2.1333	15.7522	7.0818
1986	LDGV	82	49.40%	4.7700	49.4318	2.0116	120	72.29%	3.0687	48.9966	1.5838	30	18.07%	2.7226	14.4987	5.3476
	LDGT1	57	36.77%	6.8942	84.5614	2.4809	121	78.06%	4.2725	81.1731	1.5619	23	14.84%	2.3947	14.7573	7.3921
	LDGT2	27	29.67%	9.2014	108.7110	2.4142	71	78.02%	4.6359	91.5777	2.1067	17	18.68%	2.9564	23.6639	7.2486
1986 Total		166	40.29%	6.2202	71.1362	2.2382	312	75.73%	3.8922	71.1652	1.6943	70	16.99%	2.6716	16.8095	6.4810
1987	LDGV	105	52.24%	5.9675	55.8380	1.7152	148	73.63%	4.0310	55.6055	1.4233	35	17.41%	1.7063	12.4110	4.8463
	LDGT1	78	44.07%	8.1982	96.4573	1.9425	138	77.97%	4.7685	81.3365	1.5441	27	15.25%	2.5098	15.9446	6.8883
	LDGT2	36	50.00%	7.4133	95.6822	2.6747	47	65.28%	5.2449	89.3854	2.5772	23	31.94%	2.9228	21.7285	7.0704
1987 Total		219	48.67%	6.9997	76.8549	1.9539	333	74.00%	4.5080	71.0366	1.6362	85	18.89%	2.2907	16.0546	6.0967
1988	LDGV	162	61.83%	4.7683	41.3673	2.2285	171	65.27%	3.4697	51.7282	1.2429	38	14.50%	2.7499	14.1365	5.0980
	LDGT1	102	40.96%	5.3115	51.0207	2.2719	171	68.67%	3.3612	52.6367	1.8007	56	22.49%	2.3530	17.1545	6.1232
	LDGT2	53	51.96%	7.3205	64.9308	2.9301	61	59.80%	5.0459	72.0096	2.4128	31	30.39%	2.6571	14.5477	6.5510
1988 Total		317	51.71%	5.3698	48.4131	2.3598	403	65.74%	3.6622	55.1836	1.6567	125	20.39%	2.5491	15.5905	5.9176
1989	LDGV	144	63.44%	4.6067	45.5352	1.8258	143	63.00%	3.5333	55.6273	1.1818	31	13.66%	1.3751	10.7383	4.8982
	LDGT1	126	47.19%	6.5334	68.5085	2.3233	181	67.79%	4.2115	65.9932	1.8711	63	23.60%	2.7234	15.6795	6.1562
	LDGT2	48	53.33%	7.5830	53.7217	2.8203	52	57.78%	6.0515	57.8713	2.7502	31	34.44%	2.8418	18.4114	6.1050
1989 Total		318	54.45%	5.8194	55.8735	2.1730	376	64.38%	4.2080	60.9276	1.7305	125	21.40%	2.4184	15.1316	5.8315
1990	LDGV	186	50.96%	4.6513	47.3477	1.9685	203	55.62%	3.5969	55.0961	1.3539	132	36.16%	1.6077	10.4954	4.4123
	LDGT1	131	47.46%	6.1465	63.3076	2.4872	197	71.38%	4.2483	61.7005	2.1162	62	22.46%	2.1090	15.2130	6.1234
	LDGT2	54	49.09%	8.1142	57.8554	2.5331	53	48.18%	6.0844	69.2732	2.5402	36	32.73%	3.1408	14.5374	6.0886
1990 Total		371	49.40%	5.6833	54.5126	2.2339	453	60.32%	4.1712	59.6269	1.8242	230	30.63%	1.9828	12.3998	5.1359
1991	LDGV	343	69.15%	3.7595	39.3830	2.1216	246	49.60%	3.8056	56.2980	1.3535	151	30.44%	1.7164	12.0210	4.3393
	LDGT1	168	58.95%	5.5806	59.3793	2.0277	174	61.05%	4.5046	67.0518	1.4967	73	25.61%	2.1880	14.1105	5.6990
	LDGT2	77	50.00%	6.1199	53.5072	2.3727	90	58.44%	4.5195	57.7006	2.3161	50	32.47%	1.8799	16.3085	5.5270
1991 Total		588	62.89%	4.5889	46.9459	2.1276	510	54.55%	4.1701	60.2145	1.5722	274	29.30%	1.8719	13.3601	4.9183
1992	LDGV	378	57.27%	3.6600	44.7717	1.7861	439	66.52%	2.8850	46.4185	1.3554	164	24.85%	1.4093	9.8724	4.3114
	LDGT1	133	49.44%	5.0808	46.8189	2.7538	149	55.39%	3.7756	56.1272	1.7652	88	32.71%	2.3077	16.0486	5.5244
	LDGT2	152	61.54%	5.4877	50.0805	2.5609	140	56.68%	4.8243	61.2735	2.3467	74	29.96%	2.1339	19.5023	5.5566

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)
1992 Total		663	56.38%	4.3640	46.3995	2.1579	728	61.90%	3.4402	51.2623	1.6299	326	27.72%	1.8163	13.7255	4.9215
1993	LDGV	370	54.81%	3.5756	41.5012	1.8828	407	60.30%	2.8238	45.7081	1.3681	202	29.93%	1.3487	9.5878	4.4584
	LDGT1	226	54.85%	4.9229	46.7630	2.7777	208	50.49%	4.1156	59.3519	1.6832	163	39.56%	2.3235	15.8971	5.6776
	LDGT2	149	59.84%	5.6731	40.8789	2.6007	118	47.39%	4.8964	53.9716	2.4740	86	34.54%	2.2058	18.5125	5.8350
1993 Total		745	55.76%	4.4038	42.9730	2.2978	733	54.87%	3.5240	50.9100	1.6356	451	33.76%	1.8645	13.5699	5.1615
1994	LDGV	438	60.83%	3.3197	32.1887	1.7931	383	53.19%	2.8228	41.7207	1.3521	215	29.86%	1.3600	9.3506	4.0122
	LDGT1	298	49.75%	4.4190	43.9101	2.6303	332	55.43%	3.4888	47.6978	2.1065	250	41.74%	1.6331	14.8827	5.1778
	LDGT2	317	60.15%	4.2533	39.5329	2.8433	322	61.10%	3.6960	44.0519	2.4867	193	36.62%	1.9128	17.0602	5.2990
1994 Total		1,053	57.04%	3.9118	37.7168	2.3462	1,037	56.18%	3.3071	44.3582	1.9459	658	35.64%	1.6259	13.7138	4.8325
1995	LDGV	542	58.79%	3.3489	34.1299	1.5941	445	48.26%	3.0832	45.4338	1.0934	367	39.80%	1.1400	9.0954	3.4553
	LDGT1	298	41.80%	5.1140	52.8162	2.6106	380	53.30%	3.7967	52.2876	1.9633	332	46.56%	1.5342	14.2258	5.1561
	LDGT2	318	58.14%	3.9910	33.6858	3.0598	323	59.05%	3.3534	38.4929	2.7371	223	40.77%	2.0712	19.1173	5.3906
1995 Total		1,158	53.07%	3.9795	38.8167	2.2582	1,148	52.61%	3.3954	45.7496	1.8438	922	42.25%	1.5072	13.3667	4.5358
1996	LDGV	354	40.97%	3.1237	34.4484	1.3864	361	41.78%	2.4130	41.6648	1.0869	459	53.13%	0.8121	7.6124	2.9542
	LDGT1	307	50.58%	2.9295	34.0976	2.9118	321	52.88%	2.4638	37.4723	2.3247	318	52.39%	1.1756	11.8961	4.5562
	LDGT2	164	56.55%	3.5145	36.3384	3.0381	174	60.00%	3.1057	38.5108	2.7932	120	41.38%	1.6327	14.3614	4.9092
1996 Total		825	46.85%	3.1291	34.6936	2.2824	856	48.61%	2.5729	39.4515	1.8979	897	50.94%	1.0508	10.0339	3.7836
1997	LDGV	434	41.25%	3.0362	34.7126	1.5401	480	45.63%	2.0931	40.1612	1.0095	535	50.86%	1.0565	8.7974	2.9074
	LDGT1	327	34.94%	2.7536	34.5767	2.8063	456	48.72%	1.8308	33.9641	2.2031	551	58.87%	0.9500	10.9918	4.1305
	LDGT2	233	49.68%	3.8694	28.3064	3.1461	296	63.11%	2.8814	30.4552	2.7025	234	49.89%	1.9915	15.2048	4.2540
1997 Total		994	40.46%	3.1385	33.1663	2.3331	1,232	50.14%	2.1854	35.5355	1.8580	1,320	53.72%	1.1778	10.8492	3.6567
1998	LDGV	411	32.31%	2.8887	37.2435	1.3792	507	39.86%	1.8075	40.3285	0.9565	781	61.40%	0.7915	8.5655	2.4815
	LDGT1	326	29.08%	3.3052	38.8772	2.6580	408	36.40%	2.3750	38.7978	1.9723	774	69.05%	0.7797	10.1782	3.5378
	LDGT2	245	38.77%	3.5261	33.1457	3.1237	320	50.63%	2.5459	32.3111	2.7737	438	69.30%	1.3511	14.4016	3.7740
1998 Total		982	32.46%	3.1860	36.7635	2.2390	1,235	40.83%	2.1863	37.7454	1.7630	1,993	65.88%	0.9099	10.4744	3.1758
1999	LDGV	372	30.15%	2.7171	32.3883	1.7784	381	30.88%	1.9896	39.4400	1.0107	866	70.18%	0.7745	8.1930	2.5683
	LDGT1	215	22.07%	3.5226	42.2862	2.6289	342	35.11%	2.1263	38.4472	1.7706	726	74.54%	0.6903	9.3069	3.1341
	LDGT2	274	33.21%	4.2177	36.3256	2.8229	300	36.36%	3.5186	38.9446	2.3930	646	78.30%	1.1725	12.2923	3.1994
1999 Total		861	28.39%	3.3958	36.1129	2.3232	1,023	33.73%	2.4837	38.9628	1.6701	2,238	73.79%	0.8621	9.7376	2.9340
2000	LDGV	397	27.90%	3.0580	34.1517	1.9137	470	33.03%	1.9363	39.4018	0.8719	983	69.08%	0.7121	7.4376	2.6768
	LDGT1	216	22.22%	2.5235	38.9577	2.0972	337	34.67%	1.5488	35.8320	1.5728	699	71.91%	0.5308	8.9467	3.1338
	LDGT2	155	31.44%	4.4344	57.2272	2.1697	181	36.71%	3.6366	54.2859	2.1033	367	74.44%	0.8761	10.8235	3.2705
2000 Total		768	26.59%	3.1854	40.1605	2.0170	988	34.21%	2.1157	40.9109	1.3366	2,049	70.95%	0.6797	8.5589	2.9391
2001	LDGV	291	29.60%	2.6358	33.8393	1.8537	339	34.49%	1.5933	39.2331	0.8884	653	66.43%	0.7671	7.7872	2.7727
	LDGT1	132	24.31%	3.9170	56.4092	1.7219	254	46.78%	2.1121	43.4157	1.1462	320	58.93%	0.6319	8.0969	3.5065
	LDGT2	99	31.13%	3.6033	39.1281	2.1954	132	41.51%	2.6140	38.8489	1.9763	221	69.50%	1.1238	12.3028	3.3753
2001 Total		522	28.31%	3.1433	40.5497	1.8852	725	39.32%	1.9609	40.6285	1.1768	1,194	64.75%	0.7969	8.7060	3.0809
2002	LDGV	258	28.38%	2.7089	31.6197	2.1646	267	29.37%	1.8462	38.2415	1.1545	678	74.59%	0.8169	7.8374	3.0137
	LDGT1	170	27.46%	3.2068	55.8608	1.8167	327	52.83%	1.6224	46.1705	1.0615	329	53.15%	0.7449	9.4717	3.6881
	LDGT2	69	25.09%	3.2922	41.6567	2.0876	85	30.91%	2.3672	42.9746	1.9272	213	77.45%	0.5749	8.7389	2.9929
2002 Total		497	27.57%	2.9602	41.3049	2.0349	679	37.66%	1.8037	42.6525	1.2065	1,220	67.67%	0.7552	8.4355	3.1920
2003	LDGV	160	28.42%	2.8691	30.7453	2.4889	190	33.75%	1.8224	35.6593	1.4494	416	73.89%	0.8463	8.9681	2.9790
	LDGT1	84	29.47%	3.6478	61.4537	1.7980	148	51.93%	2.0376	48.5515	1.0870	153	53.68%	0.6496	8.8637	3.4423
	LDGT2	58	31.52%	4.1043	47.7828	2.5129	85	46.20%	2.6860	42.3087	2.1799	126	68.48%	1.0200	11.8893	3.3995

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)
2003 Total		302	29.26%	3.3229	42.5588	2.3014	423	40.99%	2.0712	41.5062	1.4694	695	67.34%	0.8345	9.4747	3.1572
2004	LDGV	176	35.27%	3.0409	32.3704	2.6314	207	41.48%	2.0755	36.4654	1.8263	359	71.94%	1.1033	10.7908	3.1120
	LDGT1	81	24.70%	3.1312	57.8315	2.1317	185	56.40%	1.2674	41.6437	0.7609	156	47.56%	0.7490	9.1863	3.7140
	LDGT2	41	30.15%	2.6885	42.8314	3.0012	60	44.12%	1.6737	40.7153	1.9278	92	67.65%	0.8359	10.8983	3.7639
2004 Total		298	30.94%	3.0170	40.7303	2.5465	452	46.94%	1.6914	39.1490	1.4037	607	63.03%	0.9717	10.3947	3.3655
2005	LDGV	114	33.73%	2.6263	33.1942	2.5717	139	41.12%	1.7275	37.7615	1.5440	242	71.60%	0.9983	10.6236	3.0805
	LDGT1	36	27.48%	1.9858	32.7062	2.7836	59	45.04%	1.0538	33.0114	1.2902	84	64.12%	0.6937	9.0016	3.6600
	LDGT2	32	29.36%	2.5361	28.6142	3.7115	53	48.62%	1.6250	27.1598	2.9795	88	80.73%	1.1157	15.6679	3.4305
2005 Total		182	31.49%	2.4838	32.2924	2.8140	251	43.43%	1.5475	34.4063	1.7874	414	71.63%	0.9614	11.3667	3.2725
2006	LDGV	104	30.32%	3.0841	35.8401	2.2671	133	38.78%	2.0227	41.1294	1.3953	235	68.51%	1.0190	9.1951	2.9973
	LDGT1	18	18.95%	2.3366	43.7521	2.9190	34	35.79%	1.0912	42.2703	1.3669	67	70.53%	0.5957	7.0550	3.5056
	LDGT2	29	34.52%	3.5444	34.8453	4.1155	43	51.19%	2.2561	34.2516	3.1583	66	78.57%	1.6911	20.2610	3.6083
2006 Total		151	28.93%	3.0834	36.5922	2.6998	210	40.23%	1.9197	39.9058	1.7517	368	70.50%	1.0625	10.7901	3.1994
2007	LDGV	49	25.79%	3.9202	36.4098	2.6307	61	32.11%	2.7368	40.3813	1.8054	145	76.32%	0.6596	7.5716	3.2781
	LDGT1	5	8.93%	4.0040	119.7187	1.4462	27	48.21%	0.9812	48.2506	0.5339	29	51.79%	0.1703	2.3995	3.5539
	LDGT2	13	40.63%	5.4457	48.8261	4.2050	14	43.75%	4.8750	47.3368	3.7968	26	81.25%	1.1115	13.0204	4.6437
2007 Total		67	24.10%	4.2224	45.0360	2.8478	102	36.69%	2.5656	43.4190	1.7421	200	71.94%	0.6474	7.5300	3.4956
2008	LDGV	48	28.07%	2.9039	36.1624	2.6760	55	32.16%	1.7097	42.6377	1.9611	137	80.12%	0.7143	9.0309	2.9126
	LDGT1	4	7.55%	2.7318	57.3760	2.8677	19	35.85%	0.5674	28.0554	0.4772	34	64.15%	0.2017	1.8261	3.2108
	LDGT2	10	14.08%	2.1401	22.6449	3.7364	59	83.10%	0.4575	20.3962	0.8054	17	23.94%	1.2568	13.0766	4.0066
2008 Total		62	21.02%	2.7696	35.3508	2.8594	133	45.08%	0.9910	30.6880	1.2364	188	63.73%	0.6707	8.0938	3.0654
2009	LDGV	16	20.78%	2.4440	18.3047	3.7227	23	29.87%	1.5137	22.1201	2.8482	67	87.01%	0.6747	7.4904	3.2223
	LDGT1	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	5	100.00%	0.0591	1.3033	3.4658
	LDGT2	1	50.00%	1.4731	38.7643	1.2043	2	100.00%	1.2308	27.4519	1.2898	0	0.00%	0.0000	0.0000	0.0000
2009 Total		17	20.24%	2.3869	19.5082	3.5745	25	29.76%	1.4911	22.5466	2.7235	72	85.71%	0.6319	7.0608	3.2392
2010	LDGV	29	35.80%	2.5586	15.8543	2.2721	21	25.93%	2.3369	23.0741	2.9541	65	80.25%	0.8730	8.9321	2.8878
	LDGT1	2	16.67%	2.2587	43.1826	1.4735	3	25.00%	1.0071	42.1747	0.5761	9	75.00%	0.3684	2.7256	3.0169
	LDGT2	4	33.33%	2.6161	34.0234	3.3708	9	75.00%	1.4524	29.5613	1.6359	5	41.67%	1.1045	9.6812	4.5989
2010 Total		35	33.33%	2.5480	19.4924	2.3520	33	31.43%	1.9748	26.5797	2.3784	79	75.24%	0.8302	8.2725	3.0108
2011	LDGV	11	52.38%	2.4604	22.2790	3.3182	15	71.43%	1.7257	25.5911	2.4624	13	61.90%	1.6804	18.0635	3.7719
	LDGT1	0	0.00%	0.0000	0.0000	0.0000	1	50.00%	0.4142	41.7454	0.2943	1	50.00%	0.5834	9.5261	3.3802
	LDGT2	2	100.00%	7.4685	8.2749	3.6354	1	50.00%	1.9603	15.5029	7.2567	1	50.00%	1.9603	15.5029	7.2567
2011 Total		13	52.00%	3.2308	20.1245	3.3670	17	68.00%	1.6623	25.9480	2.6168	15	60.00%	1.6259	17.3237	3.9781
2012	LDGV	3	27.27%	1.9091	19.2148	4.5822	3	27.27%	1.3664	20.9038	2.8942	10	90.91%	0.9157	10.8325	3.3443
	LDGT1	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000	1	100.00%	0.9268	10.4219	2.0302
	LDGT2	0	0.00%	0.0000	0.0000	0.0000	1	100.00%	0.1252	25.2056	0.0262	0	0.00%	0.0000	0.0000	0.0000
2012 Total		3	23.08%	1.9091	19.2148	4.5822	4	30.77%	1.0561	21.9793	2.1772	11	84.62%	0.9167	10.7952	3.2249
2013	LDGV	2	100.00%	2.0919	20.2612	3.1181	2	100.00%	2.0919	20.2612	3.1181	1	50.00%	2.8610	25.1234	5.5295
	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
2013 Total		2	100.00%	2.0919	20.2612	3.1181	2	100.00%	2.0919	20.2612	3.1181	1	50.00%	2.8610	25.1234	5.5295
2014	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

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)
2014 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
2015	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
2015 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		12,649	39.54%	3.9885	43.1939	2.2390	15,189	47.48%	2.9012	47.4816	1.6534	16,964	53.03%	1.0673	10.4679	3.5689

Records 1 - 102 (All Records)

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	6,208	41.01%	3.4557	38.3148	1.8560	6,667	44.05%	2.5614	44.8324	1.2239	8,061	53.26%	0.9492	8.7247	3.0614
LDGT1	3,703	35.23%	4.4072	50.8602	2.4583	5,259	50.04%	2.9431	50.7484	1.7092	5,439	51.75%	1.0121	10.7836	4.0107
LDGT2	2,738	43.17%	4.6300	43.8880	2.8105	3,263	51.44%	3.5278	47.6294	2.4410	3,464	54.61%	1.4286	14.0285	4.0563
Grand Total	12,649	39.54%	3.9885	43.1939	2.2390	15,189	47.48%	2.9012	47.4816	1.6534	16,964	53.03%	1.0673	10.4679	3.5689

Appendix D

I/M240 Initial Visual Failure Report

(Mandatory)

Initial Visual Failure Report (Mandatory) (V1.00)

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%
1982	LDGV	327	316	96.60%	11	3.40%	322	98.80%	4	1.20%	199	98.00%	4	2.00%	231	99.60%	1	0.40%	326	99.70%	1	0.30%	326	99.70%	1	0.30%
	LDGT1	324	303	93.50%	21	6.50%	313	97.80%	7	2.20%	250	95.40%	12	4.60%	66	94.30%	4	5.70%	323	99.70%	1	0.30%	322	99.40%	2	0.60%
	LDGT2	81	78	96.30%	3	3.70%	75	98.70%	1	1.30%	73	97.30%	2	2.70%	14	93.30%	1	6.70%	81	100.00%	0	0.00%	80	98.80%	1	1.20%
1982 Total		732	697	95.20%	35	4.80%	710	98.30%	12	1.70%	522	96.70%	18	3.30%	311	98.10%	6	1.90%	730	99.70%	2	0.30%	728	99.50%	4	0.50%
1983	LDGV	392	374	95.40%	18	4.60%	389	99.50%	2	0.50%	228	95.40%	11	4.60%	288	98.60%	4	1.40%	391	100.00%	0	0.00%	390	99.50%	2	0.50%
	LDGT1	313	290	92.70%	23	7.30%	306	99.00%	3	1.00%	240	92.70%	19	7.30%	105	99.10%	1	0.90%	312	99.70%	1	0.30%	310	99.00%	3	1.00%
	LDGT2	119	110	92.40%	9	7.60%	113	97.40%	3	2.60%	104	93.70%	7	6.30%	19	100.00%	0	0.00%	119	100.00%	0	0.00%	118	99.20%	1	0.80%
1983 Total		824	774	93.90%	50	6.10%	808	99.00%	8	1.00%	572	93.90%	37	6.10%	412	98.80%	5	1.20%	822	99.90%	1	0.10%	818	99.30%	6	0.70%
1984	LDGV	928	902	97.20%	26	2.80%	916	99.00%	9	1.00%	528	97.40%	14	2.60%	805	99.60%	3	0.40%	926	99.80%	2	0.20%	925	99.70%	3	0.30%
	LDGT1	740	692	93.50%	48	6.50%	727	98.90%	8	1.10%	567	95.50%	27	4.50%	319	97.90%	7	2.10%	735	99.50%	4	0.50%	729	98.50%	11	1.50%
	LDGT2	248	235	94.80%	13	5.20%	240	98.00%	5	2.00%	218	95.60%	10	4.40%	69	98.60%	1	1.40%	248	100.00%	0	0.00%	246	99.20%	2	0.80%
1984 Total		1916	1,829	95.50%	87	4.50%	1,883	98.80%	22	1.20%	1,313	96.30%	51	3.70%	1,193	99.10%	11	0.90%	1,909	99.70%	6	0.30%	1,900	99.20%	16	0.80%
1985	LDGV	957	937	97.90%	20	2.10%	946	99.10%	9	0.90%	487	97.80%	11	2.20%	832	99.50%	4	0.50%	956	99.90%	1	0.10%	955	99.80%	2	0.20%
	LDGT1	797	771	96.70%	26	3.30%	786	99.00%	8	1.00%	470	97.50%	12	2.50%	489	99.20%	4	0.80%	794	99.60%	3	0.40%	791	99.20%	6	0.80%
	LDGT2	268	245	91.40%	23	8.60%	254	98.10%	5	1.90%	231	93.50%	16	6.50%	75	97.40%	2	2.60%	267	99.60%	1	0.40%	266	99.30%	2	0.70%
1985 Total		2022	1,953	96.60%	69	3.40%	1,986	98.90%	22	1.10%	1,188	96.80%	39	3.20%	1,396	99.30%	10	0.70%	2,017	99.80%	5	0.20%	2,012	99.50%	10	0.50%
1986	LDGV	1594	1,562	98.00%	32	2.00%	1,585	99.60%	6	0.40%	644	97.70%	15	2.30%	1466	99.90%	1	0.10%	1,592	99.90%	2	0.10%	1,584	99.40%	10	0.60%
	LDGT1	1459	1,418	97.20%	41	2.80%	1,449	99.50%	7	0.50%	770	97.10%	23	2.90%	1031	98.80%	12	1.20%	1,454	99.70%	5	0.30%	1,456	99.80%	3	0.20%
	LDGT2	380	365	96.10%	15	3.90%	368	98.70%	5	1.30%	346	98.00%	7	2.00%	122	97.60%	3	2.40%	380	100.00%	0	0.00%	378	99.50%	2	0.50%
1986 Total		3433	3,345	97.40%	88	2.60%	3,402	99.50%	18	0.50%	1,760	97.50%	45	2.50%	2,619	99.40%	16	0.60%	3,426	99.80%	7	0.20%	3,418	99.60%	15	0.40%
1987	LDGV	1494	1,466	98.10%	28	1.90%	1,481	99.50%	8	0.50%	542	97.30%	15	2.70%	1396	99.40%	8	0.60%	1,494	100.00%	0	0.00%	1,490	99.70%	4	0.30%
	LDGT1	1234	1,201	97.30%	33	2.70%	1,228	99.60%	5	0.40%	499	97.70%	12	2.30%	993	99.20%	8	0.80%	1,232	99.80%	2	0.20%	1,228	99.50%	6	0.50%
	LDGT2	370	351	94.90%	19	5.10%	359	98.40%	6	1.60%	331	97.10%	10	2.90%	250	98.80%	3	1.20%	369	99.70%	1	0.30%	368	99.50%	2	0.50%
1987 Total		3098	3,018	97.40%	80	2.60%	3,068	99.40%	19	0.60%	1,372	97.40%	37	2.60%	2,639	99.30%	19	0.70%	3,095	99.90%	3	0.10%	3,086	99.60%	12	0.40%
1988	LDGV	2385	2,352	98.60%	33	1.40%	2,372	99.60%	9	0.40%	762	98.30%	13	1.70%	2280	99.80%	4	0.20%	2,385	100.00%	0	0.00%	2,376	99.60%	9	0.40%
	LDGT1	2082	2,063	99.10%	19	0.90%	2,073	99.80%	4	0.20%	1,055	98.80%	13	1.20%	1903	100.00%	0	0.00%	2,081	100.00%	1	0.00%	2,081	100.00%	1	0.00%
	LDGT2	736	719	97.70%	17	2.30%	728	99.60%	3	0.40%	658	98.20%	12	1.80%	650	99.70%	2	0.30%	735	99.90%	1	0.10%	733	99.60%	3	0.40%
1988 Total		5203	5,134	98.70%	69	1.30%	5,173	99.70%	16	0.30%	2,475	98.50%	38	1.50%	4,833	99.90%	6	0.10%	5,201	100.00%	2	0.00%	5,190	99.80%	13	0.20%
1989	LDGV	2485	2,462	99.10%	23	0.90%	2,475	99.80%	4	0.20%	632	99.20%	5	0.80%	2396	99.80%	4	0.20%	2,483	99.90%	2	0.10%	2,476	99.60%	9	0.40%
	LDGT1	2009	1,976	98.40%	33	1.60%	2,001	99.70%	7	0.30%	774	98.10%	15	1.90%	1859	99.60%	7	0.40%	2,002	99.70%	6	0.30%	2,007	99.90%	2	0.10%
	LDGT2	733	722	98.50%	11	1.50%	728	99.60%	3	0.40%	373	98.70%	5	1.30%	663	99.80%	1	0.20%	731	99.70%	2	0.30%	732	99.90%	1	0.10%
1989 Total		5227	5,160	98.70%	67	1.30%	5,204	99.70%	14	0.30%	1,779	98.60%	25	1.40%	4,918	99.80%	12	0.20%	5,216	99.80%	10	0.20%	5,215	99.80%	12	0.20%
1990	LDGV	4620	4,573	99.00%	47	1.00%	4,610	99.80%	7	0.20%	711	99.20%	6	0.80%	4595	99.80%	9	0.20%	4,612	99.80%	8	0.20%	4,602	99.60%	18	0.40%
	LDGT1	2697	2,659	98.60%	38	1.40%	2,689	99.70%	7	0.30%	1,088	98.30%	19	1.70%	2623	99.70%	9	0.30%	2,694	99.90%	3	0.10%	2,695	99.90%	2	0.10%
	LDGT2	1090	1,075	98.60%	15	1.40%	1,087	99.80%	2	0.20%	494	99.20%	4	0.80%	1083	99.60%	4	0.40%	1,086	99.60%	4	0.40%	1,089	99.90%	1	0.10%
1990 Total		8407	8,307	98.80%	100	1.20%	8,386	99.80%	16	0.20%	2,293	98.80%	29	1.20%	8,301	99.70%	22	0.30%	8,392	99.80%	15	0.20%	8,386	99.80%	21	0.20%
1991	LDGV	4980	4,938	99.20%	42	0.80%	4,963	99.70%	14	0.30%	532	98.50%	8	1.50%	4965	99.90%	3	0.10%	4,973	99.90%	7	0.10%	4,967	99.70%	13	0.30%
	LDGT1	2954	2,925	99.00%	29	1.00%	2,944	99.80%	7	0.20%	898	99.20%	7	0.80%	2934	99.80%	5	0.20%	2,942	99.70%	9	0.30%	2,951	99.90%	3	0.10%

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%
	LDGT2	865	857	99.10%	8	0.90%	860	99.40%	5	0.60%	390	99.00%	4	1.00%	861	99.80%	2	0.20%	865	100.00%	0	0.00%	865	100.00%	0	0.00%
1991 Total		8799	8,720	99.10%	79	0.90%	8,767	99.70%	26	0.30%	1,820	99.00%	19	1.00%	8760	99.90%	10	0.10%	8,780	99.80%	16	0.20%	8,783	99.80%	16	0.20%
1992	LDGV	6965	6,917	99.30%	48	0.70%	6,951	99.80%	11	0.20%	590	99.50%	3	0.50%	6940	99.90%	9	0.10%	6,955	99.90%	10	0.10%	6,947	99.70%	18	0.30%
	LDGT1	3758	3,738	99.50%	20	0.50%	3,752	99.80%	6	0.20%	1,048	99.20%	8	0.80%	3752	100.00%	1	0.00%	3,757	100.00%	1	0.00%	3,754	99.90%	4	0.10%
	LDGT2	1698	1,681	99.00%	17	1.00%	1,693	99.70%	5	0.30%	709	99.40%	4	0.60%	1694	99.90%	1	0.10%	1,695	99.90%	2	0.10%	1,692	99.60%	6	0.40%
1992 Total		12421	12,336	99.30%	85	0.70%	12,396	99.80%	22	0.20%	2,347	99.40%	15	0.60%	12386	99.90%	11	0.10%	12,407	99.90%	13	0.10%	12,393	99.80%	28	0.20%
1993	LDGV	7080	7,019	99.10%	61	0.90%	7,062	99.80%	15	0.20%	477	98.10%	9	1.90%	7062	99.90%	7	0.10%	7,068	99.80%	12	0.20%	7,059	99.70%	21	0.30%
	LDGT1	4647	4,607	99.10%	40	0.90%	4,630	99.70%	15	0.30%	1,084	99.50%	5	0.50%	4637	99.90%	3	0.10%	4,636	99.80%	10	0.20%	4,639	99.80%	8	0.20%
	LDGT2	1671	1,649	98.70%	22	1.30%	1,656	99.10%	15	0.90%	610	98.50%	9	1.50%	1668	99.90%	1	0.10%	1,670	99.90%	1	0.10%	1,670	99.90%	1	0.10%
1993 Total		13398	13,275	99.10%	123	0.90%	13,348	99.70%	45	0.30%	2,171	99.00%	23	1.00%	13367	99.90%	11	0.10%	13,374	99.80%	23	0.20%	13,368	99.80%	30	0.20%
1994	LDGV	9570	9,486	99.10%	84	0.90%	9,540	99.80%	23	0.20%	733	98.70%	10	1.30%	9555	99.90%	12	0.10%	9,553	99.80%	17	0.20%	9,541	99.70%	29	0.30%
	LDGT1	6996	6,931	99.10%	65	0.90%	6,963	99.60%	28	0.40%	1,399	99.70%	4	0.30%	6987	99.90%	5	0.10%	6,978	99.70%	18	0.30%	6,985	99.80%	11	0.20%
	LDGT2	3238	3,199	98.80%	39	1.20%	3,214	99.30%	24	0.70%	1,081	99.50%	5	0.50%	3230	99.80%	7	0.20%	3,234	99.90%	4	0.10%	3,235	99.90%	3	0.10%
1994 Total		19804	19,616	99.10%	188	0.90%	19,717	99.60%	75	0.40%	3,213	99.40%	19	0.60%	19772	99.90%	24	0.10%	19,765	99.80%	39	0.20%	19,761	99.80%	43	0.20%
1995	LDGV	12066	11,970	99.20%	96	0.80%	12,043	99.80%	19	0.20%	753	98.20%	14	1.80%	12046	99.90%	15	0.10%	12,046	99.80%	20	0.20%	12,032	99.70%	34	0.30%
	LDGT1	7109	7,060	99.30%	49	0.70%	7,084	99.70%	22	0.30%	1,027	99.80%	2	0.20%	7093	99.90%	9	0.10%	7,096	99.80%	12	0.20%	7,103	99.90%	6	0.10%
	LDGT2	3581	3,545	99.00%	36	1.00%	3,562	99.50%	18	0.50%	1,167	99.60%	5	0.40%	3575	99.90%	3	0.10%	3,572	99.80%	8	0.20%	3,576	99.90%	5	0.10%
1995 Total		22756	22,575	99.20%	181	0.80%	22,689	99.70%	59	0.30%	2,947	99.30%	21	0.70%	22714	99.90%	27	0.10%	22,714	99.80%	40	0.20%	22,711	99.80%	45	0.20%
1996	LDGV	15143	15,006	99.10%	137	0.90%	9,217	99.70%	28	0.30%	630	98.10%	12	1.90%	9202	99.50%	43	0.50%	15,111	99.80%	31	0.20%	15,112	99.80%	31	0.20%
	LDGT1	9466	9,390	99.20%	76	0.80%	5,471	99.60%	22	0.40%	12	100.00%	0	0.00%	5468	99.50%	25	0.50%	9,447	99.80%	19	0.20%	9,453	99.90%	13	0.10%
	LDGT2	4138	4,104	99.20%	34	0.80%	2,285	99.30%	15	0.70%	441	98.90%	5	1.10%	2290	99.60%	10	0.40%	4,131	99.90%	6	0.10%	4,136	100.00%	2	0.00%
1996 Total		28747	28,500	99.10%	247	0.90%	16,973	99.60%	65	0.40%	1,083	98.50%	17	1.50%	16960	99.50%	78	0.50%	28,689	99.80%	56	0.20%	28,701	99.80%	46	0.20%
1997	LDGV	16925	16,787	99.20%	138	0.80%	9,452	99.60%	39	0.40%	638	97.60%	16	2.40%	9451	99.60%	40	0.40%	16,899	99.90%	25	0.10%	16,897	99.80%	28	0.20%
	LDGT1	11813	11,735	99.30%	78	0.70%	6,654	99.60%	29	0.40%	27	100.00%	0	0.00%	6665	99.70%	18	0.30%	11,790	99.80%	23	0.20%	11,804	99.90%	9	0.10%
	LDGT2	4518	4,487	99.30%	31	0.70%	2,768	99.30%	19	0.70%	7	100.00%	0	0.00%	2780	99.70%	7	0.30%	4,514	99.90%	3	0.10%	4,514	99.90%	4	0.10%
1997 Total		33256	33,009	99.30%	247	0.70%	18,874	99.50%	87	0.50%	672	97.70%	16	2.30%	18896	99.70%	65	0.30%	33,203	99.80%	51	0.20%	33,215	99.90%	41	0.10%
1998	LDGV	21999	21,852	99.30%	147	0.70%	10,119	99.70%	31	0.30%	1,218	97.50%	31	2.50%	10106	99.60%	44	0.40%	21,973	99.90%	26	0.10%	21,975	99.90%	24	0.10%
	LDGT1	17263	17,193	99.60%	70	0.40%	8,280	99.60%	31	0.40%	7	100.00%	0	0.00%	8292	99.80%	19	0.20%	17,248	99.90%	15	0.10%	17,253	99.90%	10	0.10%
	LDGT2	6179	6,148	99.50%	31	0.50%	3,356	99.60%	15	0.40%	65	98.50%	1	1.50%	3362	99.70%	9	0.30%	6,175	100.00%	3	0.00%	6,176	100.00%	3	0.00%
1998 Total		45441	45,193	99.50%	248	0.50%	21,755	99.60%	77	0.40%	1,290	97.60%	32	2.40%	21760	99.70%	72	0.30%	45,396	99.90%	44	0.10%	45,404	99.90%	37	0.10%
1999	LDGV	21764	21,627	99.40%	137	0.60%	10,158	99.70%	29	0.30%	837	96.90%	27	3.10%	10150	99.60%	37	0.40%	21,744	99.90%	20	0.10%	21,736	99.90%	28	0.10%
	LDGT1	15456	15,375	99.50%	81	0.50%	6,955	99.60%	29	0.40%	83	95.40%	4	4.60%	6967	99.80%	17	0.20%	15,438	99.90%	18	0.10%	15,439	99.90%	17	0.10%
	LDGT2	7494	7,457	99.50%	37	0.50%	4,472	99.70%	15	0.30%	125	99.20%	1	0.80%	4475	99.70%	13	0.30%	7,479	99.90%	8	0.10%	7,491	100.00%	3	0.00%
1999 Total		44714	44,459	99.40%	255	0.60%	21,585	99.70%	73	0.30%	1,045	97.00%	32	3.00%	21592	99.70%	67	0.30%	44,661	99.90%	46	0.10%	44,666	99.90%	48	0.10%
2000	LDGV	30916	30,676	99.20%	240	0.80%	13,697	99.60%	51	0.40%	1,852	95.10%	96	4.90%	13704	99.70%	44	0.30%	30,889	99.90%	27	0.10%	30,882	99.90%	34	0.10%
	LDGT1	21753	21,683	99.70%	70	0.30%	8,710	99.80%	19	0.20%	243	98.40%	4	1.60%	8717	99.90%	12	0.10%	21,729	99.90%	23	0.10%	21,738	99.90%	15	0.10%
	LDGT2	8277	8,243	99.60%	34	0.40%	4,189	99.70%	11	0.30%	207	99.50%	1	0.50%	4189	99.70%	11	0.30%	8,261	99.90%	7	0.10%	8,270	99.90%	7	0.10%
2000 Total		60946	60,602	99.40%	344	0.60%	26,596	99.70%	81	0.30%	2,302	95.80%	101	4.20%	26610	99.70%	67	0.30%	60,879	99.90%	57	0.10%	60,890	99.90%	56	0.10%
2001	LDGV	26111	25,889	99.10%	222	0.90%	12,278	99.60%	53	0.40%	2,557	96.40%	96	3.60%	12298	99.70%	33	0.30%	26,082	99.90%	27	0.10%	26,082	99.90%	29	0.10%

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%
	LDGT1	17725	17,642	99.50%	83	0.50%	8,061	99.70%	28	0.30%	723	98.80%	9	1.20%	8075	99.80%	14	0.20%	17,707	99.90%	18	0.10%	17,709	99.90%	16	0.10%
	LDGT2	7391	7,354	99.50%	37	0.50%	4,008	99.60%	15	0.40%	297	99.00%	3	1.00%	4020	99.90%	3	0.10%	7,380	99.90%	8	0.10%	7,383	99.90%	8	0.10%
2001 Total		51227	50,885	99.30%	342	0.70%	24,347	99.60%	96	0.40%	3,577	97.10%	108	2.90%	24393	99.80%	50	0.20%	51,169	99.90%	53	0.10%	51,174	99.90%	53	0.10%
2002	LDGV	33337	33,145	99.40%	192	0.60%	12,513	99.40%	72	0.60%	2,508	98.20%	46	1.80%	12535	99.60%	50	0.40%	33,311	99.90%	22	0.10%	33,314	99.90%	23	0.10%
	LDGT1	25540	25,484	99.80%	56	0.20%	9,193	99.80%	19	0.20%	129	97.70%	3	2.30%	9209	100.00%	3	0.00%	25,517	99.90%	22	0.10%	25,531	100.00%	9	0.00%
	LDGT2	8235	8,209	99.70%	26	0.30%	3,525	99.80%	8	0.20%	173	98.30%	3	1.70%	3528	99.90%	5	0.10%	8,221	99.90%	9	0.10%	8,232	100.00%	3	0.00%
2002 Total		67112	66,838	99.60%	274	0.40%	25,231	99.60%	99	0.40%	2,810	98.20%	52	1.80%	25272	99.80%	58	0.20%	67,049	99.90%	53	0.10%	67,077	99.90%	35	0.10%
2003	LDGV	25420	25,273	99.40%	147	0.60%	9,046	99.20%	73	0.80%	1,735	98.50%	26	1.50%	9081	99.60%	38	0.40%	25,400	99.90%	19	0.10%	25,408	100.00%	12	0.00%
	LDGT1	17293	17,263	99.80%	30	0.20%	5,708	99.80%	13	0.20%	53	98.10%	1	1.90%	5718	99.90%	3	0.10%	17,284	99.90%	9	0.10%	17,288	100.00%	5	0.00%
	LDGT2	6956	6,930	99.60%	26	0.40%	3,537	99.60%	14	0.40%	167	98.80%	2	1.20%	3548	99.90%	3	0.10%	6,947	99.90%	6	0.10%	6,953	100.00%	3	0.00%
2003 Total		49669	49,466	99.60%	203	0.40%	18,291	99.50%	100	0.50%	1,955	98.50%	29	1.50%	18347	99.80%	44	0.20%	49,631	99.90%	34	0.10%	49,649	100.00%	20	0.00%
2004	LDGV	30175	30,043	99.60%	132	0.40%	8,301	99.20%	69	0.80%	1,342	98.60%	19	1.40%	8345	99.70%	25	0.30%	30,151	99.90%	23	0.10%	30,165	100.00%	10	0.00%
	LDGT1	25845	25,794	99.80%	51	0.20%	6,119	99.80%	12	0.20%	515	99.60%	2	0.40%	6123	99.90%	8	0.10%	25,827	99.90%	18	0.10%	25,834	100.00%	11	0.00%
	LDGT2	10666	10,641	99.80%	25	0.20%	3,906	99.80%	7	0.20%	198	98.00%	4	2.00%	3910	99.90%	3	0.10%	10,654	99.90%	10	0.10%	10,664	100.00%	2	0.00%
2004 Total		66686	66,478	99.70%	208	0.30%	18,326	99.50%	88	0.50%	2,055	98.80%	25	1.20%	18378	99.80%	36	0.20%	66,632	99.90%	51	0.10%	66,663	100.00%	23	0.00%
2005	LDGV	23433	23,334	99.60%	99	0.40%	6,388	99.20%	50	0.80%	642	98.00%	13	2.00%	6410	99.60%	28	0.40%	23,418	99.90%	13	0.10%	23,428	100.00%	5	0.00%
	LDGT1	19330	19,289	99.80%	41	0.20%	5,323	99.80%	9	0.20%	422	99.50%	2	0.50%	5319	99.80%	13	0.20%	19,316	99.90%	14	0.10%	19,326	100.00%	4	0.00%
	LDGT2	6650	6,639	99.80%	11	0.20%	2,234	99.90%	2	0.10%	113	98.30%	2	1.70%	2236	100.00%	0	0.00%	6,648	100.00%	2	0.00%	6,645	99.90%	5	0.10%
2005 Total		49413	49,262	99.70%	151	0.30%	13,945	99.60%	61	0.40%	1,177	98.60%	17	1.40%	13965	99.70%	41	0.30%	49,382	99.90%	29	0.10%	49,399	100.00%	14	0.00%
2006	LDGV	29801	29,720	99.70%	81	0.30%	6,272	99.40%	39	0.60%	586	98.20%	11	1.80%	6291	99.70%	20	0.30%	29,791	100.00%	10	0.00%	29,792	100.00%	9	0.00%
	LDGT1	22165	22,132	99.90%	33	0.10%	4,669	99.80%	10	0.20%	388	99.00%	4	1.00%	4674	99.90%	5	0.10%	22,155	100.00%	10	0.00%	22,160	100.00%	5	0.00%
	LDGT2	8856	8,841	99.80%	15	0.20%	2,150	99.70%	6	0.30%	128	98.50%	2	1.50%	2156	100.00%	0	0.00%	8,852	100.00%	4	0.00%	8,853	100.00%	3	0.00%
2006 Total		60822	60,693	99.80%	129	0.20%	13,091	99.60%	55	0.40%	1,102	98.50%	17	1.50%	13121	99.80%	25	0.20%	60,798	100.00%	24	0.00%	60,805	100.00%	17	0.00%
2007	LDGV	21266	21,215	99.80%	51	0.20%	4,303	99.60%	19	0.40%	345	98.60%	5	1.40%	4304	99.60%	18	0.40%	21,251	99.90%	12	0.10%	21,263	100.00%	3	0.00%
	LDGT1	16330	16,318	99.90%	12	0.10%	2,820	100.00%	1	0.00%	308	99.00%	3	1.00%	2818	99.90%	3	0.10%	16,326	100.00%	4	0.00%	16,329	100.00%	1	0.00%
	LDGT2	7673	7,664	99.90%	9	0.10%	1,727	99.70%	6	0.30%	48	100.00%	0	0.00%	1732	99.90%	1	0.10%	7,671	100.00%	2	0.00%	7,673	100.00%	0	0.00%
2007 Total		45269	45,197	99.80%	72	0.20%	8,850	99.70%	26	0.30%	701	98.90%	8	1.10%	8854	99.80%	22	0.20%	45,248	100.00%	18	0.00%	45,265	100.00%	4	0.00%
2008	LDGV	31210	31,167	99.90%	43	0.10%	3,923	99.30%	27	0.70%	351	98.30%	6	1.70%	3942	99.80%	8	0.20%	31,198	100.00%	7	0.00%	31,208	100.00%	2	0.00%
	LDGT1	24238	24,227	100.00%	11	0.00%	2,446	99.90%	3	0.10%	175	98.90%	2	1.10%	2446	99.90%	3	0.10%	24,235	100.00%	3	0.00%	24,238	100.00%	0	0.00%
	LDGT2	10798	10,792	99.90%	6	0.10%	1,591	99.70%	4	0.30%	80	100.00%	0	0.00%	1593	99.90%	2	0.10%	10,796	100.00%	2	0.00%	10,798	100.00%	0	0.00%
2008 Total		66246	66,186	99.90%	60	0.10%	7,960	99.60%	34	0.40%	606	98.70%	8	1.30%	7981	99.80%	13	0.20%	66,229	100.00%	12	0.00%	66,244	100.00%	2	0.00%
2009	LDGV	13440	13,421	99.90%	19	0.10%	1,800	99.40%	11	0.60%	150	98.00%	3	2.00%	1805	99.70%	6	0.30%	13,428	100.00%	2	0.00%	13,438	100.00%	2	0.00%
	LDGT1	7108	7,098	99.90%	10	0.10%	733	99.60%	3	0.40%	27	96.40%	1	3.60%	736	100.00%	0	0.00%	7,104	99.90%	4	0.10%	7,106	100.00%	2	0.00%
	LDGT2	3632	3,631	100.00%	1	0.00%	606	99.80%	1	0.20%	14	100.00%	0	0.00%	607	100.00%	0	0.00%	3,632	100.00%	0	0.00%	3,632	100.00%	0	0.00%
2009 Total		24180	24,150	99.90%	30	0.10%	3,139	99.50%	15	0.50%	191	97.90%	4	2.10%	3148	99.80%	6	0.20%	24,164	100.00%	6	0.00%	24,176	100.00%	4	0.00%
2010	LDGV	27712	27,681	99.90%	31	0.10%	2,382	99.40%	14	0.60%	152	99.30%	1	0.70%	2387	99.60%	9	0.40%	27,702	100.00%	8	0.00%	27,710	100.00%	2	0.00%
	LDGT1	20879	20,866	99.90%	13	0.10%	1,527	100.00%	0	0.00%	42	100.00%	0	0.00%	1527	100.00%	0	0.00%	20,870	100.00%	9	0.00%	20,875	100.00%	4	0.00%
	LDGT2	10062	10,048	99.90%	14	0.10%	828	99.60%	3	0.40%	25	100.00%	0	0.00%	829	99.80%	2	0.20%	10,047	99.90%	9	0.10%	10,061	100.00%	1	0.00%
2010 Total		58653	58,595	99.90%	58	0.10%	4,737	99.60%	17	0.40%	219	99.50%	1	0.50%	4743	99.80%	11	0.20%	58,619	100.00%	26	0.00%	58,646	100.00%	7	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%
2011	LDGV	9291	9,281	99.90%	10	0.10%	1,201	99.60%	5	0.40%	87	100.00%	0	0.00%	1203	99.80%	3	0.20%	9,286	100.00%	1	0.00%	9,289	100.00%	2	0.00%
	LDGT1	4248	4,246	100.00%	2	0.00%	481	100.00%	0	0.00%	11	100.00%	0	0.00%	480	99.80%	1	0.20%	4,247	100.00%	1	0.00%	4,248	100.00%	0	0.00%
	LDGT2	2149	2,143	99.70%	6	0.30%	250	98.80%	3	1.20%	8	100.00%	0	0.00%	251	99.20%	2	0.80%	2,148	100.00%	1	0.00%	2,148	100.00%	1	0.00%
2011 Total		15688	15,670	99.90%	18	0.10%	1,932	99.60%	8	0.40%	106	100.00%	0	0.00%	1934	99.70%	6	0.30%	15,681	100.00%	3	0.00%	15,685	100.00%	3	0.00%
2012	LDGV	3972	3,962	99.70%	10	0.30%	524	99.40%	3	0.60%	42	100.00%	0	0.00%	525	99.60%	2	0.40%	3,967	99.90%	5	0.10%	3,971	100.00%	1	0.00%
	LDGT1	1245	1,243	99.80%	2	0.20%	167	98.80%	2	1.20%	9	100.00%	0	0.00%	167	98.80%	2	1.20%	1,245	100.00%	0	0.00%	1,245	100.00%	0	0.00%
	LDGT2	803	802	99.90%	1	0.10%	113	100.00%	0	0.00%	4	100.00%	0	0.00%	113	100.00%	0	0.00%	802	99.90%	1	0.10%	803	100.00%	0	0.00%
2012 Total		6020	6,007	99.80%	13	0.20%	804	99.40%	5	0.60%	55	100.00%	0	0.00%	805	99.50%	4	0.50%	6,014	99.90%	6	0.10%	6,019	100.00%	1	0.00%
2013	LDGV	1875	1,872	99.80%	3	0.20%	180	100.00%	0	0.00%	8	100.00%	0	0.00%	180	100.00%	0	0.00%	1,873	99.90%	2	0.10%	1,874	99.90%	1	0.10%
	LDGT1	708	708	100.00%	0	0.00%	52	100.00%	0	0.00%	1	100.00%	0	0.00%	52	100.00%	0	0.00%	708	100.00%	0	0.00%	708	100.00%	0	0.00%
	LDGT2	481	481	100.00%	0	0.00%	64	100.00%	0	0.00%	1	100.00%	0	0.00%	64	100.00%	0	0.00%	481	100.00%	0	0.00%	481	100.00%	0	0.00%
2013 Total		3064	3,061	99.90%	3	0.10%	296	100.00%	0	0.00%	10	100.00%	0	0.00%	296	100.00%	0	0.00%	3,062	99.90%	2	0.10%	3,063	100.00%	1	0.00%
2014	LDGV	507	506	99.80%	1	0.20%	58	100.00%	0	0.00%	2	100.00%	0	0.00%	58	100.00%	0	0.00%	506	99.80%	1	0.20%	507	100.00%	0	0.00%
	LDGT1	271	271	100.00%	0	0.00%	36	100.00%	0	0.00%	0	0.00%	0	0.00%	36	100.00%	0	0.00%	271	100.00%	0	0.00%	271	100.00%	0	0.00%
	LDGT2	160	160	100.00%	0	0.00%	27	100.00%	0	0.00%	0	0.00%	0	0.00%	27	100.00%	0	0.00%	160	100.00%	0	0.00%	160	100.00%	0	0.00%
2014 Total		938	937	99.90%	1	0.10%	121	100.00%	0	0.00%	2	100.00%	0	0.00%	121	100.00%	0	0.00%	937	99.90%	1	0.10%	938	100.00%	0	0.00%
2015	LDGV	36	36	100.00%	0	0.00%	6	100.00%	0	0.00%	0	0.00%	0	0.00%	6	100.00%	0	0.00%	36	100.00%	0	0.00%	36	100.00%	0	0.00%
	LDGT1	23	23	100.00%	0	0.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	2	100.00%	0	0.00%	23	100.00%	0	0.00%	23	100.00%	0	0.00%
	LDGT2	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%
2015 Total		61	61	100.00%	0	0.00%	9	100.00%	0	0.00%	0	0.00%	0	0.00%	9	100.00%	0	0.00%	61	100.00%	0	0.00%	61	100.00%	0	0.00%
Grand Total		886192	881,988	99.50%	4,204	0.50%	354,399	99.60%	1,361	0.40%	46,730	98.10%	883	1.90%	350806	99.80%	855	0.20%	885,352	99.90%	754	0.10%	885,509	99.90%	683	0.10%

Summary by Vehicle Type (V1.01)

Vehicle Type	Visual Overall					CAT				AIS				O2				Gas Cap				Opacity			
	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	440176	437767	99.50%	2409	0.50%	177473	99.60%	753	0.40%	23500	97.70%	546	2.30%	176840	99.70%	532	0.30%	439776	99.90%	363	0.10%	439757	99.90%	419	0.10%
LDGT1	315818	314614	99.60%	1204	0.40%	120352	99.70%	364	0.30%	14344	98.50%	213	1.50%	118282	99.80%	221	0.20%	315523	99.90%	286	0.10%	315629	99.90%	189	0.10%
LDGT2	130198	129607	99.50%	591	0.50%	56574	99.60%	244	0.40%	8886	98.60%	124	1.40%	55684	99.80%	102	0.20%	130053	99.90%	105	0.10%	130123	99.90%	75	0.10%
Grand Total	886192	881988	99.50%	4204	0.50%	354399	99.60%	1361	0.40%	46730	98.10%	883	1.90%	350806	99.80%	855	0.20%	885352	99.90%	754	0.10%	885509	99.90%	683	0.10%

Appendix E

I/M240 Initial Visual Failure Report

(Advisory)

Initial Visual Failure Report (Advisory) (V1.01)

Vehicle		Cap Pressure				Eng Light				OBD				Evap System			
Year	Type	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%
1982	LDGV	252	92.65%	20	7.35%	164	88.65%	21	11.35%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	248	84.64%	45	15.36%	39	75.00%	13	25.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	61	79.22%	16	20.78%	8	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1982 Total		561	87.38%	81	12.62%	211	86.12%	34	13.88%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1983	LDGV	322	93.60%	22	6.40%	191	85.27%	33	14.73%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	244	85.61%	41	14.39%	62	74.70%	21	25.30%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	97	85.84%	16	14.16%	14	87.50%	2	12.50%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1983 Total		663	89.35%	79	10.65%	267	82.66%	56	17.34%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1984	LDGV	820	94.04%	52	5.96%	528	82.89%	109	17.11%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	595	87.50%	85	12.50%	172	78.54%	47	21.46%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	209	88.56%	27	11.44%	39	86.67%	6	13.33%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1984 Total		1624	90.83%	164	9.17%	739	82.02%	162	17.98%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1985	LDGV	832	93.91%	54	6.09%	593	86.19%	95	13.81%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	657	89.02%	81	10.98%	363	82.88%	75	17.12%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	218	86.17%	35	13.83%	62	72.94%	23	27.06%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1985 Total		1707	90.94%	170	9.06%	1,018	84.06%	193	15.94%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1986	LDGV	1440	95.43%	69	4.57%	938	82.86%	194	17.14%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	1269	91.69%	115	8.31%	738	86.21%	118	13.79%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	327	89.10%	40	10.90%	104	83.87%	20	16.13%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1986 Total		3036	93.13%	224	6.87%	1,780	84.28%	332	15.72%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1987	LDGV	1359	95.03%	71	4.97%	957	82.79%	199	17.21%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	1086	92.74%	85	7.26%	684	83.41%	136	16.59%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	323	88.49%	42	11.51%	264	91.67%	24	8.33%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1987 Total		2768	93.32%	198	6.68%	1,905	84.14%	359	15.86%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1988	LDGV	2218	96.43%	82	3.57%	1,723	84.96%	305	15.04%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	1915	94.20%	118	5.80%	1,596	89.41%	189	10.59%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	660	91.16%	64	8.84%	642	92.37%	53	7.63%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1988 Total		4793	94.78%	264	5.22%	3,961	87.87%	547	12.13%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1989	LDGV	2277	95.43%	109	4.57%	2,052	88.99%	254	11.01%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	1797	91.68%	163	8.32%	1,498	86.04%	243	13.96%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	674	92.97%	51	7.03%	651	93.27%	47	6.73%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1989 Total		4748	93.63%	323	6.37%	4,201	88.54%	544	11.46%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1990	LDGV	4344	95.87%	187	4.13%	4,129	91.05%	406	8.95%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	2469	93.70%	166	6.30%	2,083	84.92%	370	15.08%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	983	91.70%	89	8.30%	1,037	95.84%	45	4.16%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1990 Total		7796	94.63%	442	5.37%	7,249	89.83%	821	10.17%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1991	LDGV	4650	95.29%	230	4.71%	4,479	90.56%	467	9.44%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	2700	93.26%	195	6.74%	2,591	90.31%	278	9.69%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	780	91.12%	76	8.88%	782	91.14%	76	8.86%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1991 Total		8130	94.20%	501	5.80%	7,852	90.53%	821	9.47%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1992	LDGV	6591	95.97%	277	4.03%	6,286	90.96%	625	9.04%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	3463	93.09%	257	6.91%	3,406	92.43%	279	7.57%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	1555	92.95%	118	7.05%	1,576	93.09%	117	6.91%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1992 Total		11609	94.68%	652	5.32%	11,268	91.69%	1,021	8.31%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1993	LDGV	6725	96.28%	260	3.72%	6,404	90.98%	635	9.02%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	4264	93.55%	294	6.45%	4,326	93.60%	296	6.40%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Vehicle		Cap Pressure				Eng Light				OBD				Evap System			
Year	Type	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%
	LDGT2	1547	93.25%	112	6.75%	1,533	91.74%	138	8.26%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1993 Total		12536	94.96%	666	5.04%	12,263	91.98%	1,069	8.02%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1994	LDGV	9098	96.49%	331	3.51%	8,576	89.70%	985	10.30%	240	76.68%	73	23.32%	0	0.00%	0	0.00%
	LDGT1	6534	94.16%	405	5.84%	6,254	89.47%	736	10.53%	9	100.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	2950	92.30%	246	7.70%	3,014	93.14%	222	6.86%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1994 Total		18582	94.98%	982	5.02%	17,844	90.18%	1,943	9.82%	249	77.33%	73	22.67%	0	0.00%	0	0.00%
1995	LDGV	11439	96.21%	450	3.79%	10,374	86.06%	1,681	13.94%	1,314	72.76%	492	27.24%	0	0.00%	0	0.00%
	LDGT1	6633	94.69%	372	5.31%	6,134	86.36%	969	13.64%	801	67.82%	380	32.18%	0	0.00%	0	0.00%
	LDGT2	3231	91.22%	311	8.78%	3,366	94.00%	215	6.00%	45	83.33%	9	16.67%	0	0.00%	0	0.00%
1995 Total		21303	94.95%	1,133	5.05%	19,874	87.40%	2,865	12.60%	2,160	71.03%	881	28.97%	0	0.00%	0	0.00%
1996	LDGV	14334	95.99%	599	4.01%	11,578	76.46%	3,565	23.54%	9,543	76.69%	2,900	23.31%	0	0.00%	0	0.00%
	LDGT1	8663	92.43%	710	7.57%	7,097	74.97%	2,369	25.03%	6,355	73.66%	2,273	26.34%	0	0.00%	0	0.00%
	LDGT2	3786	92.32%	315	7.68%	3,095	74.79%	1,043	25.21%	2,626	74.03%	921	25.97%	0	0.00%	0	0.00%
1996 Total		26783	94.28%	1,624	5.72%	21,770	75.73%	6,977	24.27%	18,524	75.25%	6,094	24.75%	0	0.00%	0	0.00%
1997	LDGV	15896	95.48%	753	4.52%	12,838	75.85%	4,087	24.15%	10,947	75.10%	3,630	24.90%	0	0.00%	0	0.00%
	LDGT1	10793	92.54%	870	7.46%	8,958	75.83%	2,855	24.17%	7,952	74.66%	2,699	25.34%	0	0.00%	0	0.00%
	LDGT2	4181	93.56%	288	6.44%	3,139	69.48%	1,379	30.52%	2,715	67.47%	1,309	32.53%	0	0.00%	0	0.00%
1997 Total		30870	94.17%	1,911	5.83%	24,935	74.98%	8,321	25.02%	21,614	73.89%	7,638	26.11%	0	0.00%	0	0.00%
1998	LDGV	20696	95.54%	967	4.46%	17,424	79.20%	4,575	20.80%	15,454	79.20%	4,058	20.80%	0	0.00%	0	0.00%
	LDGT1	16134	94.26%	983	5.74%	13,868	80.33%	3,395	19.67%	12,657	80.13%	3,139	19.87%	0	0.00%	0	0.00%
	LDGT2	5789	94.47%	339	5.53%	4,796	77.62%	1,383	22.38%	4,238	77.24%	1,249	22.76%	0	0.00%	0	0.00%
1998 Total		42619	94.90%	2,289	5.10%	36,088	79.42%	9,353	20.58%	32,349	79.30%	8,446	20.70%	0	0.00%	0	0.00%
1999	LDGV	20406	95.36%	992	4.64%	17,324	79.60%	4,440	20.40%	15,228	79.98%	3,811	20.02%	0	0.00%	0	0.00%
	LDGT1	14491	94.64%	821	5.36%	12,681	82.05%	2,775	17.95%	11,526	82.92%	2,374	17.08%	0	0.00%	0	0.00%
	LDGT2	7018	95.08%	363	4.92%	5,652	75.42%	1,842	24.58%	4,961	75.79%	1,585	24.21%	0	0.00%	0	0.00%
1999 Total		41915	95.06%	2,176	4.94%	35,657	79.74%	9,057	20.26%	31,715	80.32%	7,770	19.68%	0	0.00%	0	0.00%
2000	LDGV	29186	95.85%	1,265	4.15%	24,642	79.71%	6,274	20.29%	22,066	81.15%	5,126	18.85%	0	0.00%	0	0.00%
	LDGT1	20368	94.62%	1,157	5.38%	18,298	84.12%	3,455	15.88%	16,740	85.12%	2,927	14.88%	0	0.00%	0	0.00%
	LDGT2	7686	94.11%	481	5.89%	6,806	82.23%	1,471	17.77%	5,951	83.57%	1,170	16.43%	0	0.00%	0	0.00%
2000 Total		57240	95.17%	2,903	4.83%	49,746	81.62%	11,200	18.38%	44,757	82.91%	9,223	17.09%	0	0.00%	0	0.00%
2001	LDGV	24597	95.81%	1,075	4.19%	20,047	76.78%	6,064	23.22%	18,045	77.54%	5,227	22.46%	0	0.00%	0	0.00%
	LDGT1	16561	94.39%	984	5.61%	13,953	78.72%	3,772	21.28%	12,609	78.21%	3,514	21.79%	0	0.00%	0	0.00%
	LDGT2	6786	93.21%	494	6.79%	5,849	79.14%	1,542	20.86%	5,092	80.33%	1,247	19.67%	0	0.00%	0	0.00%
2001 Total		47944	94.94%	2,553	5.06%	39,849	77.79%	11,378	22.21%	35,746	78.16%	9,988	21.84%	0	0.00%	0	0.00%
2002	LDGV	31337	95.66%	1,423	4.34%	27,429	82.28%	5,908	17.72%	25,401	83.34%	5,076	16.66%	0	0.00%	0	0.00%
	LDGT1	24155	95.89%	1,035	4.11%	21,533	84.31%	4,007	15.69%	19,840	84.15%	3,737	15.85%	0	0.00%	0	0.00%
	LDGT2	7660	94.23%	469	5.77%	6,818	82.79%	1,417	17.21%	6,012	84.18%	1,130	15.82%	0	0.00%	0	0.00%
2002 Total		63152	95.57%	2,927	4.43%	55,780	83.11%	11,332	16.89%	51,253	83.75%	9,943	16.25%	0	0.00%	0	0.00%
2003	LDGV	23763	95.52%	1,114	4.48%	21,424	84.28%	3,996	15.72%	19,821	84.57%	3,616	15.43%	0	0.00%	0	0.00%
	LDGT1	16147	94.85%	877	5.15%	14,908	86.21%	2,385	13.79%	13,874	86.39%	2,185	13.61%	0	0.00%	0	0.00%
	LDGT2	6516	94.83%	355	5.17%	5,673	81.56%	1,283	18.44%	4,859	82.83%	1,007	17.17%	0	0.00%	0	0.00%
2003 Total		46426	95.19%	2,346	4.81%	42,005	84.57%	7,664	15.43%	38,554	84.99%	6,808	15.01%	0	0.00%	0	0.00%
2004	LDGV	28216	95.67%	1,278	4.33%	26,963	89.36%	3,212	10.64%	25,110	89.70%	2,882	10.30%	0	0.00%	0	0.00%
	LDGT1	24452	95.90%	1,046	4.10%	23,596	91.30%	2,249	8.70%	22,207	91.72%	2,005	8.28%	0	0.00%	0	0.00%
	LDGT2	9986	94.91%	535	5.09%	9,552	89.56%	1,114	10.44%	8,305	90.22%	900	9.78%	0	0.00%	0	0.00%
2004 Total		62654	95.64%	2,859	4.36%	60,111	90.14%	6,575	9.86%	55,622	90.58%	5,787	9.42%	0	0.00%	0	0.00%
2005	LDGV	21913	95.74%	976	4.26%	21,028	89.74%	2,405	10.26%	19,726	89.86%	2,225	10.14%	0	0.00%	0	0.00%

Vehicle		Cap Pressure				Eng Light				OBD				Evap System			
Year	Type	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%
	LDGT1	18415	96.44%	679	3.56%	17,451	90.28%	1,879	9.72%	16,364	90.40%	1,738	9.60%	0	0.00%	0	0.00%
	LDGT2	6309	96.12%	255	3.88%	6,024	90.59%	626	9.41%	5,262	91.24%	505	8.76%	0	0.00%	0	0.00%
2005 Total		46637	96.07%	1,910	3.93%	44,503	90.06%	4,910	9.94%	41,352	90.25%	4,468	9.75%	0	0.00%	0	0.00%
2006	LDGV	28389	97.53%	718	2.47%	27,755	93.13%	2,046	6.87%	26,304	93.30%	1,888	6.70%	0	0.00%	0	0.00%
	LDGT1	21223	96.85%	690	3.15%	20,810	93.89%	1,355	6.11%	19,659	94.10%	1,232	5.90%	0	0.00%	0	0.00%
	LDGT2	8397	96.34%	319	3.66%	8,339	94.16%	517	5.84%	7,749	94.59%	443	5.41%	0	0.00%	0	0.00%
2006 Total		58009	97.11%	1,727	2.89%	56,904	93.56%	3,918	6.44%	53,712	93.78%	3,563	6.22%	0	0.00%	0	0.00%
2007	LDGV	20240	97.34%	554	2.66%	20,036	94.22%	1,230	5.78%	18,939	94.09%	1,190	5.91%	0	0.00%	0	0.00%
	LDGT1	15417	95.77%	681	4.23%	15,533	95.12%	797	4.88%	14,856	95.21%	747	4.79%	0	0.00%	0	0.00%
	LDGT2	7227	95.85%	313	4.15%	7,328	95.50%	345	4.50%	6,871	95.03%	359	4.97%	0	0.00%	0	0.00%
2007 Total		42884	96.52%	1,548	3.48%	42,897	94.76%	2,372	5.24%	40,666	94.66%	2,296	5.34%	0	0.00%	0	0.00%
2008	LDGV	29891	98.09%	583	1.91%	30,320	97.15%	890	2.85%	29,098	97.21%	835	2.79%	0	0.00%	0	0.00%
	LDGT1	23221	97.13%	687	2.87%	23,708	97.81%	530	2.19%	23,037	97.93%	487	2.07%	0	0.00%	0	0.00%
	LDGT2	9969	95.77%	440	4.23%	10,507	97.31%	291	2.69%	10,096	97.41%	268	2.59%	0	0.00%	0	0.00%
2008 Total		63081	97.36%	1,710	2.64%	64,535	97.42%	1,711	2.58%	62,231	97.51%	1,590	2.49%	0	0.00%	0	0.00%
2009	LDGV	12751	98.11%	246	1.89%	13,113	97.57%	327	2.43%	12,648	97.59%	312	2.41%	0	0.00%	0	0.00%
	LDGT1	6437	96.32%	246	3.68%	6,956	97.86%	152	2.14%	6,796	97.69%	161	2.31%	0	0.00%	0	0.00%
	LDGT2	2825	94.23%	173	5.77%	3,549	97.71%	83	2.29%	3,438	97.64%	83	2.36%	0	0.00%	0	0.00%
2009 Total		22013	97.07%	665	2.93%	23,618	97.68%	562	2.32%	22,882	97.63%	556	2.37%	0	0.00%	0	0.00%
2010	LDGV	25002	98.32%	428	1.68%	27,403	98.88%	309	1.12%	26,619	99.01%	266	0.99%	0	0.00%	0	0.00%
	LDGT1	18850	97.84%	417	2.16%	20,728	99.28%	151	0.72%	20,258	99.34%	135	0.66%	0	0.00%	0	0.00%
	LDGT2	6440	96.12%	260	3.88%	9,945	98.84%	117	1.16%	9,696	98.86%	112	1.14%	0	0.00%	0	0.00%
2010 Total		50292	97.85%	1,105	2.15%	58,076	99.02%	577	0.98%	56,573	99.10%	513	0.90%	0	0.00%	0	0.00%
2011	LDGV	7845	98.44%	124	1.56%	9,184	98.85%	107	1.15%	8,910	98.98%	92	1.02%	0	0.00%	0	0.00%
	LDGT1	3730	98.26%	66	1.74%	4,223	99.41%	25	0.59%	4,120	99.52%	20	0.48%	0	0.00%	0	0.00%
	LDGT2	1616	95.56%	75	4.44%	2,121	98.70%	28	1.30%	2,073	98.90%	23	1.10%	0	0.00%	0	0.00%
2011 Total		13191	98.03%	265	1.97%	15,528	98.98%	160	1.02%	15,103	99.11%	135	0.89%	0	0.00%	0	0.00%
2012	LDGV	3255	97.95%	68	2.05%	3,936	99.09%	36	0.91%	3,757	98.92%	41	1.08%	0	0.00%	0	0.00%
	LDGT1	1079	98.99%	11	1.01%	1,230	98.80%	15	1.20%	1,197	98.93%	13	1.07%	0	0.00%	0	0.00%
	LDGT2	631	96.63%	22	3.37%	792	98.63%	11	1.37%	759	98.44%	12	1.56%	0	0.00%	0	0.00%
2012 Total		4965	98.01%	101	1.99%	5,958	98.97%	62	1.03%	5,713	98.86%	66	1.14%	0	0.00%	0	0.00%
2013	LDGV	1520	98.83%	18	1.17%	1,862	99.31%	13	0.69%	1,803	99.45%	10	0.55%	0	0.00%	0	0.00%
	LDGT1	572	99.48%	3	0.52%	706	99.72%	2	0.28%	689	99.42%	4	0.58%	0	0.00%	0	0.00%
	LDGT2	299	98.03%	6	1.97%	474	98.54%	7	1.46%	466	98.52%	7	1.48%	0	0.00%	0	0.00%
2013 Total		2391	98.88%	27	1.12%	3,042	99.28%	22	0.72%	2,958	99.30%	21	0.70%	0	0.00%	0	0.00%
2014	LDGV	412	99.04%	4	0.96%	501	98.82%	6	1.18%	484	99.18%	4	0.82%	0	0.00%	0	0.00%
	LDGT1	229	99.57%	1	0.43%	269	99.26%	2	0.74%	263	99.25%	2	0.75%	0	0.00%	0	0.00%
	LDGT2	113	100.00%	0	0.00%	157	98.13%	3	1.88%	153	98.71%	2	1.29%	0	0.00%	0	0.00%
2014 Total		754	99.34%	5	0.66%	927	98.83%	11	1.17%	900	99.12%	8	0.88%	0	0.00%	0	0.00%
2015	LDGV	33	100.00%	0	0.00%	36	100.00%	0	0.00%	34	100.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	22	100.00%	0	0.00%	23	100.00%	0	0.00%	22	100.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	1	100.00%	0	0.00%	2	100.00%	0	0.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%
2015 Total		56	100.00%	0	0.00%	61	100.00%	0	0.00%	58	100.00%	0	0.00%	0	0.00%	0	0.00%
Grand Total		823732	95.75%	36,530	4.25%	772,422	87.84%	106,929	12.16%	634,691	88.08%	85,867	11.92%	0	0.00%	0	0.00%

Records 1 - 102 (All Records)

Summary by Vehicle Type (V1.01)

Vehicle Type	Cap Pressure				Eng Light				OBD				Evap System			
	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%
LDGV	412049	96.40%	15399	3.60%	382237	87.32%	55499	12.68%	311491	87.68%	43754	12.32%	0	0.00%	0	0.00%
LDGT1	294833	95.35%	14386	4.65%	276475	88.50%	35940	11.50%	231831	88.62%	29772	11.38%	0	0.00%	0	0.00%
LDGT2	116850	94.54%	6745	5.46%	113710	88.01%	15490	11.99%	91369	88.10%	12341	11.90%	0	0.00%	0	0.00%
Grand Total	823732	95.75%	36530	4.25%	772422	87.84%	106929	12.16%	634691	88.08%	85867	11.92%	0	0.00%	0	0.00%

Appendix F

I/M240 Retest Pass Reduction Report

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	104	3.9839	63.2471	2.0249	55	52.88%	1.5672	18.1532	2.1417	1.5359	49.50%	28.4759	61.07%	0.0454	2.08%	496.00
	LDGT1	136	4.5133	78.9116	2.3657	75	55.15%	2.2434	29.1678	2.4843	1.8573	45.29%	31.3597	51.81%	-0.0332	-1.36%	0.00
	LDGT2	69	4.3852	110.7462	2.5159	18	26.09%	2.2590	37.7234	2.7417	1.9693	46.57%	70.8784	65.26%	-0.5985	-27.93%	227.50
1982 Total		309	4.3065	80.7481	2.2845	148	47.90%	1.9940	26.1151	2.3883	1.7515	46.76%	35.0944	57.33%	-0.0728	-3.14%	317.00
1983	LDGV	181	4.1904	68.1140	1.6785	71	39.23%	1.4678	15.5994	1.7900	1.9947	57.61%	40.9649	72.42%	0.0825	4.40%	180.50
	LDGT1	152	5.2357	71.4052	2.2716	86	56.58%	2.4776	30.1368	2.6042	1.6413	39.85%	26.2735	46.58%	-0.0498	-1.95%	343.50
	LDGT2	71	8.1776	107.9103	2.8140	28	39.44%	3.0518	35.8882	2.7348	3.3800	52.55%	33.9533	48.61%	0.5680	17.20%	0.00
1983 Total		404	5.2844	76.3462	2.1012	185	45.79%	2.1769	25.4280	2.3115	2.0401	48.38%	33.0742	56.53%	0.0945	3.93%	262.00
1984	LDGV	279	3.5028	55.7472	1.7424	131	46.95%	1.4737	14.5593	1.8324	1.5770	51.69%	30.9009	67.97%	-0.1052	-6.09%	374.33
	LDGT1	317	4.8199	75.9003	2.2792	180	56.78%	2.3297	26.5357	2.5526	1.7065	42.28%	30.9481	53.84%	-0.1487	-6.19%	310.00
	LDGT2	158	4.5290	76.1047	3.0019	80	50.63%	2.2404	28.2677	3.0143	1.2588	35.97%	27.4913	49.30%	0.4628	13.31%	0.00
1984 Total		754	4.2716	68.4860	2.2320	391	51.86%	2.0247	22.8775	2.4058	1.5715	43.70%	30.2250	56.92%	-0.0090	-0.38%	342.17
1985	LDGV	355	3.2825	47.5626	1.8986	154	43.38%	1.1406	9.5575	1.8672	1.4832	56.53%	20.4798	68.18%	0.2254	10.77%	162.40
	LDGT1	365	4.4083	64.3808	2.6062	175	47.95%	2.0603	21.3349	2.6428	1.7428	45.83%	29.1777	57.76%	0.1593	5.69%	309.50
	LDGT2	200	5.3178	79.3758	2.6813	81	40.50%	2.0030	23.2982	2.9484	1.9351	49.14%	33.4214	58.92%	0.1523	4.91%	480.60
1985 Total		920	4.1716	61.1510	2.3495	410	44.57%	1.7035	17.2990	2.4119	1.6833	49.70%	26.7491	60.73%	0.1828	7.04%	319.50
1986	LDGV	364	2.7794	36.0989	2.1411	184	50.55%	1.0603	8.2923	1.9325	1.1593	52.23%	18.4860	69.03%	0.2288	10.59%	448.75
	LDGT1	390	3.3879	52.8013	2.6369	234	60.00%	1.7402	17.2836	2.7621	0.9228	34.65%	21.4786	55.41%	0.0181	0.65%	305.50
	LDGT2	258	4.2732	72.9874	2.9707	117	45.35%	1.9431	21.5211	2.9149	1.8550	48.84%	32.9408	60.48%	0.2016	6.47%	257.50
1986 Total		1012	3.3947	51.9400	2.5436	535	52.87%	1.5507	15.1180	2.5102	1.2080	43.79%	22.9561	60.29%	0.1307	4.95%	345.25
1987	LDGV	438	3.2782	42.5611	1.9762	193	44.06%	1.0383	8.8095	1.7821	1.9720	65.51%	21.8157	71.23%	0.2551	12.52%	292.00
	LDGT1	448	3.8076	57.7872	2.2050	244	54.46%	1.4688	15.4848	2.3637	1.7905	54.93%	29.2476	65.38%	-0.0178	-0.76%	82.00
	LDGT2	189	4.3529	54.8439	3.2421	99	52.38%	1.7917	13.6849	3.0106	1.8381	50.64%	23.7827	63.48%	0.5751	16.04%	228.00
1987 Total		1075	3.6878	51.0660	2.2941	536	49.86%	1.3734	12.7487	2.2738	1.8647	57.58%	25.5622	66.72%	0.1900	7.71%	176.33
1988	LDGV	538	2.8117	34.3147	1.9318	262	48.70%	0.8418	7.9704	1.5929	1.4841	63.81%	19.6403	71.13%	0.2303	12.63%	236.86
	LDGT1	534	2.7263	36.9622	2.6814	294	55.06%	1.3010	12.9155	2.2439	1.1192	46.24%	17.0098	56.84%	0.3516	13.55%	206.30
	LDGT2	265	4.1121	43.3719	3.1738	134	50.57%	1.4407	11.5657	2.5384	1.9346	57.32%	19.8834	63.22%	0.6863	21.28%	352.50
1988 Total		1337	3.0353	37.1673	2.4774	690	51.61%	1.1538	10.7757	2.0539	1.4161	55.10%	18.5667	63.28%	0.3705	15.28%	261.64
1989	LDGV	495	2.9119	31.2323	2.0870	287	57.98%	0.8906	8.2517	1.7499	1.2829	59.03%	17.1076	67.46%	0.1888	9.74%	294.60
	LDGT1	665	3.5405	43.7145	2.5528	341	51.28%	1.3728	12.3780	2.2538	1.3608	49.78%	19.8551	61.60%	0.2415	9.68%	469.67
	LDGT2	219	3.8174	30.6127	3.2843	123	56.16%	1.5662	12.8514	2.8150	1.6574	51.41%	12.2429	48.79%	0.3468	10.97%	344.00
1989 Total		1379	3.3588	37.1532	2.5018	751	54.46%	1.2202	10.8786	2.1532	1.3796	53.07%	17.5584	61.74%	0.2386	9.98%	358.44
1990	LDGV	796	2.5947	28.7312	2.2880	470	59.05%	0.8456	7.8883	1.6999	1.1524	57.68%	16.0802	67.09%	0.4335	20.32%	370.20
	LDGT1	681	3.5080	40.0862	2.5460	396	58.15%	1.2141	11.5260	2.0892	1.5483	56.05%	19.2091	62.50%	0.3892	15.71%	207.92
	LDGT2	295	4.3158	33.4322	3.1035	176	59.66%	1.5261	12.5114	2.6175	1.8020	54.15%	12.3852	49.75%	0.5228	16.65%	185.25
1990 Total		1772	3.2322	33.8777	2.5229	1042	58.80%	1.1006	10.0516	2.0028	1.4126	56.21%	16.6452	62.35%	0.4318	17.73%	242.24
1991	LDGV	1118	2.5525	30.4305	2.1624	593	53.04%	0.7290	7.3633	1.5798	1.1949	62.11%	16.1157	68.64%	0.4785	23.25%	262.56
	LDGT1	678	3.0729	37.9018	2.4116	399	58.85%	1.1270	11.2685	1.8941	1.3318	54.16%	18.2372	61.81%	0.3897	17.07%	391.67
	LDGT2	345	3.1385	36.0539	3.3209	184	53.33%	1.2519	12.5324	2.4591	1.4603	53.84%	16.4151	56.71%	0.6629	21.23%	182.83
1991 Total		2141	2.8118	33.7026	2.4280	1176	54.93%	0.9459	9.4970	1.8240	1.2829	57.56%	16.8823	64.00%	0.4773	20.74%	276.67
1992	LDGV	1416	2.4471	29.7292	1.9809	750	52.97%	0.6749	6.7297	1.5692	1.0549	60.99%	16.8657	71.48%	0.2566	14.05%	293.08
	LDGT1	724	2.6915	30.4148	2.6393	467	64.50%	1.0894	10.9100	1.9125	0.8419	43.59%	12.5265	53.45%	0.4778	19.99%	212.00
	LDGT2	614	3.5417	37.7181	3.1173	298	48.53%	1.3416	12.8246	2.3491	1.5511	53.62%	17.7555	58.06%	0.5550	19.11%	645.33
1992 Total		2754	2.7554	31.6906	2.4074	1515	55.01%	0.9338	9.2172	1.8284	1.0868	53.79%	15.7032	63.01%	0.3835	17.34%	319.00

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)	
1993	LDGV	1454	2.0711	26.3507	2.2254	775	53.30%	0.6889	6.5521	1.6309	0.9228	57.26%	16.0093	70.96%	0.3635	18.23%	279.45
	LDGT1	1027	2.8009	31.5916	2.9475	595	57.94%	1.0359	9.9014	2.0621	1.1092	51.71%	13.3974	57.50%	0.7462	26.57%	290.13
	LDGT2	615	3.4104	27.6212	3.2812	315	51.22%	1.3618	12.7215	2.2535	1.7502	56.24%	11.3216	47.09%	0.8169	26.60%	324.10
1993 Total		3096	2.5792	28.3416	2.6747	1685	54.43%	0.9372	8.8881	1.8996	1.1433	54.95%	14.2107	61.52%	0.5834	23.50%	297.79
1994	LDGV	1633	1.8209	20.4693	2.0413	897	54.93%	0.5294	5.6833	1.3599	0.8454	61.49%	11.7056	67.32%	0.4248	23.80%	363.24
	LDGT1	1387	2.3171	27.6136	2.7970	863	62.22%	0.8694	8.9920	1.8858	0.8729	50.10%	11.4637	56.04%	0.6685	26.17%	346.29
	LDGT2	1337	3.0103	28.2397	2.9575	635	47.49%	0.9844	10.0640	1.9674	1.3635	58.07%	14.9402	59.75%	0.7892	28.63%	296.82
1994 Total		4357	2.3439	25.1281	2.5630	2395	54.97%	0.7725	8.0370	1.7105	0.9927	56.24%	12.4760	60.82%	0.6092	26.26%	338.97
1995	LDGV	2070	1.9345	18.8266	1.8714	1119	54.06%	0.5035	5.0766	1.1948	0.8538	62.91%	10.2391	66.85%	0.4505	27.38%	353.92
	LDGT1	1626	2.1879	25.6679	3.1137	951	58.49%	0.7850	8.7288	1.9055	0.9371	54.42%	13.0111	59.85%	0.8640	31.20%	383.31
	LDGT2	1460	2.8078	26.8461	2.9362	722	49.45%	0.9831	10.1076	1.8780	1.1811	54.58%	12.5601	55.41%	0.8840	32.01%	421.25
1995 Total		5156	2.2617	23.2549	2.5647	2792	54.15%	0.7234	7.6216	1.6135	0.9669	57.20%	11.7835	60.72%	0.7034	30.36%	381.00
1996	LDGV	1969	1.3619	16.8297	1.6809	1258	63.89%	0.4046	4.6182	0.9655	0.6651	62.18%	9.4775	67.24%	0.4472	31.66%	360.82
	LDGT1	1633	1.2530	15.5015	2.5386	1160	71.03%	0.4303	5.4843	1.5640	0.5620	56.63%	7.8213	58.78%	0.6069	27.96%	376.33
	LDGT2	828	1.6001	18.8686	2.5244	535	64.61%	0.5271	5.9612	1.4240	0.6433	54.96%	8.5053	58.79%	0.7161	33.46%	400.20
1996 Total		4430	1.3663	16.7212	2.1547	2953	66.66%	0.4369	5.2017	1.2837	0.6206	58.69%	8.6508	62.45%	0.5587	30.32%	372.98
1997	LDGV	2500	1.2665	16.4780	1.7082	1567	62.68%	0.3757	4.4108	0.9163	0.5765	60.55%	9.1960	67.58%	0.4866	34.68%	315.50
	LDGT1	2389	1.0259	16.4624	2.4426	1599	66.93%	0.3962	5.4817	1.3987	0.4243	51.71%	7.9818	59.28%	0.7215	34.03%	336.81
	LDGT2	1145	1.7084	17.8323	2.7845	653	57.03%	0.4576	5.9374	1.4107	0.8075	63.83%	9.0198	60.30%	0.9355	39.87%	359.36
1997 Total		6034	1.2551	16.7288	2.2032	3819	63.29%	0.3983	5.1202	1.2028	0.5523	58.10%	8.6575	62.84%	0.6617	35.49%	331.04
1998	LDGV	3082	0.9656	14.1740	1.5065	1968	63.85%	0.2967	4.0285	0.7196	0.4763	61.62%	8.0812	66.73%	0.5151	41.72%	332.68
	LDGT1	2781	1.1323	14.4214	2.3203	1911	68.72%	0.3621	4.6970	1.2421	0.4384	54.76%	6.8278	59.24%	0.7168	36.59%	348.25
	LDGT2	1382	1.5105	18.1934	2.7505	812	58.76%	0.3943	5.3402	1.3016	0.7556	65.71%	8.9905	62.74%	1.0651	45.00%	475.20
1998 Total		7245	1.1335	15.0357	2.0562	4691	64.75%	0.3402	4.5279	1.0332	0.5092	59.95%	7.7280	63.06%	0.6925	40.13%	354.47
1999	LDGV	3094	0.8226	12.0754	1.6298	1958	63.28%	0.2549	3.4669	0.6935	0.3884	60.38%	6.4160	64.92%	0.5999	46.38%	370.05
	LDGT1	2486	0.8959	14.6166	2.0832	1583	63.68%	0.3006	4.1056	0.9977	0.4121	57.83%	7.3164	64.05%	0.7442	42.72%	379.12
	LDGT2	1762	1.4816	16.0775	2.5330	978	55.51%	0.3447	4.0366	1.0975	0.7466	68.41%	9.4020	69.96%	1.0704	49.38%	533.67
1999 Total		7342	1.0056	13.8963	2.0001	4519	61.55%	0.2903	3.8139	0.8875	0.4743	62.03%	7.3776	65.92%	0.7523	45.88%	403.94
2000	LDGV	3626	0.7927	11.3949	1.5443	2447	67.48%	0.2170	3.2043	0.5877	0.3789	63.58%	6.2756	66.20%	0.6461	52.36%	347.05
	LDGT1	2784	0.6555	10.7744	1.8541	1914	68.75%	0.2693	3.7939	0.8983	0.2454	47.68%	4.9020	56.37%	0.5502	37.98%	502.71
	LDGT2	1346	1.1127	16.1664	2.0833	866	64.34%	0.2814	3.7142	0.9452	0.4173	59.72%	7.5278	66.96%	0.6943	42.35%	621.50
2000 Total		7756	0.7990	12.0003	1.7490	5227	67.39%	0.2468	3.5047	0.7607	0.3364	57.68%	5.9801	63.05%	0.6189	44.86%	440.65
2001	LDGV	2690	0.6733	10.3332	1.3617	1896	70.48%	0.1761	3.0443	0.4463	0.3062	63.48%	5.4976	64.36%	0.5662	55.92%	251.88
	LDGT1	1885	0.6798	11.6185	1.4637	1433	76.02%	0.1843	3.2879	0.5893	0.2495	57.52%	5.5874	62.95%	0.5286	47.28%	270.00
	LDGT2	980	0.8015	11.8650	1.6872	729	74.39%	0.2683	3.7659	0.7958	0.3577	57.14%	5.9162	61.10%	0.5036	38.75%	282.13
2001 Total		5555	0.6981	11.0396	1.4537	4058	73.05%	0.1956	3.2600	0.5596	0.2954	60.17%	5.6045	63.22%	0.5417	49.19%	263.79
2002	LDGV	2897	0.5803	8.1506	1.3306	2180	75.25%	0.1428	2.6097	0.3771	0.2489	63.54%	3.9823	60.41%	0.6185	62.12%	335.20
	LDGT1	1981	0.6571	15.4028	1.3380	1514	76.43%	0.1510	3.3385	0.5110	0.2995	66.48%	7.5246	69.27%	0.4749	48.17%	354.92
	LDGT2	910	0.5989	9.1507	1.6742	687	75.49%	0.2295	3.3341	0.8104	0.2762	54.61%	4.6540	58.26%	0.4944	37.89%	463.50
2002 Total		5788	0.6095	10.7900	1.3871	4381	75.69%	0.1593	2.9751	0.4913	0.2707	62.96%	5.3118	64.10%	0.5494	52.79%	356.00
2003	LDGV	2034	0.5133	7.9982	1.1633	1573	77.34%	0.1144	1.9751	0.3082	0.2716	70.35%	3.8196	65.91%	0.5059	62.14%	268.65
	LDGT1	1353	0.5729	10.4450	1.0607	1128	83.37%	0.1232	2.5872	0.4425	0.2430	66.35%	4.7242	64.61%	0.3585	44.76%	102.71
	LDGT2	609	0.8016	11.2687	1.5637	495	81.28%	0.2016	2.7955	0.5958	0.3940	66.15%	5.6769	67.00%	0.5160	46.41%	504.17
2003 Total		3996	0.5774	9.3251	1.1896	3196	79.98%	0.1310	2.3182	0.4001	0.2805	68.16%	4.4265	65.63%	0.4554	53.23%	277.03

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)	
2004	LDGV	2068	0.4647	7.6036	1.0039	1670	80.75%	0.0944	1.7808	0.2414	0.2368	71.49%	3.7502	67.80%	0.4216	63.59%	368.17
	LDGT1	1538	0.3910	9.4800	0.7568	1327	86.28%	0.0985	2.2990	0.2591	0.1673	62.95%	4.6902	67.11%	0.3110	54.55%	189.50
	LDGT2	752	0.3245	5.9802	0.9785	648	86.17%	0.1191	2.3228	0.3063	0.1299	52.18%	2.5856	52.68%	0.3865	55.79%	134.33
2004 Total		4358	0.4145	7.9857	0.9123	3645	83.64%	0.1003	2.0658	0.2594	0.1925	65.75%	3.8854	65.29%	0.3751	59.12%	249.93
2005	LDGV	1512	0.3967	7.0260	0.8178	1283	84.85%	0.0798	1.6021	0.2021	0.1938	70.84%	3.6023	69.22%	0.4151	67.26%	554.17
	LDGT1	878	0.2121	4.6741	0.6635	802	91.34%	0.0881	1.9566	0.2141	0.0841	48.83%	1.8793	48.99%	0.2975	58.15%	266.25
	LDGT2	435	0.5407	8.0988	1.3801	350	80.46%	0.1595	2.5895	0.3669	0.2532	61.35%	3.3543	56.43%	0.6432	63.68%	250.00
2005 Total		2825	0.3615	6.4603	0.8564	2435	86.19%	0.0940	1.8608	0.2297	0.1662	63.88%	2.9992	61.71%	0.4092	64.04%	421.82
2006	LDGV	1205	0.5170	8.6359	0.9592	1008	83.65%	0.0862	1.6689	0.1954	0.2650	75.46%	4.6853	73.74%	0.5412	73.47%	266.20
	LDGT1	835	0.1637	4.5206	0.5332	784	93.89%	0.0605	1.4555	0.1709	0.0634	51.15%	1.8976	56.59%	0.2273	57.08%	104.00
	LDGT2	460	0.5623	6.8245	1.0936	382	83.04%	0.1113	1.8264	0.2467	0.2015	64.41%	2.0856	53.31%	0.4528	64.73%	162.00
2006 Total		2500	0.4074	6.9281	0.8417	2174	86.96%	0.0814	1.6196	0.1956	0.1811	69.01%	3.2232	66.56%	0.4124	67.83%	212.63
2007	LDGV	816	0.4339	7.0171	0.9024	719	88.11%	0.0635	1.6355	0.1349	0.2782	81.41%	3.3125	66.95%	0.5624	80.65%	290.20
	LDGT1	764	0.0881	3.4471	0.2785	741	96.99%	0.0398	1.3290	0.1106	0.0304	43.34%	1.4775	52.65%	0.1348	54.92%	266.60
	LDGT2	359	0.2670	3.2519	0.5483	337	93.87%	0.0648	1.1549	0.1305	0.1341	67.41%	1.2592	52.16%	0.2780	68.05%	0.00
2007 Total		1939	0.2668	4.9134	0.5910	1797	92.68%	0.0540	1.4190	0.1241	0.1490	73.41%	2.1708	60.47%	0.3327	72.84%	278.40
2008	LDGV	809	0.2781	5.8483	0.6309	723	89.37%	0.0528	1.5156	0.1069	0.1390	72.48%	2.7155	64.18%	0.4071	79.19%	193.17
	LDGT1	747	0.0513	1.6534	0.2204	735	98.39%	0.0284	1.0630	0.0663	0.0198	41.12%	0.5589	34.46%	0.1105	62.51%	39.50
	LDGT2	529	0.1311	4.5021	0.2783	484	91.49%	0.0710	2.6274	0.1112	0.0354	33.27%	0.8218	23.82%	0.1170	51.28%	362.17
2008 Total		2085	0.1596	4.0038	0.3944	1942	93.14%	0.0481	1.6214	0.0926	0.0681	58.60%	1.4273	46.82%	0.2226	70.61%	218.13
2009	LDGV	337	0.2295	3.5305	0.8847	314	93.18%	0.0644	1.6659	0.1288	0.1184	64.78%	1.3695	45.12%	0.6322	83.07%	378.33
	LDGT1	261	0.0303	1.1329	0.1371	257	98.47%	0.0297	1.2178	0.0785	0.0006	1.97%	-0.0881	-7.80%	0.0599	43.30%	0.00
	LDGT2	173	0.0830	2.0132	0.1209	169	97.69%	0.0412	1.3028	0.0739	0.0173	29.53%	0.0571	4.20%	0.0282	27.62%	3.00
2009 Total		771	0.1292	2.3784	0.4603	740	95.98%	0.0470	1.4273	0.0988	0.0544	53.61%	0.5635	28.31%	0.2955	74.94%	284.50
2010	LDGV	547	0.3708	3.9949	0.5050	489	89.40%	0.0636	1.5802	0.1025	0.1230	65.91%	1.1113	41.29%	0.2772	73.00%	620.00
	LDGT1	440	0.0408	1.0881	0.1604	435	98.86%	0.0282	0.8634	0.0596	0.0127	31.02%	0.2120	19.72%	0.1022	63.19%	51.67
	LDGT2	274	0.0661	1.4493	0.1452	271	98.91%	0.0371	1.0260	0.0800	0.0199	34.97%	0.3722	26.62%	0.0476	37.33%	0.00
2010 Total		1261	0.1894	2.4275	0.3066	1195	94.77%	0.0447	1.1936	0.0818	0.0595	57.09%	0.6163	34.05%	0.1615	66.38%	193.75
2011	LDGV	150	0.3183	4.7889	0.6653	140	93.33%	0.0481	1.4054	0.1184	0.1391	74.31%	2.0604	59.45%	0.3188	72.92%	0.00
	LDGT1	73	0.0386	1.4196	0.1289	72	98.63%	0.0243	1.0506	0.1398	0.0138	36.19%	0.3344	24.14%	-0.0108	-8.39%	0.00
	LDGT2	71	0.2543	1.8545	0.1559	70	98.59%	0.0352	0.9802	0.0686	0.2224	86.34%	0.8932	47.68%	0.0891	56.50%	0.00
2011 Total		294	0.2334	3.2436	0.4091	282	95.92%	0.0388	1.2093	0.1115	0.1278	76.70%	1.3300	52.38%	0.1776	61.44%	0.00
2012	LDGV	69	0.1142	2.2087	0.3951	67	97.10%	0.0219	1.1588	0.0680	0.0953	81.32%	1.1039	48.79%	0.3374	83.22%	0.00
	LDGT1	11	0.0530	3.3318	0.0839	11	100.00%	0.0235	0.9350	0.0486	0.0295	55.67%	2.3967	71.94%	0.0353	42.05%	0.00
	LDGT2	23	0.0710	1.3166	0.1367	23	100.00%	0.0738	0.9561	0.1211	-0.0028	-3.94%	0.3606	27.39%	0.0156	11.39%	0.00
2012 Total		103	0.0980	2.1294	0.3041	101	98.06%	0.0339	1.0882	0.0780	0.0658	66.00%	1.0754	49.70%	0.2312	74.78%	0.00
2013	LDGV	20	0.0349	1.2939	0.0922	20	100.00%	0.0187	0.5368	0.0495	0.0162	46.35%	0.7570	58.51%	0.0427	46.34%	0.00
	LDGT1	3	0.0325	0.6308	0.0437	3	100.00%	0.0311	0.7113	0.0458	0.0014	4.31%	-0.0805	-12.77%	-0.0021	-4.73%	0.00
	LDGT2	5	0.0301	0.9262	0.0440	5	100.00%	0.0264	0.6212	0.0424	0.0037	12.37%	0.3051	32.94%	0.0016	3.55%	0.00
2013 Total		28	0.0338	1.1572	0.0784	28	100.00%	0.0214	0.5706	0.0478	0.0124	36.61%	0.5866	50.69%	0.0306	39.00%	0.00
2014	LDGV	2	0.0154	1.1141	0.0453	2	100.00%	0.0136	0.4691	0.0417	0.0018	12.01%	0.6449	57.89%	0.0036	7.96%	0.00
	LDGT1	1	0.0108	0.4131	0.0492	1	100.00%	0.0126	0.4398	0.0713	-0.0018	-16.67%	-0.0267	-6.46%	-0.0221	-44.92%	0.00
	LDGT2	1	0.0000	0.0000	0.0000	1	100.00%	0.0192	0.2668	0.0369	-0.0192	0.00%	-0.2668	0.00%	-0.0369	0.00%	0.00
2014 Total		4	0.0104	0.6603	0.0349	4	100.00%	0.0147	0.4112	0.0479	-0.0043	-41.59%	0.2491	37.72%	-0.0130	-37.08%	0.00

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)
Grand Total		90780	1.3886	18.1000	1.8108	61438	67.68%	0.4000	4.8155	0.9209	0.5338	57.17%	7.9789	62.36%	0.5140	35.82%	327.55

Records 1 - 99 (All Records)

Summary by Vehicle Type (V1.01)

Vehicle Type	Initial Exhaust Emissions				Passing Retest Exhaust Emissions					Emission Reductions						Average Repair Costs
	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	40668	1.2041	15.8013	1.5257	27223	66.94%	0.3073	3.7673	0.7085	0.5045	62.14%	7.7157	67.19%	0.4877	40.77%	322.80
LDGT1	31973	1.3627	19.2914	1.9091	22710	71.03%	0.4447	5.4641	1.0482	0.4817	52.00%	7.9971	59.41%	0.4828	31.54%	311.16
LDGT2	18139	1.8477	21.1537	2.2764	11505	63.43%	0.5309	6.0156	1.1720	0.7063	57.09%	8.5659	58.74%	0.6378	35.24%	368.17
Grand Total	90780	1.3886	18.1000	1.8108	61438	67.68%	0.4000	4.8155	0.9209	0.5338	57.17%	7.9789	62.36%	0.5140	35.82%	327.55

Appendix G

I/M240 Retest Frequency Report

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	104	1.9	57	54.81%	33	57.89%	21	20.19%	11	52.38%	11	10.58%	6	54.55%	5	4.81%	1	20.00%	10	9.62%	4	40.00%
	LDGT1	136	1.3	83	61.03%	61	73.49%	21	15.44%	8	38.10%	12	8.82%	4	33.33%	8	5.88%	1	12.50%	12	8.82%	1	8.33%
	LDGT2	69	1.8	28	40.58%	11	39.29%	15	21.74%	3	20.00%	9	13.04%	3	33.33%	5	7.25%	0	0.00%	12	17.39%	1	8.33%
1982 Total		309	1.6	168	54.37%	105	62.50%	57	18.45%	22	38.60%	32	10.36%	13	40.63%	18	5.83%	2	11.11%	34	11.00%	6	17.65%
1983	LDGV	181	1.9	86	47.51%	36	41.86%	42	23.20%	16	38.10%	26	14.36%	11	42.31%	15	8.29%	4	26.67%	12	6.63%	4	33.33%
	LDGT1	152	1.7	90	59.21%	57	63.33%	31	20.39%	16	51.61%	15	9.87%	4	26.67%	9	5.92%	7	77.78%	7	4.61%	2	28.57%
	LDGT2	71	1.9	38	53.52%	16	42.11%	12	16.90%	7	58.33%	6	8.45%	2	33.33%	5	7.04%	1	20.00%	10	14.08%	2	20.00%
1983 Total		404	1.8	214	52.97%	109	50.93%	85	21.04%	39	45.88%	47	11.63%	17	36.17%	29	7.18%	12	41.38%	29	7.18%	8	27.59%
1984	LDGV	279	1.8	155	55.56%	82	52.90%	56	20.07%	22	39.29%	29	10.39%	9	31.03%	19	6.81%	9	47.37%	20	7.17%	9	45.00%
	LDGT1	317	1.6	194	61.20%	116	59.79%	67	21.14%	36	53.73%	31	9.78%	18	58.06%	13	4.10%	5	38.46%	12	3.79%	5	41.67%
	LDGT2	158	1.9	79	50.00%	44	55.70%	38	24.05%	20	52.63%	18	11.39%	8	44.44%	6	3.80%	2	33.33%	17	10.76%	6	35.29%
1984 Total		754	1.8	428	56.76%	242	56.54%	161	21.35%	78	48.45%	78	10.34%	35	44.87%	38	5.04%	16	42.11%	49	6.50%	20	40.82%
1985	LDGV	355	1.9	178	50.14%	96	53.93%	75	21.13%	27	36.00%	44	12.39%	16	36.36%	23	6.48%	3	13.04%	35	9.86%	12	34.29%
	LDGT1	365	1.7	204	55.89%	107	52.45%	75	20.55%	36	48.00%	40	10.96%	15	37.50%	23	6.30%	10	43.48%	23	6.30%	7	30.43%
	LDGT2	200	1.9	98	49.00%	48	48.98%	47	23.50%	14	29.79%	25	12.50%	9	36.00%	16	8.00%	4	25.00%	14	7.00%	6	42.86%
1985 Total		920	1.8	480	52.17%	251	52.29%	197	21.41%	77	39.09%	109	11.85%	40	36.70%	62	6.74%	17	27.42%	72	7.83%	25	34.72%
1986	LDGV	364	1.6	216	59.34%	123	56.94%	77	21.15%	35	45.45%	34	9.34%	15	44.12%	13	3.57%	7	53.85%	24	6.59%	4	16.67%
	LDGT1	390	1.5	253	64.87%	173	68.38%	69	17.69%	29	42.03%	35	8.97%	14	40.00%	17	4.36%	8	47.06%	16	4.10%	10	62.50%
	LDGT2	258	1.8	127	49.22%	68	53.54%	60	23.26%	24	40.00%	33	12.79%	12	36.36%	16	6.20%	6	37.50%	22	8.53%	7	31.82%
1986 Total		1012	1.6	596	58.89%	364	61.07%	206	20.36%	88	42.72%	102	10.08%	41	40.20%	46	4.55%	21	45.65%	62	6.13%	21	33.87%
1987	LDGV	438	1.7	235	53.65%	132	56.17%	85	19.41%	25	29.41%	53	12.10%	20	37.74%	31	7.08%	9	29.03%	34	7.76%	7	20.59%
	LDGT1	448	1.7	265	59.15%	155	58.49%	101	22.54%	50	49.50%	43	9.60%	22	51.16%	15	3.35%	6	40.00%	24	5.36%	11	45.83%
	LDGT2	189	1.8	101	53.44%	61	60.40%	41	21.69%	17	41.46%	25	13.23%	11	44.00%	11	5.82%	5	45.45%	11	5.82%	5	45.45%
1987 Total		1075	1.7	601	55.91%	348	57.90%	227	21.12%	92	40.53%	121	11.26%	53	43.80%	57	5.30%	20	35.09%	69	6.42%	23	33.33%
1988	LDGV	538	1.7	311	57.81%	174	55.95%	109	20.26%	39	35.78%	57	10.59%	24	42.11%	30	5.58%	12	40.00%	31	5.76%	13	41.94%
	LDGT1	534	1.6	321	60.11%	206	64.17%	101	18.91%	42	41.58%	55	10.30%	24	43.64%	27	5.06%	14	51.85%	30	5.62%	8	26.67%
	LDGT2	265	1.8	151	56.98%	85	56.29%	60	22.64%	28	46.67%	23	8.68%	10	43.48%	11	4.15%	5	45.45%	20	7.55%	6	30.00%
1988 Total		1337	1.7	783	58.56%	465	59.39%	270	20.19%	109	40.37%	135	10.10%	58	42.96%	68	5.09%	31	45.59%	81	6.06%	27	33.33%
1989	LDGV	495	1.6	308	62.22%	206	66.88%	94	18.99%	41	43.62%	48	9.70%	21	43.75%	25	5.05%	10	40.00%	20	4.04%	9	45.00%
	LDGT1	665	1.7	375	56.39%	229	61.07%	137	20.60%	64	46.72%	62	9.32%	19	30.65%	34	5.11%	14	41.18%	57	8.57%	15	26.32%
	LDGT2	219	1.7	135	61.64%	79	58.52%	41	18.72%	24	58.54%	24	10.96%	11	45.83%	10	4.57%	5	50.00%	9	4.11%	4	44.44%
1989 Total		1379	1.6	818	59.32%	514	62.84%	272	19.72%	129	47.43%	134	9.72%	51	38.06%	69	5.00%	29	42.03%	86	6.24%	28	32.56%
1990	LDGV	796	1.5	507	63.69%	328	64.69%	158	19.85%	89	56.33%	65	8.17%	32	49.23%	28	3.52%	10	35.71%	38	4.77%	11	28.95%
	LDGT1	681	1.6	409	60.06%	271	66.26%	136	19.97%	69	50.74%	66	9.69%	25	37.88%	35	5.14%	18	51.43%	35	5.14%	13	37.14%
	LDGT2	295	1.5	190	64.41%	124	65.26%	63	21.36%	34	53.97%	21	7.12%	10	47.62%	8	2.71%	3	37.50%	13	4.41%	5	38.46%
1990 Total		1772	1.5	1106	62.42%	723	65.37%	357	20.15%	192	53.78%	152	8.58%	67	44.08%	71	4.01%	31	43.66%	86	4.85%	29	33.72%
1991	LDGV	1118	1.6	652	58.32%	409	62.73%	224	20.04%	97	43.30%	117	10.47%	38	32.48%	63	5.64%	25	39.68%	62	5.55%	24	38.71%
	LDGT1	678	1.6	425	62.68%	289	68.00%	125	18.44%	58	46.40%	56	8.26%	28	50.00%	30	4.42%	10	33.33%	42	6.19%	14	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%
	LDGT2	345	1.8	199	57.68%	124	62.31%	60	17.39%	25	41.67%	40	11.59%	17	42.50%	20	5.80%	6	30.00%	26	7.54%	12	46.15%
1991 Total		2141	1.6	1276	59.60%	822	64.42%	409	19.10%	180	44.01%	213	9.95%	83	38.97%	113	5.28%	41	36.28%	130	6.07%	50	38.46%
1992	LDGV	1416	1.6	839	59.25%	527	62.81%	265	18.71%	106	40.00%	145	10.24%	56	38.62%	77	5.44%	22	28.57%	90	6.36%	39	43.33%
	LDGT1	724	1.4	488	67.40%	359	73.57%	120	16.57%	62	51.67%	59	8.15%	24	40.68%	27	3.73%	11	40.74%	30	4.14%	11	36.67%
	LDGT2	614	1.8	330	53.75%	200	60.61%	118	19.22%	44	37.29%	71	11.56%	23	32.39%	38	6.19%	17	44.74%	57	9.28%	14	24.56%
1992 Total		2754	1.6	1657	60.17%	1086	65.54%	503	18.26%	212	42.15%	275	9.99%	103	37.45%	142	5.16%	50	35.21%	177	6.43%	64	36.16%
1993	LDGV	1454	1.7	853	58.67%	515	60.38%	302	20.77%	139	46.03%	139	9.56%	63	45.32%	65	4.47%	29	44.62%	95	6.53%	29	30.53%
	LDGT1	1027	1.6	649	63.19%	425	65.49%	188	18.31%	79	42.02%	101	9.83%	49	48.51%	46	4.48%	21	45.65%	43	4.19%	21	48.84%
	LDGT2	615	1.9	330	53.66%	196	59.39%	126	20.49%	47	37.30%	78	12.68%	36	46.15%	36	5.85%	17	47.22%	45	7.32%	19	42.22%
1993 Total		3096	1.7	1832	59.17%	1136	62.01%	616	19.90%	265	43.02%	318	10.27%	148	46.54%	147	4.75%	67	45.58%	183	5.91%	69	37.70%
1994	LDGV	1633	1.6	989	60.56%	625	63.20%	308	18.86%	143	46.43%	152	9.31%	64	42.11%	83	5.08%	31	37.35%	101	6.18%	34	33.66%
	LDGT1	1387	1.5	913	65.83%	638	69.88%	239	17.23%	123	51.46%	106	7.64%	47	44.34%	59	4.25%	30	50.85%	70	5.05%	25	35.71%
	LDGT2	1337	1.9	707	52.88%	387	54.74%	286	21.39%	120	41.96%	151	11.29%	56	37.09%	83	6.21%	36	43.37%	110	8.23%	36	32.73%
1994 Total		4357	1.6	2609	59.88%	1650	63.24%	833	19.12%	386	46.34%	409	9.39%	167	40.83%	225	5.16%	97	43.11%	281	6.45%	95	33.81%
1995	LDGV	2070	1.6	1227	59.28%	787	64.14%	375	18.12%	170	45.33%	200	9.66%	78	39.00%	104	5.02%	36	34.62%	164	7.92%	48	29.27%
	LDGT1	1626	1.6	1008	61.99%	665	65.97%	318	19.56%	155	48.74%	149	9.16%	60	40.27%	83	5.10%	36	43.37%	68	4.18%	35	51.47%
	LDGT2	1460	1.9	767	52.53%	448	58.41%	295	20.21%	117	39.66%	168	11.51%	70	41.67%	100	6.85%	32	32.00%	130	8.90%	55	42.31%
1995 Total		5156	1.7	3002	58.22%	1900	63.29%	988	19.16%	442	44.74%	517	10.03%	208	40.23%	287	5.57%	104	36.24%	362	7.02%	138	38.12%
1996	LDGV	1969	1.4	1340	68.05%	976	72.84%	328	16.66%	155	47.26%	153	7.77%	68	44.44%	69	3.50%	28	40.58%	79	4.01%	31	39.24%
	LDGT1	1633	1.3	1197	73.30%	935	78.11%	247	15.13%	134	54.25%	99	6.06%	54	54.55%	44	2.69%	19	43.18%	46	2.82%	18	39.13%
	LDGT2	828	1.4	570	68.84%	417	73.16%	140	16.91%	69	49.29%	59	7.13%	25	42.37%	28	3.38%	11	39.29%	31	3.74%	13	41.94%
1996 Total		4430	1.4	3107	70.14%	2328	74.93%	715	16.14%	358	50.07%	311	7.02%	147	47.27%	141	3.18%	58	41.13%	156	3.52%	62	39.74%
1997	LDGV	2500	1.4	1688	67.52%	1199	71.03%	426	17.04%	215	50.47%	184	7.36%	78	42.39%	93	3.72%	38	40.86%	109	4.36%	37	33.94%
	LDGT1	2389	1.4	1665	69.69%	1238	74.35%	395	16.53%	213	53.92%	179	7.49%	87	48.60%	72	3.01%	31	43.06%	78	3.26%	30	38.46%
	LDGT2	1145	1.7	679	59.30%	452	66.57%	218	19.04%	95	43.58%	116	10.13%	51	43.97%	61	5.33%	25	40.98%	71	6.20%	30	42.25%
1997 Total		6034	1.5	4032	66.82%	2889	71.65%	1039	17.22%	523	50.34%	479	7.94%	216	45.09%	226	3.75%	94	41.59%	258	4.28%	97	37.60%
1998	LDGV	3082	1.4	2117	68.69%	1514	71.52%	508	16.48%	258	50.79%	228	7.40%	104	45.61%	113	3.67%	45	39.82%	116	3.76%	47	40.52%
	LDGT1	2781	1.4	1951	70.15%	1493	76.52%	449	16.15%	245	54.57%	192	6.90%	82	42.71%	98	3.52%	51	52.04%	91	3.27%	40	43.96%
	LDGT2	1382	1.6	851	61.58%	551	64.75%	283	20.48%	142	50.18%	127	9.19%	66	51.97%	62	4.49%	30	48.39%	59	4.27%	23	38.98%
1998 Total		7245	1.4	4919	67.90%	3558	72.33%	1240	17.12%	645	52.02%	547	7.55%	252	46.07%	273	3.77%	126	46.15%	266	3.67%	110	41.35%
1999	LDGV	3094	1.4	2104	68.00%	1508	71.67%	512	16.55%	249	48.63%	238	7.69%	107	44.96%	111	3.59%	45	40.54%	129	4.17%	49	37.98%
	LDGT1	2486	1.5	1661	66.81%	1202	72.37%	419	16.85%	200	47.73%	207	8.33%	106	51.21%	90	3.62%	39	43.33%	109	4.38%	36	33.03%
	LDGT2	1762	1.6	1043	59.19%	657	62.99%	347	19.69%	164	47.26%	183	10.39%	81	44.26%	94	5.33%	42	44.68%	95	5.39%	34	35.79%
1999 Total		7342	1.5	4808	65.49%	3367	70.03%	1278	17.41%	613	47.97%	628	8.55%	294	46.82%	295	4.02%	126	42.71%	333	4.54%	119	35.74%
2000	LDGV	3626	1.3	2589	71.40%	1976	76.32%	552	15.22%	276	50.00%	239	6.59%	107	44.77%	113	3.12%	43	38.05%	133	3.67%	45	33.83%
	LDGT1	2784	1.3	2009	72.16%	1552	77.25%	410	14.73%	216	52.68%	173	6.21%	74	42.77%	86	3.09%	34	39.53%	106	3.81%	38	35.85%
	LDGT2	1346	1.5	900	66.86%	666	74.00%	211	15.68%	101	47.87%	109	8.10%	47	43.12%	60	4.46%	26	43.33%	66	4.90%	26	39.39%
2000 Total		7756	1.4	5498	70.89%	4194	76.28%	1173	15.12%	593	50.55%	521	6.72%	228	43.76%	259	3.34%	103	39.77%	305	3.93%	109	35.74%

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%
2001	LDGV	2690	1.3	1984	73.75%	1549	78.07%	392	14.57%	207	52.81%	162	6.02%	71	43.83%	78	2.90%	41	52.56%	74	2.75%	28	37.84%
	LDGT1	1885	1.3	1474	78.20%	1217	82.56%	235	12.47%	126	53.62%	100	5.31%	51	51.00%	41	2.18%	24	58.54%	35	1.86%	15	42.86%
	LDGT2	980	1.3	754	76.94%	612	81.17%	132	13.47%	70	53.03%	57	5.82%	33	57.89%	19	1.94%	8	42.11%	18	1.84%	6	33.33%
2001 Total		5555	1.3	4212	75.82%	3378	80.20%	759	13.66%	403	53.10%	319	5.74%	155	48.59%	138	2.48%	73	52.90%	127	2.29%	49	38.58%
2002	LDGV	2897	1.3	2253	77.77%	1854	82.29%	366	12.63%	198	54.10%	151	5.21%	69	45.70%	73	2.52%	34	46.58%	54	1.86%	25	46.30%
	LDGT1	1981	1.2	1566	79.05%	1314	83.91%	222	11.21%	126	56.76%	89	4.49%	34	38.20%	50	2.52%	19	38.00%	54	2.73%	21	38.89%
	LDGT2	910	1.3	707	77.69%	593	83.88%	101	11.10%	47	46.53%	52	5.71%	25	48.08%	26	2.86%	11	42.31%	24	2.64%	11	45.83%
2002 Total		5788	1.2	4526	78.20%	3761	83.10%	689	11.90%	371	53.85%	292	5.04%	128	43.84%	149	2.57%	64	42.95%	132	2.28%	57	43.18%
2003	LDGV	2034	1.2	1622	79.74%	1375	84.77%	228	11.21%	120	52.63%	97	4.77%	45	46.39%	43	2.11%	17	39.53%	44	2.16%	16	36.36%
	LDGT1	1353	1.2	1137	84.04%	1018	89.53%	117	8.65%	61	52.14%	53	3.92%	26	49.06%	22	1.63%	13	59.09%	24	1.77%	10	41.67%
	LDGT2	609	1.2	518	85.06%	443	85.52%	59	9.69%	37	62.71%	17	2.79%	10	58.82%	8	1.31%	4	50.00%	7	1.15%	1	14.29%
2003 Total		3996	1.2	3277	82.01%	2836	86.54%	404	10.11%	218	53.96%	167	4.18%	81	48.50%	73	1.83%	34	46.58%	75	1.88%	27	36.00%
2004	LDGV	2068	1.2	1720	83.17%	1505	87.50%	188	9.09%	102	54.26%	76	3.68%	31	40.79%	37	1.79%	15	40.54%	47	2.27%	17	36.17%
	LDGT1	1538	1.1	1352	87.91%	1222	90.38%	111	7.22%	70	63.06%	38	2.47%	17	44.74%	19	1.24%	7	36.84%	18	1.17%	11	61.11%
	LDGT2	752	1.1	658	87.50%	605	91.95%	47	6.25%	27	57.45%	19	2.53%	6	31.58%	12	1.60%	5	41.67%	16	2.13%	5	31.25%
2004 Total		4358	1.2	3730	85.59%	3332	89.33%	346	7.94%	199	57.51%	133	3.05%	54	40.60%	68	1.56%	27	39.71%	81	1.86%	33	40.74%
2005	LDGV	1512	1.2	1295	85.65%	1165	89.96%	127	8.40%	75	59.06%	46	3.04%	17	36.96%	25	1.65%	16	64.00%	19	1.26%	10	52.63%
	LDGT1	878	1.1	809	92.14%	745	92.09%	57	6.49%	48	84.21%	9	1.03%	6	66.67%	3	0.34%	3	100.00%	0	0.00%	0	0.00%
	LDGT2	435	1.2	356	81.84%	309	86.80%	45	10.34%	22	48.89%	20	4.60%	13	65.00%	6	1.38%	2	33.33%	8	1.84%	4	50.00%
2005 Total		2825	1.1	2460	87.08%	2219	90.20%	229	8.11%	145	63.32%	75	2.65%	36	48.00%	34	1.20%	21	61.76%	27	0.96%	14	51.85%
2006	LDGV	1205	1.2	1026	85.15%	915	89.18%	105	8.71%	55	52.38%	44	3.65%	23	52.27%	19	1.58%	8	42.11%	11	0.91%	7	63.64%
	LDGT1	835	1	788	94.37%	751	95.30%	38	4.55%	29	76.32%	7	0.84%	4	57.14%	1	0.12%	0	0.00%	1	0.12%	0	0.00%
	LDGT2	460	1.1	391	85.00%	347	88.75%	40	8.70%	21	52.50%	19	4.13%	9	47.37%	6	1.30%	4	66.67%	4	0.87%	1	25.00%
2006 Total		2500	1.1	2205	88.20%	2013	91.29%	183	7.32%	105	57.38%	70	2.80%	36	51.43%	26	1.04%	12	46.15%	16	0.64%	8	50.00%
2007	LDGV	816	1.1	727	89.09%	659	90.65%	60	7.35%	44	73.33%	18	2.21%	10	55.56%	7	0.86%	4	57.14%	4	0.49%	2	50.00%
	LDGT1	764	1	739	96.73%	725	98.11%	17	2.23%	13	76.47%	5	0.65%	2	40.00%	2	0.26%	1	50.00%	1	0.13%	0	0.00%
	LDGT2	359	1.1	340	94.71%	326	95.88%	12	3.34%	7	58.33%	5	1.39%	2	40.00%	2	0.56%	2	100.00%	0	0.00%	0	0.00%
2007 Total		1939	1.1	1806	93.14%	1710	94.68%	89	4.59%	64	71.91%	28	1.44%	14	50.00%	11	0.57%	7	63.64%	5	0.26%	2	40.00%
2008	LDGV	809	1.1	734	90.73%	676	92.10%	55	6.80%	38	69.09%	11	1.36%	5	45.45%	5	0.62%	2	40.00%	4	0.49%	2	50.00%
	LDGT1	747	1	736	98.53%	726	98.64%	10	1.34%	9	90.00%	1	0.13%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	529	1.1	488	92.25%	454	93.03%	31	5.86%	23	74.19%	7	1.32%	5	71.43%	2	0.38%	1	50.00%	1	0.19%	1	100.00%
2008 Total		2085	1.1	1958	93.91%	1856	94.79%	96	4.60%	70	72.92%	19	0.91%	10	52.63%	7	0.34%	3	42.86%	5	0.24%	3	60.00%
2009	LDGV	337	1.1	310	91.99%	296	95.48%	17	5.04%	13	76.47%	4	1.19%	2	50.00%	3	0.89%	2	66.67%	3	0.89%	1	33.33%
	LDGT1	261	1	256	98.08%	252	98.44%	5	1.92%	5	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	173	1	170	98.27%	168	98.82%	1	0.58%	0	0.00%	1	0.58%	0	0.00%	1	0.58%	1	100.00%	0	0.00%	0	0.00%
2009 Total		771	1	736	95.46%	716	97.28%	23	2.98%	18	78.26%	5	0.65%	2	40.00%	4	0.52%	3	75.00%	3	0.39%	1	33.33%
2010	LDGV	547	1.1	492	89.95%	460	93.50%	30	5.48%	17	56.67%	12	2.19%	7	58.33%	5	0.91%	3	60.00%	8	1.46%	2	25.00%
	LDGT1	440	1	432	98.18%	427	98.84%	8	1.82%	8	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	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%
	LDGT2	274	1	273	99.64%	270	98.90%	1	0.36%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2010 Total		1261	1.1	1197	94.92%	1157	96.66%	39	3.09%	26	66.67%	12	0.95%	7	58.33%	5	0.40%	3	60.00%	8	0.63%	2	25.00%
2011	LDGV	150	1.1	142	94.67%	135	95.07%	6	4.00%	3	50.00%	2	1.33%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	73	1	72	98.63%	71	98.61%	1	1.37%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT2	71	1	70	98.59%	69	98.57%	1	1.41%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2011 Total		294	1	284	96.60%	275	96.83%	8	2.72%	5	62.50%	2	0.68%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2012	LDGV	69	1	67	97.10%	65	97.01%	2	2.90%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT1	11	1	11	100.00%	11	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	23	1	23	100.00%	23	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%
2012 Total		103	1	101	98.06%	99	98.02%	2	1.94%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2013	LDGV	20	1	20	100.00%	20	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	3	1	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%
	LDGT2	5	1	5	100.00%	5	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%
2013 Total		28	1	28	100.00%	28	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%
2014	LDGV	2	1	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%
	LDGT1	1	1	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%
	LDGT2	1	1	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%
2014 Total		4	1	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%
Overall Total		90780	1.4	64458	71.00%	49435	76.69%	13493	14.86%	6669	49.43%	6250	6.88%	2746	43.94%	3,081	3.39%	1,292	41.93%	3498	3.85%	1,296	37.05%

Summary by Vehicle Type (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	40668	1.4	28845	70.93%	21922	76.00%	6093	14.98%	2987	49.02%	2785	6.85%	1199	43.05	1,375	3.38%	549	39.93%	1570	3.86%	566	36.05%
LDGT1	31973	1.3	23536	73.61%	18654	79.26%	4469	13.98%	2331	52.16%	1982	6.20%	896	45.21	954	2.98%	432	45.28%	1032	3.23%	397	38.47%
LDGT2	18139	1.5	12077	66.58%	8859	73.35%	2931	16.16%	1351	46.09%	1483	8.18%	651	43.9	752	4.15%	311	41.36%	896	4.94%	333	37.17%
Overall	90780	1.4	64458	71.00%	49435	76.69%	13493	14.86%	6669	49.43%	6250	6.88%	2746	43.94	3,081	3.39%	1,292	41.93%	3498	3.85%	1,296	37.05%

Appendix H

I/M240 Fleet Characterization Summary Report

Initial Inspection Component

IM240 Fleet Initial Inspection Report (V1.01)

Vehicle		Overall Initial Exhaust Emissions				Pass Initial Test Exhaust Emissions					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	322	1.9547	24.0003	2.0783	266	82.61%	1.7186	19.1353	2.0606	56	17.39%	3.0758	47.1092	2.1626
	LDGT1	299	2.7954	36.3351	3.0034	222	74.25%	2.3357	27.3599	3.2080	77	25.75%	4.1206	62.2117	2.4132
	LDGT2	70	2.9778	58.6616	2.4990	48	68.57%	2.3335	32.8891	2.7139	22	31.43%	4.3837	114.8926	2.0300
1982 Total		691	2.4221	32.8489	2.5212	536	77.57%	2.0293	23.7734	2.5943	155	22.43%	3.7805	64.2326	2.2683
1983	LDGV	366	1.7477	20.9025	2.0189	292	79.78%	1.3253	11.8400	2.0529	74	20.22%	3.4145	56.6624	1.8848
	LDGT1	305	3.3324	39.9747	2.4889	218	71.48%	3.0262	33.0998	2.4732	87	28.52%	4.0996	57.2013	2.5283
	LDGT2	102	3.6410	43.1873	3.0082	73	71.57%	2.5910	32.6480	2.9024	29	28.43%	6.2841	69.7173	3.2743
1983 Total		773	2.6228	31.3683	2.3349	583	75.42%	2.1198	22.3951	2.3165	190	24.58%	4.1662	58.9017	2.3915
1984	LDGV	873	1.6400	17.0372	1.8974	737	84.42%	1.3027	11.2160	1.9326	136	15.58%	3.4675	48.5825	1.7068
	LDGT1	713	2.4685	31.9444	2.4653	530	74.33%	1.9287	22.9361	2.4921	183	25.67%	4.0318	58.0341	2.3877
	LDGT2	241	2.5518	35.8295	3.4130	159	65.98%	2.0292	25.2360	3.4103	82	34.02%	3.5650	56.3705	3.4184
1984 Total		1827	2.0836	25.3337	2.3190	1426	78.05%	1.6164	17.1353	2.3053	401	21.95%	3.7450	54.4884	2.3675
1985	LDGV	916	1.3095	13.8458	1.9441	761	83.08%	1.0430	10.4855	1.9153	155	16.92%	2.6182	30.3439	2.0856
	LDGT1	765	2.4154	26.2217	2.6955	588	76.86%	1.9764	18.6093	2.6691	177	23.14%	3.8738	51.5105	2.7832
	LDGT2	238	2.7040	35.6982	2.9963	156	65.55%	2.0273	23.8720	2.9434	82	34.45%	3.9912	58.1969	3.0968
1985 Total		1919	1.9233	21.4896	2.3741	1505	78.43%	1.5097	15.0470	2.3163	414	21.57%	3.4270	44.9102	2.5841
1986	LDGV	1544	1.0701	10.1555	1.8970	1353	87.63%	0.9018	7.7411	1.8585	191	12.37%	2.2616	27.2587	2.1696
	LDGT1	1422	1.8367	20.0093	2.5429	1184	83.26%	1.6282	15.9267	2.5014	238	16.74%	2.8739	40.3196	2.7493
	LDGT2	365	2.4330	31.5136	2.8878	246	67.40%	1.7752	19.8005	2.7956	119	32.60%	3.7929	55.7272	3.0784
1986 Total		3331	1.5467	16.7025	2.2813	2783	83.55%	1.2881	12.2896	2.2148	548	16.45%	2.8601	39.1132	2.6187
1987	LDGV	1438	1.1854	11.1174	1.8518	1237	86.02%	0.8748	7.7927	1.8184	201	13.98%	3.0970	31.5786	2.0571
	LDGT1	1218	1.8319	20.6341	2.3337	970	79.64%	1.4612	14.2544	2.3322	248	20.36%	3.2816	45.5867	2.3393
	LDGT2	363	2.3097	20.5319	3.0229	261	71.90%	1.7956	13.5295	2.8150	102	28.10%	3.6251	38.4497	3.5547
1987 Total		3019	1.5814	16.0888	2.1870	2468	81.75%	1.2027	10.9390	2.1258	551	18.25%	3.2779	39.1555	2.4614
1988	LDGV	2302	0.9418	10.2775	1.6310	2036	88.44%	0.7586	7.9360	1.6054	266	11.56%	2.3435	28.1996	1.8267
	LDGT1	2018	1.4692	14.4566	2.1948	1722	85.33%	1.3057	11.7898	2.1247	296	14.67%	2.4202	29.9705	2.6027
	LDGT2	709	1.7888	15.8934	2.7303	574	80.96%	1.4187	12.2104	2.6133	135	19.04%	3.3625	31.5531	3.2278
1988 Total		5029	1.2728	12.7462	2.0122	4332	86.14%	1.0636	10.0343	1.9454	697	13.86%	2.5734	29.6012	2.4276
1989	LDGV	2442	0.9328	10.1706	1.6997	2150	88.04%	0.7587	7.9463	1.6692	292	11.96%	2.2142	26.5485	1.9240
	LDGT1	1949	1.4977	16.4086	2.1384	1601	82.14%	1.2166	12.7443	2.0614	348	17.86%	2.7908	33.2665	2.4929
	LDGT2	720	1.7740	14.6314	2.7905	595	82.64%	1.4617	12.4409	2.7102	125	17.36%	3.2606	25.0581	3.1726
1989 Total		5111	1.2667	13.1778	2.0207	4346	85.03%	1.0236	10.3291	1.9562	765	14.97%	2.6475	29.3610	2.3868
1990	LDGV	4545	0.8285	9.2783	1.6455	4064	89.42%	0.6880	7.5140	1.5874	481	10.58%	2.0154	24.1850	2.1364
	LDGT1	2667	1.3882	13.8285	2.1224	2265	84.93%	1.1448	10.7759	2.0581	402	15.07%	2.7601	31.0278	2.4848
	LDGT2	1076	1.7758	15.3246	2.7308	897	83.36%	1.4644	13.3155	2.6490	179	16.64%	3.3365	25.3930	3.1410
1990 Total		8288	1.1316	11.5275	1.9399	7226	87.19%	0.9276	9.2566	1.8667	1062	12.81%	2.5200	26.9788	2.4377
1991	LDGV	4878	0.7830	8.9370	1.5572	4271	87.56%	0.6150	6.7981	1.4863	607	12.44%	1.9653	23.9863	2.0557
	LDGT1	2902	1.1840	13.5600	1.8491	2495	85.98%	0.9726	10.8218	1.7790	407	14.02%	2.4799	30.3462	2.2786
	LDGT2	838	1.6255	17.6978	2.5995	652	77.80%	1.3167	14.4759	2.4555	186	22.20%	2.7079	28.9919	3.1045
1991 Total		8618	0.9999	11.3456	1.7568	7418	86.08%	0.7969	8.8263	1.6699	1200	13.92%	2.2549	26.9192	2.2939
1992	LDGV	6798	0.6953	8.1227	1.4673	6031	88.72%	0.5632	6.1638	1.4204	767	11.28%	1.7336	23.5253	1.8362

Vehicle		Overall Initial Exhaust Emissions				Pass Initial Test Exhaust Emissions					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)
	LDGT1	3714	1.0590	11.6628	1.8217	3240	87.24%	0.9191	9.8784	1.7375	474	12.76%	2.0152	23.8596	2.3968
	LDGT2	1649	1.6547	17.0133	2.5642	1348	81.75%	1.3802	13.9264	2.4853	301	18.25%	2.8836	30.8376	2.9175
1992 Total		12161	0.9364	10.4094	1.7243	10619	87.32%	0.7755	8.2826	1.6523	1542	12.68%	2.0447	25.0554	2.2196
1993	LDGV	6933	0.6839	7.7513	1.5301	6145	88.63%	0.5630	5.8204	1.4699	788	11.37%	1.6270	22.8093	1.9995
	LDGT1	4565	1.1121	11.5901	2.1218	3960	86.75%	0.9483	9.7934	2.0153	605	13.25%	2.1839	23.3509	2.8189
	LDGT2	1645	1.7217	16.0807	2.5408	1322	80.36%	1.3859	14.0503	2.4097	323	19.64%	3.0960	24.3911	3.0773
1993 Total		13143	0.9625	10.1272	1.8621	11427	86.94%	0.7917	8.1493	1.7677	1716	13.06%	2.0998	23.2980	2.4913
1994	LDGV	9434	0.5283	6.2413	1.2425	8520	90.31%	0.4362	5.0494	1.1839	914	9.69%	1.3874	17.3520	1.7885
	LDGT1	6875	0.8848	9.7078	1.8458	6004	87.33%	0.7569	8.0947	1.7435	871	12.67%	1.7665	20.8269	2.5512
	LDGT2	3135	1.2485	13.3741	2.2069	2489	79.39%	0.9645	10.3557	2.0580	646	20.61%	2.3429	25.0037	2.7806
1994 Total		19444	0.7705	8.6170	1.6113	17013	87.50%	0.6266	6.9004	1.5093	2431	12.50%	1.7771	20.6303	2.3254
1995	LDGV	11844	0.5133	5.8794	1.0996	10701	90.35%	0.4217	4.8484	1.0394	1143	9.65%	1.3706	15.5311	1.6625
	LDGT1	7009	0.8558	9.9291	1.9029	6037	86.13%	0.7094	7.9477	1.7624	972	13.87%	1.7654	22.2348	2.7751
	LDGT2	3505	1.1847	13.0246	2.1595	2771	79.06%	0.9069	10.3910	2.0009	734	20.94%	2.2332	22.9671	2.7582
1995 Total		22358	0.7259	8.2690	1.5176	19509	87.26%	0.5797	6.5948	1.3997	2849	12.74%	1.7275	19.7340	2.3244
1996	LDGV	14951	0.3827	4.6991	0.8797	13676	91.47%	0.3179	3.8226	0.8281	1275	8.53%	1.0776	14.1008	1.4331
	LDGT1	9337	0.4769	6.1900	1.4772	8167	87.47%	0.3997	5.1610	1.3759	1170	12.53%	1.0154	13.3728	2.1840
	LDGT2	4084	0.5932	7.1780	1.4417	3547	86.85%	0.5058	6.0768	1.3346	537	13.15%	1.1702	14.4515	2.1492
1996 Total		28372	0.4440	5.5465	1.1572	25390	89.49%	0.3705	4.5680	1.0751	2982	10.51%	1.0699	13.8783	1.8567
1997	LDGV	16716	0.3861	4.9542	0.8542	15127	90.49%	0.3252	4.0164	0.7962	1589	9.51%	0.9651	13.8828	1.4056
	LDGT1	11678	0.4313	6.3203	1.4049	10061	86.15%	0.3679	5.1571	1.2871	1617	13.85%	0.8255	13.5583	2.1377
	LDGT2	4436	0.5355	7.0969	1.4845	3779	85.19%	0.4091	5.7369	1.3328	657	14.81%	1.2627	14.9190	2.3574
1997 Total		32830	0.4223	5.7297	1.1352	28967	88.23%	0.3510	4.6370	1.0367	3863	11.77%	0.9573	13.9232	1.8739
1998	LDGV	21741	0.2913	4.2739	0.6987	19751	90.85%	0.2420	3.4758	0.6438	1990	9.15%	0.7806	12.1946	1.2431
	LDGT1	17122	0.3777	5.3362	1.1704	15187	88.70%	0.3209	4.5148	1.0681	1935	11.30%	0.8238	11.7836	1.9736
	LDGT2	6066	0.4476	5.9062	1.3250	5245	86.47%	0.3373	4.5670	1.1590	821	13.53%	1.1526	14.4621	2.3856
1998 Total		44929	0.3453	4.8991	0.9630	40183	89.44%	0.2842	4.0109	0.8714	4746	10.56%	0.8625	12.4193	1.7386
1999	LDGV	21519	0.2565	3.7911	0.6665	19544	90.82%	0.2173	3.1750	0.6015	1975	9.18%	0.6447	9.8871	1.3089
	LDGT1	15297	0.2956	4.5834	0.9054	13699	89.55%	0.2464	3.7704	0.8064	1598	10.45%	0.7181	11.5532	1.7540
	LDGT2	7343	0.3890	4.8415	1.0775	6353	86.52%	0.2766	3.4945	0.9046	990	13.48%	1.1099	13.4859	2.1872
1999 Total		44159	0.2921	4.2402	0.8176	39596	89.67%	0.2369	3.4323	0.7210	4563	10.33%	0.7713	11.2514	1.6553
2000	LDGV	30625	0.1972	3.1478	0.5287	28151	91.92%	0.1617	2.5874	0.4658	2474	8.08%	0.6009	9.5241	1.2438
	LDGT1	21590	0.2431	3.5889	0.7758	19649	91.01%	0.2160	3.0794	0.7070	1941	8.99%	0.5176	8.7471	1.4721
	LDGT2	8196	0.2720	3.9617	0.8075	7326	89.39%	0.2181	3.0896	0.7079	870	10.61%	0.7261	11.3051	1.6463
2000 Total		60411	0.2237	3.4159	0.6548	55126	91.25%	0.1885	2.8295	0.5840	5285	8.75%	0.5909	9.5319	1.3939
2001	LDGV	25887	0.1462	2.7529	0.3951	23979	92.63%	0.1194	2.2930	0.3450	1908	7.37%	0.4841	8.5327	1.0250
	LDGT1	17637	0.1580	3.2387	0.5127	16195	91.82%	0.1334	2.7366	0.4579	1442	8.18%	0.4351	8.8779	1.1285
	LDGT2	7320	0.2603	3.6892	0.6859	6589	90.01%	0.2198	3.0261	0.6163	731	9.99%	0.6249	9.6659	1.3139
2001 Total		50844	0.1668	3.0562	0.4778	46763	91.97%	0.1384	2.5499	0.4223	4081	8.03%	0.4920	8.8577	1.1134
2002	LDGV	33132	0.1185	2.7872	0.3263	30936	93.37%	0.0989	2.5155	0.2781	2196	6.63%	0.3946	6.6142	1.0065
	LDGT1	25424	0.1259	3.4852	0.4050	23897	93.99%	0.1048	3.0032	0.3669	1527	6.01%	0.4571	11.0283	1.0016

Vehicle		Overall Initial Exhaust Emissions				Pass Initial Test Exhaust Emissions					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	8191	0.2007	2.8607	0.6616	7500	91.56%	0.1724	2.3860	0.6013	691	8.44%	0.5074	8.0134	1.3160
2002 Total		66747	0.1314	3.0621	0.3975	62333	93.39%	0.1100	2.6869	0.3510	4414	6.61%	0.4339	8.3603	1.0532
2003	LDGV	25270	0.0923	1.8544	0.2755	23691	93.75%	0.0724	1.5897	0.2391	1579	6.25%	0.3906	5.8257	0.8223
	LDGT1	17266	0.1087	2.2325	0.3491	16135	93.45%	0.0905	1.8741	0.3172	1131	6.55%	0.3681	7.3461	0.8039
	LDGT2	6914	0.1772	2.5329	0.4714	6417	92.81%	0.1444	2.0683	0.4216	497	7.19%	0.6008	8.5323	1.1147
2003 Total		49450	0.1099	2.0813	0.3286	46243	93.51%	0.0887	1.7553	0.2917	3207	6.49%	0.4152	6.7814	0.8612
2004	LDGV	30034	0.0706	1.5113	0.1863	28362	94.43%	0.0552	1.2743	0.1581	1672	5.57%	0.3311	5.5309	0.6647
	LDGT1	25790	0.0723	1.7397	0.1962	24458	94.84%	0.0615	1.4512	0.1758	1332	5.16%	0.2701	7.0384	0.5710
	LDGT2	10646	0.0886	1.6518	0.2200	9997	93.90%	0.0782	1.4408	0.1888	649	6.10%	0.2487	4.9012	0.7003
2004 Total		66470	0.0742	1.6224	0.1955	62817	94.50%	0.0614	1.3697	0.1699	3653	5.50%	0.2942	5.9687	0.6369
2005	LDGV	23373	0.0587	1.3642	0.1648	22086	94.49%	0.0461	1.1379	0.1379	1287	5.51%	0.2746	5.2477	0.6260
	LDGT1	19313	0.0602	1.2565	0.1414	18510	95.84%	0.0554	1.1448	0.1252	803	4.16%	0.1720	3.8325	0.5157
	LDGT2	6636	0.1059	1.7265	0.2313	6283	94.68%	0.0886	1.4874	0.1866	353	5.32%	0.4142	5.9829	1.0274
2005 Total		49322	0.0656	1.3708	0.1646	46879	95.05%	0.0554	1.1875	0.1394	2443	4.95%	0.2611	4.8888	0.6478
2006	LDGV	29721	0.0512	1.3630	0.1251	28712	96.61%	0.0406	1.1875	0.1034	1009	3.39%	0.3519	6.3574	0.7405
	LDGT1	22153	0.0421	1.2057	0.1146	21368	96.46%	0.0391	1.1263	0.1041	785	3.54%	0.1240	3.3693	0.3994
	LDGT2	8834	0.0745	1.1676	0.1452	8452	95.68%	0.0637	1.0435	0.1201	382	4.32%	0.3128	3.9119	0.6995
2006 Total		60708	0.0512	1.2772	0.1242	58532	96.42%	0.0434	1.1443	0.1061	2176	3.58%	0.2628	4.8501	0.6103
2007	LDGV	21221	0.0464	1.1995	0.1140	20502	96.61%	0.0361	1.0680	0.0936	719	3.39%	0.3417	4.9480	0.6973
	LDGT1	16329	0.0353	1.1281	0.1021	15588	95.46%	0.0336	1.0484	0.0952	741	4.54%	0.0702	2.8065	0.2454
	LDGT2	7662	0.0565	0.8550	0.1009	7325	95.60%	0.0500	0.7833	0.0867	337	4.40%	0.1989	2.4141	0.4086
2007 Total		45212	0.0441	1.1153	0.1075	43415	96.03%	0.0375	1.0129	0.0930	1797	3.97%	0.2029	3.5898	0.4568
2008	LDGV	31164	0.0372	1.1376	0.0943	30440	97.68%	0.0333	1.0596	0.0843	724	2.32%	0.2012	4.4183	0.5148
	LDGT1	24226	0.0293	0.9448	0.0861	23491	96.97%	0.0287	0.9236	0.0832	735	3.03%	0.0482	1.6219	0.1768
	LDGT2	10779	0.0432	1.0398	0.0809	10294	95.50%	0.0402	0.9249	0.0739	485	4.50%	0.1066	3.4787	0.2285
2008 Total		66169	0.0353	1.0511	0.0891	64225	97.06%	0.0327	0.9883	0.0823	1944	2.94%	0.1197	3.1266	0.3156
2009	LDGV	13423	0.0367	1.1441	0.1039	13109	97.66%	0.0332	1.0988	0.0882	314	2.34%	0.1827	3.0354	0.7610
	LDGT1	7109	0.0285	1.0461	0.0840	6852	96.38%	0.0285	1.0430	0.0820	257	3.62%	0.0303	1.1296	0.1384
	LDGT2	3626	0.0375	0.8076	0.0671	3457	95.34%	0.0365	0.7806	0.0654	169	4.66%	0.0585	1.3599	0.1021
2009 Total		24158	0.0344	1.0648	0.0926	23418	96.94%	0.0323	1.0355	0.0830	740	3.06%	0.1014	1.9909	0.3943
2010	LDGV	27683	0.0323	1.0938	0.0779	27193	98.23%	0.0295	1.0651	0.0723	490	1.77%	0.1863	2.6865	0.3883
	LDGT1	20881	0.0251	0.8529	0.0686	20446	97.92%	0.0248	0.8482	0.0666	435	2.08%	0.0408	1.0754	0.1618
	LDGT2	10058	0.0351	0.7768	0.0597	9787	97.31%	0.0345	0.7596	0.0578	271	2.69%	0.0571	1.3982	0.1276
2010 Total		58622	0.0302	0.9536	0.0714	57426	97.96%	0.0287	0.9358	0.0678	1196	2.04%	0.1041	1.8086	0.2468
2011	LDGV	9280	0.0315	1.1003	0.0749	9140	98.49%	0.0292	1.0641	0.0693	140	1.51%	0.1872	3.4658	0.4372
	LDGT1	4251	0.0262	0.9423	0.0630	4179	98.31%	0.0260	0.9347	0.0618	72	1.69%	0.0381	1.3851	0.1290
	LDGT2	2138	0.0444	0.7341	0.0568	2068	96.73%	0.0372	0.6956	0.0534	70	3.27%	0.2576	1.8734	0.1576
2011 Total		15669	0.0319	1.0075	0.0692	15387	98.20%	0.0294	0.9794	0.0652	282	1.80%	0.1666	2.5393	0.2891
2012	LDGV	3957	0.0287	1.0974	0.0670	3890	98.31%	0.0272	1.0773	0.0612	67	1.69%	0.1171	2.2627	0.4054
	LDGT1	1242	0.0268	0.9506	0.0596	1231	99.11%	0.0266	0.9294	0.0594	11	0.89%	0.0530	3.3318	0.0839
	LDGT2	803	0.0349	0.6735	0.0521	780	97.14%	0.0338	0.6546	0.0496	23	2.86%	0.0710	1.3166	0.1367

Vehicle		Overall Initial Exhaust Emissions				Pass Initial Test Exhaust Emissions					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)
2012 Total		6002	0.0291	1.0103	0.0635	5901	98.32%	0.0279	0.9906	0.0593	101	1.68%	0.0996	2.1637	0.3092
2013	LDGV	1874	0.0237	0.8690	0.0610	1854	98.93%	0.0236	0.8645	0.0607	20	1.07%	0.0349	1.2939	0.0922
	LDGT1	708	0.0232	0.8483	0.0502	705	99.58%	0.0232	0.8492	0.0502	3	0.42%	0.0325	0.6308	0.0437
	LDGT2	480	0.0330	0.5516	0.0539	475	98.96%	0.0330	0.5477	0.0540	5	1.04%	0.0301	0.9262	0.0440
2013 Total		3062	0.0250	0.8145	0.0574	3034	99.09%	0.0250	0.8113	0.0572	28	0.91%	0.0338	1.1572	0.0784
2014	LDGV	505	0.0215	0.7447	0.0577	503	99.60%	0.0215	0.7433	0.0577	2	0.40%	0.0154	1.1141	0.0453
	LDGT1	271	0.0199	0.7141	0.0492	270	99.63%	0.0199	0.7152	0.0492	1	0.37%	0.0108	0.4131	0.0492
	LDGT2	161	0.0292	0.5556	0.0428	160	99.38%	0.0294	0.5591	0.0431	1	0.62%	0.0000	0.0000	0.0000
2014 Total		937	0.0224	0.7034	0.0527	933	99.57%	0.0224	0.7036	0.0527	4	0.43%	0.0104	0.6603	0.0349
2015	LDGV	36	0.0365	0.6357	0.0430	36	100.00%	0.0365	0.6357	0.0430	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	23	0.0479	0.6319	0.0423	23	100.00%	0.0479	0.6319	0.0423	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	2	0.0554	0.8894	0.0349	2	100.00%	0.0554	0.8894	0.0349	0	0.00%	0.0000	0.0000	0.0000
2015 Total		61	0.0414	0.6426	0.0424	61	100.00%	0.0414	0.6426	0.0424	0	0.00%	0.0000	0.0000	0.0000
Grand Total		879846	0.2470	3.4973	0.5598	817820	92.95%	0.1937	2.7774	0.4925	62026	7.05%	0.9494	12.9897	1.4465

Records 1 - 102 (All Records)

Summary by Vehicle Type (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	436747	0.2036	3.0262	0.4650	409246	93.70%	0.1618	2.4470	0.4151	27501	6.30%	0.8254	11.6460	1.2074
LDGT1	314068	0.2679	3.8611	0.6264	291147	92.70%	0.2147	3.0870	0.5543	22921	7.30%	0.9448	13.6947	1.5431
LDGT2	129031	0.3427	4.2062	0.7185	117427	91.01%	0.2528	3.1611	0.6094	11604	8.99%	1.2525	14.7816	1.8226
Grand Total	879846	0.2470	3.4973	0.5598	817820	92.95%	0.1937	2.7774	0.4925	62026	7.05%	0.9494	12.9897	1.4465

Appendix I

I/M240 Fleet Characterization Summary Report

Final Inspection Component

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	322	1.6904	19.1149	2.0705	55	17.08%	1.5672	18.1532	2.1417	1	0.31%	0.9503	66.5736	0.7816
	LDGT1	299	2.3217	28.1554	3.0087	75	25.08%	2.2434	29.1678	2.4843	2	0.67%	3.6979	78.4920	0.5494
	LDGT2	70	2.3333	37.7993	2.7451	18	25.71%	2.2590	37.7234	2.7417	4	5.71%	2.6656	97.0629	3.1353
1982 Total		691	2.0287	24.9195	2.5448	148	21.42%	1.9940	26.1151	2.3883	7	1.01%	2.7155	87.4013	2.0602
1983	LDGV	366	1.3575	12.9779	2.0047	71	19.40%	1.4678	15.5994	1.7900	3	0.82%	1.8815	61.6875	2.3935
	LDGT1	305	2.8686	32.4727	2.5021	86	28.20%	2.4776	30.1368	2.6042	1	0.33%	2.1207	96.6495	0.0257
	LDGT2	102	2.7131	33.8668	2.8522	28	27.45%	3.0518	35.8882	2.7348	1	0.98%	2.1491	66.2397	2.4757
1983 Total		773	2.1326	23.4262	2.3128	185	23.93%	2.1769	25.4280	2.3115	5	0.65%	1.9829	69.5904	1.9364
1984	LDGV	873	1.4042	12.2102	1.9146	131	15.01%	1.4737	14.5593	1.8324	5	0.57%	14.5319	97.2113	1.4115
	LDGT1	713	2.0378	24.1721	2.5014	180	25.25%	2.3297	26.5357	2.5526	3	0.42%	3.8051	100.7241	1.0609
	LDGT2	241	2.1231	26.6641	3.2660	80	33.20%	2.2404	28.2677	3.0143	2	0.83%	4.8927	76.0541	1.8561
1984 Total		1827	1.7463	18.7851	2.3218	391	21.40%	2.0247	22.8775	2.4058	10	0.55%	9.3860	94.0337	1.3952
1985	LDGV	916	1.0593	10.3716	1.9062	154	16.81%	1.1406	9.5575	1.8672	1	0.11%	0.9931	49.1116	1.0529
	LDGT1	765	2.0032	19.4243	2.6578	175	22.88%	2.0603	21.3349	2.6428	2	0.26%	4.8773	91.8456	0.6654
	LDGT2	238	2.2352	23.7534	2.9536	81	34.03%	2.0030	23.2982	2.9484	1	0.42%	53.4631	42.1241	4.9583
1985 Total		1919	1.5814	15.6401	2.3357	410	21.37%	1.7035	17.2990	2.4119	4	0.21%	16.0527	68.7317	1.8355
1986	LDGV	1544	0.9272	7.8598	1.8740	184	11.92%	1.0603	8.2923	1.9325	7	0.45%	2.3244	19.4287	3.3220
	LDGT1	1422	1.6614	16.4895	2.5396	234	16.46%	1.7402	17.2836	2.7621	4	0.28%	6.8820	136.6091	0.8331
	LDGT2	365	1.8384	20.9544	2.8231	117	32.05%	1.9431	21.5211	2.9149	2	0.55%	3.4841	129.7441	0.8484
1986 Total		3331	1.3405	12.9787	2.2621	535	16.06%	1.5507	15.1180	2.5102	13	0.39%	3.9052	72.4558	2.1756
1987	LDGV	1438	0.9210	8.1587	1.8151	193	13.42%	1.0383	8.8095	1.7821	8	0.56%	5.2374	49.0475	2.0922
	LDGT1	1218	1.4674	14.6516	2.3383	244	20.03%	1.4688	15.4848	2.3637	4	0.33%	2.8695	60.1276	2.2472
	LDGT2	363	1.8078	14.1654	2.8750	99	27.27%	1.7917	13.6849	3.0106	3	0.83%	3.4043	85.3473	3.6154
1987 Total		3019	1.2481	11.5004	2.1536	536	17.75%	1.3734	12.7487	2.2738	15	0.50%	4.2394	59.2621	2.4382
1988	LDGV	2302	0.7710	8.0038	1.6027	262	11.38%	0.8418	7.9704	1.5929	4	0.17%	2.4045	44.6706	0.8537
	LDGT1	2018	1.3060	11.9860	2.1415	294	14.57%	1.3010	12.9155	2.2439	2	0.10%	2.2451	44.2635	1.5324
	LDGT2	709	1.4225	12.1184	2.6001	134	18.90%	1.4407	11.5657	2.5384	1	0.14%	1.1764	33.3598	3.2735
1988 Total		5029	1.0775	10.1818	1.9595	690	13.72%	1.1538	10.7757	2.0539	7	0.14%	2.1835	42.9384	1.3933
1989	LDGV	2442	0.7805	8.1169	1.6780	287	11.75%	0.8906	8.2517	1.7499	5	0.20%	3.8212	73.7334	1.3225
	LDGT1	1949	1.2587	12.8153	2.0956	341	17.50%	1.3728	12.3780	2.2538	7	0.36%	5.3372	50.3591	2.1985
	LDGT2	720	1.4880	12.5458	2.7296	123	17.08%	1.5662	12.8514	2.8150	2	0.28%	4.5238	24.9394	3.2627
1989 Total		5111	1.0625	10.5325	1.9854	751	14.69%	1.2202	10.8786	2.1532	14	0.27%	4.6796	55.0757	2.0377
1990	LDGV	4545	0.7097	7.6116	1.5999	470	10.34%	0.8456	7.8883	1.6999	11	0.24%	2.9018	31.8459	1.9568
	LDGT1	2667	1.1569	10.9598	2.0648	396	14.85%	1.2141	11.5260	2.0892	6	0.22%	1.9525	42.9872	3.0034
	LDGT2	1076	1.4791	13.2104	2.6494	176	16.36%	1.5261	12.5114	2.6175	3	0.28%	3.1338	22.8148	4.6487
1990 Total		8288	0.9535	9.4159	1.8858	1042	12.57%	1.1006	10.0516	2.0028	20	0.24%	2.6518	33.8336	2.6746
1991	LDGV	4878	0.6341	6.9613	1.4988	593	12.16%	0.7290	7.3633	1.5798	14	0.29%	2.4461	39.6913	1.8777
	LDGT1	2902	0.9975	10.9792	1.7946	399	13.75%	1.1270	11.2685	1.8941	8	0.28%	2.3078	45.6661	1.7028
	LDGT2	838	1.3047	14.0937	2.4540	184	21.96%	1.2519	12.5324	2.4591	2	0.24%	2.2752	33.1642	1.5036

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)
1991 Total		8618	0.8217	9.0078	1.6913	1176	13.65%	0.9459	9.4970	1.8240	24	0.28%	2.3857	41.1390	1.7882
1992	LDGV	6798	0.5789	6.2601	1.4393	750	11.03%	0.6749	6.7297	1.5692	17	0.25%	1.8887	19.6843	2.4087
	LDGT1	3714	0.9451	10.0837	1.7612	467	12.57%	1.0894	10.9100	1.9125	7	0.19%	3.3422	49.9769	2.6043
	LDGT2	1649	1.3738	13.8131	2.4607	298	18.07%	1.3416	12.8246	2.3491	3	0.18%	1.6952	61.1140	2.4677
1992 Total		12161	0.7985	8.4520	1.6761	1515	12.46%	0.9338	9.2172	1.8284	27	0.22%	2.2440	32.1412	2.4660
1993	LDGV	6933	0.5804	5.9593	1.4892	775	11.18%	0.6889	6.5521	1.6309	13	0.19%	2.3441	36.2865	2.1504
	LDGT1	4565	0.9645	9.8399	2.0234	595	13.03%	1.0359	9.9014	2.0621	10	0.22%	3.1185	24.6293	2.9284
	LDGT2	1645	1.3912	13.9638	2.3832	315	19.15%	1.3618	12.7215	2.2535	8	0.49%	3.4197	48.5788	3.1124
1993 Total		13143	0.8153	8.3090	1.7867	1685	12.82%	0.9372	8.8881	1.8996	31	0.24%	2.8715	35.6983	2.6496
1994	LDGV	9434	0.4481	5.1290	1.2022	897	9.51%	0.5294	5.6833	1.3599	17	0.18%	2.1437	15.7901	2.0578
	LDGT1	6875	0.7730	8.2456	1.7613	863	12.55%	0.8694	8.9920	1.8858	8	0.12%	2.4629	40.9165	1.7243
	LDGT2	3135	0.9769	10.3583	2.0487	635	20.26%	0.9844	10.0640	1.9674	11	0.35%	3.3587	27.9299	4.6238
1994 Total		19444	0.6482	7.0741	1.5364	2395	12.32%	0.7725	8.0370	1.7105	36	0.19%	2.5859	25.0831	2.7677
1995	LDGV	11844	0.4330	4.9148	1.0564	1119	9.45%	0.5035	5.0766	1.1948	24	0.20%	2.1485	26.9778	2.1501
	LDGT1	7009	0.7270	8.1272	1.7854	951	13.57%	0.7850	8.7288	1.9055	21	0.30%	3.1791	32.4741	2.9436
	LDGT2	3505	0.9394	10.4096	1.9776	722	20.60%	0.9831	10.1076	1.8780	12	0.34%	5.8102	32.8609	2.5849
1995 Total		22358	0.6045	6.7833	1.4293	2792	12.49%	0.7234	7.6216	1.6135	57	0.25%	3.2991	30.2413	2.5340
1996	LDGV	14951	0.3266	3.8977	0.8422	1258	8.41%	0.4046	4.6182	0.9655	17	0.11%	1.4976	11.0259	3.0430
	LDGT1	9337	0.4060	5.2158	1.4018	1160	12.42%	0.4303	5.4843	1.5640	10	0.11%	2.6807	18.8964	3.7326
	LDGT2	4084	0.5088	6.0631	1.3476	535	13.10%	0.5271	5.9612	1.4240	2	0.05%	0.8745	9.1086	3.8829
1996 Total		28372	0.3789	4.6432	1.0991	2953	10.41%	0.4369	5.2017	1.2837	29	0.10%	1.8626	13.6076	3.3387
1997	LDGV	16716	0.3324	4.0994	0.8088	1567	9.37%	0.3757	4.4108	0.9163	22	0.13%	2.1695	39.0532	1.7583
	LDGT1	11678	0.3728	5.2250	1.3052	1599	13.69%	0.3962	5.4817	1.3987	18	0.15%	0.9930	20.4177	3.1388
	LDGT2	4436	0.4166	5.7669	1.3464	653	14.72%	0.4576	5.9374	1.4107	4	0.09%	0.8316	6.2599	3.7390
1997 Total		32830	0.3581	4.7251	1.0580	3819	11.63%	0.3983	5.1202	1.2028	44	0.13%	1.5665	28.4484	2.5031
1998	LDGV	21741	0.2477	3.5420	0.6522	1968	9.05%	0.2967	4.0285	0.7196	22	0.10%	0.9461	19.3976	2.1233
	LDGT1	17122	0.3271	4.5539	1.0897	1911	11.16%	0.3621	4.6970	1.2421	24	0.14%	1.4947	17.8833	2.6731
	LDGT2	6066	0.3465	4.7021	1.1830	812	13.39%	0.3943	5.3402	1.3016	9	0.15%	1.4110	25.8959	4.4920
1998 Total		44929	0.2913	4.0842	0.8906	4691	10.44%	0.3402	4.5279	1.0332	55	0.12%	1.2616	19.8002	2.7508
1999	LDGV	21519	0.2213	3.2080	0.6116	1958	9.10%	0.2549	3.4669	0.6935	17	0.08%	0.9924	11.2361	2.7006
	LDGT1	15297	0.2529	3.8235	0.8285	1583	10.35%	0.3006	4.1056	0.9977	15	0.10%	1.2314	22.5395	3.0971
	LDGT2	7343	0.2888	3.5849	0.9334	978	13.32%	0.3447	4.0366	1.0975	12	0.16%	2.1663	14.6536	2.8322
1999 Total		44159	0.2435	3.4839	0.7402	4519	10.23%	0.2903	3.8139	0.8875	44	0.10%	1.3940	16.0215	2.8717
2000	LDGV	30625	0.1669	2.6459	0.4772	2447	7.99%	0.2170	3.2043	0.5877	27	0.09%	1.0421	12.9695	2.2841
	LDGT1	21590	0.2222	3.1633	0.7268	1914	8.87%	0.2693	3.7939	0.8983	27	0.13%	1.3479	19.5676	3.0142
	LDGT2	8196	0.2251	3.1606	0.7342	866	10.57%	0.2814	3.7142	0.9452	4	0.05%	0.8987	13.2615	3.1760
2000 Total		60411	0.1945	2.9006	0.6013	5227	8.65%	0.2468	3.5047	0.7607	58	0.10%	1.1746	16.0612	2.6855
2001	LDGV	25887	0.1239	2.3506	0.3534	1896	7.32%	0.1761	3.0443	0.4463	12	0.05%	0.9800	7.8393	2.4367
	LDGT1	17637	0.1378	2.7846	0.4699	1433	8.12%	0.1843	3.2879	0.5893	9	0.05%	0.6430	9.0027	2.9692
	LDGT2	7320	0.2246	3.1000	0.6361	729	9.96%	0.2683	3.7659	0.7958	2	0.03%	0.2370	3.8444	7.6541

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)
2001 Total		50844	0.1432	2.6090	0.4345	4058	7.98%	0.1956	3.2600	0.5596	23	0.05%	0.7835	7.9471	3.0988
2002	LDGV	33132	0.1021	2.5256	0.2857	2180	6.58%	0.1428	2.6097	0.3771	16	0.05%	0.8078	10.4688	2.6585
	LDGT1	25424	0.1079	3.0332	0.3766	1514	5.96%	0.1510	3.3385	0.5110	13	0.05%	0.8211	22.7896	2.5493
	LDGT2	8191	0.1773	2.4683	0.6200	687	8.39%	0.2295	3.3341	0.8104	4	0.05%	0.4733	8.1553	3.0006
2002 Total		66747	0.1136	2.7119	0.3614	4381	6.56%	0.1593	2.9751	0.4913	33	0.05%	0.7725	15.0420	2.6569
2003	LDGV	25270	0.0752	1.6161	0.2440	1573	6.22%	0.1144	1.9751	0.3082	6	0.02%	0.6477	11.7637	2.6328
	LDGT1	17266	0.0928	1.9241	0.3259	1128	6.53%	0.1232	2.5872	0.4425	3	0.02%	0.7080	21.6252	2.9916
	LDGT2	6914	0.1490	2.1268	0.4344	495	7.16%	0.2016	2.7955	0.5958	2	0.03%	1.8944	24.5217	1.6533
2003 Total		49450	0.0916	1.7951	0.2992	3196	6.46%	0.1310	2.3182	0.4001	11	0.02%	0.8908	16.7728	2.5526
2004	LDGV	30034	0.0574	1.3028	0.1629	1670	5.56%	0.0944	1.7808	0.2414	2	0.01%	0.3228	6.4459	2.1194
	LDGT1	25790	0.0637	1.4987	0.1802	1327	5.15%	0.0985	2.2990	0.2591	5	0.02%	1.3959	21.3653	0.7949
	LDGT2	10646	0.0807	1.4944	0.1967	648	6.09%	0.1191	2.3228	0.3063	1	0.01%	0.1002	0.4997	7.5522
2004 Total		66470	0.0636	1.4095	0.1750	3645	5.48%	0.1003	2.0658	0.2594	8	0.01%	0.9657	15.0272	1.9707
2005	LDGV	23373	0.0480	1.1656	0.1418	1283	5.49%	0.0798	1.6021	0.2021	4	0.02%	0.3159	14.1029	2.7638
	LDGT1	19313	0.0568	1.1784	0.1292	802	4.15%	0.0881	1.9566	0.2141	1	0.01%	2.3910	0.1484	7.0673
	LDGT2	6636	0.0926	1.5582	0.1972	350	5.27%	0.1595	2.5895	0.3669	3	0.05%	0.6726	29.5373	2.6964
2005 Total		49322	0.0575	1.2234	0.1444	2435	4.94%	0.0940	1.8608	0.2297	8	0.02%	0.7091	18.1465	3.2764
2006	LDGV	29721	0.0422	1.2039	0.1069	1008	3.39%	0.0862	1.6689	0.1954	1	0.00%	1.0927	3.3180	8.9067
	LDGT1	22153	0.0398	1.1386	0.1065	784	3.54%	0.0605	1.4555	0.1709	1	0.00%	0.2370	15.3335	1.1604
	LDGT2	8834	0.0658	1.0774	0.1256	382	4.32%	0.1113	1.8264	0.2467	0	0.00%	0.0000	0.0000	0.0000
2006 Total		60708	0.0448	1.1616	0.1095	2174	3.58%	0.0814	1.6196	0.1956	2	0.00%	0.6648	9.3258	5.0336
2007	LDGV	21221	0.0370	1.0872	0.0950	719	3.39%	0.0635	1.6355	0.1349	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	16329	0.0339	1.0611	0.0959	741	4.54%	0.0398	1.3290	0.1106	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	7662	0.0506	0.7997	0.0887	337	4.40%	0.0648	1.1549	0.1305	0	0.00%	0.0000	0.0000	0.0000
2007 Total		45212	0.0382	1.0291	0.0943	1797	3.97%	0.0540	1.4190	0.1241	0	0.00%	0.0000	0.0000	0.0000
2008	LDGV	31164	0.0338	1.0718	0.0849	723	2.32%	0.0528	1.5156	0.1069	1	0.00%	3.4279	53.0501	0.9844
	LDGT1	24226	0.0287	0.9278	0.0827	735	3.03%	0.0284	1.0630	0.0663	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	10779	0.0416	1.0029	0.0756	484	4.49%	0.0710	2.6274	0.1112	1	0.01%	0.1481	18.3538	0.1844
2008 Total		66169	0.0332	1.0079	0.0826	1942	2.93%	0.0481	1.6214	0.0926	2	0.00%	1.7880	35.7020	0.5844
2009	LDGV	13423	0.0340	1.1120	0.0892	314	2.34%	0.0644	1.6659	0.1288	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	7109	0.0285	1.0493	0.0819	257	3.62%	0.0297	1.2178	0.0785	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	3626	0.0367	0.8049	0.0658	169	4.66%	0.0412	1.3028	0.0739	0	0.00%	0.0000	0.0000	0.0000
2009 Total		24158	0.0328	1.0475	0.0835	740	3.06%	0.0470	1.4273	0.0988	0	0.00%	0.0000	0.0000	0.0000
2010	LDGV	27683	0.0301	1.0742	0.0730	489	1.77%	0.0636	1.5802	0.1025	1	0.00%	0.0077	0.1068	4.9567
	LDGT1	20881	0.0249	0.8485	0.0664	435	2.08%	0.0282	0.8634	0.0596	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	10058	0.0345	0.7668	0.0584	271	2.69%	0.0371	1.0260	0.0800	0	0.00%	0.0000	0.0000	0.0000
2010 Total		58622	0.0290	0.9410	0.0681	1195	2.04%	0.0447	1.1936	0.0818	1	0.00%	0.0077	0.1068	4.9567
2011	LDGV	9280	0.0294	1.0692	0.0701	140	1.51%	0.0481	1.4054	0.1184	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	4251	0.0260	0.9367	0.0632	72	1.69%	0.0243	1.0506	0.1398	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	2138	0.0371	0.7049	0.0539	70	3.27%	0.0352	0.9802	0.0686	0	0.00%	0.0000	0.0000	0.0000

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)
2011 Total		15669	0.0296	0.9835	0.0660	282	1.80%	0.0388	1.2093	0.1115	0	0.00%	0.0000	0.0000	0.0000
2012	LDGV	3957	0.0271	1.0787	0.0613	67	1.69%	0.0219	1.1588	0.0680	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	1242	0.0266	0.9294	0.0593	11	0.89%	0.0235	0.9350	0.0486	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	803	0.0350	0.6632	0.0517	23	2.86%	0.0738	0.9561	0.1211	0	0.00%	0.0000	0.0000	0.0000
2012 Total		6002	0.0280	0.9922	0.0596	101	1.68%	0.0339	1.0882	0.0780	0	0.00%	0.0000	0.0000	0.0000
2013	LDGV	1874	0.0235	0.8610	0.0606	20	1.07%	0.0187	0.5368	0.0495	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	708	0.0232	0.8486	0.0502	3	0.42%	0.0311	0.7113	0.0458	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	480	0.0329	0.5485	0.0539	5	1.04%	0.0264	0.6212	0.0424	0	0.00%	0.0000	0.0000	0.0000
2013 Total		3062	0.0249	0.8091	0.0571	28	0.91%	0.0214	0.5706	0.0478	0	0.00%	0.0000	0.0000	0.0000
2014	LDGV	505	0.0215	0.7422	0.0577	2	0.40%	0.0136	0.4691	0.0417	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	271	0.0199	0.7142	0.0493	1	0.37%	0.0126	0.4398	0.0713	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	161	0.0293	0.5573	0.0430	1	0.62%	0.0192	0.2668	0.0369	0	0.00%	0.0000	0.0000	0.0000
2014 Total		937	0.0224	0.7023	0.0527	4	0.43%	0.0147	0.4112	0.0479	0	0.00%	0.0000	0.0000	0.0000
2015	LDGV	36	0.0365	0.6357	0.0430	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT1	23	0.0479	0.6319	0.0423	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
	LDGT2	2	0.0554	0.8894	0.0349	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
2015 Total		61	0.0414	0.6426	0.0424	0	0.00%	0.0000	0.0000	0.0000	0	0.00%	0.0000	0.0000	0.0000
Grand Total		879846	0.2095	2.9371	0.5239	61438	6.98%	0.4000	4.8155	0.9209	588	0.07%	2.2391	28.7990	2.5906

Records 1 - 102 (All Records)

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	436747	0.1721	2.5436	0.4346	27223	6.23%	0.3073	3.7673	0.7085	278	0.06%	2.0069	25.0477	2.2727
LDGT1	314068	0.2326	3.2779	0.5914	22710	7.23%	0.4447	5.4641	1.0482	211	0.07%	2.1155	31.3399	2.6447
LDGT2	129031	0.2798	3.4392	0.6617	11505	8.92%	0.5309	6.0156	1.1720	99	0.08%	3.1547	33.9174	3.3682
Grand Total	879846	0.2095	2.9371	0.5239	61438	6.98%	0.4000	4.8155	0.9209	588	0.07%	2.2391	28.7990	2.5906

Appendix J

I/M240 Fleet Characterization Summary Report

Emissions Reduction Component

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	322	1.9547	24.0003	2.0783	322	1.6904	19.1149	2.0705	0.2643	13.52%	4.8855	20.36%	0.0079	0.38%
	LDGT1	299	2.7954	36.3351	3.0034	299	2.3217	28.1554	3.0087	0.4737	16.95%	8.1797	22.51%	-0.0053	-0.18%
	LDGT2	70	2.9778	58.6616	2.4990	70	2.3333	37.7993	2.7451	0.6445	21.64%	20.8624	35.56%	-0.2462	-9.85%
1982 Total		691	2.4221	32.8489	2.5212	691	2.0287	24.9195	2.5448	0.3934	16.24%	7.9294	24.14%	-0.0236	-0.94%
1983	LDGV	366	1.7477	20.9025	2.0189	366	1.3575	12.9779	2.0047	0.3902	22.33%	7.9246	37.91%	0.0142	0.70%
	LDGT1	305	3.3324	39.9747	2.4889	305	2.8686	32.4727	2.5021	0.4638	13.92%	7.5020	18.77%	-0.0132	-0.53%
	LDGT2	102	3.6410	43.1873	3.0082	102	2.7131	33.8668	2.8522	0.9278	25.48%	9.3205	21.58%	0.1559	5.18%
1983 Total		773	2.6228	31.3683	2.3349	773	2.1326	23.4262	2.3128	0.4902	18.69%	7.9420	25.32%	0.0221	0.95%
1984	LDGV	873	1.6400	17.0372	1.8974	873	1.4042	12.2102	1.9146	0.2358	14.38%	4.8269	28.33%	-0.0172	-0.90%
	LDGT1	713	2.4685	31.9444	2.4653	713	2.0378	24.1721	2.5014	0.4306	17.45%	7.7723	24.33%	-0.0360	-1.46%
	LDGT2	241	2.5518	35.8295	3.4130	241	2.1231	26.6641	3.2660	0.4287	16.80%	9.1654	25.58%	0.1471	4.31%
1984 Total		1827	2.0836	25.3337	2.3190	1827	1.7463	18.7851	2.3218	0.3373	16.19%	6.5487	25.85%	-0.0029	-0.12%
1985	LDGV	916	1.3095	13.8458	1.9441	916	1.0593	10.3716	1.9062	0.2502	19.11%	3.4742	25.09%	0.0378	1.95%
	LDGT1	765	2.4154	26.2217	2.6955	765	2.0032	19.4243	2.6578	0.4122	17.07%	6.7975	25.92%	0.0377	1.40%
	LDGT2	238	2.7040	35.6982	2.9963	238	2.2352	23.7534	2.9536	0.4688	17.34%	11.9448	33.46%	0.0427	1.43%
1985 Total		1919	1.9233	21.4896	2.3741	1919	1.5814	15.6401	2.3357	0.3419	17.78%	5.8495	27.22%	0.0384	1.62%
1986	LDGV	1544	1.0701	10.1555	1.8970	1544	0.9272	7.8598	1.8740	0.1429	13.35%	2.2957	22.61%	0.0230	1.21%
	LDGT1	1422	1.8367	20.0093	2.5429	1422	1.6614	16.4895	2.5396	0.1753	9.54%	3.5199	17.59%	0.0033	0.13%
	LDGT2	365	2.4330	31.5136	2.8878	365	1.8384	20.9544	2.8231	0.5946	24.44%	10.5591	33.51%	0.0646	2.24%
1986 Total		3331	1.5467	16.7025	2.2813	3331	1.3405	12.9787	2.2621	0.2062	13.33%	3.7238	22.29%	0.0192	0.84%
1987	LDGV	1438	1.1854	11.1174	1.8518	1438	0.9210	8.1587	1.8151	0.2644	22.30%	2.9588	26.61%	0.0367	1.98%
	LDGT1	1218	1.8319	20.6341	2.3337	1218	1.4674	14.6516	2.3383	0.3645	19.90%	5.9825	28.99%	-0.0046	-0.20%
	LDGT2	363	2.3097	20.5319	3.0229	363	1.8078	14.1654	2.8750	0.5018	21.73%	6.3664	31.01%	0.1479	4.89%
1987 Total		3019	1.5814	16.0888	2.1870	3019	1.2481	11.5004	2.1536	0.3333	21.08%	4.5884	28.52%	0.0334	1.53%
1988	LDGV	2302	0.9418	10.2775	1.6310	2302	0.7710	8.0038	1.6027	0.1708	18.14%	2.2737	22.12%	0.0283	1.74%
	LDGT1	2018	1.4692	14.4566	2.1948	2018	1.3060	11.9860	2.1415	0.1632	11.11%	2.4706	17.09%	0.0533	2.43%
	LDGT2	709	1.7888	15.8934	2.7303	709	1.4225	12.1184	2.6001	0.3663	20.48%	3.7750	23.75%	0.1302	4.77%
1988 Total		5029	1.2728	12.7462	2.0122	5029	1.0775	10.1818	1.9595	0.1953	15.35%	2.5644	20.12%	0.0527	2.62%
1989	LDGV	2442	0.9328	10.1706	1.6997	2442	0.7805	8.1169	1.6780	0.1523	16.33%	2.0538	20.19%	0.0217	1.28%
	LDGT1	1949	1.4977	16.4086	2.1384	1949	1.2587	12.8153	2.0956	0.2390	15.96%	3.5933	21.90%	0.0429	2.01%
	LDGT2	720	1.7740	14.6314	2.7905	720	1.4880	12.5458	2.7296	0.2860	16.12%	2.0856	14.25%	0.0608	2.18%
1989 Total		5111	1.2667	13.1778	2.0207	5111	1.0625	10.5325	1.9854	0.2042	16.12%	2.6453	20.07%	0.0353	1.75%
1990	LDGV	4545	0.8285	9.2783	1.6455	4545	0.7097	7.6116	1.5999	0.1188	14.34%	1.6667	17.96%	0.0456	2.77%
	LDGT1	2667	1.3882	13.8285	2.1224	2667	1.1569	10.9598	2.0648	0.2314	16.67%	2.8687	20.75%	0.0576	2.71%
	LDGT2	1076	1.7758	15.3246	2.7308	1076	1.4791	13.2104	2.6494	0.2967	16.71%	2.1142	13.80%	0.0814	2.98%
1990 Total		8288	1.1316	11.5275	1.9399	8288	0.9535	9.4159	1.8858	0.1781	15.74%	2.1116	18.32%	0.0541	2.79%
1991	LDGV	4878	0.7830	8.9370	1.5572	4878	0.6341	6.9613	1.4988	0.1489	19.02%	1.9757	22.11%	0.0584	3.75%
	LDGT1	2902	1.1840	13.5600	1.8491	2902	0.9975	10.9792	1.7946	0.1865	15.75%	2.5808	19.03%	0.0545	2.95%
	LDGT2	838	1.6255	17.6978	2.5995	838	1.3047	14.0937	2.4540	0.3207	19.73%	3.6041	20.36%	0.1455	5.60%
1991 Total		8618	0.9999	11.3456	1.7568	8618	0.8217	9.0078	1.6913	0.1783	17.83%	2.3378	20.61%	0.0655	3.73%
1992	LDGV	6798	0.6953	8.1227	1.4673	6798	0.5789	6.2601	1.4393	0.1164	16.74%	1.8626	22.93%	0.0280	1.91%
	LDGT1	3714	1.0590	11.6628	1.8217	3714	0.9451	10.0837	1.7612	0.1139	10.76%	1.5791	13.54%	0.0605	3.32%

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	1649	1.6547	17.0133	2.5642	1649	1.3738	13.8131	2.4607	0.2808	16.97%	3.2001	18.81%	0.1035	4.04%
1992 Total		12161	0.9364	10.4094	1.7243	12161	0.7985	8.4520	1.6761	0.1380	14.73%	1.9574	18.80%	0.0482	2.79%
1993	LDGV	6933	0.6839	7.7513	1.5301	6933	0.5804	5.9593	1.4892	0.1035	15.14%	1.7920	23.12%	0.0409	2.67%
	LDGT1	4565	1.1121	11.5901	2.1218	4565	0.9645	9.8399	2.0234	0.1476	13.27%	1.7502	15.10%	0.0984	4.64%
	LDGT2	1645	1.7217	16.0807	2.5408	1645	1.3912	13.9638	2.3832	0.3305	19.20%	2.1170	13.16%	0.1576	6.20%
1993 Total		13143	0.9625	10.1272	1.8621	13143	0.8153	8.3090	1.7867	0.1472	15.30%	1.8182	17.95%	0.0755	4.05%
1994	LDGV	9434	0.5283	6.2413	1.2425	9434	0.4481	5.1290	1.2022	0.0802	15.18%	1.1123	17.82%	0.0403	3.24%
	LDGT1	6875	0.8848	9.7078	1.8458	6875	0.7730	8.2456	1.7613	0.1118	12.64%	1.4622	15.06%	0.0845	4.58%
	LDGT2	3135	1.2485	13.3741	2.2069	3135	0.9769	10.3583	2.0487	0.2716	21.75%	3.0158	22.55%	0.1582	7.17%
1994 Total		19444	0.7705	8.6170	1.6113	19444	0.6482	7.0741	1.5364	0.1222	15.87%	1.5429	17.91%	0.0749	4.65%
1995	LDGV	11844	0.5133	5.8794	1.0996	11844	0.4330	4.9148	1.0564	0.0803	15.65%	0.9645	16.41%	0.0432	3.93%
	LDGT1	7009	0.8558	9.9291	1.9029	7009	0.7270	8.1272	1.7854	0.1288	15.05%	1.8018	18.15%	0.1175	6.17%
	LDGT2	3505	1.1847	13.0246	2.1595	3505	0.9394	10.4096	1.9776	0.2453	20.70%	2.6151	20.08%	0.1819	8.42%
1995 Total		22358	0.7259	8.2690	1.5176	22358	0.6045	6.7833	1.4293	0.1214	16.72%	1.4858	17.97%	0.0882	5.81%
1996	LDGV	14951	0.3827	4.6991	0.8797	14951	0.3266	3.8977	0.8422	0.0561	14.67%	0.8014	17.05%	0.0375	4.26%
	LDGT1	9337	0.4769	6.1900	1.4772	9337	0.4060	5.2158	1.4018	0.0709	14.87%	0.9741	15.74%	0.0754	5.10%
	LDGT2	4084	0.5932	7.1780	1.4417	4084	0.5088	6.0631	1.3476	0.0844	14.23%	1.1148	15.53%	0.0942	6.53%
1996 Total		28372	0.4440	5.5465	1.1572	28372	0.3789	4.6432	1.0991	0.0651	14.65%	0.9033	16.29%	0.0581	5.02%
1997	LDGV	16716	0.3861	4.9542	0.8542	16716	0.3324	4.0994	0.8088	0.0537	13.90%	0.8548	17.25%	0.0454	5.32%
	LDGT1	11678	0.4313	6.3203	1.4049	11678	0.3728	5.2250	1.3052	0.0585	13.57%	1.0953	17.33%	0.0996	7.09%
	LDGT2	4436	0.5355	7.0969	1.4845	4436	0.4166	5.7669	1.3464	0.1189	22.20%	1.3300	18.74%	0.1381	9.30%
1997 Total		32830	0.4223	5.7297	1.1352	32830	0.3581	4.7251	1.0580	0.0642	15.20%	1.0046	17.53%	0.0772	6.80%
1998	LDGV	21741	0.2913	4.2739	0.6987	21741	0.2477	3.5420	0.6522	0.0436	14.98%	0.7319	17.13%	0.0465	6.66%
	LDGT1	17122	0.3777	5.3362	1.1704	17122	0.3271	4.5539	1.0897	0.0506	13.39%	0.7824	14.66%	0.0807	6.89%
	LDGT2	6066	0.4476	5.9062	1.3250	6066	0.3465	4.7021	1.1830	0.1011	22.59%	1.2041	20.39%	0.1420	10.72%
1998 Total		44929	0.3453	4.8991	0.9630	44929	0.2913	4.0842	0.8906	0.0540	15.65%	0.8149	16.63%	0.0724	7.52%
1999	LDGV	21519	0.2565	3.7911	0.6665	21519	0.2213	3.2080	0.6116	0.0352	13.72%	0.5831	15.38%	0.0549	8.24%
	LDGT1	15297	0.2956	4.5834	0.9054	15297	0.2529	3.8235	0.8285	0.0427	14.44%	0.7599	16.58%	0.0770	8.50%
	LDGT2	7343	0.3890	4.8415	1.0775	7343	0.2888	3.5849	0.9334	0.1002	25.76%	1.2566	25.96%	0.1441	13.37%
1999 Total		44159	0.2921	4.2402	0.8176	44159	0.2435	3.4839	0.7402	0.0486	16.64%	0.7564	17.84%	0.0774	9.46%
2000	LDGV	30625	0.1972	3.1478	0.5287	30625	0.1669	2.6459	0.4772	0.0303	15.36%	0.5019	15.95%	0.0515	9.74%
	LDGT1	21590	0.2431	3.5889	0.7758	21590	0.2222	3.1633	0.7268	0.0210	8.63%	0.4256	11.86%	0.0489	6.31%
	LDGT2	8196	0.2720	3.9617	0.8075	8196	0.2251	3.1606	0.7342	0.0469	17.24%	0.8011	20.22%	0.0733	9.08%
2000 Total		60411	0.2237	3.4159	0.6548	60411	0.1945	2.9006	0.6013	0.0292	13.06%	0.5152	15.08%	0.0535	8.18%
2001	LDGV	25887	0.1462	2.7529	0.3951	25887	0.1239	2.3506	0.3534	0.0223	15.27%	0.4023	14.61%	0.0417	10.56%
	LDGT1	17637	0.1580	3.2387	0.5127	17637	0.1378	2.7846	0.4699	0.0203	12.83%	0.4541	14.02%	0.0429	8.36%
	LDGT2	7320	0.2603	3.6892	0.6859	7320	0.2246	3.1000	0.6361	0.0356	13.69%	0.5892	15.97%	0.0499	7.27%
2001 Total		50844	0.1668	3.0562	0.4778	50844	0.1432	2.6090	0.4345	0.0235	14.11%	0.4472	14.63%	0.0433	9.06%
2002	LDGV	33132	0.1185	2.7872	0.3263	33132	0.1021	2.5256	0.2857	0.0164	13.81%	0.2616	9.39%	0.0406	12.45%
	LDGT1	25424	0.1259	3.4852	0.4050	25424	0.1079	3.0332	0.3766	0.0180	14.33%	0.4519	12.97%	0.0284	7.02%
	LDGT2	8191	0.2007	2.8607	0.6616	8191	0.1773	2.4683	0.6200	0.0233	11.62%	0.3924	13.72%	0.0416	6.29%
2002 Total		66747	0.1314	3.0621	0.3975	66747	0.1136	2.7119	0.3614	0.0179	13.59%	0.3502	11.44%	0.0361	9.08%

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
2003	LDGV	25270	0.0923	1.8544	0.2755	25270	0.0752	1.6161	0.2440	0.0171	18.56%	0.2383	12.85%	0.0316	11.46%
	LDGT1	17266	0.1087	2.2325	0.3491	17266	0.0928	1.9241	0.3259	0.0159	14.66%	0.3084	13.82%	0.0232	6.66%
	LDGT2	6914	0.1772	2.5329	0.4714	6914	0.1490	2.1268	0.4344	0.0282	15.92%	0.4061	16.03%	0.0370	7.85%
2003 Total		49450	0.1099	2.0813	0.3286	49450	0.0916	1.7951	0.2992	0.0183	16.62%	0.2862	13.75%	0.0294	8.95%
2004	LDGV	30034	0.0706	1.5113	0.1863	30034	0.0574	1.3028	0.1629	0.0132	18.64%	0.2085	13.79%	0.0234	12.58%
	LDGT1	25790	0.0723	1.7397	0.1962	25790	0.0637	1.4987	0.1802	0.0086	11.91%	0.2411	13.86%	0.0160	8.15%
	LDGT2	10646	0.0886	1.6518	0.2200	10646	0.0807	1.4944	0.1967	0.0079	8.92%	0.1574	9.53%	0.0233	10.61%
2004 Total		66470	0.0742	1.6224	0.1955	66470	0.0636	1.4095	0.1750	0.0106	14.23%	0.2129	13.12%	0.0205	10.50%
2005	LDGV	23373	0.0587	1.3642	0.1648	23373	0.0480	1.1656	0.1418	0.0107	18.22%	0.1986	14.56%	0.0229	13.90%
	LDGT1	19313	0.0602	1.2565	0.1414	19313	0.0568	1.1784	0.1292	0.0034	5.60%	0.0781	6.21%	0.0122	8.62%
	LDGT2	6636	0.1059	1.7265	0.2313	6636	0.0926	1.5582	0.1972	0.0133	12.58%	0.1683	9.75%	0.0341	14.74%
2005 Total		49322	0.0656	1.3708	0.1646	49322	0.0575	1.2234	0.1444	0.0082	12.46%	0.1473	10.75%	0.0202	12.28%
2006	LDGV	29721	0.0512	1.3630	0.1251	29721	0.0422	1.2039	0.1069	0.0090	17.57%	0.1591	11.67%	0.0182	14.56%
	LDGT1	22153	0.0421	1.2057	0.1146	22153	0.0398	1.1386	0.1065	0.0022	5.32%	0.0672	5.57%	0.0081	7.03%
	LDGT2	8834	0.0745	1.1676	0.1452	8834	0.0658	1.0774	0.1256	0.0087	11.69%	0.0902	7.72%	0.0196	13.49%
2006 Total		60708	0.0512	1.2772	0.1242	60708	0.0448	1.1616	0.1095	0.0065	12.66%	0.1155	9.05%	0.0147	11.84%
2007	LDGV	21221	0.0464	1.1995	0.1140	21221	0.0370	1.0872	0.0950	0.0094	20.30%	0.1122	9.36%	0.0191	16.71%
	LDGT1	16329	0.0353	1.1281	0.1021	16329	0.0339	1.0611	0.0959	0.0014	3.91%	0.0670	5.94%	0.0061	5.99%
	LDGT2	7662	0.0565	0.8550	0.1009	7662	0.0506	0.7997	0.0887	0.0059	10.43%	0.0554	6.48%	0.0122	12.12%
2007 Total		45212	0.0441	1.1153	0.1075	45212	0.0382	1.0291	0.0943	0.0059	13.43%	0.0863	7.74%	0.0132	12.30%
2008	LDGV	31164	0.0372	1.1376	0.0943	31164	0.0338	1.0718	0.0849	0.0033	8.99%	0.0658	5.78%	0.0094	10.01%
	LDGT1	24226	0.0293	0.9448	0.0861	24226	0.0287	0.9278	0.0827	0.0006	2.05%	0.0170	1.79%	0.0034	3.90%
	LDGT2	10779	0.0432	1.0398	0.0809	10779	0.0416	1.0029	0.0756	0.0016	3.69%	0.0368	3.54%	0.0053	6.52%
2008 Total		66169	0.0353	1.0511	0.0891	66169	0.0332	1.0079	0.0826	0.0021	5.82%	0.0432	4.11%	0.0065	7.33%
2009	LDGV	13423	0.0367	1.1441	0.1039	13423	0.0340	1.1120	0.0892	0.0028	7.54%	0.0320	2.80%	0.0148	14.23%
	LDGT1	7109	0.0285	1.0461	0.0840	7109	0.0285	1.0493	0.0819	0.0000	0.08%	-0.0032	-0.30%	0.0022	2.58%
	LDGT2	3626	0.0375	0.8076	0.0671	3626	0.0367	0.8049	0.0658	0.0008	2.15%	0.0027	0.33%	0.0013	1.96%
2009 Total		24158	0.0344	1.0648	0.0926	24158	0.0328	1.0475	0.0835	0.0017	4.84%	0.0173	1.62%	0.0091	9.78%
2010	LDGV	27683	0.0323	1.0938	0.0779	27683	0.0301	1.0742	0.0730	0.0022	6.74%	0.0196	1.80%	0.0049	6.27%
	LDGT1	20881	0.0251	0.8529	0.0686	20881	0.0249	0.8485	0.0664	0.0003	1.05%	0.0044	0.52%	0.0021	3.11%
	LDGT2	10058	0.0351	0.7768	0.0597	10058	0.0345	0.7668	0.0584	0.0005	1.53%	0.0100	1.29%	0.0013	2.15%
2010 Total		58622	0.0302	0.9536	0.0714	58622	0.0290	0.9410	0.0681	0.0012	4.01%	0.0126	1.32%	0.0033	4.60%
2011	LDGV	9280	0.0315	1.1003	0.0749	9280	0.0294	1.0692	0.0701	0.0021	6.65%	0.0311	2.82%	0.0048	6.42%
	LDGT1	4251	0.0262	0.9423	0.0630	4251	0.0260	0.9367	0.0632	0.0002	0.89%	0.0057	0.60%	-0.0002	-0.29%
	LDGT2	2138	0.0444	0.7341	0.0568	2138	0.0371	0.7049	0.0539	0.0073	16.40%	0.0292	3.98%	0.0029	5.13%
2011 Total		15669	0.0319	1.0075	0.0692	15669	0.0296	0.9835	0.0660	0.0023	7.22%	0.0239	2.38%	0.0032	4.62%
2012	LDGV	3957	0.0287	1.0974	0.0670	3957	0.0271	1.0787	0.0613	0.0016	5.62%	0.0187	1.70%	0.0057	8.52%
	LDGT1	1242	0.0268	0.9506	0.0596	1242	0.0266	0.9294	0.0593	0.0003	0.97%	0.0212	2.23%	0.0003	0.52%
	LDGT2	803	0.0349	0.6735	0.0521	803	0.0350	0.6632	0.0517	-0.0001	-0.23%	0.0103	1.53%	0.0004	0.86%
2012 Total		6002	0.0291	1.0103	0.0635	6002	0.0280	0.9922	0.0596	0.0011	3.80%	0.0181	1.79%	0.0039	6.13%
2013	LDGV	1874	0.0237	0.8690	0.0610	1874	0.0235	0.8610	0.0606	0.0002	0.73%	0.0081	0.93%	0.0005	0.75%
	LDGT1	708	0.0232	0.8483	0.0502	708	0.0232	0.8486	0.0502	0.0000	0.03%	-0.0003	-0.04%	-0.0000	-0.02%

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	480	0.0330	0.5516	0.0539	480	0.0329	0.5485	0.0539	0.0000	0.12%	0.0032	0.58%	0.0000	0.03%
2013 Total		3062	0.0250	0.8145	0.0574	3062	0.0249	0.8091	0.0571	0.0001	0.45%	0.0054	0.66%	0.0003	0.49%
2014	LDGV	505	0.0215	0.7447	0.0577	505	0.0215	0.7422	0.0577	0.0000	0.03%	0.0026	0.34%	0.0000	0.02%
	LDGT1	271	0.0199	0.7141	0.0492	271	0.0199	0.7142	0.0493	-0.0000	-0.03%	-0.0001	-0.01%	-0.0001	-0.17%
	LDGT2	161	0.0292	0.5556	0.0428	161	0.0293	0.5573	0.0430	-0.0001	-0.41%	-0.0017	-0.30%	-0.0002	-0.54%
2014 Total		937	0.0224	0.7034	0.0527	937	0.0224	0.7023	0.0527	-0.0000	-0.08%	0.0011	0.15%	-0.0001	-0.10%
2015	LDGV	36	0.0365	0.6357	0.0430	36	0.0365	0.6357	0.0430	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
	LDGT1	23	0.0479	0.6319	0.0423	23	0.0479	0.6319	0.0423	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
	LDGT2	2	0.0554	0.8894	0.0349	2	0.0554	0.8894	0.0349	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
2015 Total		61	0.0414	0.6426	0.0424	61	0.0414	0.6426	0.0424	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%
Grand Total		879846	0.2470	3.4973	0.5598	879846	0.2095	2.9371	0.5239	0.0375	15.19%	0.5602	16.02%	0.0359	6.42%

Records 1 - 102 (All Records)

Summary by Vehicle Type (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	436747	0.2036	3.0262	0.4650	436747	0.1721	2.5436	0.4346	0.0315	15.49%	0.4826	15.95%	0.0304	6.54%
LDGT1	314068	0.2679	3.8611	0.6264	314068	0.2326	3.2779	0.5914	0.0354	13.20%	0.5833	15.11%	0.0350	5.59%
LDGT2	129031	0.3427	4.2062	0.7185	129031	0.2798	3.4392	0.6617	0.0629	18.35%	0.7669	18.23%	0.0568	7.91%
Grand Total	879846	0.2470	3.4973	0.5598	879846	0.2095	2.9371	0.5239	0.0375	15.19%	0.5602	16.02%	0.0359	6.42%

Appendix K

Idle Initial Inspection Report

Enhanced Area

Idle Initial Inspection Report (V1.01)

Vehicle		All Initial Inspections					Passing Initial Inspections						Failing Initial Inspections					
Year	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	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm
1974	LDGV	1,105	486.32	2.44	412.8	3.01	761	68.87%	293.7	1.27	276.39	2.34	344	31.13%	912.43	5.01	714.56	4.52
	LDGT	628	418.03	1.96	371.98	2.71	464	73.89%	271.04	1.11	274.3	2.31	164	26.11%	833.88	4.36	648.32	3.81
	HDGT	612	366.45	2.25	357.78	2.56	551	90.03%	287.37	1.88	312.02	2.37	61	9.97%	1080.79	5.58	771.07	4.23
1974 Total		2,345	436.75	2.26	387.51	2.81	1776	75.74%	285.82	1.42	286.9	2.34	569	24.26%	907.84	4.88	701.53	4.28
1975	LDGV	79	306.16	1.47	248.22	2.18	56	70.89%	166.68	0.6	133.34	1.71	23	29.11%	645.77	3.57	527.93	3.32
	LDGT	33	276.86	2.23	192.14	2.61	17	51.52%	138.13	0.48	123.42	1.29	16	48.48%	424.26	4.1	265.15	4.01
	HDGT	147	377.14	1.97	384.57	2.18	123	83.67%	264.3	1.7	296.8	2.29	24	16.33%	955.45	3.34	834.41	1.62
1975 Total		259	342.71	1.85	318.46	2.24	196	75.68%	225.46	1.28	235.06	2.04	63	24.32%	707.49	3.62	577.95	2.85
1976	LDGV	389	298.85	1.29	253.75	1.81	267	68.64%	147.97	0.51	151.82	1.26	122	31.36%	629.07	3.01	476.83	3.02
	LDGT	245	320.67	1.43	280.89	1.95	145	59.18%	166.05	0.51	184.22	1.31	100	40.82%	544.86	2.78	421.07	2.87
	HDGT	663	373.19	2.09	293.16	2.47	557	84.01%	274.06	1.66	237.51	2.28	106	15.99%	894.07	4.35	585.58	3.46
1976 Total		1,297	340.97	1.73	279.03	2.17	969	74.71%	223.15	1.17	205.93	1.85	328	25.29%	689.04	3.37	494.98	3.12
1977	LDGV	417	209.4	1.01	178.49	1.35	280	67.15%	91.23	0.25	95.72	0.97	137	32.85%	450.9	2.54	347.65	2.12
	LDGT	187	254.95	1.28	183.21	1.52	111	59.36%	122.07	0.38	101.13	1.1	76	40.64%	449.02	2.59	303.09	2.14
	HDGT	952	387.15	2.08	329.68	2.25	784	82.35%	273.47	1.59	249.31	2.01	168	17.65%	917.68	4.36	704.75	3.34
1977 Total		1,556	323.63	1.69	271.56	1.92	1175	75.51%	215.74	1.16	198.71	1.68	381	24.49%	656.35	3.35	496.22	2.66
1978	LDGV	570	216.71	0.96	192.01	1.42	402	70.53%	102.04	0.28	115.28	0.95	168	29.47%	491.1	2.58	375.62	2.57
	LDGT	243	232.39	1.14	226.65	1.76	148	60.91%	95.3	0.35	151.32	1.22	95	39.09%	445.96	2.37	344.02	2.62
	HDGT	1,098	382.31	1.92	316.63	2.14	931	84.79%	276.81	1.59	250.49	2.02	167	15.21%	970.5	3.75	685.34	2.82
1978 Total		1,911	313.85	1.53	268.02	1.88	1481	77.50%	211.23	1.11	203.88	1.65	430	22.50%	667.31	2.99	488.93	2.68
1979	LDGV	712	229.9	1.07	195.73	1.64	482	67.70%	103.09	0.32	104.79	1.06	230	32.30%	495.63	2.64	386.31	2.85
	LDGT	896	244.39	0.96	217.75	1.52	587	65.51%	117.18	0.31	131.9	1.12	309	34.49%	486.06	2.2	380.82	2.28
	HDGT	309	347	1.73	251.46	1.83	243	78.64%	206.19	1.07	164.59	1.54	66	21.36%	865.41	4.16	571.28	2.9
1979 Total		1,917	255.55	1.12	215	1.62	1312	68.44%	128.49	0.45	127.99	1.18	605	31.56%	531.08	2.58	403.68	2.56
1980	LDGV	454	190.31	0.93	181.13	1.42	331	72.91%	82.92	0.21	104.34	0.85	123	27.09%	479.29	2.86	387.78	2.95
	LDGT	489	204.96	0.81	185.98	1.59	332	67.89%	102.72	0.24	121.14	1.2	157	32.11%	421.18	2.01	323.11	2.42
	HDGT	129	334.06	1.19	234.82	1.68	99	76.74%	182.15	0.83	134.39	1.49	30	23.26%	835.38	2.35	566.25	2.31
1980 Total		1,072	214.29	0.9	189.81	1.53	762	71.08%	104.44	0.3	115.56	1.08	310	28.92%	484.32	2.38	372.3	2.62
1981	LDGV	388	162.29	0.69	143.13	1.08	245	63.14%	59.37	0.15	50.83	0.3	143	36.86%	338.61	1.61	301.27	2.43
	LDGT	513	183.63	0.67	141.97	1.02	288	56.14%	69.35	0.14	55.66	0.33	225	43.86%	329.91	1.35	252.44	1.91
	HDGT	214	216.49	1.14	169.87	1.3	185	86.45%	130.56	0.9	109.46	1.1	29	13.55%	764.64	2.67	555.21	2.58
1981 Total		1,115	182.51	0.77	147.73	1.09	718	64.39%	81.72	0.34	67.88	0.51	397	35.61%	364.8	1.54	292.14	2.14
1982	LDGV	10	312.68	1.68	157.32	1.46	6	60.00%	92.42	0.23	106.52	0.35	4	40.00%	643.08	3.86	233.53	3.12
	LDGT	7	232.44	0.91	212.66	0.77	4	57.14%	73.88	0.1	101.13	0.56	3	42.86%	443.87	1.99	361.37	1.05
	HDGT	164	273.07	1.25	182.03	1.08	131	79.88%	169.03	0.75	99.04	0.77	33	20.12%	686.11	3.26	511.47	2.29
1982 Total		181	273.69	1.26	181.85	1.09	141	77.90%	163.07	0.71	99.41	0.75	40	22.10%	663.64	3.22	472.42	2.28

Vehicle		All Initial Inspections					Passing Initial Inspections						Failing Initial Inspections					
Year	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	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm
1983	LDGV	3	166.53	0.14	188.5	0.23	2	66.67%	39.8	0.13	32	0.27	1	33.33%	420	0.16	501.5	0.17
	LDGT	6	91.22	0.26	327.53	0.47	3	50.00%	30	0.26	31.33	0.52	3	50.00%	152.43	0.27	623.73	0.42
	HDGT	178	266.35	1.4	169.35	1.21	135	75.84%	147.39	0.91	89.92	0.82	43	24.16%	639.81	2.93	418.72	2.44
1983 Total		187	259.13	1.34	174.73	1.17	140	74.87%	143.34	0.88	87.84	0.8	47	25.13%	604.03	2.7	433.57	2.26
1984	LDGV	20	118.97	0.86	79.13	0.97	12	60.00%	41.44	0.27	38.87	0.41	8	40.00%	235.25	1.75	139.53	1.8
	LDGT	5	76.24	0.27	64.7	0.49	4	80.00%	70.65	0.12	50.63	0.29	1	20.00%	98.6	0.88	121	1.31
	HDGT	376	231.11	1.12	127.63	0.93	304	80.85%	137.75	0.73	79.75	0.71	72	19.15%	625.3	2.77	329.81	1.85
1984 Total		401	223.58	1.1	124.43	0.92	320	79.80%	133.3	0.71	77.85	0.69	81	20.20%	580.27	2.65	308.44	1.83
1985	LDGV	14	121.67	0.65	100.87	0.77	11	78.57%	85.28	0.22	86.37	0.41	3	21.43%	255.1	2.23	154.03	2.08
	LDGT	4	146.9	0.48	120.98	0.46	2	50.00%	139.15	0.52	98	0.37	2	50.00%	154.65	0.45	143.95	0.56
	HDGT	359	246.44	0.92	149.23	0.85	301	83.84%	141.91	0.72	88.46	0.62	58	16.16%	788.86	2	464.63	2.05
1985 Total		377	240.75	0.91	147.14	0.84	314	83.29%	139.91	0.7	88.44	0.61	63	16.71%	743.31	1.96	439.66	2.01
1986	LDGV	30	115.3	0.52	97.51	0.55	23	76.67%	76.58	0.3	64.09	0.39	7	23.33%	242.53	1.24	207.34	1.07
	LDGT	4	56.73	0.04	84.15	1.38	3	75.00%	69.07	0.04	74.4	0.3	1	25.00%	19.7	0.01	113.4	4.61
	HDGT	378	191.05	0.99	118.2	0.94	277	73.28%	85.91	0.61	55.57	0.63	101	26.72%	479.42	2.01	289.99	1.8
1986 Total		412	184.23	0.94	116.37	0.92	303	73.54%	85.03	0.58	56.4	0.61	109	26.46%	459.99	1.94	283.06	1.78
1987	LDGV	18	67.61	0.3	75.67	0.33	17	94.44%	70.01	0.32	77.66	0.35	1	5.56%	26.8	0	41.7	0.01
	LDGT	38	133.81	0.51	116.33	0.69	26	68.42%	80.49	0.2	71.16	0.34	12	31.58%	249.34	1.17	214.21	1.44
	HDGT	285	172.66	0.82	127.49	0.81	228	80.00%	89.65	0.47	73.2	0.63	57	20.00%	504.71	2.22	344.66	1.5
1987 Total		341	162.78	0.76	123.51	0.77	271	79.47%	87.54	0.43	73.29	0.59	70	20.53%	454.11	2.01	317.97	1.47
1988	LDGV	21	70.65	0.23	75.28	0.34	17	80.95%	52.57	0.17	50.31	0.17	4	19.05%	147.5	0.51	181.38	1.07
	LDGT	64	142.46	0.38	130.35	0.6	50	78.13%	101.67	0.26	86.59	0.4	14	21.88%	288.14	0.79	286.64	1.3
	HDGT	493	130.15	0.58	106.32	0.59	419	84.99%	78.35	0.33	66.53	0.48	74	15.01%	423.48	2	331.61	1.26
1988 Total		578	129.35	0.55	107.85	0.59	486	84.08%	79.84	0.32	68.03	0.46	92	15.92%	390.89	1.75	318.23	1.26
1989	LDGV	30	56.27	0.3	50.52	0.41	26	86.67%	47.54	0.15	40.89	0.23	4	13.33%	113.03	1.29	113.15	1.59
	LDGT	66	159.2	0.39	121.13	0.57	46	69.70%	94.72	0.26	92.98	0.39	20	30.30%	307.5	0.7	185.89	0.99
	HDGT	630	124.39	0.48	96.32	0.58	544	86.35%	69.68	0.3	58.02	0.46	86	13.65%	470.45	1.64	338.62	1.36
1989 Total		726	124.74	0.46	96.68	0.57	616	84.85%	70.61	0.29	59.9	0.44	110	15.15%	427.82	1.46	302.65	1.3
1990	LDGV	35	85.94	0.18	87.63	0.42	30	85.71%	56.7	0.13	60.61	0.34	5	14.29%	261.34	0.53	249.7	0.91
	LDGT	103	157.82	0.34	117.9	0.48	78	75.73%	106.97	0.29	95.75	0.43	25	24.27%	316.46	0.49	187.02	0.65
	HDGT	721	111.46	0.58	87.79	0.64	630	87.38%	75.36	0.32	56.69	0.44	91	12.62%	361.37	2.36	303.1	1.97
1990 Total		859	115.98	0.53	91.39	0.61	738	85.91%	77.94	0.31	60.98	0.44	121	14.09%	347.96	1.9	276.91	1.65
1991	LDGV	49	59.92	0.22	82.99	0.25	42	85.71%	40.62	0.09	41.81	0.16	7	14.29%	175.69	0.97	330.06	0.81
	LDGT	99	133.34	0.38	108.22	0.42	80	80.81%	90.05	0.27	74.64	0.36	19	19.19%	315.59	0.85	249.59	0.69
	HDGT	558	124.43	0.77	103.85	0.78	467	83.69%	69.27	0.31	55.78	0.46	91	16.31%	407.54	3.13	350.56	2.46
1991 Total		706	121.2	0.68	103.02	0.69	589	83.43%	70.05	0.29	57.35	0.42	117	16.57%	378.74	2.63	332.94	2.07
1992	LDGV	52	72.14	0.13	109.88	0.32	47	90.38%	35.06	0.09	34.96	0.11	5	9.62%	420.7	0.46	814.1	2.3

Vehicle		All Initial Inspections					Passing Initial Inspections						Failing Initial Inspections					
Year	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	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm
	LDGT	118	117.8	0.29	73.01	0.34	104	88.14%	91.25	0.23	61.99	0.29	14	11.86%	314.99	0.74	154.86	0.72
	HDGT	835	99.37	0.53	72.2	0.66	753	90.18%	65.98	0.28	49.44	0.44	82	9.82%	406	2.81	281.2	2.69
1992 Total		1,005	100.12	0.48	74.24	0.61	904	89.95%	67.28	0.26	50.13	0.41	101	10.05%	394.11	2.41	290.07	2.4
1993	LDGV	31	63.67	0.21	73.09	0.29	28	90.32%	46.15	0.15	50.29	0.25	3	9.68%	227.13	0.8	285.93	0.69
	LDGT	32	126.89	0.42	88.77	0.55	24	75.00%	87.97	0.29	58.83	0.29	8	25.00%	243.66	0.81	178.59	1.33
	HDGT	829	97.5	0.51	72.48	0.62	735	88.66%	63.85	0.26	41.81	0.37	94	11.34%	360.6	2.42	312.34	2.62
1993 Total		892	97.38	0.49	73.09	0.61	787	88.23%	63.96	0.26	42.63	0.36	105	11.77%	347.88	2.25	301.4	2.46
1994	LDGV	51	59.84	0.24	75.88	0.41	44	86.27%	37.18	0.09	43.07	0.16	7	13.73%	202.29	1.17	282.09	2
	LDGT	112	95.58	0.4	93.23	0.58	97	86.61%	75.13	0.28	64.89	0.42	15	13.39%	227.84	1.15	276.5	1.61
	HDGT	1,225	102.07	0.53	71.54	0.61	1087	88.73%	56.33	0.26	42.08	0.38	138	11.27%	462.39	2.69	303.6	2.44
1994 Total		1,388	100	0.51	73.45	0.6	1228	88.47%	57.13	0.25	43.92	0.38	160	11.53%	429.02	2.48	300.12	2.34
1995	LDGV	59	42.08	0.1	45.09	0.24	55	93.22%	36.21	0.07	39.51	0.16	4	6.78%	122.85	0.45	121.78	1.32
	LDGT	31	88.73	0.3	71.67	0.3	27	87.10%	57.26	0.14	44.6	0.25	4	12.90%	301.18	1.36	254.4	0.63
	HDGT	1,361	95.67	0.51	69.27	0.69	1220	89.64%	58.59	0.27	47.61	0.47	141	10.36%	416.52	2.64	256.7	2.63
1995 Total		1,451	93.35	0.49	68.34	0.66	1302	89.73%	57.62	0.26	47.2	0.45	149	10.27%	405.54	2.55	253.02	2.54
1996	LDGV	45	19.69	0.06	23.74	0.12	45	100.00%	19.69	0.06	23.74	0.12	0	0.00%	0	0	0	0
	LDGT	46	45.44	0.12	36.78	0.16	43	93.48%	38.32	0.1	30.99	0.15	3	6.52%	147.43	0.41	119.8	0.35
	HDGT	1,761	79.15	0.32	51.83	0.32	1649	93.64%	55	0.2	35.96	0.25	112	6.36%	434.71	2.1	285.49	1.35
1996 Total		1,852	76.87	0.31	50.77	0.31	1737	93.79%	53.67	0.19	35.52	0.25	115	6.21%	427.22	2.05	281.16	1.32
1997	LDGV	54	25.73	0.05	30.65	0.09	53	98.15%	23.71	0.05	26.95	0.09	1	1.85%	132.4	0.16	226.4	0.49
	LDGT	63	54.66	0.18	47.06	0.25	58	92.06%	46.23	0.15	39.29	0.23	5	7.94%	152.5	0.53	137.22	0.51
	HDGT	1,693	77.9	0.29	49.06	0.29	1600	94.51%	55.74	0.21	34.39	0.23	93	5.49%	459.03	1.58	301.47	1.34
1997 Total		1,810	75.53	0.28	48.44	0.29	1711	94.53%	54.43	0.2	34.32	0.23	99	5.47%	440.25	1.52	292.42	1.29
1998	LDGV	78	35.75	0.06	36.83	0.11	77	98.72%	36.15	0.06	36.98	0.11	1	1.28%	4.6	0	24.7	0.01
	LDGT	179	70.81	0.2	43.34	0.27	173	96.65%	64.7	0.18	36.67	0.23	6	3.35%	246.83	0.93	235.68	1.46
	HDGT	1,573	97.45	0.24	53.46	0.24	1465	93.13%	65.52	0.18	38.9	0.21	108	6.87%	530.55	1.04	250.88	0.64
1998 Total		1,830	92.22	0.23	51.76	0.24	1715	93.72%	64.12	0.17	38.59	0.21	115	6.28%	511.17	1.02	248.12	0.68
1999	LDGV	106	30.02	0.12	39.83	0.13	101	95.28%	17.56	0.03	19.95	0.06	5	4.72%	281.86	1.89	441.36	1.62
	LDGT	1,084	49.7	0.16	35.14	0.19	1027	94.74%	44.72	0.13	29.41	0.15	57	5.26%	139.5	0.55	138.46	0.9
	HDGT	2,357	72.94	0.2	49.47	0.26	2256	95.71%	52.11	0.15	36.16	0.22	101	4.29%	538.36	1.13	346.71	1.18
1999 Total		3,547	64.56	0.18	44.8	0.24	3384	95.40%	48.83	0.14	33.63	0.19	163	4.60%	391.01	0.95	276.79	1.1
2000	LDGV	156	21.21	0.08	38.05	0.1	147	94.23%	13.87	0.04	16.36	0.05	9	5.77%	140.98	0.78	392.3	0.82
	LDGT	2,204	34.15	0.11	30.78	0.12	2075	94.15%	30.3	0.1	26.31	0.11	129	5.85%	96.02	0.32	102.76	0.33
	HDGT	3,090	62.98	0.17	38.29	0.19	2977	96.34%	45.14	0.12	29.59	0.15	113	3.66%	532.85	1.47	267.41	1.35
2000 Total		5,450	50.12	0.14	35.25	0.16	5199	95.39%	38.33	0.11	27.91	0.13	251	4.61%	294.29	0.85	187.27	0.81
2001	LDGV	187	21.5	0.05	25.91	0.08	183	97.86%	13.84	0.03	16.07	0.06	4	2.14%	372.03	0.9	476.55	1.03
	LDGT	2,480	28.2	0.11	24.24	0.11	2340	94.35%	25.61	0.09	21.79	0.09	140	5.65%	71.36	0.57	65.05	0.46

Vehicle		All Initial Inspections					Passing Initial Inspections						Failing Initial Inspections					
Year	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	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm
	HDGT	2,394	52.07	0.16	38.51	0.22	2326	97.16%	42.62	0.11	30.78	0.17	68	2.84%	375.41	1.71	303.04	1.83
2001 Total		5,061	39.24	0.13	31.05	0.16	4849	95.81%	33.33	0.1	25.89	0.13	212	4.19%	174.56	0.94	149.15	0.91
2002	LDGV	212	13.23	0.06	16.72	0.1	207	97.64%	11.65	0.03	14.38	0.05	5	2.36%	78.5	1.49	113.44	2.11
	LDGT	2,983	34.76	0.14	26.76	0.13	2777	93.09%	31.13	0.11	23.72	0.11	206	6.91%	83.73	0.47	67.78	0.47
	HDGT	2,760	50.77	0.14	34.41	0.2	2713	98.30%	43.84	0.11	29.82	0.18	47	1.70%	450.76	1.55	299.08	1.8
2002 Total		5,955	41.42	0.14	29.95	0.16	5697	95.67%	36.48	0.11	26.29	0.14	258	4.33%	150.49	0.69	110.8	0.75
2003	LDGV	366	14.15	0.04	16.03	0.07	356	97.27%	11.81	0.03	13	0.04	10	2.73%	97.49	0.48	124.02	1.1
	LDGT	2,051	30.1	0.13	24.99	0.15	1894	92.35%	25.89	0.09	20.2	0.1	157	7.65%	80.83	0.62	82.69	0.68
	HDGT	2,036	37.54	0.13	26.87	0.17	2007	98.58%	32.99	0.11	23.44	0.16	29	1.42%	351.87	1.71	264.45	1.41
2003 Total		4,453	32.19	0.12	25.11	0.15	4257	95.60%	28.06	0.09	21.13	0.12	196	4.40%	121.78	0.77	111.69	0.81
2004	LDGV	289	12.36	0.04	16.62	0.11	276	95.50%	9.63	0.03	11.93	0.05	13	4.50%	70.38	0.4	116.25	1.3
	LDGT	2,685	19.77	0.09	17.72	0.08	2498	93.04%	16.59	0.06	15.22	0.06	187	6.96%	62.18	0.4	51.06	0.28
	HDGT	2,651	23.93	0.06	18.12	0.1	2636	99.43%	23.44	0.06	17.46	0.1	15	0.57%	109.15	0.61	134.93	1.28
2004 Total		5,625	21.35	0.07	17.85	0.09	5410	96.18%	19.58	0.06	16.14	0.08	215	3.82%	65.95	0.41	60.85	0.41
2005	LDGV	255	12.22	0.04	17.39	0.14	247	96.86%	10.47	0.03	13.78	0.07	8	3.14%	66.25	0.44	128.95	2.28
	LDGT	1,665	17.25	0.06	15.88	0.07	1596	95.86%	15.85	0.05	14.7	0.06	69	4.14%	49.54	0.28	43.37	0.3
	HDGT	1,506	31.47	0.09	22.89	0.11	1487	98.74%	27.58	0.08	19.05	0.1	19	1.26%	336.42	0.92	323.94	0.83
2005 Total		3,426	23.13	0.07	19.08	0.09	3330	97.20%	20.69	0.06	16.57	0.08	96	2.80%	107.71	0.42	106.03	0.57
2006	LDGV	415	9.76	0.04	14.61	0.08	405	97.59%	8.84	0.02	11.6	0.04	10	2.41%	46.97	0.6	136.47	1.83
	LDGT	1,516	8.41	0.03	9.2	0.04	1474	97.23%	8.24	0.02	9.05	0.04	42	2.77%	14.48	0.06	14.67	0.21
	HDGT	2,388	28.27	0.08	21.26	0.1	2358	98.74%	23.09	0.07	17.02	0.09	30	1.26%	435.25	1.27	354.54	0.9
2006 Total		4,319	19.52	0.06	16.39	0.08	4237	98.10%	16.56	0.05	13.73	0.07	82	1.90%	172.38	0.57	153.87	0.66
2007	LDGV	347	8.56	0.03	10.02	0.04	344	99.14%	8.61	0.03	9.99	0.03	3	0.86%	2.67	0	13.57	0.2
	LDGT	2,064	5.65	0.02	9.28	0.03	2019	97.82%	5.55	0.02	8.87	0.03	45	2.18%	9.95	0.05	27.81	0.16
	HDGT	1,359	15.22	0.05	11.7	0.06	1352	99.48%	14.33	0.04	11.58	0.06	7	0.52%	187.77	1.03	34.3	0.25
2007 Total		3,770	9.37	0.03	10.22	0.04	3715	98.54%	9.03	0.03	9.96	0.04	55	1.46%	32.19	0.17	27.86	0.17
2008	LDGV	706	10.26	0.03	14.25	0.08	685	97.03%	8.41	0.02	11.03	0.04	21	2.97%	70.49	0.43	119.05	1.32
	LDGT	2,490	6.02	0.03	8.16	0.05	2450	98.39%	5.66	0.03	8.03	0.04	40	1.61%	28.13	0.05	15.97	0.2
	HDGT	2,318	11.91	0.04	10.76	0.07	2309	99.61%	11.08	0.04	10.67	0.07	9	0.39%	223.6	0.33	35.18	0.16
2008 Total		5,514	9.04	0.03	10.03	0.06	5444	98.73%	8.31	0.03	9.53	0.06	70	1.27%	65.97	0.2	49.36	0.53
2009	LDGV	330	7.08	0.02	10.61	0.06	328	99.39%	6.38	0.01	8.18	0.03	2	0.61%	120.9	0.57	408	3.92
	LDGT	818	4.4	0.02	7.82	0.04	808	98.78%	4.16	0.02	6.89	0.03	10	1.22%	24.06	0.08	83.07	0.63
	HDGT	605	15.05	0.07	14.48	0.12	602	99.50%	14.09	0.06	13.36	0.11	3	0.50%	208.17	2.35	239.13	3.81
2009 Total		1,753	8.58	0.04	10.64	0.07	1738	99.14%	8.02	0.03	9.37	0.06	15	0.86%	73.79	0.6	157.61	1.7
2010	LDGV	345	9.02	0.03	11.63	0.09	332	96.23%	7.6	0.02	9.27	0.04	13	3.77%	45.32	0.28	71.89	1.27
	LDGT	2,227	4.62	0.02	7.41	0.04	2193	98.47%	4.21	0.02	7.11	0.03	34	1.53%	31.03	0.15	26.65	0.24
	HDGT	1,074	12.5	0.04	14.64	0.12	1067	99.35%	11.41	0.04	14.23	0.11	7	0.65%	178.91	0.12	75.99	0.45

Vehicle		All Initial Inspections					Passing Initial Inspections						Failing Initial Inspections					
Year	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	Total	Total%	Avg HC Idle	Avg CO Idle	Avg HC 2500 rpm	Avg CO 2500 rpm
2010 Total		3,646	7.36	0.03	9.94	0.06	3592	98.52%	6.66	0.02	9.43	0.06	54	1.48%	53.64	0.18	43.94	0.51
2011	LDGV	106	7.48	0.05	9.36	0.06	104	98.11%	6.19	0.03	7.93	0.04	2	1.89%	74.7	1.1	83.65	1.19
	LDGT	475	5.24	0.03	7.75	0.05	468	98.53%	5.19	0.03	7.6	0.05	7	1.47%	8.67	0.06	17.96	0.33
	HDGT	325	10.46	0.03	12.81	0.1	323	99.38%	10.45	0.03	12.62	0.1	2	0.62%	11.25	0.02	43.45	0.28
2011 Total		906	7.37	0.03	9.76	0.07	895	98.79%	7.2	0.03	9.45	0.06	11	1.21%	21.15	0.24	34.54	0.47
2012	LDGV	38	6.83	0.03	9.32	0.06	37	97.37%	4.86	0.02	7.43	0.05	1	2.63%	79.7	0.41	79.3	0.43
	LDGT	133	5.94	0.03	5.66	0.04	131	98.50%	4.31	0.02	4.57	0.03	2	1.50%	112.4	0.15	77.5	0.54
	HDGT	124	11.91	0.03	12.05	0.07	122	98.39%	11.66	0.03	11.35	0.07	2	1.61%	27.45	0.11	54.8	0.33
2012 Total		295	8.56	0.03	8.82	0.06	290	98.31%	7.47	0.03	7.78	0.05	5	1.69%	71.88	0.18	68.78	0.43
2013	LDGV	31	3.35	0.01	5.97	0.02	30	96.77%	3.43	0.01	6.14	0.02	1	3.23%	0.9	0.01	1	0
	LDGT	73	4.7	0.03	4.74	0.04	72	98.63%	4.76	0.03	4.8	0.04	1	1.37%	0.3	0	0.5	0.01
	HDGT	123	5.41	0.01	6.48	0.04	123	100.00%	5.41	0.01	6.48	0.04	0	0.00%	0	0	0	0
2013 Total		227	4.9	0.02	5.85	0.03	225	99.12%	4.94	0.02	5.9	0.03	2	0.88%	0.6	0.01	0.75	0.01
2014	LDGV	21	5.44	0.01	7.66	0.02	21	100.00%	5.44	0.01	7.66	0.02	0	0.00%	0	0	0	0
	LDGT	43	4.03	0.02	6.69	0.04	41	95.35%	4.18	0.03	6.87	0.04	2	4.65%	0.95	0.01	3.05	0.01
	HDGT	45	5.09	0.01	5.6	0.03	45	100.00%	5.09	0.01	5.6	0.03	0	0.00%	0	0	0	0
2014 Total		109	4.74	0.02	6.43	0.03	107	98.17%	4.81	0.02	6.49	0.03	2	1.83%	0.95	0.01	3.05	0.01
2015	LDGV	1	0.6	0.01	1	0.01	1	100.00%	0.6	0.01	1	0.01	0	0.00%	0	0	0	0
	LDGT	1	0.4	0.01	1.5	0.03	1	100.00%	0.4	0.01	1.5	0.03	0	0.00%	0	0	0	0
	HDGT	7	8.7	0	17.31	0.13	7	100.00%	8.7	0	17.31	0.13	0	0.00%	0	0	0	0
2015 Total		9	6.88	0	13.74	0.11	9	100.00%	6.88	0	13.74	0.11	0	0.00%	0	0	0	0
Grand Total		80,533	83.99	0.37	67.39	0.46	74069	91.97%	51.03	0.21	43.44	0.32	6,464	8.03%	461.7	2.21	341.89	2.06

Summary by Vehicle (V1.01)

Vehicle Type	All Initial Inspections					Passing Initial Inspections						Failing Initial Inspections					
	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	8625	149.07	0.7	131.9	0.96	7163	83.05%	68.24	0.24	69.3	0.56	1462	16.95%	545.07	2.93	438.62	2.96
LDGT	29203	50.62	0.21	44.32	0.28	26778	91.70%	29.55	0.1	28.08	0.17	2425	8.30%	283.35	1.38	223.62	1.46
HDGT	42705	93.66	0.41	70.14	0.47	40128	93.97%	62.28	0.28	49.07	0.37	2577	6.03%	582.22	2.57	398.31	2.12
Grand Total	80533	83.99	0.37	67.39	0.46	74069	91.97%	51.03	0.21	43.44	0.32	6464	8.03%	461.7	2.21	341.89	2.06

Appendix L

Idle Initial Failure Report

Enhanced Area

Idle Initial Failure Report (V1.02)

Vehicle		Failure For Both Exhaust And Visual						Failure For Exhaust Only						Failure For Visual Only					
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	4	0.36%	1606.03	5.92	1535.83	6.25	340	30.77%	904.27	4.99	704.9	4.5	0	0.00%	0	0	0	0
	LDGT	3	0.48%	781.5	4.84	727.4	3.08	161	25.64%	834.86	4.35	646.85	3.83	0	0.00%	0	0	0	0
	HDGT	1	0.16%	2000	0.21	2000	2.62	59	9.64%	1072.05	5.68	749.24	4.24	1	0.16%	677.4	5.46	829.9	5.36
1974 Total		8	0.34%	1346.08	4.8	1290.69	4.61	560	23.88%	901.99	4.88	692.88	4.28	1	0.04%	677.4	5.46	829.9	5.36
1975	LDGV	2	2.53%	1242.65	7.11	1044.3	5.43	20	25.32%	614.36	3.38	498.15	3.23	0	0.00%	0	0	0	0
	LDGT	2	6.06%	524.05	6.21	545.4	5.95	12	36.36%	449.35	4.33	219.73	3.67	1	3.03%	120.7	0.3	410.9	7.41
	HDGT	0	0.00%	0	0	0	0	21	14.29%	1072.19	3.73	940.35	1.71	1	0.68%	34	0.06	44.5	0.06
1975 Total		4	1.54%	883.35	6.66	794.85	5.69	53	20.46%	758.4	3.73	610.32	2.72	2	0.77%	77.35	0.18	227.7	3.74
1976	LDGV	12	3.08%	872.01	3.43	501.63	2.4	92	23.65%	687.69	3.36	525.93	3.41	5	1.29%	159.5	0.95	254.42	0.76
	LDGT	5	2.04%	600.34	3.09	503.02	1.91	74	30.20%	639.41	3.36	470.95	3.2	11	4.49%	244	0.76	250.43	1.06
	HDGT	1	0.15%	2000	5.88	2000	8.36	76	11.46%	1127.94	5.34	690.54	3.74	7	1.06%	183.47	1.76	217.17	1.78
1976 Total		18	1.39%	859.21	3.47	585.26	2.59	242	18.66%	811.19	3.98	560.81	3.45	23	1.77%	207.21	1.1	241.17	1.21
1977	LDGV	14	3.36%	772.43	3.48	614.21	2.61	104	24.94%	470.69	2.81	351.66	2.29	8	1.92%	126.64	0.42	106.55	1.29
	LDGT	7	3.74%	765.99	3.23	879.89	3.21	56	29.95%	481.85	3.07	274	2.16	6	3.21%	163.93	0.26	128.43	2.44
	HDGT	4	0.42%	1066.83	2.71	909.78	5.36	124	13.03%	1089.67	5.27	827.52	3.57	8	0.84%	436.9	1.53	375.99	2.17
1977 Total		25	1.61%	817.73	3.28	735.89	3.22	284	18.25%	743.15	3.94	544.12	2.82	22	1.41%	249.63	0.78	210.5	1.92
1978	LDGV	7	1.23%	559.73	1.8	565.21	1.77	137	24.04%	545.99	2.99	405.11	2.78	12	2.11%	202.19	0.5	206.8	2.04
	LDGT	7	2.88%	305.11	4.37	197.77	2.8	65	26.75%	567.23	2.84	428.8	2.75	7	2.88%	212.91	0.41	304.46	5.12
	HDGT	4	0.36%	1197.3	4.73	943.48	4.94	121	11.02%	1174.61	4.57	829.97	3.15	14	1.28%	320.26	1.05	328.35	1.38
1978 Total		18	0.94%	602.39	3.45	506.38	2.87	323	16.90%	785.75	3.55	569.04	2.91	33	1.73%	254.56	0.71	279.08	2.41
1979	LDGV	20	2.81%	773.72	4.23	623.23	3.75	175	24.58%	533.93	2.91	402.39	2.98	11	1.54%	154.39	0.53	169.11	1.42
	LDGT	42	4.69%	622.04	4.37	426.1	3.2	201	22.43%	575.85	2.34	450.94	2.43	21	2.34%	126.71	0.6	120.29	1.16
	HDGT	5	1.62%	711.06	6.31	636.76	3.08	52	16.83%	968.37	4.4	611.53	2.94	8	2.59%	344.38	1.74	318.09	2.78
1979 Total		67	3.50%	673.96	4.47	500.67	3.35	428	22.33%	606.4	2.82	450.6	2.72	40	2.09%	177.86	0.81	173.27	1.55
1980	LDGV	14	3.08%	623.46	4.53	520.46	3.65	87	19.16%	546.31	3.24	431.62	3.37	8	1.76%	185.94	0.34	212.69	1.21
	LDGT	21	4.29%	583.39	3.66	474.42	2.83	96	19.63%	509.26	2.39	352.58	2.76	13	2.66%	137.43	0.27	273.31	1.86
	HDGT	3	2.33%	1197.4	2.15	841.23	2.33	17	13.18%	1113.35	3.16	718.12	3	6	4.65%	328.52	0.98	320.6	1.11
1980 Total		38	3.54%	646.63	3.86	520.34	3.09	200	18.66%	576.73	2.82	418.03	3.04	27	2.52%	194.27	0.44	265.86	1.5
1981	LDGV	18	4.64%	530.53	3.03	425.36	3.92	115	29.64%	332.9	1.52	301.25	2.37	4	1.03%	66.98	0.18	81.23	0.26
	LDGT	23	4.48%	654.76	2.6	467.7	3.51	170	33.14%	333.46	1.39	258.9	1.99	9	1.75%	86.16	0.33	77.31	0.29
	HDGT	5	2.34%	780.08	2.64	536.18	2.72	20	9.35%	858.98	2.92	643.09	2.84	4	1.87%	273.68	1.46	139.63	1.11
1981 Total		46	4.13%	619.77	2.77	458.58	3.59	305	27.35%	367.71	1.54	300.06	2.19	17	1.52%	125.76	0.56	92.89	0.48
1982	LDGV	0	0.00%	0	0	0	0	4	40.00%	643.08	3.86	233.53	3.12	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	3	42.86%	443.87	1.99	361.37	1.05	0	0.00%	0	0	0	0
	HDGT	3	1.83%	690.03	2.42	808.1	3.85	26	15.85%	750.02	3.59	531.19	2.19	4	2.44%	267.8	1.71	160.85	1.79
1982 Total		3	1.66%	690.03	2.42	808.1	3.85	33	18.23%	709.22	3.48	479.67	2.2	4	2.21%	267.8	1.71	160.85	1.79

Vehicle		Failure For Both Exhaust And Visual						Failure For Exhaust Only						Failure For Visual Only					
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
1983	LDGV	0	0.00%	0	0	0	0	1	33.33%	420	0.16	501.5	0.17	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	2	33.33%	204.4	0.08	913.1	0.28	0	0.00%	0	0	0	0
	HDGT	2	1.12%	798.85	1.66	396.55	0.53	32	17.98%	766.01	3.53	497.77	2.57	8	4.49%	167.83	1.22	158.14	2.68
1983 Total		2	1.07%	798.85	1.66	396.55	0.53	35	18.72%	724.03	3.23	521.61	2.37	8	4.28%	167.83	1.22	158.14	2.68
1984	LDGV	0	0.00%	0	0	0	0	8	40.00%	235.25	1.75	139.53	1.8	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	1	20.00%	98.6	0.88	121	1.31	0	0.00%	0	0	0	0
	HDGT	7	1.86%	595.93	2.96	277.79	1.58	54	14.36%	703.64	3.13	377.42	1.9	10	2.66%	264.95	0.82	123.44	1.22
1984 Total		7	1.75%	595.93	2.96	277.79	1.58	63	15.71%	634.56	2.92	343.14	1.88	10	2.49%	264.95	0.82	123.44	1.22
1985	LDGV	0	0.00%	0	0	0	0	3	21.43%	255.1	2.23	154.03	2.08	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	1	25.00%	215.4	0.65	255.4	0.96	0	0.00%	0	0	0	0
	HDGT	8	2.23%	1213.93	2.3	560.35	3.14	39	10.86%	848.22	2.27	533.22	2	11	3.06%	269.27	0.81	151.86	1.44
1985 Total		8	2.12%	1213.93	2.3	560.35	3.14	43	11.41%	792.12	2.23	500.3	1.98	11	2.92%	269.27	0.81	151.86	1.44
1986	LDGV	1	3.33%	160.7	1.32	86.8	0.34	5	16.67%	265.38	1.34	241.3	1.29	1	3.33%	210.1	0.65	158.1	0.71
	LDGT	0	0.00%	0	0	0	0	1	25.00%	19.7	0.01	113.4	4.61	0	0.00%	0	0	0	0
	HDGT	11	2.91%	612.89	2	299.58	2.58	86	22.75%	479.17	2.05	299.43	1.77	3	0.79%	126.4	1.26	70.67	0.35
1986 Total		12	2.91%	575.21	1.95	281.85	2.4	92	22.33%	462.55	1.99	294.25	1.77	4	0.97%	147.33	1.11	92.52	0.44
1987	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	1	5.56%	26.8	0	41.7	0.01
	LDGT	0	0.00%	0	0	0	0	12	31.58%	249.34	1.17	214.21	1.44	0	0.00%	0	0	0	0
	HDGT	4	1.40%	811.68	2.48	772.15	1.45	47	16.49%	530.81	2.38	341.96	1.49	6	2.11%	95.6	0.82	80.78	1.67
1987 Total		4	1.17%	811.68	2.48	772.15	1.45	59	17.30%	473.56	2.13	315.98	1.48	7	2.05%	85.77	0.7	75.2	1.43
1988	LDGV	0	0.00%	0	0	0	0	4	19.05%	147.5	0.51	181.38	1.07	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	14	21.88%	288.14	0.79	286.64	1.3	0	0.00%	0	0	0	0
	HDGT	4	0.81%	393.58	2.81	235.35	1.62	59	11.97%	486.92	2.27	363.92	1.38	10	2.03%	97.13	0.24	205.12	0.42
1988 Total		4	0.69%	393.58	2.81	235.35	1.62	77	13.32%	433.14	1.91	340.39	1.35	10	1.73%	97.13	0.24	205.12	0.42
1989	LDGV	0	0.00%	0	0	0	0	4	13.33%	113.03	1.29	113.15	1.59	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	20	30.30%	307.5	0.7	185.89	0.99	0	0.00%	0	0	0	0
	HDGT	5	0.79%	948.44	2.96	829.38	2.66	71	11.27%	486.73	1.66	342.82	1.4	6	0.95%	130.33	1.2	70.4	0.64
1989 Total		5	0.69%	948.44	2.96	829.38	2.66	95	13.09%	433.26	1.45	300.11	1.32	6	0.83%	130.33	1.2	70.4	0.64
1990	LDGV	0	0.00%	0	0	0	0	5	14.29%	261.34	0.53	249.7	0.91	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	25	24.27%	316.46	0.49	187.02	0.65	0	0.00%	0	0	0	0
	HDGT	3	0.42%	362.3	4.79	249.6	4.18	77	10.68%	399.37	2.53	337.07	2.14	10	1.39%	90.77	0.43	83.98	0.22
1990 Total		3	0.35%	362.3	4.79	249.6	4.18	107	12.46%	373.55	1.96	297.93	1.73	10	1.16%	90.77	0.43	83.98	0.22
1991	LDGV	0	0.00%	0	0	0	0	3	6.12%	382.7	2.2	743.03	1.81	2	4.08%	15.4	0.01	23.75	0.08
	LDGT	0	0.00%	0	0	0	0	18	18.18%	332.17	0.89	262.41	0.73	0	0.00%	0	0	0	0
	HDGT	2	0.36%	386.1	4.14	311.3	2.42	82	14.70%	438.09	3.34	378.45	2.64	6	1.08%	63.12	0.48	39.82	0.47
1991 Total		2	0.28%	386.1	4.14	311.3	2.42	103	14.59%	417.97	2.88	368.79	2.28	8	1.13%	51.19	0.36	35.8	0.37
1992	LDGV	1	1.92%	640.4	0.05	2000	8.03	4	7.69%	365.78	0.56	517.63	0.87	0	0.00%	0	0	0	0

Vehicle		Failure For Both Exhaust And Visual						Failure For Exhaust Only						Failure For Visual Only					
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 HC 2500 rpm
	LDGT	0	0.00%	0	0	0	0	12	10.17%	348.08	0.85	170.37	0.79	0	0.00%	0	0	0	0
	HDGT	1	0.12%	190	4.32	262.1	4.25	70	8.38%	457.64	3.16	315.95	2.95	9	1.08%	111.32	0.53	72.87	1.06
1992 Total		2	0.20%	415.2	2.19	1131.05	6.14	86	8.56%	438.08	2.72	305.02	2.55	9	0.90%	111.32	0.53	72.87	1.06
1993	LDGV	0	0.00%	0	0	0	0	2	6.45%	308	1.19	398.4	1.02	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	6	18.75%	307.18	1.08	226.98	1.67	0	0.00%	0	0	0	0
	HDGT	2	0.24%	506.5	0.65	469.75	0.23	79	9.53%	404.15	2.8	344.96	2.96	11	1.33%	74.47	0.35	98.38	0.91
1993 Total		2	0.22%	506.5	0.65	469.75	0.23	87	9.75%	395.26	2.65	338.05	2.83	11	1.23%	74.47	0.35	98.38	0.91
1994	LDGV	1	1.96%	338.1	0.32	556	0.74	4	7.84%	219.18	1.87	290.15	2.97	1	1.96%	113.9	0.14	117.1	0.76
	LDGT	0	0.00%	0	0	0	0	14	12.50%	233.89	1.17	286.04	1.66	0	0.00%	0	0	0	0
	HDGT	2	0.16%	1328.85	2.12	1035.95	3.34	120	9.80%	495.36	3.01	318	2.67	13	1.06%	98.53	0.4	107.09	0.69
1994 Total		3	0.22%	998.6	1.52	875.97	2.47	138	9.94%	460.83	2.79	313.95	2.57	14	1.01%	99.63	0.38	107.81	0.7
1995	LDGV	0	0.00%	0	0	0	0	4	6.78%	122.85	0.45	121.78	1.32	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	3	9.68%	398.2	1.81	336.13	0.84	0	0.00%	0	0	0	0
	HDGT	0	0.00%	0	0	0	0	122	8.96%	467.89	2.96	286.84	2.95	15	1.10%	87.19	0.65	42.94	0.41
1995 Total		0	0.00%	0	0	0	0	129	8.89%	455.57	2.85	282.87	2.85	15	1.03%	87.19	0.65	42.94	0.41
1996	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	2	4.35%	186	0.49	157.85	0.25	0	0.00%	0	0	0	0
	HDGT	1	0.06%	444.4	3.94	143.7	2.96	98	5.57%	481.57	2.3	317.04	1.46	12	0.68%	86.79	0.47	62.89	0.43
1996 Total		1	0.05%	444.4	3.94	143.7	2.96	100	5.40%	475.66	2.26	313.85	1.43	12	0.65%	86.79	0.47	62.89	0.43
1997	LDGV	0	0.00%	0	0	0	0	1	1.85%	132.4	0.16	226.4	0.49	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	2	3.17%	341.4	1.32	302.4	1.13	0	0.00%	0	0	0	0
	HDGT	1	0.06%	304.7	1.39	249.5	1.47	79	4.67%	521.67	1.78	341.81	1.47	12	0.71%	95.79	0.42	62.95	0.56
1997 Total		1	0.06%	304.7	1.39	249.5	1.47	82	4.53%	512.52	1.75	339.44	1.45	12	0.66%	95.79	0.42	62.95	0.56
1998	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	3	1.68%	376.73	1.62	421	2.46	0	0.00%	0	0	0	0
	HDGT	0	0.00%	0	0	0	0	98	6.23%	577.64	1.12	266.95	0.67	7	0.45%	75.1	0.24	116.27	0.52
1998 Total		0	0.00%	0	0	0	0	101	5.52%	571.67	1.14	271.52	0.72	7	0.38%	75.1	0.24	116.27	0.52
1999	LDGV	0	0.00%	0	0	0	0	3	2.83%	432.23	2.96	697	2.52	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	28	2.58%	233.87	0.97	245.6	1.67	1	0.09%	88.3	0.2	106.4	0.53
	HDGT	1	0.04%	201.7	2.04	71.9	0.61	86	3.65%	610.98	1.26	387.49	1.26	10	0.42%	116.84	0.26	132.21	0.95
1999 Total		1	0.03%	201.7	2.04	71.9	0.61	117	3.30%	516.15	1.24	361.47	1.39	11	0.31%	114.25	0.26	129.86	0.91
2000	LDGV	0	0.00%	0	0	0	0	4	2.56%	310.8	1.74	875.13	1.81	2	1.28%	6.55	0.01	6.55	0.05
	LDGT	0	0.00%	0	0	0	0	33	1.50%	270.24	0.97	303.3	0.84	3	0.14%	118.23	0.42	88.77	0.3
	HDGT	2	0.06%	1233.3	6.23	1030.45	6.59	101	3.27%	564.19	1.49	273.27	1.35	7	0.23%	65.61	0.22	55.96	0.23
2000 Total		2	0.04%	1233.3	6.23	1030.45	6.59	138	2.53%	486.55	1.38	297.89	1.24	12	0.22%	68.93	0.23	55.93	0.22
2001	LDGV	0	0.00%	0	0	0	0	2	1.07%	693.55	1.65	902.15	1.93	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	52	2.10%	124.93	1.26	127.6	1.04	10	0.40%	57.69	0.18	46.97	0.16

Vehicle		Failure For Both Exhaust And Visual						Failure For Exhaust Only						Failure For Visual Only					
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 HC 2500 rpm
	HDGT	6	0.25%	495.23	2.31	235.5	2.32	36	1.50%	554.99	2.66	457.14	2.72	22	0.92%	110.21	0.31	118.3	0.55
2001 Total		6	0.12%	495.23	2.31	235.5	2.32	90	1.78%	309.59	1.83	276.63	1.73	32	0.63%	93.8	0.27	96.01	0.43
2002	LDGV	0	0.00%	0	0	0	0	2	0.94%	172.1	3.67	238.75	4.66	2	0.94%	21.6	0.07	20.95	0.13
	LDGT	0	0.00%	0	0	0	0	79	2.65%	161.1	1.02	130.68	1.01	6	0.20%	54.53	0.17	53.62	0.27
	HDGT	0	0.00%	0	0	0	0	41	1.49%	505.18	1.74	336.61	2.01	6	0.22%	78.88	0.26	42.65	0.32
2002 Total		0	0.00%	0	0	0	0	122	2.05%	276.91	1.31	201.65	1.41	14	0.24%	60.26	0.19	44.25	0.27
2003	LDGV	0	0.00%	0	0	0	0	7	1.91%	120.17	0.6	156.13	1.49	2	0.55%	62.45	0.3	69.65	0.32
	LDGT	0	0.00%	0	0	0	0	57	2.78%	166.57	1.5	180.83	1.63	2	0.10%	75.65	0.26	100.8	0.34
	HDGT	1	0.05%	352.2	1.81	1192.7	6.56	20	0.98%	466.66	2.26	296.72	1.55	8	0.39%	64.84	0.33	67.76	0.41
2003 Total		1	0.02%	352.2	1.81	1192.7	6.56	84	1.89%	234.15	1.6	206.36	1.6	12	0.27%	66.24	0.32	73.58	0.39
2004	LDGV	2	0.69%	193.45	1.17	275.75	1.53	5	1.73%	83.94	0.52	171.3	2.7	1	0.35%	60.2	0.23	60	0.21
	LDGT	0	0.00%	0	0	0	0	30	1.12%	233.07	1.84	193.87	1.12	9	0.34%	32.51	0.13	22.31	0.18
	HDGT	1	0.04%	164.4	3.27	171.3	5.35	3	0.11%	266.77	1.51	495.53	3.81	8	0.30%	43.68	0.06	23.4	0.16
2004 Total		3	0.05%	183.77	1.87	240.93	2.8	38	0.68%	216.11	1.64	214.72	1.54	18	0.32%	39.01	0.11	24.89	0.17
2005	LDGV	0	0.00%	0	0	0	0	4	1.57%	90.48	0.6	225.48	4.17	3	1.18%	55.87	0.36	42.73	0.51
	LDGT	0	0.00%	0	0	0	0	11	0.66%	195.14	1.43	171.06	1.45	2	0.12%	80.95	0.31	31.85	0.43
	HDGT	0	0.00%	0	0	0	0	13	0.86%	462.91	1.29	454.3	1.08	6	0.40%	62.35	0.13	41.5	0.28
2005 Total		0	0.00%	0	0	0	0	28	0.82%	304.51	1.25	310.34	1.67	11	0.32%	63.96	0.22	40.08	0.37
2006	LDGV	1	0.24%	131.5	1.85	133.5	1.77	6	1.45%	33.87	0.59	174.57	2.64	2	0.48%	60.05	0.31	82.2	0.33
	LDGT	0	0.00%	0	0	0	0	3	0.20%	84.53	0.66	96.5	2.63	3	0.20%	38.77	0.03	14	0.01
	HDGT	0	0.00%	0	0	0	0	22	0.92%	589.15	1.72	475.88	1.18	8	0.34%	12.04	0.03	20.86	0.12
2006 Total		1	0.02%	131.5	1.85	133.5	1.77	31	0.72%	432.84	1.4	380.85	1.6	13	0.30%	25.59	0.07	28.72	0.13
2007	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	1	0.29%	1.7	0	2	0
	LDGT	0	0.00%	0	0	0	0	4	0.19%	73.45	0.46	239.95	1.59	1	0.05%	2.8	0	6.3	0
	HDGT	0	0.00%	0	0	0	0	4	0.29%	325.93	1.79	55.5	0.43	1	0.07%	3.6	0.03	6.9	0.03
2007 Total		0	0.00%	0	0	0	0	8	0.21%	199.69	1.12	147.73	1.01	3	0.08%	2.7	0.01	5.07	0.01
2008	LDGV	0	0.00%	0	0	0	0	9	1.27%	100.76	0.69	210.93	2.71	8	1.13%	65.74	0.35	68.13	0.4
	LDGT	0	0.00%	0	0	0	0	2	0.08%	385.65	0.26	100.3	2	1	0.04%	80.8	0.49	113.3	0.59
	HDGT	0	0.00%	0	0	0	0	2	0.09%	941.2	1.18	118	0.34	3	0.13%	13.2	0.01	5.47	0.01
2008 Total		0	0.00%	0	0	0	0	13	0.24%	273.88	0.7	179.62	2.24	12	0.22%	53.86	0.28	56.22	0.32
2009	LDGV	0	0.00%	0	0	0	0	2	0.61%	120.9	0.57	408	3.92	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	2	0.24%	110.2	0.28	397.65	2.89	1	0.12%	8.8	0.08	12.1	0.4
	HDGT	0	0.00%	0	0	0	0	1	0.17%	600	7.02	663.3	11.08	1	0.17%	8.2	0	9.9	0
2009 Total		0	0.00%	0	0	0	0	5	0.29%	212.44	1.74	454.92	4.94	2	0.11%	8.5	0.04	11	0.2
2010	LDGV	1	0.29%	152.6	1.12	126.3	1.41	5	1.45%	35.12	0.15	97.12	2.71	3	0.87%	84.87	0.55	102.17	0.43
	LDGT	0	0.00%	0	0	0	0	3	0.13%	310.97	1.52	242.77	2.43	2	0.09%	4.75	0.01	7.55	0.03
	HDGT	0	0.00%	0	0	0	0	2	0.19%	489.1	0.17	145	1.01	3	0.28%	31.3	0.03	18.83	0.22

Vehicle		Failure For Both Exhaust And Visual						Failure For Exhaust Only						Failure For Visual Only					
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 HC 2500 rpm
2010 Total		1	0.03%	152.6	1.12	126.3	1.41	10	0.27%	208.67	0.57	150.39	2.29	8	0.22%	44.75	0.22	47.26	0.25
2011	LDGV	0	0.00%	0	0	0	0	1	0.94%	139.6	2.15	149.6	2.32	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	1	0.21%	0.8	0.09	4.6	1.22	0	0.00%	0	0	0	0
	HDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
2011 Total		0	0.00%	0	0	0	0	2	0.22%	70.2	1.12	77.1	1.77	0	0.00%	0	0	0	0
2012	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	1	2.63%	79.7	0.41	79.3	0.43
	LDGT	0	0.00%	0	0	0	0	1	0.75%	224	0.29	153	1.06	0	0.00%	0	0	0	0
	HDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
2012 Total		0	0.00%	0	0	0	0	1	0.34%	224	0.29	153	1.06	1	0.34%	79.7	0.41	79.3	0.43
2013	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	HDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
2013 Total		0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
2014	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	1	2.33%	1	0	1	0
	HDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
2014 Total		0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	1	0.92%	1	0	1	0
2015	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	HDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
2015 Total		0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
Grand Total		298	0.37%	696.58	3.46	538.53	3.14	4,512	5.60%	583.72	2.81	425.2	2.52	473	0.59%	133.37	0.54	128.95	0.96

Summary by Vehicle Type (V1.02)

Vehicle Type	Failure For Both Exhaust And Visual						Failure For Exhaust Only						Failure For Visual Only					
	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 HC 2500 rpm
LDGV	98	1.14%	710.9	3.57	588.45	3.32	1,172	13.59%	603.77	3.3	479.04	3.27	78	0.90%	121.32	0.41	132.52	0.96
LDGT	110	0.38%	612.07	3.78	472.26	3.16	1,280	4.38%	445.42	2.18	345.33	2.21	110	0.38%	115.22	0.36	133.29	1.18
HDGT	90	0.21%	784.28	2.95	565.18	2.93	2,060	4.82%	658.26	2.93	444.19	2.29	285	0.67%	143.68	0.64	126.29	0.88
Grand Total	298	0.37%	696.58	3.46	538.53	3.14	4,512	5.60%	583.72	2.81	425.2	2.52	473	0.59%	133.37	0.54	128.95	0.96

Appendix M

Idle Initial Exhaust Failure Report

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	344	47.38%	1036.02	5.32	783.37	4.79	137	39.83%	1546.14	4.44	1146.65	4.58	286	83.14%	791.65	5.74	609.35	4.89
	LDGT	164	53.25%	950.65	4.67	694.46	4.02	62	37.80%	1533.37	3.39	1121.89	3.54	129	78.66%	670.58	5.28	489.03	4.25
	HDGT	60	44.44%	1164.61	6.03	763.78	4.45	30	50.00%	1589.3	3.94	1207.33	3.89	40	66.67%	846.1	7.61	431.12	4.87
1974 Total		568	48.59%	1025.34	5.21	756.54	4.54	229	40.32%	1548.34	4.09	1147.9	4.21	455	80.11%	762.11	5.78	559.57	4.71
1975	LDGV	22	84.62%	824.36	4.36	679.4	3.83	9	40.91%	1242.73	4.86	1101.42	4.77	19	86.36%	626.18	4.13	479.49	3.38
	LDGT	14	100.00%	588.49	5.08	338.14	4.32	3	21.43%	1188	7.3	673.57	5.81	14	100.00%	460.02	4.6	266.26	3.99
	HDGT	21	67.74%	1114.36	4.02	988.52	2.09	12	57.14%	1534.97	1.58	1489.85	1.75	10	47.62%	609.64	6.95	386.92	2.49
1975 Total		57	80.28%	859.74	4.43	694.31	3.38	24	42.11%	1382.01	3.52	1242.15	3.39	43	75.44%	568.24	4.94	388.54	3.37
1976	LDGV	104	61.54%	816.36	3.89	571.9	3.62	53	50.96%	1135.87	3.01	794.59	3.31	74	71.15%	587.51	4.51	412.4	3.84
	LDGT	79	71.82%	707.49	3.61	479.51	3.34	33	41.77%	1135.83	2.6	754.41	2.84	60	75.95%	471.9	4.17	328.31	3.61
	HDGT	77	42.78%	1232.15	5.89	730.35	4.08	47	61.04%	1541.77	4.43	1003.26	3.61	51	66.23%	946.81	7.23	478.85	4.52
1976 Total		260	56.64%	912.65	4.42	593.71	3.68	133	51.15%	1279.3	3.41	858.36	3.3	185	71.15%	649.07	5.15	403.44	3.95
1977	LDGV	118	60.82%	597.43	3.23	441.57	2.61	57	48.31%	826.86	2.73	635.97	2.48	94	79.66%	458.31	3.54	323.69	2.69
	LDGT	63	76.83%	590.54	3.74	363.35	2.47	32	50.79%	790.2	3.35	479.2	2.34	47	74.60%	454.59	4	284.48	2.57
	HDGT	128	33.68%	1176.66	5.64	856.42	3.75	72	56.25%	1454.27	3.62	1107.08	2.81	80	62.50%	926.82	7.47	630.82	4.59
1977 Total		309	47.10%	826.48	4.3	590.46	3.04	161	52.10%	1100.15	3.25	815.5	2.6	221	71.52%	627.11	5.06	426.53	3.35
1978	LDGV	144	56.03%	625.05	3.3	452.94	2.96	76	52.78%	836.17	2.61	612.34	2.57	108	75.00%	476.49	3.79	340.77	3.23
	LDGT	72	72.73%	584.44	3.39	430.01	2.99	40	55.56%	797.96	2.36	568.87	2.46	48	66.67%	406.51	4.25	314.29	3.44
	HDGT	125	29.21%	1260.81	5.21	857.59	3.52	84	67.20%	1485.45	3.39	1038.51	2.63	67	53.60%	979.17	7.49	630.77	4.64
1978 Total		341	43.49%	843.55	4	592.62	3.17	200	58.65%	1101.23	2.89	782.64	2.57	223	65.40%	612.46	5	422.2	3.7
1979	LDGV	195	47.56%	646.76	3.61	492.33	3.53	103	52.82%	850.6	3.06	620.14	3.15	144	73.85%	500.96	4	400.91	3.8
	LDGT	243	62.95%	667.04	3.27	497.23	2.85	143	58.85%	848.21	2.56	636.1	2.6	160	65.84%	505.13	3.9	373.12	3.09
	HDGT	57	62.64%	1022.24	5.1	688.1	3.34	34	59.65%	1267.63	3.43	865.89	2.65	37	64.91%	796.74	6.64	524.73	3.97
1979 Total		495	55.81%	699.59	3.61	517.1	3.18	280	56.57%	900.02	2.85	658.13	2.8	341	68.89%	535.01	4.24	401.3	3.48
1980	LDGV	101	56.11%	645.28	4.03	483	3.75	49	48.51%	922.96	3.68	675.7	3.51	79	78.22%	473.05	4.26	363.48	3.9
	LDGT	117	69.23%	582.99	3.18	420.15	3.2	65	55.56%	783.72	2.48	543.36	3.15	78	66.67%	415.72	3.77	317.47	3.25
	HDGT	20	80.00%	1182.15	3.32	741.1	3.26	13	65.00%	1523.46	1.9	1019.22	2.74	9	45.00%	689.16	5.39	339.36	4.01
1980 Total		238	63.64%	655.19	3.57	471.7	3.45	127	53.36%	913.16	2.88	643.13	3.25	166	69.75%	457.83	4.09	340.55	3.6
1981	LDGV	101	68.71%	522.41	2.94	402.51	3.01	74	73.27%	549.82	2.3	413.41	2.59	53	52.48%	484.13	3.82	387.29	3.6
	LDGT	143	74.87%	536.56	2.64	344.45	2.28	105	73.43%	596.4	1.94	377.99	1.97	70	48.95%	446.81	3.7	294.14	2.75
	HDGT	25	65.79%	850.39	3.42	678.61	3.09	19	76.00%	1014.46	2.42	707.73	2.86	13	52.00%	610.58	4.89	636.06	3.41
1981 Total		269	71.54%	561.25	2.83	398.54	2.64	198	73.61%	619.11	2.12	422.87	2.29	136	50.56%	477.01	3.86	363.13	3.14
1982	LDGV	4	100.00%	914.46	5.56	275.04	3.89	3	75.00%	818.67	4.65	257.47	3.31	2	50.00%	1058.15	6.92	301.4	4.76
	LDGT	3	100.00%	424.13	2.93	311.55	1.24	3	100.00%	443.87	1.99	361.37	1.05	1	33.33%	364.9	5.74	162.1	1.78
	HDGT	29	70.73%	856.61	4.1	609.45	2.71	18	62.07%	1041.77	3.1	799.55	2.25	18	62.07%	671.46	5.09	419.35	3.18
1982 Total		36	75.00%	824.6	4.16	545.81	2.71	24	66.67%	939.14	3.16	677.02	2.23	21	58.33%	693.69	5.3	395.87	3.26
1983	LDGV	1	100.00%	420	0.16	501.5	0.17	1	100.00%	420	0.16	501.5	0.17	0	0.00%	0	0	0	0

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	1	100.00%	349.2	0.04	1571.1	0.25	1	100.00%	349.2	0.04	1571.1	0.25	0	0.00%	0	0	0	0
	HDGT	34	65.38%	875.45	3.92	581.65	2.81	18	52.94%	1197.61	2.76	777.84	2.65	22	64.71%	611.87	4.86	421.13	2.95
1983 Total		36	66.67%	852.08	3.73	603.3	2.69	20	55.56%	1116.31	2.5	803.69	2.4	22	61.11%	611.87	4.86	421.13	2.95
1984	LDGV	7	100.00%	267.81	2.29	146.14	2.12	4	57.14%	316.43	1.94	152.2	1.65	5	71.43%	228.92	2.57	141.3	2.5
	LDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	HDGT	61	54.46%	761.62	3.54	381.76	2.05	36	59.02%	968.22	2.33	501.47	1.39	36	59.02%	555.03	4.74	262.05	2.72
1984 Total		68	57.14%	706.76	3.4	355.58	2.06	40	58.82%	903.04	2.29	466.54	1.41	41	60.29%	515.26	4.48	247.32	2.69
1985	LDGV	3	100.00%	301.33	2.97	200.93	2.95	2	66.67%	352.2	2.61	220	2.95	2	66.67%	250.45	3.32	181.85	2.94
	LDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	HDGT	47	47.96%	993.4	2.78	539.1	2.37	38	80.85%	1076.71	1.86	638.31	2.03	17	36.17%	807.18	4.85	317.33	3.13
1985 Total		50	49.50%	946.48	2.8	516.17	2.41	40	80.00%	1040.48	1.9	617.4	2.08	19	38.00%	748.58	4.69	303.07	3.11
1986	LDGV	5	83.33%	276.16	1.59	210.58	0.86	2	40.00%	437.3	0.14	367.2	0.13	3	60.00%	168.73	2.55	106.17	1.35
	LDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	HDGT	97	54.19%	519.59	2.41	310.9	2.17	69	71.13%	628.46	1.51	353.5	1.55	45	46.39%	352.66	3.8	245.57	3.13
1986 Total		102	55.14%	509.36	2.38	306.68	2.12	71	69.61%	623.07	1.47	353.89	1.51	48	47.06%	341.16	3.72	236.85	3.02
1987	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	8	72.73%	346.6	1.97	162.59	1.52	6	75.00%	360.63	1.41	157.33	0.55	4	50.00%	325.55	2.81	170.48	2.97
	HDGT	51	49.51%	651.1	3.01	438.18	1.82	39	76.47%	670.07	2.15	468.82	1.36	25	49.02%	621.52	4.37	390.36	2.54
1987 Total		59	51.75%	609.96	2.87	400.93	1.78	45	76.27%	628.81	2.05	427.29	1.25	29	49.15%	580.7	4.15	360.03	2.6
1988	LDGV	2	66.67%	225.3	0.93	213.25	0.69	1	50.00%	327.3	0.56	350.2	0.52	1	50.00%	123.3	1.29	76.3	0.86
	LDGT	11	73.33%	379.92	1.12	233	0.68	10	90.91%	364.95	0.86	239.1	0.61	2	18.18%	454.75	2.44	202.5	1.02
	HDGT	63	47.01%	521.81	2.7	371.75	1.38	42	66.67%	637.02	1.86	465.73	0.97	35	55.56%	383.55	3.7	258.98	1.88
1988 Total		76	50.00%	496.58	2.45	349.97	1.28	53	69.74%	579.84	1.65	420.79	0.89	38	50.00%	380.45	3.57	251.2	1.81
1989	LDGV	3	100.00%	147.17	1.71	131.53	1.59	0	0.00%	0	0	0	0	3	100.00%	147.17	1.71	131.53	1.59
	LDGT	18	81.82%	330.7	0.91	188.72	1.22	17	94.44%	337.18	0.72	187.52	0.99	2	11.11%	275.65	2.58	198.9	3.24
	HDGT	76	35.35%	552.85	1.98	373.73	1.66	56	73.68%	635.01	1.38	469.59	1.5	34	44.74%	417.54	2.96	215.84	1.94
1989 Total		97	40.42%	504.3	1.79	335.85	1.59	73	75.26%	565.65	1.23	403.9	1.38	39	40.21%	389.47	2.84	208.49	1.98
1990	LDGV	4	66.67%	323.45	0.66	289.03	0.7	4	100.00%	323.45	0.66	289.03	0.7	0	0.00%	0	0	0	0
	LDGT	22	57.89%	351.86	0.59	178.17	0.75	22	100.00%	343.09	0.53	175.91	0.69	1	4.55%	544.9	1.75	228	2.03
	HDGT	80	31.25%	434.44	3	361.68	2.49	51	63.75%	514.84	2.32	407.43	1.93	52	65.00%	355.59	3.66	316.81	3.04
1990 Total		106	35.33%	416.42	2.5	326.97	2.13	77	72.64%	455.83	1.72	335.13	1.51	53	50.00%	359.16	3.62	315.13	3.02
1991	LDGV	3	100.00%	382.7	2.2	743.03	1.81	2	66.67%	480.4	0.82	1066.25	2.55	1	33.33%	187.3	4.97	96.6	0.35
	LDGT	16	59.26%	402.57	1.31	170.26	0.78	16	100.00%	363.03	0.98	169.52	0.73	2	12.50%	718.95	3.97	176.15	1.17
	HDGT	84	40.78%	494.7	3.85	407.18	3.01	47	55.95%	626.5	3.62	518.57	2.85	66	78.57%	400.85	4.02	327.87	3.12
1991 Total		103	43.64%	479.82	3.47	382.88	2.68	65	63.11%	557.15	2.89	449.5	2.32	69	66.99%	406.97	4.03	320.12	3.02
1992	LDGV	4	100.00%	511.13	0.53	749.88	2.76	4	100.00%	511.13	0.53	749.88	2.76	0	0.00%	0	0	0	0
	LDGT	12	75.00%	361.21	1.05	194.63	0.97	12	100.00%	348.08	0.85	170.37	0.79	2	16.67%	440	2.25	340.2	2.07
	HDGT	71	31.00%	510.7	3.63	342.98	3.45	44	61.97%	613.05	3.34	407.95	3.27	55	77.46%	428.83	3.85	291.02	3.58

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
1992 Total		87	34.94%	492.83	3.21	339.14	3.13	60	68.97%	553.26	2.65	383.23	2.74	57	65.52%	429.22	3.8	292.74	3.53
1993	LDGV	2	66.67%	318.83	1.24	491.37	1.15	2	100.00%	308	1.19	398.4	1.02	1	50.00%	340.5	1.36	677.3	1.41
	LDGT	5	71.43%	379.74	1.61	297.83	2.15	5	100.00%	346.42	1.25	254.58	1.69	2	40.00%	463.05	2.53	405.95	3.3
	HDGT	81	28.32%	461.63	3.14	388.83	3.29	41	50.62%	615	2.46	568.51	3.27	57	70.37%	351.31	3.63	259.59	3.3
1993 Total		88	29.73%	452.35	2.99	385.78	3.15	48	54.55%	574.23	2.28	528.72	3.01	60	68.18%	354.85	3.55	271.43	3.27
1994	LDGV	4	100.00%	247.92	2.13	374.4	3.41	3	75.00%	273.93	1.88	437.07	2.97	3	75.00%	221.9	2.37	311.73	3.85
	LDGT	10	71.43%	294.62	2.23	208.34	2.61	8	80.00%	303.9	1.65	209.68	2.04	2	20.00%	257.5	4.59	203	4.91
	HDGT	122	25.31%	572.82	3.54	363.12	3.21	84	68.85%	642.94	3.11	420.94	2.94	83	68.03%	501.86	3.97	304.61	3.48
1994 Total		136	27.20%	546.96	3.42	355.03	3.19	95	69.85%	602.73	2.94	403.66	2.87	88	64.71%	486.76	3.93	302.54	3.53
1995	LDGV	2	66.67%	240.47	1.03	164.4	0.69	2	100.00%	235.85	0.9	163.65	0.66	1	50.00%	249.7	1.29	165.9	0.74
	LDGT	2	100.00%	412.77	2.62	288.43	0.66	2	100.00%	489.2	2.14	393.8	0.67	1	50.00%	259.9	3.59	77.7	0.64
	HDGT	122	21.18%	502.34	3.38	304.02	3.26	88	72.13%	575	3.03	348.42	3.12	86	70.49%	428	3.74	258.58	3.41
1995 Total		126	21.69%	496.49	3.33	301.43	3.18	92	73.02%	565.76	2.96	345.39	3.02	88	69.84%	424.06	3.71	255.47	3.34
1996	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	1	50.00%	314.1	0.95	87.9	0.34	1	100.00%	314.1	0.95	87.9	0.34	0	0.00%	0	0	0	0
	HDGT	99	17.22%	504.3	2.7	324.47	1.7	73	73.74%	583.07	2.02	386.56	1.44	50	50.51%	389.3	3.68	233.81	2.1
1996 Total		100	17.33%	502.77	2.68	322.56	1.69	74	74.00%	579.44	2.01	382.53	1.42	50	50.00%	389.3	3.68	233.81	2.1
1997	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	2	100.00%	304.97	1.44	239.9	1.18	2	100.00%	341.4	1.32	302.4	1.13	1	50.00%	232.1	1.7	114.9	1.3
	HDGT	80	16.19%	556.09	2.17	355.53	1.75	63	78.75%	612.92	1.55	406.9	1.56	32	40.00%	444.21	3.37	254.38	2.12
1997 Total		82	16.53%	548.41	2.14	351.99	1.73	65	79.27%	604.57	1.55	403.69	1.55	33	40.24%	437.78	3.32	250.15	2.1
1998	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	3	100.00%	382.93	2.04	599.5	3.44	3	100.00%	376.73	1.62	421	2.46	1	33.33%	401.5	3.3	1135	6.39
	HDGT	98	19.52%	594.08	1.25	275.12	0.72	95	96.94%	589.37	1.06	262.16	0.61	10	10.20%	638.78	2.98	398.28	1.71
1998 Total		101	20.00%	586.33	1.27	287.03	0.82	98	97.03%	582.86	1.08	267.02	0.67	11	10.89%	617.21	3.01	465.25	2.13
1999	LDGV	3	60.00%	459.36	3.42	784.66	2.86	3	100.00%	432.23	2.96	697	2.52	2	66.67%	500.05	4.1	916.15	3.38
	LDGT	19	19.79%	327.02	1.64	275.49	2.33	17	89.47%	323.78	1.27	231.67	1.92	7	36.84%	334.9	2.56	381.9	3.32
	HDGT	87	14.31%	622.95	1.55	390.49	1.53	83	95.40%	627.02	1.23	396.37	1.23	19	21.84%	605.16	2.91	364.81	2.85
1999 Total		109	15.37%	562.49	1.63	384.46	1.73	103	94.50%	571.3	1.29	377.94	1.38	28	25.69%	530.09	2.9	408.46	3.01
2000	LDGV	3	42.86%	357.56	2.65	788.44	2.25	3	100.00%	411.13	2.32	1154.37	2	2	66.67%	277.2	3.15	239.55	2.62
	LDGT	24	15.69%	406.34	1.43	390.03	0.83	14	58.33%	479.45	1.09	397.37	0.73	15	62.50%	338.1	1.75	383.17	0.93
	HDGT	103	10.63%	661.12	1.99	346.3	1.81	94	91.26%	613.83	1.45	298.2	1.21	23	22.33%	854.38	4.18	542.9	4.26
2000 Total		130	11.51%	602.13	1.9	369.34	1.64	111	85.38%	591.4	1.43	333.85	1.17	40	30.77%	631.92	3.22	467.84	2.93
2001	LDGV	1	100.00%	1229.3	3.21	1470.2	3.2	1	100.00%	1229.3	3.21	1470.2	3.2	1	100.00%	1229.3	3.21	1470.2	3.2
	LDGT	37	17.21%	162.51	1.81	115.02	0.62	5	13.51%	282.78	1.36	404.26	1.77	32	86.49%	143.72	1.88	69.83	0.45
	HDGT	42	11.90%	580.24	3.22	478.53	3.24	33	78.57%	640.76	2.43	473.86	2.36	21	50.00%	485.13	4.47	485.86	4.62
2001 Total		80	14.06%	428	2.66	355.23	2.2	39	48.75%	609.96	2.31	490.48	2.31	54	67.50%	296.59	2.91	257.55	2.12
2002	LDGV	2	100.00%	172.1	3.67	238.75	4.66	0	0.00%	0	0	0	0	2	100.00%	172.1	3.67	238.75	4.66

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	50	9.09%	241.2	1.53	133.3	0.41	10	20.00%	539.28	1.11	335.21	0.96	39	78.00%	164.76	1.64	81.53	0.27
	HDGT	41	9.93%	551.34	2.27	380.03	2.74	37	90.24%	537.62	1.69	356.66	1.94	13	31.71%	590.36	3.93	446.55	5.04
2002 Total		93	9.64%	393.36	1.94	257.53	1.65	47	50.54%	537.98	1.56	352.1	1.73	54	58.06%	267.49	2.27	175.23	1.58
2003	LDGV	3	75.00%	178.65	0.99	187.25	1.22	1	33.33%	265	0.34	276.4	0.32	1	33.33%	92.3	1.64	98.1	2.11
	LDGT	38	14.02%	244.69	2.47	192.08	1.83	11	28.95%	386.51	2.63	353.26	3.19	31	81.58%	194.36	2.41	134.89	1.35
	HDGT	21	11.93%	493.4	2.52	323.74	1.89	11	52.38%	682.23	1.7	545.25	1.68	13	61.90%	333.62	3.21	136.31	2.07
2003 Total		62	13.75%	330.52	2.44	238.41	1.83	23	37.10%	522.66	2.09	441.74	2.34	45	72.58%	232.32	2.63	134.48	1.58
2004	LDGV	2	50.00%	227.77	1.28	292.37	1.47	1	50.00%	284	1.29	370.1	1.59	2	100.00%	199.65	1.27	253.5	1.41
	LDGT	22	10.38%	317.4	2.61	195.45	1.22	11	50.00%	406.56	2.55	200.76	1.29	19	86.36%	265.78	2.64	192.38	1.18
	HDGT	4	10.00%	241.18	1.95	414.48	4.2	1	25.00%	540.8	0.21	525.9	0.59	3	75.00%	141.3	2.53	377.33	5.4
2004 Total		28	10.94%	301.89	2.43	226.99	1.56	13	46.43%	407.46	2.27	238.8	1.26	24	85.71%	244.71	2.51	220.59	1.73
2005	LDGV	1	50.00%	183.9	1.22	179.3	1.22	0	0.00%	0	0	0	0	1	100.00%	183.9	1.22	179.3	1.22
	LDGT	9	17.31%	232.02	1.79	170.36	1.7	4	44.44%	287.75	1.41	190.05	1.52	7	77.78%	200.17	2.01	159.11	1.8
	HDGT	13	19.70%	462.75	1.39	433.51	1.09	11	84.62%	514.19	1.05	353.8	0.7	3	23.08%	274.13	2.66	725.77	2.49
2005 Total		23	19.17%	354.41	1.55	312.4	1.35	15	65.22%	453.81	1.14	310.13	0.92	11	47.83%	218.86	2.11	315.49	1.94
2006	LDGV	2	50.00%	138.85	2.66	151.7	2.75	0	0.00%	0	0	0	0	2	100.00%	138.85	2.66	151.7	2.75
	LDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	HDGT	22	11.06%	589.18	2.13	484.92	1.56	19	86.36%	645.09	1.64	538.9	1.3	8	36.36%	456.39	3.27	356.71	2.17
2006 Total		24	11.82%	558.12	2.16	461.94	1.64	19	79.17%	645.09	1.64	538.9	1.3	10	41.67%	392.88	3.15	315.71	2.28
2007	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	1	25.00%	91.8	1.27	102.8	1.57	0	0.00%	0	0	0	0	1	100.00%	91.8	1.27	102.8	1.57
	HDGT	4	11.11%	325.93	1.79	55.5	0.43	2	50.00%	490.75	0.82	69	0.68	2	50.00%	161.1	2.77	42	0.18
2007 Total		5	12.50%	279.1	1.69	64.96	0.65	2	40.00%	490.75	0.82	69	0.68	3	60.00%	138	2.27	62.27	0.64
2008	LDGV	3	37.50%	231.82	1.88	433.66	2.93	2	66.67%	271.9	2.05	524.1	3.34	3	100.00%	205.1	1.77	373.37	2.66
	LDGT	1	20.00%	762.1	0.5	160.9	0.52	1	100.00%	762.1	0.5	160.9	0.52	0	0.00%	0	0	0	0
	HDGT	2	9.52%	941.2	1.18	118	0.34	2	100.00%	941.2	1.18	118	0.34	0	0.00%	0	0	0	0
2008 Total		6	17.65%	475.45	1.53	320.65	1.98	5	83.33%	637.66	1.39	289.02	1.58	3	50.00%	205.1	1.77	373.37	2.66
2009	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	HDGT	1	33.33%	600	7.02	663.3	11.08	1	100.00%	600	7.02	663.3	11.08	1	100.00%	600	7.02	663.3	11.08
2009 Total		1	33.33%	600	7.02	663.3	11.08	1	100.00%	600	7.02	663.3	11.08	1	100.00%	600	7.02	663.3	11.08
2010	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	2	20.00%	553.67	1.96	373.63	3.12	1	50.00%	730.8	1.34	442.6	3.32	2	100.00%	465.1	2.27	339.15	3.02
	HDGT	2	50.00%	489.1	0.17	145	1.01	2	100.00%	489.1	0.17	145	1.01	0	0.00%	0	0	0	0
2010 Total		4	28.57%	527.84	1.24	282.18	2.27	3	75.00%	569.67	0.56	244.2	1.78	2	50.00%	465.1	2.27	339.15	3.02
2011	LDGV	1	50.00%	139.6	2.15	149.6	2.32	0	0.00%	0	0	0	0	1	100.00%	139.6	2.15	149.6	2.32
	LDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	HDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0

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
2011 Total		1	50.00%	139.6	2.15	149.6	2.32	0	0.00%	0	0	0	0	1	100.00%	139.6	2.15	149.6	2.32
2012	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	1	100.00%	224	0.29	153	1.06	1	100.00%	224	0.29	153	1.06	0	0.00%	0	0	0	0
	HDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
2012 Total		1	100.00%	224	0.29	153	1.06	1	100.00%	224	0.29	153	1.06	0	0.00%	0	0	0	0
2013	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	HDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
2013 Total		0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
2014	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	HDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
2014 Total		0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
2015	LDGV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	LDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
	HDGT	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
2015 Total		0	0.00%	0	0	0	0	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0
Grand Total		4,557	32.49%	686.71	3.45	480.43	2.9	2,774	60.87%	832.84	2.49	581.6	2.38	2,812	61.71%	542.55	4.39	380.62	3.42

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	1,194	54.32%	740.55	3.96	561.46	3.64	599	50.17%	975.83	3.17	735.11	3.26	896	75.04%	583.27	4.48	445.38	3.9
LDGT	1,213	39.24%	583.5	3.05	411.86	2.6	666	54.91%	745.98	2.21	520.3	2.27	780	64.30%	444.77	3.77	319.28	2.88
HDGT	2,150	24.61%	712.7	3.38	472.1	2.65	1,509	70.19%	814.42	2.35	547.72	2.08	1,136	52.84%	577.58	4.75	371.67	3.42
Grand Total	4,557	32.49%	686.71	3.45	480.43	2.9	2,774	60.87%	832.84	2.49	581.6	2.38	2,812	61.71%	542.55	4.39	380.62	3.42

Appendix M

Idle Initial Exhaust Failure Report

Idle Initial Visual Failure Report (Mandatory) (V1.01)

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%
1974	LDGV	1,105	1,101	99.60%	4	0.40%	4	100.00%	0	0.00%	11	100.00%	0	0.00%	0	0.00%	0	0.00%	270	100.00%	0	0.00%	1,101	99.60%	4	0.40%
	LDGT	628	625	99.50%	3	0.50%	7	100.00%	0	0.00%	13	100.00%	0	0.00%	0	0.00%	0	0.00%	147	100.00%	0	0.00%	625	99.50%	3	0.50%
	HDGT	612	610	99.70%	2	0.30%	1	100.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	139	100.00%	0	0.00%	610	99.70%	2	0.30%
1974 Total		2,345	2,336	99.60%	9	0.40%	12	100.00%	0	0.00%	25	100.00%	0	0.00%	0	0.00%	0	0.00%	556	100.00%	0	0.00%	2,336	99.60%	9	0.40%
1975	LDGV	79	77	97.50%	2	2.50%	54	96.40%	2	3.60%	34	100.00%	0	0.00%	2	100.00%	0	0.00%	79	100.00%	0	0.00%	79	100.00%	0	0.00%
	LDGT	33	30	90.90%	3	9.10%	13	92.90%	1	7.10%	9	81.80%	2	18.20%	0	0.00%	0	0.00%	33	100.00%	0	0.00%	33	100.00%	0	0.00%
	HDGT	147	146	99.30%	1	0.70%	9	100.00%	0	0.00%	10	100.00%	0	0.00%	1	100.00%	0	0.00%	146	99.30%	1	0.70%	147	100.00%	0	0.00%
1975 Total		259	253	97.70%	6	2.30%	76	96.20%	3	3.80%	53	96.40%	2	3.60%	3	100.00%	0	0.00%	258	99.60%	1	0.40%	259	100.00%	0	0.00%
1976	LDGV	389	372	95.60%	17	4.40%	265	96.40%	10	3.60%	177	96.70%	6	3.30%	13	100.00%	0	0.00%	388	100.00%	0	0.00%	387	99.50%	2	0.50%
	LDGT	245	229	93.50%	16	6.50%	106	93.00%	8	7.00%	87	90.60%	9	9.40%	11	100.00%	0	0.00%	245	100.00%	0	0.00%	244	99.60%	1	0.40%
	HDGT	663	655	98.80%	8	1.20%	56	96.60%	2	3.40%	81	97.60%	2	2.40%	10	90.90%	1	9.10%	663	100.00%	0	0.00%	658	99.20%	5	0.80%
1976 Total		1,297	1,256	96.80%	41	3.20%	427	95.50%	20	4.50%	345	95.30%	17	4.70%	34	97.10%	1	2.90%	1,296	100.00%	0	0.00%	1,289	99.40%	8	0.60%
1977	LDGV	417	395	94.70%	22	5.30%	348	97.50%	9	2.50%	223	94.10%	14	5.90%	13	100.00%	0	0.00%	417	100.00%	0	0.00%	416	99.80%	1	0.20%
	LDGT	187	174	93.00%	13	7.00%	110	95.70%	5	4.30%	100	91.70%	9	8.30%	7	100.00%	0	0.00%	186	99.50%	1	0.50%	185	98.90%	2	1.10%
	HDGT	952	940	98.70%	12	1.30%	77	96.30%	3	3.80%	99	98.00%	2	2.00%	15	100.00%	0	0.00%	948	99.70%	3	0.30%	945	99.30%	7	0.70%
1977 Total		1,556	1,509	97.00%	47	3.00%	535	96.90%	17	3.10%	422	94.40%	25	5.60%	35	100.00%	0	0.00%	1,551	99.70%	4	0.30%	1,546	99.40%	10	0.60%
1978	LDGV	570	551	96.70%	19	3.30%	482	98.60%	7	1.40%	296	96.70%	10	3.30%	21	95.50%	1	4.50%	570	100.00%	0	0.00%	569	99.80%	1	0.20%
	LDGT	243	229	94.20%	14	5.80%	134	95.00%	7	5.00%	130	92.20%	11	7.80%	7	100.00%	0	0.00%	241	99.60%	1	0.40%	243	100.00%	0	0.00%
	HDGT	1,098	1,080	98.40%	18	1.60%	123	95.30%	6	4.70%	126	96.90%	4	3.10%	18	100.00%	0	0.00%	1,096	99.90%	1	0.10%	1,090	99.30%	8	0.70%
1978 Total		1,911	1,860	97.30%	51	2.70%	739	97.40%	20	2.60%	552	95.70%	25	4.30%	46	97.90%	1	2.10%	1,907	99.90%	2	0.10%	1,902	99.50%	9	0.50%
1979	LDGV	712	681	95.60%	31	4.40%	620	97.90%	13	2.10%	359	95.00%	19	5.00%	45	97.80%	1	2.20%	710	99.90%	1	0.10%	709	99.60%	3	0.40%
	LDGT	896	833	93.00%	63	7.00%	759	96.10%	31	3.90%	492	92.10%	42	7.90%	24	100.00%	0	0.00%	892	99.90%	1	0.10%	891	99.40%	5	0.60%
	HDGT	309	296	95.80%	13	4.20%	48	100.00%	0	0.00%	139	92.70%	11	7.30%	3	100.00%	0	0.00%	308	100.00%	0	0.00%	307	99.40%	2	0.60%
1979 Total		1,917	1,810	94.40%	107	5.60%	1,427	97.00%	44	3.00%	990	93.20%	72	6.80%	72	98.60%	1	1.40%	1,910	99.90%	2	0.10%	1,907	99.50%	10	0.50%
1980	LDGV	454	432	95.20%	22	4.80%	418	97.90%	9	2.10%	314	96.30%	12	3.70%	114	97.40%	3	2.60%	454	100.00%	0	0.00%	452	99.60%	2	0.40%
	LDGT	489	455	93.00%	34	7.00%	410	96.20%	16	3.80%	349	93.80%	23	6.20%	29	100.00%	0	0.00%	485	100.00%	0	0.00%	485	99.20%	4	0.80%
	HDGT	129	120	93.00%	9	7.00%	12	92.30%	1	7.70%	72	91.10%	7	8.90%	4	100.00%	0	0.00%	126	98.40%	2	1.60%	129	100.00%	0	0.00%
1980 Total		1,072	1,007	93.90%	65	6.10%	840	97.00%	26	3.00%	735	94.60%	42	5.40%	147	98.00%	3	2.00%	1,065	99.80%	2	0.20%	1,066	99.40%	6	0.60%
1981	LDGV	388	366	94.30%	22	5.70%	370	97.40%	10	2.60%	232	93.50%	16	6.50%	246	98.80%	3	1.20%	387	100.00%	0	0.00%	385	99.20%	3	0.80%
	LDGT	513	481	93.80%	32	6.20%	470	96.90%	15	3.10%	398	95.90%	17	4.10%	71	95.90%	3	4.10%	507	99.60%	2	0.40%	513	100.00%	0	0.00%
	HDGT	214	205	95.80%	9	4.20%	22	100.00%	0	0.00%	175	96.20%	7	3.80%	7	100.00%	0	0.00%	213	99.50%	1	0.50%	213	99.50%	1	0.50%
1981 Total		1,115	1,052	94.30%	63	5.70%	862	97.20%	25	2.80%	805	95.30%	40	4.70%	324	98.20%	6	1.80%	1,107	99.70%	3	0.30%	1,111	99.60%	4	0.40%
1982	LDGV	10	10	100.00%	0	0.00%	9	100.00%	0	0.00%	5	100.00%	0	0.00%	7	100.00%	0	0.00%	10	100.00%	0	0.00%	10	100.00%	0	0.00%
	LDGT	7	7	100.00%	0	0.00%	6	100.00%	0	0.00%	6	100.00%	0	0.00%	3	100.00%	0	0.00%	7	100.00%	0	0.00%	7	100.00%	0	0.00%
	HDGT	164	157	95.70%	7	4.30%	19	100.00%	0	0.00%	149	96.80%	5	3.20%	10	100.00%	0	0.00%	164	100.00%	0	0.00%	162	98.80%	2	1.20%
1982 Total		181	174	96.10%	7	3.90%	34	100.00%	0	0.00%	160	97.00%	5	3.00%	20	100.00%	0	0.00%	181	100.00%	0	0.00%	179	98.90%	2	1.10%
1983	LDGV	3	3	100.00%	0	0.00%	3	100.00%	0	0.00%	0	0.00%	0	0.00%	3	100.00%	0	0.00%	3	100.00%	0	0.00%	3	100.00%	0	0.00%
	LDGT	6	6	100.00%	0	0.00%	4	100.00%	0	0.00%	5	100.00%	0	0.00%	1	100.00%	0	0.00%	6	100.00%	0	0.00%	6	100.00%	0	0.00%
	HDGT	178	168	94.40%	10	5.60%	20	100.00%	0	0.00%	154	94.50%	9	5.50%	8	100.00%	0	0.00%	178	100.00%	0	0.00%	177	99.40%	1	0.60%
1983 Total		187	177	94.70%	10	5.30%	27	100.00%	0	0.00%	159	94.60%	9	5.40%	12	100.00%	0	0.00%	187	100.00%	0	0.00%	186	99.50%	1	0.50%
1984	LDGV	20	20	100.00%	0	0.00%	20	100.00%	0	0.00%	11	100.00%	0	0.00%	15	100.00%	0	0.00%	20	100.00%	0	0.00%	20	100.00%	0	0.00%
	LDGT	5	5	100.00%	0	0.00%	5	100.00%	0	0.00%	3	100.00%	0	0.00%	3	100.00%	0	0.00%	5	100.00%	0	0.00%	5	100.00%	0	0.00%
	HDGT	376	359	95.50%	17	4.50%	40	97.60%	1	2.40%	330	95.90%	14	4.10%	20	100.00%	0	0.00%	372	99.20%	3	0.80%	375	99.70%	1	0.30%
1984 Total		401	384	95.80%	17	4.20%	65	98.50%</																		

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%
1985	LDGV	14	14	100.00%	0	0.00%	14	100.00%	0	0.00%	9	100.00%	0	0.00%	14	100.00%	0	0.00%	14	100.00%	0	0.00%	14	100.00%	0	0.00%
	LDGT	4	4	100.00%	0	0.00%	3	100.00%	0	0.00%	3	100.00%	0	0.00%	1	100.00%	0	0.00%	4	100.00%	0	0.00%	4	100.00%	0	0.00%
	HDGT	359	340	94.70%	19	5.30%	42	95.50%	2	4.50%	324	95.00%	17	5.00%	25	100.00%	0	0.00%	358	99.70%	1	0.30%	359	100.00%	0	0.00%
1985 Total		377	358	95.00%	19	5.00%	59	96.70%	2	3.30%	336	95.20%	17	4.80%	40	100.00%	0	0.00%	376	99.70%	1	0.30%	377	100.00%	0	0.00%
1986	LDGV	30	28	93.30%	2	6.70%	27	93.10%	2	6.90%	20	100.00%	0	0.00%	24	92.30%	2	7.70%	30	100.00%	0	0.00%	30	100.00%	0	0.00%
	LDGT	4	4	100.00%	0	0.00%	4	100.00%	0	0.00%	3	100.00%	0	0.00%	2	100.00%	0	0.00%	4	100.00%	0	0.00%	4	100.00%	0	0.00%
	HDGT	378	364	96.30%	14	3.70%	38	100.00%	0	0.00%	344	96.40%	13	3.60%	31	100.00%	0	0.00%	378	100.00%	0	0.00%	377	99.70%	1	0.30%
1986 Total		412	396	96.10%	16	3.90%	69	97.20%	2	2.80%	367	96.60%	13	3.40%	57	96.60%	2	3.40%	412	100.00%	0	0.00%	411	99.80%	1	0.20%
1987	LDGV	18	17	94.40%	1	5.60%	18	100.00%	0	0.00%	8	88.90%	1	11.10%	14	100.00%	0	0.00%	18	100.00%	0	0.00%	18	100.00%	0	0.00%
	LDGT	38	38	100.00%	0	0.00%	38	100.00%	0	0.00%	7	100.00%	0	0.00%	37	100.00%	0	0.00%	38	100.00%	0	0.00%	38	100.00%	0	0.00%
	HDGT	285	275	96.50%	10	3.50%	110	95.70%	5	4.30%	255	97.70%	6	2.30%	74	97.40%	2	2.60%	285	100.00%	0	0.00%	285	100.00%	0	0.00%
1987 Total		341	330	96.80%	11	3.20%	166	97.10%	5	2.90%	270	97.50%	7	2.50%	125	98.40%	2	1.60%	341	100.00%	0	0.00%	341	100.00%	0	0.00%
1988	LDGV	21	21	100.00%	0	0.00%	21	100.00%	0	0.00%	11	100.00%	0	0.00%	19	100.00%	0	0.00%	21	100.00%	0	0.00%	21	100.00%	0	0.00%
	LDGT	64	64	100.00%	0	0.00%	64	100.00%	0	0.00%	9	100.00%	0	0.00%	63	100.00%	0	0.00%	64	100.00%	0	0.00%	64	100.00%	0	0.00%
	HDGT	493	479	97.20%	14	2.80%	398	98.80%	5	1.20%	454	98.50%	7	1.50%	336	99.40%	2	0.60%	493	100.00%	0	0.00%	491	99.60%	2	0.40%
1988 Total		578	564	97.60%	14	2.40%	483	99.00%	5	1.00%	474	98.50%	7	1.50%	418	99.50%	2	0.50%	578	100.00%	0	0.00%	576	99.70%	2	0.30%
1989	LDGV	30	30	100.00%	0	0.00%	30	100.00%	0	0.00%	17	100.00%	0	0.00%	25	100.00%	0	0.00%	30	100.00%	0	0.00%	30	100.00%	0	0.00%
	LDGT	66	66	100.00%	0	0.00%	65	100.00%	0	0.00%	7	100.00%	0	0.00%	63	100.00%	0	0.00%	66	100.00%	0	0.00%	66	100.00%	0	0.00%
	HDGT	630	619	98.30%	11	1.70%	553	99.50%	3	0.50%	455	98.50%	7	1.50%	497	99.80%	1	0.20%	629	99.80%	1	0.20%	630	100.00%	0	0.00%
1989 Total		726	715	98.50%	11	1.50%	648	99.50%	3	0.50%	479	98.60%	7	1.40%	585	99.80%	1	0.20%	725	99.90%	1	0.10%	726	100.00%	0	0.00%
1990	LDGV	35	35	100.00%	0	0.00%	35	100.00%	0	0.00%	10	100.00%	0	0.00%	35	100.00%	0	0.00%	35	100.00%	0	0.00%	35	100.00%	0	0.00%
	LDGT	103	103	100.00%	0	0.00%	103	100.00%	0	0.00%	6	100.00%	0	0.00%	103	100.00%	0	0.00%	103	100.00%	0	0.00%	103	100.00%	0	0.00%
	HDGT	721	708	98.20%	13	1.80%	692	99.10%	6	0.90%	453	99.10%	4	0.90%	678	99.40%	4	0.60%	721	100.00%	0	0.00%	719	99.70%	2	0.30%
1990 Total		859	846	98.50%	13	1.50%	830	99.30%	6	0.70%	469	99.20%	4	0.80%	816	99.50%	4	0.50%	859	100.00%	0	0.00%	857	99.80%	2	0.20%
1991	LDGV	49	47	95.90%	2	4.10%	49	100.00%	0	0.00%	12	85.70%	2	14.30%	49	100.00%	0	0.00%	49	100.00%	0	0.00%	49	100.00%	0	0.00%
	LDGT	99	99	100.00%	0	0.00%	99	100.00%	0	0.00%	6	100.00%	0	0.00%	98	100.00%	0	0.00%	99	100.00%	0	0.00%	99	100.00%	0	0.00%
	HDGT	558	550	98.60%	8	1.40%	545	99.30%	4	0.70%	302	99.30%	2	0.70%	546	99.80%	1	0.20%	555	99.50%	3	0.50%	558	100.00%	0	0.00%
1991 Total		706	696	98.60%	10	1.40%	693	99.40%	4	0.60%	320	98.80%	4	1.20%	693	99.90%	1	0.10%	703	99.60%	3	0.40%	706	100.00%	0	0.00%
1992	LDGV	52	51	98.10%	1	1.90%	52	100.00%	0	0.00%	18	94.70%	1	5.30%	52	100.00%	0	0.00%	52	100.00%	0	0.00%	52	100.00%	0	0.00%
	LDGT	118	118	100.00%	0	0.00%	118	100.00%	0	0.00%	1	100.00%	0	0.00%	118	100.00%	0	0.00%	118	100.00%	0	0.00%	118	100.00%	0	0.00%
	HDGT	835	825	98.80%	10	1.20%	827	99.80%	2	0.20%	470	98.90%	5	1.10%	829	99.90%	1	0.10%	834	99.90%	1	0.10%	833	99.80%	2	0.20%
1992 Total		1,005	994	98.90%	11	1.10%	997	99.80%	2	0.20%	489	98.80%	6	1.20%	999	99.90%	1	0.10%	1,004	99.90%	1	0.10%	1,003	99.80%	2	0.20%
1993	LDGV	31	31	100.00%	0	0.00%	31	100.00%	0	0.00%	12	100.00%	0	0.00%	31	100.00%	0	0.00%	31	100.00%	0	0.00%	31	100.00%	0	0.00%
	LDGT	32	32	100.00%	0	0.00%	32	100.00%	0	0.00%	4	100.00%	0	0.00%	32	100.00%	0	0.00%	31	100.00%	0	0.00%	32	100.00%	0	0.00%
	HDGT	829	816	98.40%	13	1.60%	812	99.10%	7	0.90%	426	99.10%	4	0.90%	825	99.90%	1	0.10%	825	99.50%	4	0.50%	829	100.00%	0	0.00%
1993 Total		892	879	98.50%	13	1.50%	875	99.20%	7	0.80%	442	99.10%	4	0.90%	888	99.90%	1	0.10%	887	99.60%	4	0.40%	892	100.00%	0	0.00%
1994	LDGV	51	49	96.10%	2	3.90%	50	98.00%	1	2.00%	24	100.00%	0	0.00%	50	98.00%	1	2.00%	51	100.00%	0	0.00%	51	100.00%	0	0.00%
	LDGT	112	112	100.00%	0	0.00%	112	100.00%	0	0.00%	3	100.00%	0	0.00%	112	100.00%	0	0.00%	112	100.00%	0	0.00%	112	100.00%	0	0.00%
	HDGT	1,225	1,210	98.80%	15	1.20%	1,185	99.40%	7	0.60%	613	99.80%	1	0.20%	1,217	99.70%	4	0.30%	1,223	99.80%	2	0.20%	1,222	99.80%	3	0.20%
1994 Total		1,388	1,371	98.80%	17	1.20%	1,347	99.40%	8	0.60%	640	99.80%	1	0.20%	1,379	99.60%	5	0.40%	1,386	99.90%	2	0.10%	1,385	99.80%	3	0.20%
1995	LDGV	59	59	100.00%	0	0.00%	59	100.00%	0	0.00%	35	100.00%	0	0.00%	59	100.00%	0	0.00%	59	100.00%	0	0.00%	59	100.00%	0	0.00%
	LDGT	31	31	100.00%	0	0.00%	31	100.00%	0	0.00%	3	100.00%	0	0.00%	31	100.00%	0	0.00%	31	100.00%	0	0.00%	31	100.00%	0	0.00%
	HDGT	1,361	1,346	98.90%	15	1.10%	1,292	99.20%	11	0.80%	674	99.60%	3	0.40%	1,355	99.90%	1	0.10%	1,360	99.90%	1	0.10%	1,361	100.00%	0	0.00%
1995 Total		1,451	1,436	99.00%	15	1.00%	1,382	99.20%	11	0.80%	712	99.60%														

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%
	LDGT	46	46	100.00%	0	0.00%	36	100.00%	0	0.00%	2	100.00%	0	0.00%	36	100.00%	0	0.00%	46	100.00%	0	0.00%	46	100.00%	0	0.00%
	HDGT	1,761	1,748	99.30%	13	0.70%	1,698	99.60%	7	0.40%	753	99.20%	6	0.80%	1,754	99.90%	2	0.10%	1,760	99.90%	1	0.10%	1,760	99.90%	1	0.10%
1996 Total		1,852	1,839	99.30%	13	0.70%	1,769	99.60%	7	0.40%	774	99.20%	6	0.80%	1,825	99.90%	2	0.10%	1,850	99.90%	1	0.10%	1,851	99.90%	1	0.10%
1997	LDGV	54	54	100.00%	0	0.00%	36	100.00%	0	0.00%	19	100.00%	0	0.00%	36	100.00%	0	0.00%	54	100.00%	0	0.00%	54	100.00%	0	0.00%
	LDGT	63	63	100.00%	0	0.00%	56	100.00%	0	0.00%	3	100.00%	0	0.00%	56	100.00%	0	0.00%	63	100.00%	0	0.00%	63	100.00%	0	0.00%
	HDGT	1,693	1,680	99.20%	13	0.80%	1,610	99.50%	8	0.50%	601	99.50%	3	0.50%	1,689	99.90%	2	0.10%	1,687	99.80%	3	0.20%	1,693	100.00%	0	0.00%
1997 Total		1,810	1,797	99.30%	13	0.70%	1,702	99.50%	8	0.50%	623	99.50%	3	0.50%	1,781	99.90%	2	0.10%	1,804	99.80%	3	0.20%	1,810	100.00%	0	0.00%
1998	LDGV	78	78	100.00%	0	0.00%	62	100.00%	0	0.00%	24	100.00%	0	0.00%	61	100.00%	0	0.00%	78	100.00%	0	0.00%	78	100.00%	0	0.00%
	LDGT	179	179	100.00%	0	0.00%	117	100.00%	0	0.00%	5	100.00%	0	0.00%	116	100.00%	0	0.00%	179	100.00%	0	0.00%	179	100.00%	0	0.00%
	HDGT	1,573	1,566	99.60%	7	0.40%	1,559	99.90%	1	0.10%	93	97.90%	2	2.10%	1,569	99.90%	1	0.10%	1,569	100.00%	0	0.00%	1,570	99.80%	3	0.20%
1998 Total		1,830	1,823	99.60%	7	0.40%	1,738	99.90%	1	0.10%	122	98.40%	2	1.60%	1,746	99.90%	1	0.10%	1,826	100.00%	0	0.00%	1,827	99.80%	3	0.20%
1999	LDGV	106	106	100.00%	0	0.00%	62	100.00%	0	0.00%	36	100.00%	0	0.00%	62	100.00%	0	0.00%	106	100.00%	0	0.00%	106	100.00%	0	0.00%
	LDGT	1,084	1,083	99.90%	1	0.10%	615	100.00%	0	0.00%	16	100.00%	0	0.00%	615	100.00%	0	0.00%	1,084	100.00%	0	0.00%	1,083	99.90%	1	0.10%
	HDGT	2,357	2,346	99.50%	11	0.50%	2,346	99.70%	7	0.30%	98	97.00%	3	3.00%	2,353	100.00%	0	0.00%	2,352	100.00%	1	0.00%	2,355	99.90%	2	0.10%
1999 Total		3,547	3,535	99.70%	12	0.30%	3,023	99.80%	7	0.20%	150	98.00%	3	2.00%	3,030	100.00%	0	0.00%	3,542	100.00%	1	0.00%	3,544	99.90%	3	0.10%
2000	LDGV	156	154	98.70%	2	1.30%	80	100.00%	0	0.00%	38	100.00%	0	0.00%	79	98.80%	1	1.30%	155	99.40%	1	0.60%	156	100.00%	0	0.00%
	LDGT	2,204	2,201	99.90%	3	0.10%	1,063	100.00%	0	0.00%	45	97.80%	1	2.20%	1,059	99.90%	1	0.10%	2,200	100.00%	0	0.00%	2,203	100.00%	1	0.00%
	HDGT	3,090	3,081	99.70%	9	0.30%	3,089	100.00%	1	0.00%	72	97.30%	2	2.70%	3,084	99.90%	3	0.10%	3,084	100.00%	0	0.00%	3,087	99.90%	3	0.10%
2000 Total		5,450	5,436	99.70%	14	0.30%	4,232	100.00%	1	0.00%	155	98.10%	3	1.90%	4,222	99.90%	5	0.10%	5,439	100.00%	1	0.00%	5,446	99.90%	4	0.10%
2001	LDGV	187	187	100.00%	0	0.00%	116	100.00%	0	0.00%	50	100.00%	0	0.00%	116	100.00%	0	0.00%	186	100.00%	0	0.00%	187	100.00%	0	0.00%
	LDGT	2,480	2,470	99.60%	10	0.40%	1,619	99.80%	4	0.20%	35	100.00%	0	0.00%	1,622	99.90%	1	0.10%	2,474	99.90%	2	0.10%	2,477	99.90%	3	0.10%
	HDGT	2,394	2,366	98.80%	28	1.20%	2,382	99.50%	11	0.50%	104	99.00%	1	1.00%	2,386	99.70%	6	0.30%	2,385	99.80%	5	0.20%	2,389	99.80%	5	0.20%
2001 Total		5,061	5,023	99.20%	38	0.80%	4,117	99.60%	15	0.40%	189	99.50%	1	0.50%	4,124	99.80%	7	0.20%	5,045	99.90%	7	0.10%	5,053	99.80%	8	0.20%
2002	LDGV	212	210	99.10%	2	0.90%	112	98.20%	2	1.80%	69	100.00%	0	0.00%	114	100.00%	0	0.00%	211	100.00%	0	0.00%	212	100.00%	0	0.00%
	LDGT	2,983	2,977	99.80%	6	0.20%	1,277	99.80%	2	0.20%	31	100.00%	0	0.00%	1,274	99.80%	2	0.20%	2,979	100.00%	0	0.00%	2,980	99.90%	3	0.10%
	HDGT	2,760	2,754	99.80%	6	0.20%	2,753	99.90%	3	0.10%	60	100.00%	0	0.00%	2,752	99.90%	4	0.10%	2,756	100.00%	0	0.00%	2,760	100.00%	0	0.00%
2002 Total		5,955	5,941	99.80%	14	0.20%	4,142	99.80%	7	0.20%	160	100.00%	0	0.00%	4,140	99.90%	6	0.10%	5,946	100.00%	0	0.00%	5,952	99.90%	3	0.10%
2003	LDGV	366	364	99.50%	2	0.50%	215	99.10%	2	0.90%	81	100.00%	0	0.00%	215	99.50%	1	0.50%	366	100.00%	0	0.00%	366	100.00%	0	0.00%
	LDGT	2,051	2,049	99.90%	2	0.10%	1,170	99.90%	1	0.10%	25	100.00%	0	0.00%	1,168	100.00%	0	0.00%	2,042	100.00%	0	0.00%	2,050	100.00%	1	0.00%
	HDGT	2,036	2,027	99.60%	9	0.40%	2,031	99.90%	3	0.10%	47	97.90%	1	2.10%	2,030	99.80%	4	0.20%	2,032	100.00%	1	0.00%	2,035	100.00%	1	0.00%
2003 Total		4,453	4,440	99.70%	13	0.30%	3,416	99.80%	6	0.20%	153	99.40%	1	0.60%	3,413	99.90%	5	0.10%	4,440	100.00%	1	0.00%	4,451	100.00%	2	0.00%
2004	LDGV	289	286	99.00%	3	1.00%	157	98.10%	3	1.90%	83	98.80%	1	1.20%	160	100.00%	0	0.00%	288	100.00%	0	0.00%	289	100.00%	0	0.00%
	LDGT	2,685	2,676	99.70%	9	0.30%	1,168	99.90%	1	0.10%	11	91.70%	1	8.30%	1,167	99.90%	1	0.10%	2,678	99.80%	5	0.20%	2,684	100.00%	1	0.00%
	HDGT	2,651	2,642	99.70%	9	0.30%	2,650	100.00%	0	0.00%	44	97.80%	1	2.20%	2,646	99.80%	4	0.20%	2,644	99.80%	4	0.20%	2,651	100.00%	0	0.00%
2004 Total		5,625	5,604	99.60%	21	0.40%	3,975	99.90%	4	0.10%	138	97.90%	3	2.10%	3,973	99.90%	5	0.10%	5,610	99.80%	9	0.20%	5,624	100.00%	1	0.00%
2005	LDGV	255	252	98.80%	3	1.20%	163	98.20%	3	1.80%	78	100.00%	0	0.00%	165	99.40%	1	0.60%	254	100.00%	0	0.00%	255	100.00%	0	0.00%
	LDGT	1,665	1,663	99.90%	2	0.10%	653	99.80%	1	0.20%	12	100.00%	0	0.00%	654	100.00%	0	0.00%	1,662	99.90%	1	0.10%	1,665	100.00%	0	0.00%
	HDGT	1,506	1,500	99.60%	6	0.40%	1,504	99.90%	1	0.10%	29	100.00%	0	0.00%	1,502	99.90%	1	0.10%	1,503	99.80%	3	0.20%	1,505	99.90%	1	0.10%
2005 Total		3,426	3,415	99.70%	11	0.30%	2,320	99.80%	5	0.20%	119	100.00%	0	0.00%	2,321	99.90%	2	0.10%	3,419	99.90%	4	0.10%	3,425	100.00%	1	0.00%
2006	LDGV	415	412	99.30%	3	0.70%	259	99.60%	1	0.40%	114	99.10%	1	0.90%	258	99.20%	2	0.80%	415	100.00%	0	0.00%	415	100.00%	0	0.00%
	LDGT	1,516	1,513	99.80%	3	0.20%	581	99.80%	1	0.20%	26	96.30%	1	3.70%	581	99.80%	1	0.20%	1,508	100.00%	0	0.00%	1,516	100.00%	0	0.00%
	HDGT	2,388	2,380	99.70%	8	0.30%	2,384	99.90%	3	0.10%	35	100.00%	0	0.00%	2,385	100.00%	1	0.00%	2,384	99.90%	3	0.10%	2,387	100.00%	1	0.00%
2006 Total		4,319	4,305	99.70%																						

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%
	HDGT	1,359	1,358	99.90%	1	0.10%	1,359	100.00%	0	0.00%	38	100.00%	0	0.00%	1,356	99.90%	1	0.10%	1,355	100.00%	0	0.00%	1,359	100.00%	0	0.00%
2007 Total		3,770	3,767	99.90%	3	0.10%	2,122	100.00%	1	0.00%	180	99.40%	1	0.60%	2,118	100.00%	1	0.00%	3,764	100.00%	0	0.00%	3,770	100.00%	0	0.00%
2008	LDGV	706	698	98.90%	8	1.10%	396	98.30%	7	1.70%	160	100.00%	0	0.00%	401	99.50%	2	0.50%	656	100.00%	0	0.00%	706	100.00%	0	0.00%
	LDGT	2,490	2,489	100.00%	1	0.00%	533	99.80%	1	0.20%	75	100.00%	0	0.00%	532	100.00%	0	0.00%	2,487	100.00%	0	0.00%	2,490	100.00%	0	0.00%
	HDGT	2,318	2,315	99.90%	3	0.10%	2,316	100.00%	1	0.00%	46	100.00%	0	0.00%	2,313	99.90%	3	0.10%	2,316	100.00%	0	0.00%	2,318	100.00%	0	0.00%
2008 Total		5,514	5,502	99.80%	12	0.20%	3,245	99.70%	9	0.30%	281	100.00%	0	0.00%	3,246	99.80%	5	0.20%	5,459	100.00%	0	0.00%	5,514	100.00%	0	0.00%
2009	LDGV	330	330	100.00%	0	0.00%	189	100.00%	0	0.00%	49	100.00%	0	0.00%	189	100.00%	0	0.00%	307	100.00%	0	0.00%	330	100.00%	0	0.00%
	LDGT	818	817	99.90%	1	0.10%	171	100.00%	0	0.00%	27	100.00%	0	0.00%	170	99.40%	1	0.60%	818	100.00%	0	0.00%	818	100.00%	0	0.00%
	HDGT	605	604	99.80%	1	0.20%	605	100.00%	0	0.00%	7	100.00%	0	0.00%	604	99.80%	1	0.20%	604	100.00%	0	0.00%	605	100.00%	0	0.00%
2009 Total		1,753	1,751	99.90%	2	0.10%	965	100.00%	0	0.00%	83	100.00%	0	0.00%	963	99.80%	2	0.20%	1,729	100.00%	0	0.00%	1,753	100.00%	0	0.00%
2010	LDGV	345	341	98.80%	4	1.20%	149	97.40%	4	2.60%	51	100.00%	0	0.00%	151	98.70%	2	1.30%	341	100.00%	0	0.00%	345	100.00%	0	0.00%
	LDGT	2,227	2,225	99.90%	2	0.10%	328	100.00%	0	0.00%	49	100.00%	0	0.00%	327	100.00%	0	0.00%	2,217	100.00%	1	0.00%	2,226	100.00%	1	0.00%
	HDGT	1,074	1,071	99.70%	3	0.30%	1,072	100.00%	0	0.00%	19	100.00%	0	0.00%	1,070	99.90%	1	0.10%	1,070	99.80%	2	0.20%	1,074	100.00%	0	0.00%
2010 Total		3,646	3,637	99.80%	9	0.20%	1,549	99.70%	4	0.30%	119	100.00%	0	0.00%	1,548	99.80%	3	0.20%	3,628	99.90%	3	0.10%	3,645	100.00%	1	0.00%
2011	LDGV	106	106	100.00%	0	0.00%	46	100.00%	0	0.00%	18	100.00%	0	0.00%	46	100.00%	0	0.00%	106	100.00%	0	0.00%	106	100.00%	0	0.00%
	LDGT	475	475	100.00%	0	0.00%	75	100.00%	0	0.00%	10	100.00%	0	0.00%	75	100.00%	0	0.00%	474	100.00%	0	0.00%	475	100.00%	0	0.00%
	HDGT	325	325	100.00%	0	0.00%	325	100.00%	0	0.00%	8	100.00%	0	0.00%	325	100.00%	0	0.00%	320	100.00%	0	0.00%	325	100.00%	0	0.00%
2011 Total		906	906	100.00%	0	0.00%	446	100.00%	0	0.00%	36	100.00%	0	0.00%	446	100.00%	0	0.00%	900	100.00%	0	0.00%	906	100.00%	0	0.00%
2012	LDGV	38	37	97.40%	1	2.60%	8	88.90%	1	11.10%	4	100.00%	0	0.00%	8	88.90%	1	11.10%	38	100.00%	0	0.00%	38	100.00%	0	0.00%
	LDGT	133	133	100.00%	0	0.00%	21	100.00%	0	0.00%	2	100.00%	0	0.00%	21	100.00%	0	0.00%	133	100.00%	0	0.00%	133	100.00%	0	0.00%
	HDGT	124	124	100.00%	0	0.00%	123	100.00%	0	0.00%	3	100.00%	0	0.00%	123	100.00%	0	0.00%	124	100.00%	0	0.00%	124	100.00%	0	0.00%
2012 Total		295	294	99.70%	1	0.30%	152	99.30%	1	0.70%	9	100.00%	0	0.00%	152	99.30%	1	0.70%	295	100.00%	0	0.00%	295	100.00%	0	0.00%
2013	LDGV	31	31	100.00%	0	0.00%	12	100.00%	0	0.00%	5	100.00%	0	0.00%	12	100.00%	0	0.00%	31	100.00%	0	0.00%	31	100.00%	0	0.00%
	LDGT	73	73	100.00%	0	0.00%	11	100.00%	0	0.00%	1	100.00%	0	0.00%	11	100.00%	0	0.00%	72	100.00%	0	0.00%	73	100.00%	0	0.00%
	HDGT	123	123	100.00%	0	0.00%	123	100.00%	0	0.00%	4	100.00%	0	0.00%	123	100.00%	0	0.00%	123	100.00%	0	0.00%	123	100.00%	0	0.00%
2013 Total		227	227	100.00%	0	0.00%	146	100.00%	0	0.00%	10	100.00%	0	0.00%	146	100.00%	0	0.00%	226	100.00%	0	0.00%	227	100.00%	0	0.00%
2014	LDGV	21	21	100.00%	0	0.00%	10	100.00%	0	0.00%	3	100.00%	0	0.00%	10	100.00%	0	0.00%	21	100.00%	0	0.00%	21	100.00%	0	0.00%
	LDGT	43	42	97.70%	1	2.30%	12	100.00%	0	0.00%	4	100.00%	0	0.00%	12	100.00%	0	0.00%	42	97.70%	1	2.30%	43	100.00%	0	0.00%
	HDGT	45	45	100.00%	0	0.00%	45	100.00%	0	0.00%	2	100.00%	0	0.00%	45	100.00%	0	0.00%	40	100.00%	0	0.00%	45	100.00%	0	0.00%
2014 Total		109	108	99.10%	1	0.90%	67	100.00%	0	0.00%	9	100.00%	0	0.00%	67	100.00%	0	0.00%	103	99.00%	1	1.00%	109	100.00%	0	0.00%
2015	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%
	LDGT	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%
	HDGT	7	7	100.00%	0	0.00%	7	100.00%	0	0.00%	0	0.00%	0	0.00%	7	100.00%	0	0.00%	3	100.00%	0	0.00%	7	100.00%	0	0.00%
2015 Total		9	9	100.00%	0	0.00%	7	100.00%	0	0.00%	0	0.00%	0	0.00%	7	100.00%	0	0.00%	5	100.00%	0	0.00%	9	100.00%	0	0.00%
Grand Total		80,533	79,762	99.00%	771	1.00%	54,950	99.50%	292	0.50%	13,073	97.40%	349	2.60%	50,668	99.80%	83	0.20%	78,473	99.90%	64	0.10%	80,435	99.90%	98	0.10%

Summary by Vehicle Type (V1.01)

Vehicle Type	Visual Overall					CAT				AIS				O2				Gas Cap				Opacity			
	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	8625	8449	98.00%	176	2.00%	5289	98.40%	87	1.60%	2828	97.10%	83	2.90%	3172	99.30%	21	0.70%	7702	100.00%	2	0.00%	8609	99.80%	16	0.20%
LDGT	29203	28983	99.20%	220	0.80%	12759	99.30%	94	0.70%	2076	94.70%	117	5.30%	10871	99.90%	10	0.10%	28646	99.90%	15	0.10%	29177	99.90%	26	0.10%
HDGT	42705	42330	99.10%	375	0.90%	36902	99.70%	111	0.30%	8169	98.20%	149	1.80%	36625	99.90%	52	0.10%	42125	99.90%	47	0.10%	42649	99.90%	56	0.10%
Grand Total	80533	79762	99.00%	771	1.00%	54950	99.50%	292	0.50%	13073	97.40%	349	2.60%	50668	99.80%	83	0.20%	78473	99.90%	64	0.10%	80435	99.90%	98	0.10%

Appendix O

Idle Initial Visual Failure Report

(Advisory)

Idle Initial Visual Failure Report (Advisory) (V1.02)

Vehicle		Cap Pressure				Eng Light				OBD				EVAP System			
Year	Type	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%
1974	LDGV	0	0.00%	0	0.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1974 Total		0	0.00%	0	0.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1975	LDGV	47	92.16%	4	7.84%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	14	87.50%	2	12.50%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	20	86.96%	3	13.04%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1975 Total		81	90.00%	9	10.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1976	LDGV	210	91.70%	19	8.30%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	114	85.71%	19	14.29%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	111	78.17%	31	21.83%	0	0.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1976 Total		435	86.31%	69	13.69%	0	0.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1977	LDGV	253	93.36%	18	6.64%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	98	84.48%	18	15.52%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	149	78.84%	40	21.16%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1977 Total		500	86.81%	76	13.19%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1978	LDGV	324	93.10%	24	6.90%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	125	83.89%	24	16.11%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	146	82.95%	30	17.05%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1978 Total		595	88.41%	78	11.59%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1979	LDGV	397	90.64%	41	9.36%	55	93.22%	4	6.78%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	490	85.66%	82	14.34%	36	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	62	95.38%	3	4.62%	11	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1979 Total		949	88.28%	126	11.72%	102	96.23%	4	3.77%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1980	LDGV	273	93.17%	20	6.83%	74	87.06%	11	12.94%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	294	86.98%	44	13.02%	42	89.36%	5	10.64%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	25	80.65%	6	19.35%	7	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1980 Total		592	89.43%	70	10.57%	123	88.49%	16	11.51%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1981	LDGV	225	94.94%	12	5.06%	145	84.30%	27	15.70%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	284	86.32%	45	13.68%	59	89.39%	7	10.61%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	7	87.50%	1	12.50%	14	87.50%	2	12.50%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1981 Total		516	89.90%	58	10.10%	218	85.83%	36	14.17%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1982	LDGV	6	100.00%	0	0.00%	5	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	5	100.00%	0	0.00%	2	66.67%	1	33.33%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	1	100.00%	0	0.00%	11	84.62%	2	15.38%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1982 Total		12	100.00%	0	0.00%	18	85.71%	3	14.29%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1983	LDGV	3	100.00%	0	0.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	5	83.33%	1	16.67%	3	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	2	66.67%	1	33.33%	15	93.75%	1	6.25%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1983 Total		10	83.33%	2	16.67%	20	95.24%	1	4.76%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1984	LDGV	13	92.86%	1	7.14%	6	85.71%	1	14.29%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	5	100.00%	0	0.00%	2	66.67%	1	33.33%	1	100.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	9	64.29%	5	35.71%	37	92.50%	3	7.50%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1984 Total		27	81.82%	6	18.18%	45	90.00%	5	10.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%
1985	LDGV	7	100.00%	0	0.00%	8	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	2	66.67%	1	33.33%	3	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	4	80.00%	1	20.00%	79	96.34%	3	3.66%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1985 Total		13	86.67%	2	13.33%	90	96.77%	3	3.23%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Vehicle		Cap Pressure				Eng Light				OBD				EVAP System			
Year	Type	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%
1986	LDGV	15	100.00%	0	0.00%	12	85.71%	2	14.29%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	3	100.00%	0	0.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	8	88.89%	1	11.11%	129	97.73%	3	2.27%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1986 Total		26	96.30%	1	3.70%	143	96.62%	5	3.38%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1987	LDGV	10	100.00%	0	0.00%	11	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	5	100.00%	0	0.00%	35	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	8	100.00%	0	0.00%	137	91.95%	12	8.05%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1987 Total		23	100.00%	0	0.00%	183	93.85%	12	6.15%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1988	LDGV	13	100.00%	0	0.00%	14	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	10	100.00%	0	0.00%	58	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	23	92.00%	2	8.00%	372	93.94%	24	6.06%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1988 Total		46	95.83%	2	4.17%	444	94.87%	24	5.13%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1989	LDGV	22	100.00%	0	0.00%	20	86.96%	3	13.04%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	9	100.00%	0	0.00%	59	98.33%	1	1.67%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	12	66.67%	6	33.33%	523	94.75%	29	5.25%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1989 Total		43	87.76%	6	12.24%	602	94.80%	33	5.20%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1990	LDGV	17	100.00%	0	0.00%	24	80.00%	6	20.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	8	88.89%	1	11.11%	93	97.89%	2	2.11%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	16	94.12%	1	5.88%	642	94.69%	36	5.31%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1990 Total		41	95.35%	2	4.65%	759	94.52%	44	5.48%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1991	LDGV	36	94.74%	2	5.26%	45	93.75%	3	6.25%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	8	88.89%	1	11.11%	92	97.87%	2	2.13%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	15	78.95%	4	21.05%	502	92.62%	40	7.38%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1991 Total		59	89.39%	7	10.61%	639	93.42%	45	6.58%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1992	LDGV	39	100.00%	0	0.00%	47	94.00%	3	6.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	3	75.00%	1	25.00%	115	99.14%	1	0.86%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	9	75.00%	3	25.00%	801	96.16%	32	3.84%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1992 Total		51	92.73%	4	7.27%	963	96.40%	36	3.60%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1993	LDGV	21	95.45%	1	4.55%	26	89.66%	3	10.34%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	5	71.43%	2	28.57%	32	100.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	10	62.50%	6	37.50%	789	95.64%	36	4.36%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1993 Total		36	80.00%	9	20.00%	847	95.60%	39	4.40%	1	100.00%	0	0.00%	0	0.00%	0	0.00%
1994	LDGV	29	96.67%	1	3.33%	41	82.00%	9	18.00%	3	100.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	31	96.88%	1	3.13%	104	99.05%	1	0.95%	17	100.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	27	84.38%	5	15.63%	1167	95.66%	53	4.34%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1994 Total		87	92.55%	7	7.45%	1312	95.42%	63	4.58%	20	100.00%	0	0.00%	0	0.00%	0	0.00%
1995	LDGV	44	100.00%	0	0.00%	55	93.22%	4	6.78%	1	100.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	23	95.83%	1	4.17%	29	93.55%	2	6.45%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	28	82.35%	6	17.65%	1295	95.43%	62	4.57%	2	100.00%	0	0.00%	0	0.00%	0	0.00%
1995 Total		95	93.14%	7	6.86%	1379	95.30%	68	4.70%	3	100.00%	0	0.00%	0	0.00%	0	0.00%
1996	LDGV	39	100.00%	0	0.00%	39	86.67%	6	13.33%	19	86.36%	3	13.64%	0	0.00%	0	0.00%
	LDGT	31	96.88%	1	3.13%	36	78.26%	10	21.74%	20	66.67%	10	33.33%	0	0.00%	0	0.00%
	HDGT	36	92.31%	3	7.69%	1603	91.03%	158	8.97%	632	86.46%	99	13.54%	0	0.00%	0	0.00%
1996 Total		106	96.36%	4	3.64%	1678	90.60%	174	9.40%	671	85.70%	112	14.30%	0	0.00%	0	0.00%
1997	LDGV	38	100.00%	0	0.00%	51	94.44%	3	5.56%	30	85.71%	5	14.29%	0	0.00%	0	0.00%
	LDGT	48	96.00%	2	4.00%	53	84.13%	10	15.87%	30	85.71%	5	14.29%	0	0.00%	0	0.00%
	HDGT	34	89.47%	4	10.53%	1517	89.82%	172	10.18%	637	84.15%	120	15.85%	0	0.00%	0	0.00%

Vehicle		Cap Pressure				Eng Light				OBD				EVAP System			
Year	Type	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%
1997 Total		120	95.24%	6	4.76%	1621	89.76%	185	10.24%	697	84.28%	130	15.72%	0	0.00%	0	0.00%
1998	LDGV	32	96.97%	1	3.03%	72	92.31%	6	7.69%	47	95.92%	2	4.08%	0	0.00%	0	0.00%
	LDGT	123	97.62%	3	2.38%	153	85.47%	26	14.53%	122	81.88%	27	18.12%	0	0.00%	0	0.00%
	HDGT	19	86.36%	3	13.64%	1388	88.35%	183	11.65%	964	89.51%	113	10.49%	0	0.00%	0	0.00%
1998 Total		174	96.13%	7	3.87%	1613	88.24%	215	11.76%	1,133	88.86%	142	11.14%	0	0.00%	0	0.00%
1999	LDGV	61	96.83%	2	3.17%	100	94.34%	6	5.66%	60	89.55%	7	10.45%	0	0.00%	0	0.00%
	LDGT	978	96.83%	32	3.17%	846	78.04%	238	21.96%	740	80.17%	183	19.83%	0	0.00%	0	0.00%
	HDGT	54	91.53%	5	8.47%	2056	87.23%	301	12.77%	1,434	86.49%	224	13.51%	0	0.00%	0	0.00%
1999 Total		1,093	96.55%	39	3.45%	3002	84.63%	545	15.37%	2,234	84.37%	414	15.63%	0	0.00%	0	0.00%
2000	LDGV	90	95.74%	4	4.26%	149	95.51%	7	4.49%	104	97.20%	3	2.80%	0	0.00%	0	0.00%
	LDGT	1,938	95.28%	96	4.72%	1732	79.56%	445	20.44%	1,512	80.04%	377	19.96%	0	0.00%	0	0.00%
	HDGT	78	96.30%	3	3.70%	2812	91.15%	273	8.85%	2,015	93.03%	151	6.97%	0	0.00%	0	0.00%
2000 Total		2,106	95.34%	103	4.66%	4693	86.62%	725	13.38%	3,631	87.24%	531	12.76%	0	0.00%	0	0.00%
2001	LDGV	106	98.15%	2	1.85%	170	91.40%	16	8.60%	110	88.00%	15	12.00%	0	0.00%	0	0.00%
	LDGT	1,624	95.19%	82	4.81%	1976	82.30%	425	17.70%	1,659	82.74%	346	17.26%	0	0.00%	0	0.00%
	HDGT	56	86.15%	9	13.85%	2120	88.67%	271	11.33%	1,500	88.18%	201	11.82%	0	0.00%	0	0.00%
2001 Total		1,786	95.05%	93	4.95%	4266	85.70%	712	14.30%	3,269	85.33%	562	14.67%	0	0.00%	0	0.00%
2002	LDGV	133	99.25%	1	0.75%	203	95.75%	9	4.25%	125	91.91%	11	8.09%	0	0.00%	0	0.00%
	LDGT	2,633	95.47%	125	4.53%	2456	82.33%	527	17.67%	2,102	83.38%	419	16.62%	0	0.00%	0	0.00%
	HDGT	104	100.00%	0	0.00%	2522	91.54%	233	8.46%	1,838	91.17%	178	8.83%	0	0.00%	0	0.00%
2002 Total		2,870	95.79%	126	4.21%	5181	87.08%	769	12.92%	4,065	86.99%	608	13.01%	0	0.00%	0	0.00%
2003	LDGV	168	99.41%	1	0.59%	350	95.63%	16	4.37%	252	94.03%	16	5.97%	0	0.00%	0	0.00%
	LDGT	1,766	94.44%	104	5.56%	1642	80.06%	409	19.94%	1,374	81.54%	311	18.46%	0	0.00%	0	0.00%
	HDGT	84	98.82%	1	1.18%	1805	88.65%	231	11.35%	1,322	89.38%	157	10.62%	0	0.00%	0	0.00%
2003 Total		2,018	95.01%	106	4.99%	3797	85.27%	656	14.73%	2,948	85.90%	484	14.10%	0	0.00%	0	0.00%
2004	LDGV	154	96.25%	6	3.75%	271	93.77%	18	6.23%	176	91.67%	16	8.33%	0	0.00%	0	0.00%
	LDGT	2,375	93.76%	158	6.24%	2327	86.67%	358	13.33%	1,981	89.31%	237	10.69%	0	0.00%	0	0.00%
	HDGT	96	93.20%	7	6.80%	2384	89.93%	267	10.07%	1,678	91.15%	163	8.85%	0	0.00%	0	0.00%
2004 Total		2,625	93.88%	171	6.12%	4982	88.57%	643	11.43%	3,835	90.21%	416	9.79%	0	0.00%	0	0.00%
2005	LDGV	106	99.07%	1	0.93%	246	96.47%	9	3.53%	133	96.38%	5	3.62%	0	0.00%	0	0.00%
	LDGT	1,494	96.32%	57	3.68%	1468	88.17%	197	11.83%	1,229	89.77%	140	10.23%	0	0.00%	0	0.00%
	HDGT	58	95.08%	3	4.92%	1337	88.84%	168	11.16%	878	86.93%	132	13.07%	0	0.00%	0	0.00%
2005 Total		1,658	96.45%	61	3.55%	3051	89.08%	374	10.92%	2,240	88.99%	277	11.01%	0	0.00%	0	0.00%
2006	LDGV	186	98.41%	3	1.59%	399	96.61%	14	3.39%	266	96.03%	11	3.97%	0	0.00%	0	0.00%
	LDGT	1,327	97.36%	36	2.64%	1399	92.28%	117	7.72%	1,194	93.87%	78	6.13%	0	0.00%	0	0.00%
	HDGT	41	93.18%	3	6.82%	2157	90.36%	230	9.64%	1,380	90.55%	144	9.45%	0	0.00%	0	0.00%
2006 Total		1,554	97.37%	42	2.63%	3955	91.64%	361	8.36%	2,840	92.42%	233	7.58%	0	0.00%	0	0.00%
2007	LDGV	136	98.55%	2	1.45%	341	98.27%	6	1.73%	217	97.31%	6	2.69%	0	0.00%	0	0.00%
	LDGT	1,831	97.86%	40	2.14%	1977	95.78%	87	4.22%	1,792	95.93%	76	4.07%	0	0.00%	0	0.00%
	HDGT	35	92.11%	3	7.89%	1249	91.91%	110	8.09%	784	89.91%	88	10.09%	0	0.00%	0	0.00%
2007 Total		2,002	97.80%	45	2.20%	3567	94.62%	203	5.38%	2,793	94.26%	170	5.74%	0	0.00%	0	0.00%
2008	LDGV	363	98.91%	4	1.09%	687	97.31%	19	2.69%	442	96.93%	14	3.07%	0	0.00%	0	0.00%
	LDGT	2,187	98.34%	37	1.66%	2428	97.51%	62	2.49%	2,232	97.13%	66	2.87%	0	0.00%	0	0.00%
	HDGT	74	94.87%	4	5.13%	2199	94.87%	119	5.13%	1,638	94.03%	104	5.97%	0	0.00%	0	0.00%
2008 Total		2,624	98.31%	45	1.69%	5314	96.37%	200	3.63%	4,312	95.91%	184	4.09%	0	0.00%	0	0.00%
2009	LDGV	158	100.00%	0	0.00%	326	98.79%	4	1.21%	185	100.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	710	99.02%	7	0.98%	811	99.14%	7	0.86%	737	98.79%	9	1.21%	0	0.00%	0	0.00%

Vehicle		Cap Pressure				Eng Light				OBD				EVAP System			
Year	Type	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%
	HDGT	23	95.83%	1	4.17%	573	94.71%	32	5.29%	431	94.73%	24	5.27%	0	0.00%	0	0.00%
2009 Total		891	99.11%	8	0.89%	1710	97.55%	43	2.45%	1,353	97.62%	33	2.38%	0	0.00%	0	0.00%
2010	LDGV	213	98.16%	4	1.84%	337	97.97%	7	2.03%	249	98.42%	4	1.58%	0	0.00%	0	0.00%
	LDGT	1,942	98.53%	29	1.47%	2209	99.19%	18	0.81%	2,029	99.22%	16	0.78%	0	0.00%	0	0.00%
	HDGT	35	89.74%	4	10.26%	1030	95.90%	44	4.10%	832	94.98%	44	5.02%	0	0.00%	0	0.00%
2010 Total		2,190	98.34%	37	1.66%	3576	98.11%	69	1.89%	3,110	97.98%	64	2.02%	0	0.00%	0	0.00%
2011	LDGV	71	98.61%	1	1.39%	102	96.23%	4	3.77%	77	98.72%	1	1.28%	0	0.00%	0	0.00%
	LDGT	424	98.60%	6	1.40%	471	99.16%	4	0.84%	436	99.54%	2	0.46%	0	0.00%	0	0.00%
	HDGT	153	98.71%	2	1.29%	314	96.62%	11	3.38%	233	95.49%	11	4.51%	0	0.00%	0	0.00%
2011 Total		648	98.63%	9	1.37%	887	97.90%	19	2.10%	746	98.16%	14	1.84%	0	0.00%	0	0.00%
2012	LDGV	24	100.00%	0	0.00%	38	100.00%	0	0.00%	34	100.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	115	99.14%	1	0.86%	131	98.50%	2	1.50%	124	99.20%	1	0.80%	0	0.00%	0	0.00%
	HDGT	65	97.01%	2	2.99%	121	97.58%	3	2.42%	85	96.59%	3	3.41%	0	0.00%	0	0.00%
2012 Total		204	98.55%	3	1.45%	290	98.31%	5	1.69%	243	98.38%	4	1.62%	0	0.00%	0	0.00%
2013	LDGV	21	95.45%	1	4.55%	30	96.77%	1	3.23%	23	100.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	62	98.41%	1	1.59%	73	100.00%	0	0.00%	66	100.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	73	100.00%	0	0.00%	122	99.19%	1	0.81%	86	98.85%	1	1.15%	0	0.00%	0	0.00%
2013 Total		156	98.73%	2	1.27%	225	99.12%	2	0.88%	175	99.43%	1	0.57%	0	0.00%	0	0.00%
2014	LDGV	12	100.00%	0	0.00%	21	100.00%	0	0.00%	13	100.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	36	97.30%	1	2.70%	43	100.00%	0	0.00%	39	100.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	28	100.00%	0	0.00%	45	100.00%	0	0.00%	34	100.00%	0	0.00%	0	0.00%	0	0.00%
2014 Total		76	98.70%	1	1.30%	109	100.00%	0	0.00%	86	100.00%	0	0.00%	0	0.00%	0	0.00%
2015	LDGV	1	100.00%	0	0.00%	1	100.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%
	LDGT	1	100.00%	0	0.00%	1	100.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%
	HDGT	2	100.00%	0	0.00%	7	100.00%	0	0.00%	7	100.00%	0	0.00%	0	0.00%	0	0.00%
2015 Total		4	100.00%	0	0.00%	9	100.00%	0	0.00%	9	100.00%	0	0.00%	0	0.00%	0	0.00%
Grand Total		29,142	95.26%	1,449	4.74%	61413	90.64%	6,342	9.36%	40,415	90.22%	4,379	9.78%	0	0.00%	0	0.00%

Records 1 - 124 (All Records)

Summary by Vehicle Type (V1.02)

Vehicle Type	Cap Pressure				Eng Light				OBD				EVAP System			
	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%	Pass	Pass%	Fail	Fail%
LDGV	4116	95.90%	176	4.10%	4523	95.20%	228	4.80%	2567	95.57%	119	4.43%	0	0.00%	0	0.00%
LDGT	23186	95.62%	1,061	4.38%	22998	88.58%	2,966	11.42%	19438	89.41%	2,303	10.59%	0	0.00%	0	0.00%
HDGT	1840	89.67%	212	10.33%	33892	91.50%	3,148	8.50%	18410	90.39%	1,957	9.61%	0	0.00%	0	0.00%
Grand Total	29142	95.26%	1,449	4.74%	61413	90.64%	6,342	9.36%	40415	90.22%	4,379	9.78%	0	0.00%	0	0.00%

Appendix P

Idle Retest Pass Reduction Report

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 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 2500rpm	Avg HC % 2500 rpm	Avg CO 2500 rpm	Avg CO % 2500 rpm	
1974	LDGV	309	906.38	4.83	654.33	4.06	199	64.40%	350.69	1.52	354.67	2.46	455.06	56.48%	3.11	67.16%	209.77	37.16%	1.2	32.83%	335.57
	LDGT	158	829.97	4.35	563.02	3.87	108	68.35%	313.38	1.2	301.73	2.32	401.61	56.17%	2.93	70.99%	187.01	38.26%	1.11	32.49%	174
	HDGT	85	1044.99	5.12	649.12	3.84	60	70.59%	320.28	2.12	284.48	2.25	603.97	65.35%	2.74	56.33%	292.87	50.73%	1.4	38.31%	302
1974 Total		552	905.85	4.74	627.39	3.97	367	66.49%	334.74	1.52	327.61	2.38	463.68	58.07%	2.99	66.28%	216.65	39.81%	1.21	33.65%	291.36
1975	LDGV	24	637.83	3.78	433.25	2.36	15	62.50%	160.59	0.77	154.47	1.42	419.84	72.33%	2.96	79.43%	194	55.67%	0.63	30.66%	0
	LDGT	12	213.51	3.54	118.73	2.73	10	83.33%	126.95	0.63	105.05	2.05	63.01	33.17%	2.49	79.75%	17.17	14.05%	0.93	31.31%	85
	HDGT	32	1019.09	2.94	732	1.63	19	59.38%	333.59	1.62	304.56	1.62	558.57	62.61%	1.87	53.48%	342.33	52.92%	0.3	15.79%	0
1975 Total		68	742.37	3.34	518.33	2.08	44	64.71%	227.65	1.11	208.05	1.65	398.65	63.65%	2.38	68.28%	217.86	51.15%	0.56	25.25%	85
1976	LDGV	145	784.79	3.73	557.47	3.63	90	62.07%	207.69	0.77	218.44	2.13	442.53	68.06%	2.37	75.44%	232.83	51.59%	0.84	28.29%	307
	LDGT	113	509.38	3.19	341.98	2.7	72	63.72%	195.16	0.64	165.86	1.66	233.48	54.47%	2.15	77.10%	163	49.57%	0.76	31.35%	0
	HDGT	142	933.42	5.01	586.33	3.95	100	70.42%	298.11	2.08	291.58	2.73	584.18	66.21%	2.77	57.17%	233.7	44.49%	1	26.91%	105
1976 Total		400	759.75	4.03	506.84	3.48	262	65.50%	238.76	1.23	231.9	2.23	439.14	64.78%	2.46	66.64%	213.97	47.99%	0.88	28.31%	206
1977	LDGV	182	515.82	2.72	364.81	2.2	114	62.64%	116.42	0.44	121.64	0.97	276.26	70.35%	1.82	80.52%	156.68	56.30%	0.91	48.47%	405.33
	LDGT	106	554.07	3.26	347.26	2.48	56	52.83%	127.59	0.42	172.49	1.39	310.34	70.87%	2.22	84.10%	145.27	45.72%	0.65	31.91%	0
	HDGT	211	1032.61	4.57	659.73	3.36	146	69.19%	391.98	1.9	365.47	2.58	549.7	58.37%	2.31	54.80%	270.02	42.49%	0.6	18.83%	94.5
1977 Total		499	742.47	3.62	485.79	2.75	316	63.33%	245.71	1.11	243.3	1.79	408.64	62.45%	2.12	65.54%	207.02	45.97%	0.72	28.71%	327.63
1978	LDGV	201	540.07	3	373.82	2.62	120	59.70%	144.35	0.38	150.98	1.51	284.89	66.37%	2.19	85.21%	124.64	45.22%	0.73	32.60%	0
	LDGT	144	408.85	2.49	295.85	2.86	85	59.03%	145.56	0.47	145.31	1.51	187.05	56.24%	1.26	72.81%	128.55	46.94%	0.63	29.44%	0
	HDGT	228	991.7	3.66	673.16	2.66	148	64.91%	340.13	1.66	294.69	2.11	537.39	61.24%	1.99	54.56%	287.51	49.38%	0.52	19.77%	66.33
1978 Total		573	686.8	3.13	473.33	2.69	353	61.61%	226.72	0.94	209.87	1.76	367.19	61.83%	1.88	66.75%	193.87	48.02%	0.62	25.97%	66.33
1979	LDGV	298	470.99	2.5	343.33	2.59	173	58.05%	144.49	0.5	162.62	1.61	295.32	67.15%	1.74	77.61%	157.04	49.13%	0.79	33.10%	163
	LDGT	444	533.82	2.6	382.03	2.29	265	59.68%	133.3	0.38	166.23	1.48	305.43	69.62%	1.82	82.72%	167.29	50.16%	0.49	24.82%	389.75
	HDGT	86	1013.04	3.55	639.89	2.9	51	59.30%	294.16	1.15	300.66	1.7	600.65	67.13%	2.12	64.88%	330.72	52.38%	0.95	35.73%	80
1979 Total		828	560.98	2.66	394.89	2.46	489	59.06%	154.04	0.5	178.97	1.55	332.64	68.35%	1.82	78.37%	180.71	50.24%	0.64	29.40%	266
1980	LDGV	183	561.83	2.54	382.02	2.78	95	51.91%	117.33	0.29	111.81	1.01	358.65	75.35%	2.35	89.16%	237.58	68.00%	1.63	61.74%	244
	LDGT	200	539.88	2.97	394.49	2.94	115	57.50%	108.75	0.3	145.99	1.43	284.03	72.31%	1.72	85.25%	136.18	48.26%	0.58	28.70%	0
	HDGT	44	678.79	1.75	473.25	2.04	35	79.55%	245.54	1.02	156.91	1.77	347.34	58.59%	0.72	41.16%	240.45	60.51%	0.37	17.47%	46
1980 Total		427	563.6	2.66	397.26	2.78	245	57.38%	131.62	0.4	134.3	1.32	322.01	70.99%	1.82	82.11%	190.39	58.64%	0.96	42.08%	112
1981	LDGV	213	345.95	1.79	341.6	2.63	103	48.36%	55.19	0.12	55.2	0.3	201.76	78.52%	1.18	90.77%	208.32	79.05%	1.73	85.31%	284
	LDGT	362	356.91	1.52	265.68	1.91	165	45.58%	73.59	0.18	62.94	0.37	202.87	73.38%	1.03	85.16%	139.34	68.88%	1.1	74.61%	345
	HDGT	43	698.7	2.26	407.91	2.38	27	62.79%	196.46	0.94	219.72	1.83	368.38	65.22%	0.89	48.70%	80.35	26.78%	-0.14	-7.96%	0
1981 Total		618	376.91	1.66	301.74	2.19	295	47.73%	78.41	0.23	74.59	0.48	217.63	73.51%	1.07	82.41%	158.03	67.94%	1.2	71.48%	320.6
1982	LDGV	6	674.92	4.47	173.98	2.75	3	50.00%	84.87	0.19	92.8	0.24	609.43	87.78%	4.52	95.90%	108.13	53.82%	2.93	92.53%	0
	LDGT	4	261.55	0.04	268.45	0.04	3	75.00%	44.97	0.12	25.63	0.26	129.4	74.21%	-0.1	-362.50%	153.33	85.68%	-0.24	-887.50%	0
	HDGT	46	575.55	2.65	373.02	1.94	30	65.22%	176.03	1.14	134.77	0.87	327.24	65.02%	1.42	55.64%	203.81	60.20%	1.09	55.72%	0
1982 Total		56	563.77	2.66	344.22	1.89	36	64.29%	157.51	0.97	122.18	0.76	334.27	67.97%	1.56	61.52%	191.63	61.07%	1.13	59.74%	0
1983	LDGV	5	601.78	1.76	684.1	1.65	3	60.00%	56.37	0.12	56.2	0.88	532.93	90.43%	1.38	92.20%	597.47	91.40%	0.53	37.68%	0
	LDGT	3	275.87	0.04	1132.43	0.27	1	33.33%	101	0.03	106.1	0.19	28.2	21.83%	0	0.00%	149	58.41%	0.12	38.71%	0
	HDGT	63	611.81	2.29	401.7	2.13	41	65.08%	174.58	1.12	133.89	1.41	434.49	71.34%	1.48	56.84%	285.97	68.11%	0.89	38.80%	0
1983 Total		71	596.91	2.15	452.46	2.01	45	63.38%	165.06	1.03	128.1	1.35	432.02	72.36%	1.44	58.25%	303.69	70.33%	0.85	38.76%	0
1984	LDGV	6	332.2	1.59	127.85	1.29	3	50.00%	86.8	0.3	65.13	0.29	246.23	73.94%	2.01	87.01%	66.63	50.57%	1.41	83.14%	0
	LDGT	1	98.6	0.88	121	1.31	0	0.00%	0	0	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
	HDGT	86	655.75	2.44	359.44	1.74	58	67.44%	160.29	1.01	94.11	0.88	471.84	74.64%	1.46	59.20%	253.28	72.91%	0.61	41.22%	401.33
1984 Total		93	628.88	2.37	341.93	1.71	61	65.59%	156.68	0.97	92.69	0.85	460.74	74.62%	1.49	60.48%	244.1	72.48%	0.65	43.55%	401.33
1985	LDGV	7	172.49	1.81	121.77	1.75	5	71.43%	105.2	0.42	80.48	0.42	48.28	31.46%	1.08	71.83%	21.68	21.22%	0.91	68.31%	0

Vehicle		Initial Exhaust Emissions					Passing Retest Exhaust Emissions						Emission Reductions								Average Repair Costs
Year	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 2500rpm	Avg HC% 2500 rpm	Avg CO 2500 rpm	Avg CO% 2500 rpm	
	LDGT	5	0	0	0	0	3	60.00%	296.27	1.15	216.67	0.25	-296.27	0.00%	-1.15	0.00%	-216.67	0.00%	-0.25	0.00%	0
	HDGT	97	827.67	2.15	379.11	2.24	57	58.76%	210.44	0.91	165.83	1.14	496.1	70.22%	0.95	50.96%	218.33	56.83%	0.77	40.47%	0
	1985 Total	109	747.62	2.03	345.19	2.11	65	59.63%	206.3	0.88	161.61	1.04	425.08	67.32%	0.86	49.30%	183.13	53.12%	0.74	41.43%	0
1986	LDGV	8	314.01	0.77	231.29	0.43	5	62.50%	96.76	0.48	116.32	0.37	205.58	68.00%	0.71	59.63%	106.86	47.88%	0.27	41.96%	160
	LDGT	5	44.48	0.12	22.68	0.92	4	80.00%	85.25	0.19	71.9	0.19	-29.65	-53.33%	-0.04	-25.00%	-43.55	-153.62%	0.96	83.51%	0
	HDGT	155	492.36	2.05	270.04	1.84	84	54.19%	119.06	0.8	105.59	1.1	373.7	75.84%	1.1	57.90%	154.83	59.45%	0.5	31.37%	637.5
	1986 Total	168	470.53	1.93	260.84	1.74	93	55.36%	116.41	0.76	104.71	1.02	347.31	74.90%	1.03	57.67%	143.72	57.85%	0.51	33.30%	542
1987	LDGV	1	124.1	0.01	41.7	0.01	1	100.00%	9.9	0.01	6.8	0.01	114.2	92.02%	0	0.00%	34.9	83.69%	0	0.00%	0
	LDGT	8	141.63	0.17	151.13	0.36	6	75.00%	71.33	0.26	74.67	0.27	69	49.17%	-0.05	-24.19%	2.83	3.66%	-0.03	-13.19%	150
	HDGT	113	567.88	2.81	433.89	2	54	47.79%	122.87	0.69	120.79	0.75	393.09	76.19%	1.64	70.26%	207.15	63.17%	0.75	49.75%	314
	1987 Total	122	536.29	2.62	412.13	1.88	61	50.00%	115.95	0.64	114.39	0.69	356.64	75.47%	1.45	69.33%	184.23	61.69%	0.66	48.65%	232
1988	LDGV	7	157.84	0.7	132.76	0.52	3	42.86%	63.73	0.49	47.93	0.54	-22.63	-55.07%	-0.06	-13.18%	-22.5	-88.47%	-0.25	-87.21%	0
	LDGT	9	453.56	2.76	281.16	2.43	6	66.67%	116.07	0.24	92.4	0.46	412.52	78.04%	2.29	90.65%	210.27	69.47%	1.68	78.55%	589
	HDGT	113	515.73	2.17	336.32	1.17	65	57.52%	124.68	0.64	116.38	0.77	413.23	76.82%	1.48	69.68%	236.88	67.06%	0.37	32.52%	167
	1988 Total	129	491.97	2.13	321.42	1.23	74	57.36%	121.51	0.6	111.66	0.74	395.51	76.50%	1.48	71.05%	224.2	66.75%	0.45	38.06%	307.67
1989	LDGV	9	140.62	1.5	130.89	1.21	6	66.67%	40.75	0.09	36.72	0.09	122.83	75.09%	0.97	91.52%	113.07	75.49%	0.66	88.59%	342
	LDGT	12	203.33	0.35	113.58	0.53	10	83.33%	108.6	0.37	120.9	0.58	88.5	44.90%	0.01	2.12%	1.7	1.39%	-0.02	-3.60%	0
	HDGT	120	533.96	2.09	275.7	1.34	73	60.83%	116.68	0.48	111.72	0.76	374.28	76.23%	1.48	75.56%	169.03	60.21%	0.51	40.34%	105
	1989 Total	141	480.72	1.9	252.66	1.26	89	63.12%	110.65	0.44	107.69	0.69	325.22	74.61%	1.28	74.41%	146.46	57.63%	0.46	40.07%	223.5
1990	LDGV	7	269.96	0.53	234.77	1.56	4	57.14%	61.28	0.06	36.38	0.08	221.88	78.36%	0.43	87.76%	174.1	82.72%	1.53	95.16%	0
	LDGT	17	188.73	0.53	100.12	0.39	12	70.59%	91.83	0.34	91.58	0.46	86.58	48.53%	-0.14	-69.71%	15.08	14.14%	-0.11	-31.37%	600
	HDGT	141	459.67	3.18	316.36	2.53	79	56.03%	98.3	0.47	108.14	0.7	280.07	74.02%	2.3	82.96%	144.18	57.14%	1.25	64.12%	0
	1990 Total	165	423.71	2.79	290.62	2.27	95	57.58%	95.92	0.44	103.03	0.64	253.18	72.52%	1.91	81.35%	129.13	55.62%	1.09	62.87%	600
1991	LDGV	10	75.5	0.58	51.06	0.16	8	80.00%	79.39	0.29	67.8	0.33	-13.03	-19.63%	0.39	57.27%	-25.09	-58.74%	-0.2	-142.73%	0
	LDGT	15	322.45	1.11	139.11	0.78	11	73.33%	67.91	0.19	68.64	0.22	114.27	62.72%	0.12	39.17%	49	41.65%	0.4	64.96%	200
	HDGT	146	490.94	3.67	315.9	2.59	77	52.74%	108.82	0.57	103.98	0.88	310.81	74.07%	2.56	81.92%	184.43	63.95%	1.55	63.70%	304
	1991 Total	171	451.86	3.27	284.9	2.29	96	56.14%	101.68	0.5	96.91	0.76	261.3	71.99%	2.1	80.80%	151.46	60.98%	1.28	62.58%	283.2
1992	LDGV	7	164.86	0.27	91.51	0.23	6	85.71%	114.53	0.17	70.4	0.17	-30.47	-36.24%	0.07	29.45%	-2.92	-4.32%	0	-3.09%	233
	LDGT	9	207.42	0.73	111.93	0.62	6	66.67%	100.17	0.24	75.67	0.28	61.83	38.17%	0.1	28.50%	-21.17	-38.84%	-0.05	-20.57%	0
	HDGT	134	560.38	2.95	348.82	2.35	76	56.72%	108.9	0.64	84.21	0.9	349.29	76.23%	1.98	75.71%	189.13	69.19%	1.08	54.59%	0
	1992 Total	150	520.74	2.69	322.6	2.15	88	58.67%	108.69	0.58	82.68	0.81	303.8	73.65%	1.72	74.91%	161.7	66.17%	0.93	53.54%	233
1993	LDGV	4	85.13	0.34	169.33	0.35	2	50.00%	73.05	0.58	57.5	0.44	97.2	57.09%	0.1	14.71%	281.15	83.02%	0.27	38.30%	0
	LDGT	8	220.88	1.05	148.71	1.14	6	75.00%	93.98	0.11	68.08	0.18	200.52	68.09%	1.29	92.46%	130.2	65.66%	1.34	88.33%	0
	HDGT	122	556.05	3.4	384.45	2.94	78	63.93%	114.88	0.59	73.95	0.92	319.3	73.54%	2.33	79.95%	223.95	75.18%	1.52	62.32%	50
	1993 Total	134	521.98	3.17	363.95	2.75	86	64.18%	112.45	0.55	73.16	0.86	305.85	73.12%	2.21	80.02%	218.74	74.94%	1.48	63.33%	50
1994	LDGV	4	274.85	2.1	248.78	2.9	4	100.00%	73.27	0.31	56.43	0.31	201.58	73.34%	1.79	85.10%	192.35	77.32%	2.59	89.46%	0
	LDGT	11	214.15	0.74	130.96	0.68	9	81.82%	74.86	0.38	70.34	0.5	68.68	47.85%	0.1	20.28%	48.62	40.87%	0.08	14.37%	0
	HDGT	258	792.1	3.53	336.23	2.8	116	44.96%	106.15	0.41	77.02	0.76	521.4	83.09%	2.5	86.00%	203.55	72.55%	1.4	64.85%	298.8
	1994 Total	273	761.23	3.4	326.67	2.71	129	47.25%	102.95	0.4	75.91	0.73	479.9	82.34%	2.31	85.17%	192.39	71.71%	1.35	64.91%	298.8
1995	LDGV	7	37.23	0.08	45.89	0.65	6	85.71%	59.28	0.13	83.7	0.21	-15.85	-36.49%	-0.03	-28.81%	-30.17	-56.35%	0.55	72.53%	0
	LDGT	8	334.64	0.65	235.2	0.65	4	50.00%	112	0.3	86.83	0.36	187.2	62.57%	-0.06	-22.68%	111.65	56.25%	-0.14	-67.06%	0
	HDGT	251	609.66	3.02	260.62	2.88	136	54.18%	108.83	0.55	85.42	0.92	386.46	78.03%	1.84	76.96%	129.65	60.28%	1.35	59.51%	469.5
	1995 Total	266	586.33	2.87	254.2	2.76	146	54.89%	106.88	0.53	85.39	0.88	364.47	77.33%	1.71	76.47%	122.59	58.94%	1.28	59.36%	469.5
1996	LDGV	3	53.13	0.12	78.1	0.14	2	66.67%	4	0.01	7.55	0.01	75.7	94.98%	0.18	97.22%	109.6	93.56%	0.21	95.35%	0
	LDGT	6	73.72	0.21	59.9	0.18	6	100.00%	88.52	0.2	66.65	0.25	-14.8	-20.08%	0.01	2.44%	-6.75	-11.27%	-0.08	-44.76%	0
	HDGT	169	574.17	2.58	297.61	1.63	100	59.17%	112.83	0.46	99.79	0.6	387.99	77.47%	1.89	80.53%	169.83	62.99%	0.74	55.24%	504

Vehicle		Initial Exhaust Emissions					Passing Retest Exhaust Emissions						Emission Reductions								Average Repair Costs
Year	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 2500rpm	Avg HC% 2500 rpm	Avg CO 2500 rpm	Avg CO% 2500 rpm	
1996 Total		178	548.52	2.46	285.9	1.56	108	60.67%	109.47	0.43	96.24	0.57	359.83	76.67%	1.76	80.15%	158.9	62.28%	0.69	54.59%	504
1997	LDGT	7	248.63	0.26	257.03	0.27	7	100.00%	63.29	0.2	40.4	0.31	185.34	74.55%	0.07	25.54%	216.63	84.28%	-0.05	-17.11%	0
	HDGT	150	650.96	2.55	276.07	1.73	86	57.33%	102.53	0.36	74.22	0.51	399.9	79.59%	1.76	82.86%	163.95	68.84%	0.65	55.86%	0
1997 Total		157	633.02	2.45	275.22	1.66	93	59.24%	99.57	0.35	71.68	0.5	383.75	79.40%	1.63	82.29%	167.91	70.08%	0.6	54.52%	0
1998	LDGV	2	2.3	0	12.35	0.01	2	100.00%	0.9	0.01	11.1	0.01	1.4	60.87%	-0.01		1.25	10.12%	-0.01	-100.00%	0
	LDGT	8	276.5	0.73	156	0.92	7	87.50%	69.91	0.23	50.13	0.28	246.09	77.88%	0.61	72.70%	128.16	71.88%	0.76	72.95%	0
	HDGT	174	784.46	1.8	252.96	0.69	100	57.47%	134.46	0.32	66.08	0.35	565.33	80.79%	1.28	79.93%	156.56	70.32%	0.29	45.51%	272.5
1998 Total		184	753.87	1.73	246.13	0.69	109	59.24%	127.86	0.31	64.04	0.34	534.48	80.70%	1.21	79.67%	151.89	70.34%	0.31	48.32%	272.5
1999	LDGV	9	453.94	1.58	377.76	1.28	8	88.89%	57.99	0.16	54.18	0.31	226.66	79.63%	0.92	85.09%	188.11	77.64%	0.61	66.67%	0
	LDGT	75	86.83	0.52	41.93	0.38	67	89.33%	66.25	0.2	43.64	0.26	9.44	12.47%	0.25	56.03%	-3.43	-8.54%	0.12	31.88%	185
	HDGT	165	779.61	1.93	305.94	1.3	100	60.61%	125.67	0.3	113.16	0.52	533.06	80.92%	1.34	81.76%	159.09	58.44%	0.55	51.61%	0
1999 Total		249	559.17	1.49	229.02	1.02	175	70.28%	99.83	0.25	83.85	0.41	318.58	76.14%	0.9	78.04%	98.19	53.94%	0.39	48.76%	185
2000	LDGV	8	53.78	0.78	27.23	0.41	7	87.50%	14.87	0.02	16.79	0.04	46.59	75.80%	0.87	97.75%	14.33	46.05%	0.43	91.82%	0
	LDGT	142	147.09	0.48	140.39	0.39	128	90.14%	35.57	0.12	32.21	0.14	78.93	68.94%	0.25	66.60%	84.56	72.41%	0.2	58.97%	150
	HDGT	152	718.5	2.18	303.07	1.55	102	67.11%	121.06	0.33	71.1	0.37	507.82	80.75%	1.53	82.22%	192.52	73.03%	0.91	70.97%	97.5
2000 Total		302	432.22	1.34	219.27	0.98	237	78.48%	71.75	0.21	48.49	0.24	262.56	78.54%	0.82	79.58%	128.95	72.67%	0.51	68.42%	115
2001	LDGV	6	43.13	0.07	72.67	0.16	5	83.33%	29.84	0.07	26.54	0.16	21.92	42.35%	0.01	12.82%	60.66	69.56%	0.02	11.83%	0
	LDGT	148	71.9	0.71	55.51	0.45	141	95.27%	34.98	0.13	25.14	0.12	36.56	51.10%	0.57	81.70%	29.25	53.78%	0.3	71.94%	0
	HDGT	81	492.48	2.09	294.86	1.95	66	81.48%	89.48	0.31	82.12	0.51	331.63	78.75%	1.51	83.00%	152.14	64.94%	1.27	71.26%	0
2001 Total		235	216.13	1.17	138.45	0.96	212	90.21%	51.83	0.18	42.91	0.24	128.08	71.19%	0.85	82.29%	68.25	61.40%	0.6	71.18%	0
2002	LDGV	7	81.37	0.72	68.74	0.86	6	85.71%	18.75	0.03	21.15	0.06	51.4	73.27%	0.52	93.94%	35.13	62.42%	0.67	92.40%	0
	LDGT	223	96.04	0.66	66.93	0.5	205	91.93%	38.7	0.13	31.59	0.17	46.24	54.44%	0.47	78.15%	29.88	48.61%	0.25	59.62%	506.67
	HDGT	63	613.77	1.97	353.29	1.77	46	73.02%	110.97	0.36	106.25	1.07	413.82	78.85%	1.38	79.35%	157.18	59.67%	0.55	34.01%	810
2002 Total		293	207.01	0.94	128.54	0.78	257	87.71%	51.17	0.17	44.71	0.33	112.15	68.67%	0.63	78.87%	52.79	54.14%	0.31	48.78%	582.5
2003	LDGV	14	87.42	0.25	65.06	0.6	11	78.57%	31.27	0.05	38.31	0.14	18.56	37.25%	0.11	69.01%	17.45	31.29%	0.22	61.27%	0
	LDGT	160	108.2	0.66	74.44	0.55	148	92.50%	31.72	0.1	25.91	0.14	77.08	70.84%	0.58	85.58%	42.97	62.38%	0.39	74.12%	0
	HDGT	44	496.4	2.01	295.99	1.61	30	68.18%	72.27	0.32	99.47	0.53	333.86	82.21%	1.38	81.42%	172.21	63.39%	0.74	58.36%	0
2003 Total		218	185.22	0.91	118.55	0.77	189	86.70%	38.13	0.13	38.31	0.2	114.43	75.01%	0.68	84.01%	62	61.81%	0.44	68.71%	0
2004	LDGV	14	99.69	0.38	101.55	0.51	12	85.71%	47.18	0.05	38.59	0.17	48.61	50.75%	0.37	87.25%	60.08	60.89%	0.39	69.23%	0
	LDGT	182	67.72	0.46	50.06	0.28	173	95.05%	25.71	0.08	23.66	0.11	36.63	58.75%	0.34	80.78%	19.3	44.94%	0.12	52.76%	240
	HDGT	17	191.6	1.25	145.58	1.67	15	88.24%	39.12	0.06	33.99	0.12	145.86	78.85%	0.88	93.31%	104.84	75.52%	1.15	90.22%	0
2004 Total		213	79.71	0.52	61.07	0.4	200	93.90%	28.01	0.08	25.33	0.12	45.54	61.92%	0.38	83.07%	28.17	52.65%	0.22	65.15%	240
2005	LDGV	11	63.35	0.41	96.15	1.4	7	63.64%	39.5	0.25	32.21	0.43	7.5	15.96%	0.04	15.27%	67.66	67.74%	1.42	76.92%	0
	LDGT	71	59.26	0.37	40.03	0.31	67	94.37%	24.25	0.1	18.05	0.08	30.39	55.62%	0.23	69.70%	17.88	49.76%	0.21	72.66%	0
	HDGT	29	444.47	0.99	122.56	0.54	19	65.52%	103.21	0.38	61.92	0.34	207.4	66.77%	0.55	59.42%	61.56	49.86%	0.15	30.32%	0
2005 Total		111	160.3	0.54	67.15	0.48	93	83.78%	41.53	0.17	28.08	0.16	64.83	60.95%	0.28	62.71%	30.55	52.11%	0.29	64.64%	0
2006	LDGV	15	54.79	0.54	81.64	0.93	13	86.67%	22.62	0.1	27.35	0.14	40.59	64.21%	0.53	84.57%	66.85	70.96%	0.93	87.12%	0
	LDGT	41	28.18	0.2	14.57	0.21	41	100.00%	7.93	0.02	9.37	0.04	20.25	71.85%	0.18	89.82%	5.2	35.68%	0.17	79.72%	0
	HDGT	31	660.5	1.62	457.21	0.86	24	77.42%	78.24	0.37	42.26	0.25	468.05	85.68%	1.17	75.91%	276.85	86.76%	0.45	63.86%	20
2006 Total		87	258.08	0.76	183.86	0.56	78	89.66%	32.01	0.14	22.49	0.12	161.42	83.45%	0.54	79.35%	99.06	81.50%	0.38	75.54%	20
2007	LDGV	4	1.6	0	2.03	0	3	75.00%	13.33	0.03	56.73	0.23	-11.2	-525.00%	-0.03		-54.03	-2001.23%	-0.22	-6700.00%	0
	LDGT	47	11.81	0.08	28.71	0.18	45	95.74%	3.37	0.02	6.04	0.02	4.55	57.42%	0.06	78.18%	5.9	49.40%	0.1	80.84%	0
	HDGT	7	214.6	0.9	34.3	0.25	7	100.00%	73.94	0.35	27.63	0.24	140.66	65.54%	0.54	60.45%	6.67	19.45%	0.01	3.43%	0
2007 Total		58	35.58	0.17	27.55	0.18	55	94.83%	12.9	0.06	11.55	0.06	21.01	61.97%	0.11	65.73%	2.73	19.11%	0.07	52.76%	0
2008	LDGV	22	83.43	0.61	142.26	1.8	17	77.27%	35.05	0.14	39.22	0.29	46	56.75%	0.5	78.37%	70.32	64.19%	0.87	75.16%	0
	LDGT	45	28.29	0.17	17.3	0.2	45	100.00%	10.04	0.06	10.67	0.07	18.25	64.51%	0.11	66.44%	6.64	38.35%	0.13	64.37%	0

Vehicle		Initial Exhaust Emissions					Passing Retest Exhaust Emissions						Emission Reductions								Average Repair Costs
Year	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 2500rpm	Avg HC% 2500 rpm	Avg CO 2500 rpm	Avg CO% 2500 rpm	
	HDGT	10	269.99	0.34	72.23	0.16	10	100.00%	17.05	0.12	16.21	0.09	252.94	93.68%	0.22	64.79%	56.02	77.56%	0.06	41.29%	0
2008 Total		77	75.43	0.32	60.14	0.65	72	93.51%	16.92	0.08	18.18	0.13	57.4	77.23%	0.22	72.16%	28.53	61.08%	0.3	70.22%	0
2009	LDGV	5	180.18	0.5	263.4	1.94	1	20.00%	47.2	0.91	57.1	1.05	231.6	83.07%	-0.14	-18.18%	193.4	77.21%	-0.12	-12.90%	0
	LDGT	9	38.46	0.31	74.53	0.44	9	100.00%	7	0.05	8.87	0.02	31.46	81.80%	0.26	85.25%	65.67	88.10%	0.42	95.23%	0
	HDGT	2	12.25	0.02	27.05	0.18	2	100.00%	19.35	0.04	27.1	0.17	-7.1	-57.96%	-0.03	-166.67%	-0.05	-0.18%	0.01	5.71%	0
2009 Total		16	79.47	0.33	127.62	0.88	12	75.00%	12.41	0.12	15.92	0.13	41.71	77.07%	0.18	60.89%	65.36	80.41%	0.31	70.15%	0
2010	LDGV	14	64.44	0.44	67.1	1.18	13	92.86%	16.81	0.09	17.08	0.14	51.32	75.33%	0.37	80.10%	51.03	74.92%	0.92	86.99%	0
	LDGT	32	13.03	0.13	14.29	0.15	30	93.75%	6.63	0.02	7.73	0.06	-3.24	-95.67%	0.03	66.20%	-0.41	-5.55%	0.01	15.66%	0
	HDGT	10	107.94	0.07	43.23	0.33	9	90.00%	63.17	0.08	34.03	0.21	47.22	42.78%	-0.01	-9.68%	10.03	22.77%	0.1	32.86%	0
2010 Total		56	42.83	0.2	32.66	0.44	52	92.86%	18.96	0.05	14.62	0.1	19.13	50.23%	0.11	70.81%	14.26	49.37%	0.25	71.07%	0
2011	LDGV	5	62.64	0.89	63.38	0.94	3	60.00%	30.27	0.15	23.4	0.17	23.57	43.78%	0.59	79.46%	32.37	58.04%	0.62	78.90%	0
	LDGT	7	9.69	0.07	13.76	0.26	7	100.00%	6.93	0.02	8.56	0.05	2.76	28.47%	0.06	78.00%	5.2	37.80%	0.21	80.33%	0
	HDGT	3	8.5	0.02	31.2	0.2	3	100.00%	1.23	0.02	2.07	0.02	7.27	85.49%	0	-20.00%	29.13	93.38%	0.18	90.00%	0
2011 Total		15	27.1	0.33	33.79	0.47	13	86.67%	11	0.05	10.48	0.07	8.6	43.88%	0.17	77.42%	16.99	61.84%	0.3	80.83%	0
2012	LDGT	1	0.8	0.01	2	0.01	1	100.00%	14.9	0.05	23.5	0.23	-14.1	-1762.50%	-0.04	-400.00%	-21.5	-1075.00%	-0.22	-2200.00%	0
	HDGT	2	36.85	0.13	54.8	0.33	2	100.00%	11.6	0.04	15.85	0.07	25.25	68.52%	0.09	68.00%	38.95	71.08%	0.27	80.30%	0
2012 Total		3	24.83	0.09	37.2	0.22	3	100.00%	12.7	0.04	18.4	0.12	12.13	48.86%	0.04	50.00%	18.8	50.54%	0.1	46.27%	0
2013	LDGT	1	0.3	0	0.5	0.01	1	100.00%	0.7	0	1.1	0	-0.4	-133.33%	0		-0.6	-120.00%	0.01	100.00%	0
2013 Total		1	0.3	0	0.5	0.01	1	100.00%	0.7	0	1.1	0	-0.4	-133.33%	0		-0.6	-120.00%	0.01	100.00%	0
Grand Total		8466	535.29	2.46	334.22	2.1	5494	64.89%	134.63	0.56	125.57	0.99	299.8	69.01%	1.5	72.69%	149.59	54.36%	0.72	42.26%	300.61

Summary by Vehicle Type (V1.01)

Vehicle Type	Initial Exhaust Emissions					Passing Retest Exhaust Emissions						Emission Reductions								Average Repair Costs
	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	1782	540.31	2.8	398.39	2.72	1078	60.49%	158.74	0.59	163.66	1.33	298.54	65.29%	1.94	76.77%	168.31	50.70%	1.02	43.31%	309.63
LDGT	2859	318.69	1.67	227.24	1.56	2085	72.93%	82.4	0.26	83.75	0.67	143.75	63.56%	0.96	78.40%	82.96	49.76%	0.44	39.90%	315.65
HDGT	3825	694.85	2.9	384.28	2.21	2331	60.94%	170.19	0.82	145.37	1.11	439.96	72.11%	1.79	68.47%	200.53	57.97%	0.83	42.89%	288.39
Grand Total	8466	535.29	2.46	334.22	2.1	5494	64.89%	134.63	0.56	125.57	0.99	299.8	69.01%	1.5	72.69%	149.59	54.36%	0.72	42.26%	300.61

Appendix Q

Idle Retest Frequency Report

Idle Retest Frequency Report (V1.01)

Vehicle		Total	Avg Retest #	Retest #1				Retest #2				Retest #3				Retest #4				Retest >= #5			
Year	Type			Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt %	Goal	Goal%	Cnt	Cnt%	Goal	Goal%	Cnt	Cnt%	Goal	Goal%
1974	LDGV	309	1.2	234	75.73%	164	70.09%	50	16.18%	25	50.00%	17	5.50%	7	41.18%	6	1.94%	3	50.00%	2	1	0	0.00%
	LDGT	158	1.3	119	75.32%	89	74.79%	21	13.29%	12	57.14%	8	5.06%	4	50.00%	4	2.53%	1	25.00%	6	4	2	33.33%
	HDGT	85	1.2	65	76.47%	48	73.85%	15	17.65%	10	66.67%	3	3.53%	2	66.67%	1	1.18%	0	0.00%	1	1	0	0.00%
1974 Total		552	1.3	418	75.72%	301	72.01%	86	15.58%	47	54.65%	28	5.07%	13	46.43%	11	1.99%	4	36.36%	9	2	2	22.22%
1975	LDGV	24	1.5	16	66.67%	8	50.00%	8	33.33%	7	87.50%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	12	1.1	11	91.67%	9	81.82%	1	8.33%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	32	1.2	22	68.75%	15	68.18%	9	28.13%	4	44.44%	1	3.13%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
1975 Total		68	1.3	49	72.06%	32	65.31%	18	26.47%	12	66.67%	1	1.47%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
1976	LDGV	145	1.5	101	69.66%	68	67.33%	23	15.86%	12	52.17%	12	8.28%	6	50.00%	4	2.76%	1	25.00%	5	3	3	60.00%
	LDGT	113	1.3	85	75.22%	55	64.71%	22	19.47%	13	59.09%	5	4.42%	4	80.00%	0	0.00%	0	0.00%	1	1	0	0.00%
	HDGT	142	1.4	101	71.13%	76	75.25%	25	17.61%	15	60.00%	10	7.04%	6	60.00%	4	2.82%	2	50.00%	2	1	1	50.00%
1976 Total		400	1.4	287	71.75%	199	69.34%	70	17.50%	40	57.14%	27	6.75%	16	59.26%	8	2.00%	3	37.50%	8	2	4	50.00%
1977	LDGV	182	1.5	122	67.03%	80	65.57%	34	18.68%	19	55.88%	14	7.69%	8	57.14%	7	3.85%	4	57.14%	5	3	3	60.00%
	LDGT	106	1.6	65	61.32%	36	55.38%	24	22.64%	11	45.83%	10	9.43%	7	70.00%	4	3.77%	2	50.00%	3	3	0	0.00%
	HDGT	211	1.3	155	73.46%	120	77.42%	32	15.17%	15	46.88%	15	7.11%	10	66.67%	3	1.42%	1	33.33%	6	3	0	0.00%
1977 Total		499	1.4	342	68.54%	236	69.01%	90	18.04%	45	50.00%	39	7.82%	25	64.10%	14	2.81%	7	50.00%	14	3	3	21.43%
1978	LDGV	201	1.4	136	67.66%	89	65.44%	39	19.40%	20	51.28%	15	7.46%	6	40.00%	6	2.99%	3	50.00%	5	2	2	40.00%
	LDGT	144	1.5	88	61.11%	56	63.64%	32	22.22%	21	65.63%	11	7.64%	4	36.36%	6	4.17%	2	33.33%	7	5	2	28.57%
	HDGT	228	1.4	158	69.30%	104	65.82%	49	21.49%	33	67.35%	10	4.39%	5	50.00%	6	2.63%	4	66.67%	5	2	2	40.00%
1978 Total		573	1.5	382	66.67%	249	65.18%	120	20.94%	74	61.67%	36	6.28%	15	41.67%	18	3.14%	9	50.00%	17	3	6	35.29%
1979	LDGV	298	1.5	197	66.11%	117	59.39%	64	21.48%	33	51.56%	26	8.72%	16	61.54%	7	2.35%	6	85.71%	4	1	1	25.00%
	LDGT	444	1.5	288	64.86%	193	67.01%	84	18.92%	41	48.81%	36	8.11%	20	55.56%	14	3.15%	2	14.29%	22	5	9	40.91%
	HDGT	86	1.7	54	62.79%	39	72.22%	10	11.63%	4	40.00%	7	8.14%	3	42.86%	5	5.81%	1	20.00%	10	12	4	40.00%
1979 Total		828	1.5	539	65.10%	349	64.75%	158	19.08%	78	49.37%	69	8.33%	39	56.52%	26	3.14%	9	34.62%	36	4	14	38.89%
1980	LDGV	183	1.5	109	59.56%	65	59.63%	39	21.31%	20	51.28%	16	8.74%	5	31.25%	7	3.83%	3	42.86%	12	7	2	16.67%
	LDGT	200	1.4	129	64.50%	86	66.67%	35	17.50%	20	57.14%	14	7.00%	6	42.86%	6	3.00%	2	33.33%	16	8	1	6.25%
	HDGT	44	1.3	32	72.73%	29	90.63%	6	13.64%	3	50.00%	3	6.82%	1	33.33%	2	4.55%	1	50.00%	1	2	1	100.00%
1980 Total		427	1.4	270	63.23%	180	66.67%	80	18.74%	43	53.75%	33	7.73%	12	36.36%	15	3.51%	6	40.00%	29	7	4	13.79%
1981	LDGV	213	1.9	118	55.40%	60	50.85%	54	25.35%	20	37.04%	24	11.27%	15	62.50%	7	3.29%	3	42.86%	10	5	5	50.00%
	LDGT	362	1.8	198	54.70%	99	50.00%	83	22.93%	32	38.55%	43	11.88%	21	48.84%	14	3.87%	5	35.71%	24	7	8	33.33%
	HDGT	43	1.7	32	74.42%	19	59.38%	8	18.60%	6	75.00%	1	2.33%	0	0.00%	1	2.33%	1	100.00%	1	2	1	100.00%
1981 Total		618	1.8	348	56.31%	178	51.15%	145	23.46%	58	40.00%	68	11.00%	36	52.94%	22	3.56%	9	40.91%	35	6	14	40.00%
1982	LDGV	6	1.3	4	66.67%	2	50.00%	2	33.33%	1	50.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	4	2	1	25.00%	1	100.00%	2	50.00%	1	50.00%	1	25.00%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	46	1.4	30	65.22%	22	73.33%	9	19.57%	5	55.56%	4	8.70%	2	50.00%	2	4.35%	1	50.00%	1	2	0	0.00%
1982 Total		56	1.4	35	62.50%	25	71.43%	13	23.21%	7	53.85%	5	8.93%	3	60.00%	2	3.57%	1	50.00%	1	2	0	0.00%
1983	LDGV	5	1.7	3	60.00%	1	33.33%	2	40.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	3	1	2	66.67%	1	50.00%	1	33.33%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	63	1.5	43	68.25%	29	67.44%	12	19.05%	9	75.00%	2	3.17%	0	0.00%	3	4.76%	0	0.00%	3	5	3	100.00%
1983 Total		71	1.5	48	67.61%	31	64.58%	15	21.13%	11	73.33%	2	2.82%	0	0.00%	3	4.23%	0	0.00%	3	4	3	100.00%
1984	LDGV	6	1.3	5	83.33%	2	40.00%	1	16.67%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	1	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	86	1.4	59	68.60%	41	69.49%	18	20.93%	11	61.11%	7	8.14%	5	71.43%	2	2.33%	1	50.00%	0	0	0	0.00%
1984 Total		93	1.4	65	69.89%	43	66.15%	19	20.43%	12	63.16%	7	7.53%	5	71.43%	2	2.15%	1	50.00%	0	0	0	0.00%

Vehicle			Avg Retest	Retest #1			Retest #2			Retest #3			Retest #4			Retest >= #5							
Year	Type	Total	#	Cnt	Cnt%	Goal	Cnt	Cnt%	Goal	Cnt	Cnt%	Goal	Cnt	Cnt%	Goal	Cnt	Cnt%	Goal	Cnt	Cnt%	Goal	Goal%	
1985	LDGV	7	1.2	6	85.71%	4	66.67%	1	14.29%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	5	1.3	3	60.00%	2	66.67%	2	40.00%	1	50.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	97	1.7	61	62.89%	35	57.38%	21	21.65%	11	52.38%	10	10.31%	7	70.00%	4	4.12%	3	75.00%	1	1	1	100.00%
1985 Total		109	1.6	70	64.22%	41	58.57%	24	22.02%	13	54.17%	10	9.17%	7	70.00%	4	3.67%	3	75.00%	1	1	1	100.00%
1986	LDGV	8	1.4	5	62.50%	3	60.00%	2	25.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	13	0	0.00%
	LDGT	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%
	HDGT	155	1.7	92	59.35%	54	58.70%	32	20.65%	17	53.13%	13	8.39%	6	46.15%	7	4.52%	2	28.57%	11	7	5	45.45%
1986 Total		168	1.7	101	60.12%	60	59.41%	35	20.83%	20	57.14%	13	7.74%	6	46.15%	7	4.17%	2	28.57%	12	7	5	41.67%
1987	LDGV	1	1	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	8	1	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	0	0.00%
	HDGT	113	1.8	60	53.10%	31	51.67%	28	24.78%	14	50.00%	12	10.62%	6	50.00%	4	3.54%	0	0.00%	9	8	3	33.33%
1987 Total		122	1.7	68	55.74%	38	55.88%	29	23.77%	14	48.28%	12	9.84%	6	50.00%	4	3.28%	0	0.00%	9	7	3	33.33%
1988	LDGV	7	2	3	42.86%	1	33.33%	3	42.86%	1	33.33%	1	14.29%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	9	1.2	7	77.78%	5	71.43%	2	22.22%	1	50.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	113	1.7	68	60.18%	38	55.88%	27	23.89%	15	55.56%	12	10.62%	8	66.67%	4	3.54%	3	75.00%	2	2	1	50.00%
1988 Total		129	1.7	78	60.47%	44	56.41%	32	24.81%	17	53.13%	13	10.08%	9	69.23%	4	3.10%	3	75.00%	2	2	1	50.00%
1989	LDGV	9	1.5	6	66.67%	5	83.33%	1	11.11%	0	0.00%	1	11.11%	0	0.00%	1	11.11%	1	100.00%	0	0	0	0.00%
	LDGT	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%
	HDGT	120	1.7	70	58.33%	46	65.71%	29	24.17%	15	51.72%	10	8.33%	6	60.00%	6	5.00%	4	66.67%	5	4	2	40.00%
1989 Total		141	1.6	86	60.99%	59	68.60%	32	22.70%	17	53.13%	11	7.80%	6	54.55%	7	4.96%	5	71.43%	5	4	2	40.00%
1990	LDGV	7	1.8	4	57.14%	1	25.00%	3	42.86%	3	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	17	1.2	15	88.24%	10	66.67%	2	11.76%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	141	1.6	84	59.57%	57	67.86%	25	17.73%	11	44.00%	15	10.64%	4	26.67%	8	5.67%	3	37.50%	9	6	4	44.44%
1990 Total		165	1.6	103	62.42%	68	66.02%	30	18.18%	16	53.33%	15	9.09%	4	26.67%	8	4.85%	3	37.50%	9	5	4	44.44%
1991	LDGV	10	2.4	5	50.00%	5	100.00%	2	20.00%	1	50.00%	1	10.00%	1	100.00%	0	0.00%	0	0.00%	2	20	1	50.00%
	LDGT	15	1.2	12	80.00%	9	75.00%	3	20.00%	2	66.67%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	146	1.6	83	56.85%	48	57.83%	32	21.92%	16	50.00%	17	11.64%	9	52.94%	7	4.79%	2	28.57%	7	5	2	28.57%
1991 Total		171	1.6	100	58.48%	62	62.00%	37	21.64%	19	51.35%	18	10.53%	10	55.56%	7	4.09%	2	28.57%	9	5	3	33.33%
1992	LDGV	7	1	6	85.71%	6	100.00%	1	14.29%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	9	1	8	88.89%	6	75.00%	1	11.11%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	134	1.6	83	61.94%	55	66.27%	20	14.93%	6	30.00%	17	12.69%	7	41.18%	10	7.46%	7	70.00%	4	3	1	25.00%
1992 Total		150	1.5	97	64.67%	67	69.07%	22	14.67%	6	27.27%	17	11.33%	7	41.18%	10	6.67%	7	70.00%	4	3	1	25.00%
1993	LDGV	4	1	4	100.00%	2	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	8	1	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	0	0.00%
	HDGT	122	1.6	79	64.75%	55	69.62%	29	23.77%	13	44.83%	10	8.20%	7	70.00%	2	1.64%	1	50.00%	2	2	2	100.00%
1993 Total		134	1.5	90	67.16%	63	70.00%	30	22.39%	13	43.33%	10	7.46%	7	70.00%	2	1.49%	1	50.00%	2	1	2	100.00%
1994	LDGV	4	1.3	3	75.00%	3	100.00%	1	25.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	11	1.1	9	81.82%	8	88.89%	1	9.09%	1	100.00%	1	9.09%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	258	1.8	129	50.00%	74	57.36%	53	20.54%	18	33.96%	32	12.40%	13	40.63%	17	6.59%	3	17.65%	27	10	8	29.63%
1994 Total		273	1.8	141	51.65%	85	60.28%	55	20.15%	20	36.36%	33	12.09%	13	39.39%	17	6.23%	3	17.65%	27	10	8	29.63%
1995	LDGV	7	1.2	5	71.43%	5	100.00%	2	28.57%	1	50.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	8	1.5	5	62.50%	2	40.00%	3	37.50%	2	66.67%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	251	1.7	141	56.18%	93	65.96%	46	18.33%	22	47.83%	25	9.96%	6	24.00%	19	7.57%	8	42.11%	20	8	7	35.00%
1995 Total		266	1.7	151	56.77%	100	66.23%	51	19.17%	25	49.02%	25	9.40%	6	24.00%	19	7.14%	8	42.11%	20	8	7	35.00%

Vehicle			Avg Retest	Retest #1			Retest #2			Retest #3			Retest #4			Retest >= #5							
Year	Type	Total	#	Cnt	Cnt%	Goal	Cnt	Cnt%	Goal	Cnt	Cnt%	Goal	Cnt	Cnt%	Goal	Cnt	Cnt%	Goal	Cnt	Cnt%	Goal	Goal%	
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	6	1.2	5	83.33%	5	100.00%	1	16.67%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	169	1.5	108	63.91%	66	61.11%	40	23.67%	23	57.50%	14	8.28%	7	50.00%	6	3.55%	3	50.00%	1	1	1	100.00%
1996 Total		178	1.5	115	64.61%	72	62.61%	42	23.60%	25	59.52%	14	7.87%	7	50.00%	6	3.37%	3	50.00%	1	1	1	100.00%
1997	LDGV	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	7	1.3	5	71.43%	5	100.00%	2	28.57%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	150	1.7	89	59.33%	57	64.04%	31	20.67%	18	58.06%	12	8.00%	5	41.67%	7	4.67%	2	28.57%	11	7	4	36.36%
1997 Total		157	1.6	94	59.87%	62	65.96%	33	21.02%	20	60.61%	12	7.64%	5	41.67%	7	4.46%	2	28.57%	11	7	4	36.36%
1998	LDGV	2	1	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	8	1.4	5	62.50%	5	100.00%	2	25.00%	1	50.00%	1	12.50%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	174	1.6	104	59.77%	60	57.69%	42	24.14%	24	57.14%	19	10.92%	11	57.89%	5	2.87%	3	60.00%	4	2	2	50.00%
1998 Total		184	1.6	111	60.33%	67	60.36%	44	23.91%	25	56.82%	20	10.87%	12	60.00%	5	2.72%	3	60.00%	4	2	2	50.00%
1999	LDGV	9	1.5	6	66.67%	5	83.33%	2	22.22%	2	100.00%	1	11.11%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	75	1.4	57	76.00%	52	91.23%	12	16.00%	10	83.33%	3	4.00%	2	66.67%	1	1.33%	1	100.00%	2	3	2	100.00%
	HDGT	165	1.5	105	63.64%	75	71.43%	28	16.97%	13	46.43%	12	7.27%	8	66.67%	4	2.42%	1	25.00%	16	10	3	18.75%
1999 Total		249	1.5	168	67.47%	132	78.57%	42	16.87%	25	59.52%	16	6.43%	11	68.75%	5	2.01%	2	40.00%	18	7	5	27.78%
2000	LDGV	8	1	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%
	LDGT	142	1.1	129	90.85%	117	90.70%	9	6.34%	8	88.89%	3	2.11%	2	66.67%	1	0.70%	1	100.00%	0	0	0	0.00%
	HDGT	152	1.5	104	68.42%	77	74.04%	26	17.11%	13	50.00%	13	8.55%	7	53.85%	5	3.29%	2	40.00%	4	3	3	75.00%
2000 Total		302	1.3	241	79.80%	201	83.40%	35	11.59%	21	60.00%	16	5.30%	9	56.25%	6	1.99%	3	50.00%	4	1	3	75.00%
2001	LDGV	6	1.2	5	83.33%	4	80.00%	1	16.67%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	148	1	141	95.27%	134	95.04%	7	4.73%	7	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	81	1.2	65	80.25%	54	83.08%	13	16.05%	9	69.23%	3	3.70%	3	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2001 Total		235	1.1	211	89.79%	192	91.00%	21	8.94%	17	80.95%	3	1.28%	3	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2002	LDGV	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%
	LDGT	223	1.1	204	91.48%	192	94.12%	16	7.17%	12	75.00%	2	0.90%	0	0.00%	1	0.45%	1	100.00%	0	0	0	0.00%
	HDGT	63	1.3	47	74.60%	36	76.60%	11	17.46%	8	72.73%	2	3.17%	0	0.00%	2	3.17%	1	50.00%	1	2	1	100.00%
2002 Total		293	1.1	257	87.71%	233	90.66%	28	9.56%	21	75.00%	4	1.37%	0	0.00%	3	1.02%	2	66.67%	1	0	1	100.00%
2003	LDGV	14	1.6	11	78.57%	8	72.73%	1	7.14%	1	100.00%	1	7.14%	1	100.00%	0	0.00%	0	0.00%	1	7	1	100.00%
	LDGT	160	1.1	147	91.88%	137	93.20%	11	6.88%	9	81.82%	2	1.25%	2	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	44	1.4	32	72.73%	23	71.88%	8	18.18%	4	50.00%	3	6.82%	2	66.67%	1	2.27%	1	100.00%	0	0	0	0.00%
2003 Total		218	1.2	190	87.16%	168	88.42%	20	9.17%	14	70.00%	6	2.75%	5	83.33%	1	0.46%	1	100.00%	1	0	1	100.00%
2004	LDGV	14	1.1	13	92.86%	11	84.62%	1	7.14%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	182	1.1	172	94.51%	163	94.77%	10	5.49%	10	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	17	1.1	15	88.24%	13	86.67%	2	11.76%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2004 Total		213	1.1	200	93.90%	187	93.50%	13	6.10%	13	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2005	LDGV	11	1.4	7	63.64%	5	71.43%	3	27.27%	1	33.33%	1	9.09%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	71	1	68	95.77%	64	94.12%	3	4.23%	3	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	29	1.4	19	65.52%	14	73.68%	5	17.24%	4	80.00%	2	6.90%	0	0.00%	2	6.90%	1	50.00%	1	3	0	0.00%
2005 Total		111	1.1	94	84.68%	83	88.30%	11	9.91%	8	72.73%	3	2.70%	1	33.33%	2	1.80%	1	50.00%	1	1	0	0.00%
2006	LDGV	15	1.5	12	80.00%	11	91.67%	0	0.00%	0	0.00%	1	6.67%	0	0.00%	1	6.67%	1	100.00%	1	7	1	100.00%
	LDGT	41	1	41	100.00%	41	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	31	1.2	26	83.87%	19	73.08%	5	16.13%	5	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2006 Total		87	1.2	79	90.80%	71	89.87%	5	5.75%	5	100.00%	1	1.15%	0	0.00%	1	1.15%	1	100.00%	1	1	1	100.00%

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%
2007	LDGV	4	1	3	75.00%	3	100.00%	1	25.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	47	1	47	100.00%	45	95.74%	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	7	100.00%	7	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%
2007 Total		58	1	57	98.28%	55	96.49%	1	1.72%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2008	LDGV	22	1.2	18	81.82%	14	77.78%	3	13.64%	2	66.67%	1	4.55%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	45	1	43	95.56%	43	100.00%	2	4.44%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	10	1	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%
2008 Total		77	1.1	71	92.21%	67	94.37%	5	6.49%	4	80.00%	1	1.30%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2009	LDGV	5	3	3	60.00%	0	0.00%	1	20.00%	0	0.00%	1	20.00%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	9	1	9	100.00%	9	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	2	1	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%
2009 Total		16	1.2	14	87.50%	11	78.57%	1	6.25%	0	0.00%	1	6.25%	1	100.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2010	LDGV	14	1	14	100.00%	13	92.86%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	LDGT	32	1	31	96.88%	29	93.55%	1	3.13%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
	HDGT	10	1.1	9	90.00%	8	88.89%	1	10.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2010 Total		56	1	54	96.43%	50	92.59%	2	3.57%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0	0	0.00%
2011	LDGV	5	2.3	2	40.00%	1	50.00%	1	20.00%	1	100.00%	1	20.00%	0	0.00%	1	20.00%	1	100.00%	0	0	0	0.00%
	LDGT	7	1	7	100.00%	7	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	3	1	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%
2011 Total		15	1.3	12	80.00%	11	91.67%	1	6.67%	1	100.00%	1	6.67%	0	0.00%	1	6.67%	1	100.00%	0	0	0	0.00%
2012	LDGV	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	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	2	1	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%
2012 Total		3	1	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%
2013	LDGV	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	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%
2013 Total		1	1	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%
2014	LDGV	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	0.00%	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%
2014 Total		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%
Grand Total		8,466	1.4	5840	68.98%	4176	71.51%	1495	17.66%	808	54.05%	590	6.97%	300	50.85%	247	2.92%	105	42.51%	294	3	105	35.71%

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	1,782	1.5	1205	67.62%	782	64.90%	348	19.53%	181	52.01%	134	7.52%	70	52.24%	47	2.64%	26	55.32%	48	3	19	39.58%
LDGT	2,859	1.3	2187	76.50%	1740	79.56%	400	13.99%	230	57.50%	140	4.90%	74	52.86%	51	1.78%	17	33.33%	81	3	24	29.63%
HDGT	3,825	1.5	2448	64.00%	1654	67.57%	747	19.53%	397	53.15%	316	8.26%	156	49.37%	149	3.90%	62	41.61%	165	4	62	37.58%
Grand Total	8,466	1.4	5840	68.98%	4176	71.51%	1495	17.66%	808	54.05%	590	6.97%	300	50.85%	247	2.92%	105	42.51%	294	3	105	35.71%

Appendix R

I/M Eligible Vehicle Report

Evaluated Vehicles

Colorado

I/M Eligible Vehicle Report, Evaluated Vehicles

Wednesday, 04-March-2015

Report Start: **Jan, 2014** Report Period: **Year**

County: **All Counties**

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria					Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh. Evaluated	
			No			Yes									
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits								
1982															
P	50	50	0	22	0	0	28	Clean:	6	21.43%	0.1158	72.3083	404.3333	-0.03	
			0.00%	44.00%	0.00%	0.00%	56.00%	Not Clean:	22	78.57%	1.1216	180.5727	1,249.7591	0.99	56.00%
T	71	71	0	40	1	0	30	Clean:	1	3.33%	0.1700	38.9500	237.0000	1.90	
			0.00%	56.34%	1.41%	0.00%	42.25%	Not Clean:	29	96.67%	2.1893	332.2535	1,669.8672	0.86	42.25%
U	786	786	783	2	0	0	1	Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00	
			99.62%	0.25%	0.00%	0.00%	0.13%	Not Clean:	1	100.00%	0.8400	200.5000	966.0500	0.75	0.13%
Total For 1982		907	783	64	1	0	59	Clean:	7	11.86%	0.1236	67.5429	380.4286	0.24	
			86.33%	7.06%	0.11%	0.00%	6.50%	Not Clean:	52	88.14%	1.7116	265.5471	1,478.5942	0.91	6.50%
1983															
P	75	75	0	41	1	0	33	Clean:	4	12.12%	0.2125	48.2750	293.0875	0.66	
			0.00%	54.67%	1.33%	0.00%	44.00%	Not Clean:	29	87.88%	1.3929	184.6759	1,396.4224	0.79	44.00%
T	73	73	0	41	0	0	32	Clean:	2	6.25%	0.0275	6.6000	19.0500	1.85	
			0.00%	56.16%	0.00%	0.00%	43.84%	Not Clean:	30	93.75%	1.9518	177.2900	1,391.2117	0.87	43.84%
U	882	882	878	3	0	0	1	Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00	
			99.55%	0.34%	0.00%	0.00%	0.11%	Not Clean:	1	100.00%	2.8550	164.6000	317.4500	1.35	0.11%
Total For 1983		1,030	878	85	1	0	66	Clean:	6	9.09%	0.1508	34.3833	201.7417	1.06	
			85.24%	8.25%	0.10%	0.00%	6.41%	Not Clean:	60	90.91%	1.6967	180.6483	1,375.8342	0.84	6.41%
1984															
P	161	161	0	90	2	0	69	Clean:	8	11.59%	0.1006	41.3750	422.8062	0.65	
			0.00%	55.90%	1.24%	0.00%	42.86%	Not Clean:	61	88.41%	1.5170	252.5926	1,236.0943	1.24	42.86%
T	182	182	0	103	0	0	79	Clean:	4	5.06%	0.0675	60.0375	99.5375	-0.27	
			0.00%	56.59%	0.00%	0.00%	43.41%	Not Clean:	75	94.94%	2.3379	289.8393	1,498.9547	1.04	43.41%
U	2,107	2,107	2,095	6	0	0	6	Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00	
			99.43%	0.28%	0.00%	0.00%	0.28%	Not Clean:	6	100.00%	1.2108	324.3167	756.0250	0.91	0.28%
Total For 1984		2,450	2,095	199	2	0	154	Clean:	12	7.79%	0.0896	47.5958	315.0500	0.34	
			85.51%	8.12%	0.08%	0.00%	6.29%	Not Clean:	142	92.21%	1.9376	275.2958	1,354.6444	1.12	6.29%

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria					Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh. Evaluated	
			No			Yes									
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits								
1985															
P	166	0	94	2	4	66	Clean:	15	21.43%	0.1600	39.7533	316.9833	0.72		
			0.00%	56.63%	1.20%	2.41%	39.76%	Not Clean:	55	78.57%	1.1251	171.2027	1,220.5891	1.29	42.17%
T	200	0	120	0	0	80	Clean:	8	10.00%	0.1469	38.4125	421.4937	0.63		
			0.00%	60.00%	0.00%	0.00%	40.00%	Not Clean:	72	90.00%	2.1151	299.8833	1,452.5215	0.93	40.00%
U	1,681	1,673	7	0	0	1	Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.52%	0.42%	0.00%	0.00%	0.06%	Not Clean:	1	100.00%	0.1100	124.6000	1,354.5000	0.40	0.06%
Total For 1985	2,047	1,673	221	2	4	147	Clean:	23	15.23%	0.1554	39.2870	353.3348	0.69		
			81.73%	10.80%	0.10%	0.20%	7.18%	Not Clean:	128	84.77%	1.6740	243.2215	1,352.0973	1.08	7.38%
1986															
P	315	0	161	0	4	150	Clean:	32	20.78%	0.1047	33.7734	340.5375	0.78		
			0.00%	51.11%	0.00%	1.27%	47.62%	Not Clean:	122	79.22%	1.0657	194.4234	1,190.5344	1.04	48.89%
T	372	0	202	3	0	167	Clean:	13	7.78%	0.1258	50.2231	381.7385	0.67		
			0.00%	54.30%	0.81%	0.00%	44.89%	Not Clean:	154	92.22%	1.2621	318.4451	1,632.2357	0.97	44.89%
U	2,727	2,724	3	0	0	0	Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.89%	0.11%	0.00%	0.00%	0.00%	Not Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%
Total For 1986	3,414	2,724	366	3	4	317	Clean:	45	14.02%	0.1108	38.5256	352.4400	0.75		
			79.79%	10.72%	0.09%	0.12%	9.29%	Not Clean:	276	85.98%	1.1753	263.6239	1,436.9909	1.00	9.40%
1987															
P	304	0	148	2	2	152	Clean:	32	20.78%	0.1283	39.4328	379.0391	0.82		
			0.00%	48.68%	0.66%	0.66%	50.00%	Not Clean:	122	79.22%	1.3054	189.4246	1,195.3074	1.11	50.66%
T	328	0	160	3	1	164	Clean:	14	8.48%	0.1464	43.4179	345.9607	0.76		
			0.00%	48.78%	0.91%	0.30%	50.00%	Not Clean:	151	91.52%	1.3481	238.6781	1,549.8563	0.99	50.30%
U	2,026	2,024	1	0	0	1	Clean:	1	100.00%	0.2000	6.2500	254.3000	0.70		
			99.90%	0.05%	0.00%	0.00%	0.05%	Not Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00	0.05%
Total For 1987	2,658	2,024	309	5	3	317	Clean:	47	14.69%	0.1352	39.9138	366.5319	0.80		
			76.15%	11.63%	0.19%	0.11%	11.93%	Not Clean:	273	85.31%	1.3290	216.6674	1,391.4132	1.05	12.04%
1988															
P	507	0	263	2	3	239	Clean:	57	23.55%	0.0945	36.9895	290.9386	0.90		
			0.00%	51.87%	0.39%	0.59%	47.14%	Not Clean:	185	76.45%	1.1120	250.5514	1,365.1765	0.97	47.73%
T	662	0	329	1	0	332	Clean:	39	11.75%	0.1618	59.3282	440.4859	0.93		
			0.00%	49.70%	0.15%	0.00%	50.15%	Not Clean:	293	88.25%	0.9059	218.0853	1,320.3461	0.91	50.15%
U	3,997	3,996	1	0	0	0	Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00		
			99.97%	0.03%	0.00%	0.00%	0.00%	Not Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00	0.00%
Total For 1988	5,166	3,996	593	3	3	571	Clean:	96	16.72%	0.1218	46.0646	351.6922	0.91		
			77.35%	11.48%	0.06%	0.06%	11.05%	Not Clean:	478	83.28%	0.9857	230.6506	1,337.6968	0.93	11.11%

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria					Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh. Evaluated	
			No			Yes									
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits								
1989															
P	564	0	260	2	3	299	Clean:	70	23.18%	0.1064	31.9293	294.5521	0.85		
		0.00%	46.10%	0.35%	0.53%	53.01%	Not Clean:	232	76.82%	1.1610	205.2470	1,275.7000	1.06	53.55%	
T	616	0	292	6	0	318	Clean:	48	15.09%	0.1309	49.9104	366.4219	0.90		
		0.00%	47.40%	0.97%	0.00%	51.62%	Not Clean:	270	84.91%	1.0147	213.3369	1,358.9883	0.96	51.62%	
U	3,420	3,418	1	0	0	1	Clean:	1	100.00%	0.0950	5.1000	457.8500	1.25		
		99.94%	0.03%	0.00%	0.00%	0.03%	Not Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00	0.03%	
Total For 1989		4,600	3,418	553	8	3	618	Clean:	119	19.16%	0.1162	38.9567	324.9139	0.88	
								Not Clean:	502	80.84%	1.0823	209.5981	1,320.4965	1.01	13.50%
1990															
P	1,149	0	513	5	16	615	Clean:	181	28.68%	0.1228	23.9633	309.3970	0.90		
		0.00%	44.65%	0.44%	1.39%	53.52%	Not Clean:	450	71.32%	0.9583	146.3222	1,230.3526	1.05	54.92%	
T	973	0	454	7	1	511	Clean:	99	19.34%	0.1502	39.6662	332.8212	0.95		
		0.00%	46.66%	0.72%	0.10%	52.52%	Not Clean:	413	80.66%	0.9244	169.2271	1,385.8350	0.99	52.62%	
U	6,063	6,062	0	0	0	1	Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00		
		99.98%	0.00%	0.00%	0.00%	0.02%	Not Clean:	1	100.00%	0.3650	47.1000	638.2000	1.95	0.02%	
Total For 1990		8,185	6,062	967	12	17	1,127	Clean:	280	24.48%	0.1325	29.5154	317.6791	0.92	
								Not Clean:	864	75.52%	0.9414	157.1561	1,303.9892	1.02	13.98%
1991															
P	1,252	0	561	3	6	682	Clean:	202	29.36%	0.1282	30.6522	308.7587	1.02		
		0.00%	44.81%	0.24%	0.48%	54.47%	Not Clean:	486	70.64%	1.0111	188.0243	1,245.6011	1.03	54.95%	
T	1,010	0	463	10	1	536	Clean:	102	18.99%	0.1259	40.2211	315.6196	0.95		
		0.00%	45.84%	0.99%	0.10%	53.07%	Not Clean:	435	81.01%	1.1022	180.4406	1,321.3963	0.96	53.17%	
U	5,019	5,014	4	0	0	1	Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00		
		99.90%	0.08%	0.00%	0.00%	0.02%	Not Clean:	1	100.00%	1.1400	20.5000	601.2000	1.45	0.02%	
Total For 1991		7,281	5,014	1,028	13	7	1,219	Clean:	304	24.80%	0.1274	33.8628	311.0607	1.00	
								Not Clean:	922	75.20%	1.0542	184.2646	1,280.6624	1.00	16.84%
1992															
P	1,896	0	882	7	4	1,003	Clean:	335	33.27%	0.1162	28.5140	325.5739	0.95		
		0.00%	46.52%	0.37%	0.21%	52.90%	Not Clean:	672	66.73%	0.7681	155.6485	1,252.9926	1.04	53.11%	
T	1,563	0	734	13	7	809	Clean:	163	19.98%	0.1212	36.8245	367.8347	0.86		
		0.00%	46.96%	0.83%	0.45%	51.76%	Not Clean:	653	80.02%	0.8802	193.7524	1,285.6734	1.04	52.21%	
U	8,054	8,050	3	0	0	1	Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00		
		99.95%	0.04%	0.00%	0.00%	0.01%	Not Clean:	1	100.00%	0.0500	1.3000	828.8500	0.15	0.01%	
Total For 1992		11,513	8,050	1,619	20	11	1,813	Clean:	498	27.30%	0.1179	31.2341	339.4062	0.92	
								Not Clean:	1,326	72.70%	0.8228	174.2967	1,268.7667	1.04	15.84%

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria					Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh. Evaluated	
			No			Yes									
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits								
1993															
P	1,892	1,892	0	827	14	6	1,045	Clean:	333	31.68%	0.1315	30.4911	358.5856	0.88	
			0.00%	43.71%	0.74%	0.32%	55.23%	Not Clean:	718	68.32%	0.8424	155.2042	1,215.6561	1.05	55.55%
T	1,780	1,780	0	813	9	1	957	Clean:	175	18.27%	0.1405	36.1869	399.9766	0.74	
			0.00%	45.67%	0.51%	0.06%	53.76%	Not Clean:	783	81.73%	0.8642	179.7451	1,338.7430	1.00	53.82%
U	7,324	7,324	7,321	2	0	0	1	Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00	
			99.96%	0.03%	0.00%	0.00%	0.01%	Not Clean:	1	100.00%	0.0550	23.7000	2,527.5500	1.10	0.01%
Total For 1993		10,996	7,321	1,642	23	7	2,003	Clean:	508	25.27%	0.1346	32.4532	372.8443	0.83	
			66.58%	14.93%	0.21%	0.06%	18.22%	Not Clean:	1,502	74.73%	0.8532	167.9100	1,280.6953	1.03	18.28%
1994															
P	2,765	2,765	0	1223	9	8	1,525	Clean:	606	39.53%	0.1279	30.1282	307.7695	0.97	
			0.00%	44.23%	0.33%	0.29%	55.15%	Not Clean:	927	60.47%	0.7970	174.4700	1,045.9640	1.11	55.44%
T	3,071	3,071	0	1344	30	6	1,691	Clean:	382	22.51%	0.1237	42.3708	350.3758	0.83	
			0.00%	43.76%	0.98%	0.20%	55.06%	Not Clean:	1,315	77.49%	0.7372	155.0330	1,242.8768	1.00	55.26%
U	11,902	11,898	11,898	2	0	0	2	Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00	
			99.97%	0.02%	0.00%	0.00%	0.02%	Not Clean:	2	100.00%	0.2750	153.0500	1,693.4250	1.38	0.02%
Total For 1994		17,738	11,898	2,569	39	14	3,218	Clean:	988	30.57%	0.1263	34.8617	324.2428	0.92	
			67.08%	14.48%	0.22%	0.08%	18.14%	Not Clean:	2,244	69.43%	0.7615	163.0607	1,161.9334	1.05	18.22%
1995															
P	3,489	3,489	0	1455	13	16	2,005	Clean:	915	45.27%	0.1251	29.7999	267.4027	0.90	
			0.00%	41.70%	0.37%	0.46%	57.47%	Not Clean:	1,106	54.73%	0.7375	134.0536	913.7005	1.10	57.92%
T	3,424	3,424	0	1362	36	56	1,970	Clean:	543	26.80%	0.1042	30.6556	291.9850	0.76	
			0.00%	39.78%	1.05%	1.64%	57.54%	Not Clean:	1,483	73.20%	0.7796	143.9673	1,191.6181	0.98	59.17%
U	11,695	11,691	11,691	3	0	0	1	Clean:	0	0.00%	0.0000	0.0000	0.0000	0.00	
			99.97%	0.03%	0.00%	0.00%	0.01%	Not Clean:	1	100.00%	4.0900	149.4000	1,013.1000	1.30	0.01%
Total For 1995		18,608	11,691	2,820	49	72	3,976	Clean:	1,458	36.02%	0.1173	30.1186	276.5579	0.85	
			62.83%	15.15%	0.26%	0.39%	21.37%	Not Clean:	2,590	63.98%	0.7629	139.7360	1,072.8709	1.03	21.75%
1996															
P	4,994	4,994	0	2123	22	69	2,780	Clean:	1,618	56.79%	0.1070	25.4582	239.0475	0.96	
			0.00%	42.51%	0.44%	1.38%	55.67%	Not Clean:	1,231	43.21%	0.7150	127.5565	863.5558	1.14	57.05%
T	5,075	5,075	0	2150	31	27	2,867	Clean:	1,362	47.06%	0.1139	26.6550	290.4700	0.89	
			0.00%	42.36%	0.61%	0.53%	56.49%	Not Clean:	1,532	52.94%	0.5950	114.3665	1,113.8846	1.03	57.02%
U	16,906	16,900	16,900	4	0	0	2	Clean:	1	50.00%	0.0750	0.0000	283.2500	1.05	
			99.96%	0.02%	0.00%	0.00%	0.01%	Not Clean:	1	50.00%	0.2200	73.5000	1,078.7000	1.10	0.01%
Total For 1996		26,975	16,900	4,277	53	96	5,649	Clean:	2,981	51.89%	0.1102	25.9965	262.5570	0.93	
			62.65%	15.86%	0.20%	0.36%	20.94%	Not Clean:	2,764	48.11%	0.6483	120.2262	1,002.3832	1.08	21.30%

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria					Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh. Evaluated	
			No			Yes									
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits								
1997															
P	5,477	5,477	0	2259	23	85	3,110	Clean:	1,917	60.00%	0.1091	24.2557	227.5304	0.94	
			0.00%	41.25%	0.42%	1.55%	56.78%	Not Clean:	1,278	40.00%	0.8230	135.7448	740.6786	1.14	58.33%
T	5,922	5,922	0	2292	59	66	3,505	Clean:	1,780	49.85%	0.1103	24.6857	280.3246	0.88	
			0.00%	38.70%	1.00%	1.11%	59.19%	Not Clean:	1,791	50.15%	0.5697	107.8202	1,097.3991	1.06	60.30%
U	16,182	16,170	16,170	7	0	0	5	Clean:	2	40.00%	0.1075	52.9000	98.8750	1.15	
			99.93%	0.04%	0.00%	0.00%	0.03%	Not Clean:	3	60.00%	1.7417	210.5500	951.6500	0.52	0.03%
Total For 1997		27,581	16,170	4,558	82	151	6,620	Clean:	3,699	54.63%	0.1097	24.4781	252.8660	0.91	
			58.63%	16.53%	0.30%	0.55%	24.00%	Not Clean:	3,072	45.37%	0.6762	119.5376	948.8554	1.09	24.55%
1998															
P	7,772	7,772	0	2686	21	556	4,509	Clean:	3,366	66.46%	0.0855	18.7217	169.9540	0.86	
			0.00%	34.56%	0.27%	7.15%	58.02%	Not Clean:	1,699	33.54%	0.7823	111.2195	671.9388	1.15	65.17%
T	9,640	9,640	0	3636	65	261	5,678	Clean:	3,590	60.45%	0.0946	20.7899	233.1748	0.86	
			0.00%	37.72%	0.67%	2.71%	58.90%	Not Clean:	2,349	39.55%	0.5041	102.1041	962.6842	1.05	61.61%
U	24,744	24,733	24,733	4	0	0	7	Clean:	4	57.14%	0.0763	66.2000	251.2125	1.26	
			99.96%	0.02%	0.00%	0.00%	0.03%	Not Clean:	3	42.86%	1.4617	105.8333	547.5667	1.50	0.03%
Total For 1998		42,156	24,733	6,326	86	817	10,194	Clean:	6,960	63.21%	0.0902	19.8158	202.6103	0.86	
			58.67%	15.01%	0.20%	1.94%	24.18%	Not Clean:	4,051	36.79%	0.6215	105.9299	840.4374	1.10	26.12%
1999															
P	7,247	7,247	0	2514	20	445	4,268	Clean:	3,277	69.53%	0.0826	18.1914	167.5339	0.86	
			0.00%	34.69%	0.28%	6.14%	58.89%	Not Clean:	1,436	30.47%	0.7522	93.3776	705.7182	1.12	65.03%
T	9,945	9,945	0	3489	73	259	6,124	Clean:	4,439	69.54%	0.0813	19.7742	194.6120	0.86	
			0.00%	35.08%	0.73%	2.60%	61.58%	Not Clean:	1,944	30.46%	0.5453	89.0532	886.1968	1.04	64.18%
U	21,003	20,985	20,985	7	0	0	11	Clean:	8	72.73%	0.0931	16.4125	177.9813	0.65	
			99.91%	0.03%	0.00%	0.00%	0.05%	Not Clean:	3	27.27%	0.2350	268.9000	577.5167	1.23	0.05%
Total For 1999		38,195	20,985	6,010	93	704	10,403	Clean:	7,724	69.54%	0.0819	19.0992	183.1065	0.86	
			54.94%	15.74%	0.24%	1.84%	27.24%	Not Clean:	3,383	30.46%	0.6329	91.0483	809.3143	1.07	29.08%
2000															
P	12,016	12,016	0	3629	34	1,178	7,175	Clean:	6,466	77.41%	0.0659	15.6717	116.1027	0.88	
			0.00%	30.20%	0.28%	9.80%	59.71%	Not Clean:	1,887	22.59%	0.7982	121.3790	655.3124	1.18	69.52%
T	15,690	15,690	0	4401	144	1,576	9,569	Clean:	8,626	77.40%	0.0650	15.7353	142.6078	0.79	
			0.00%	28.05%	0.92%	10.04%	60.99%	Not Clean:	2,519	22.60%	0.5367	82.7999	810.3788	1.04	71.03%
U	34,386	34,358	34,358	10	0	0	18	Clean:	14	77.78%	0.0807	21.2929	194.0000	1.18	
			99.92%	0.03%	0.00%	0.00%	0.05%	Not Clean:	4	22.22%	0.8462	54.1250	1,469.2375	1.06	0.05%
Total For 2000		62,092	34,358	8,040	178	2,754	16,762	Clean:	15,106	77.40%	0.0654	15.7132	131.3102	0.83	
			55.33%	12.95%	0.29%	4.44%	27.00%	Not Clean:	4,410	22.60%	0.6489	99.2815	744.6249	1.10	31.43%

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria					Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh. Evaluated	
			No			Yes									
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits								
2001															
P	9,887	0	1891	17	1,958	6,021	Clean:	6,547	82.05%	0.0527	12.8285	79.1392	0.71		
			0.00%	19.13%	0.17%	19.80%	60.90%							Not Clean:	1,432
T	12,385	0	2712	90	1,709	7,874	Clean:	8,020	83.69%	0.0601	15.0584	103.2932	0.77		
			0.00%	21.90%	0.73%	13.80%	63.58%							Not Clean:	1,563
U	23,846	23,830	8	0	0	8	Clean:	6	75.00%	0.0817	10.6750	125.7083	1.28		
			99.93%	0.03%	0.00%	0.00%	0.03%							Not Clean:	2
Total For 2001	46,118	23,830	4,611	107	3,667	13,903	Clean:	14,573	82.94%	0.0568	14.0548	92.4511	0.75		
			51.67%	10.00%	0.23%	7.95%	30.15%	Not Clean:	2,997	17.06%	0.6614	92.9330	640.1371	1.08	38.10%
2002															
P	15,059	0	2232	33	3,614	9,180	Clean:	10,880	85.04%	0.0452	10.9983	63.4206	0.73		
			0.00%	14.82%	0.22%	24.00%	60.96%							Not Clean:	1,914
T	21,557	0	4050	134	3,722	13,651	Clean:	15,085	86.83%	0.0508	12.6270	89.4647	0.77		
			0.00%	18.79%	0.62%	17.27%	63.33%							Not Clean:	2,288
U	39,230	39,209	6	0	0	15	Clean:	11	73.33%	0.0923	14.5182	224.4773	1.05		
			99.95%	0.02%	0.00%	0.00%	0.04%							Not Clean:	4
Total For 2002	75,846	39,209	6,288	167	7,336	22,846	Clean:	25,976	86.06%	0.0485	11.9457	78.6134	0.75		
			51.70%	8.29%	0.22%	9.67%	30.12%	Not Clean:	4,206	13.94%	0.6101	91.2064	629.4365	1.11	39.79%
2003															
P	9,717	0	1325	20	2,348	6,024	Clean:	7,222	86.26%	0.0439	11.3071	61.5599	0.72		
			0.00%	13.64%	0.21%	24.16%	61.99%							Not Clean:	1,150
T	13,033	0	1216	67	3,137	8,613	Clean:	10,501	89.37%	0.0455	11.4228	65.1587	0.72		
			0.00%	9.33%	0.51%	24.07%	66.09%							Not Clean:	1,249
U	21,814	21,803	2	0	0	9	Clean:	7	77.78%	0.0521	7.0071	143.6357	1.36		
			99.95%	0.01%	0.00%	0.00%	0.04%							Not Clean:	2
Total For 2003	44,564	21,803	2,543	87	5,485	14,646	Clean:	17,730	88.07%	0.0448	11.3739	63.7238	0.72		
			48.93%	5.71%	0.20%	12.31%	32.87%	Not Clean:	2,401	11.93%	0.6594	96.7876	588.0603	1.08	45.17%
2004															
P	15,702	0	1262	32	4,674	9,734	Clean:	12,971	90.03%	0.0386	10.2154	44.5075	0.71		
			0.00%	8.04%	0.20%	29.77%	61.99%							Not Clean:	1,437
T	28,290	0	1914	162	7,853	18,361	Clean:	24,448	93.26%	0.0351	9.9649	42.1037	0.72		
			0.00%	6.77%	0.57%	27.76%	64.90%							Not Clean:	1,766
U	40,290	40,268	5	0	0	17	Clean:	14	82.35%	0.0454	14.7071	65.4250	0.98		
			99.95%	0.01%	0.00%	0.00%	0.04%							Not Clean:	3
Total For 2004	84,282	40,268	3,181	194	12,527	28,112	Clean:	37,433	92.11%	0.0363	10.0535	42.9454	0.71		
			47.78%	3.77%	0.23%	14.86%	33.35%	Not Clean:	3,206	7.89%	0.6592	94.0256	469.8122	1.16	48.22%

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria					Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh. Evaluated	
			No			Yes									
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits								
2005															
P	9,307	0	878	18	2,457	5,954	Clean:	7,562	89.91%	0.0397	10.6156	42.0100	0.72		
			0.00%	9.43%	0.19%	26.40%	63.97%	Not Clean:	849	10.09%	0.6600	98.5769	477.6941	1.20	90.37%
T	13,711	0	931	78	3,600	9,102	Clean:	11,942	94.02%	0.0356	10.4200	41.6161	0.72		
			0.00%	6.79%	0.57%	26.26%	66.38%	Not Clean:	760	5.98%	0.5320	90.5145	502.9070	1.02	92.64%
U	18,891	18,875	8	0	0	8	Clean:	5	62.50%	0.0830	10.2500	38.5300	0.88		
			99.92%	0.04%	0.00%	0.00%	0.04%	Not Clean:	3	37.50%	0.4350	35.1000	471.0167	0.83	0.04%
Total For 2005	41,909	18,875	1,817	96	6,057	15,064	Clean:	19,509	92.37%	0.0372	10.4958	41.7680	0.72		
			45.04%	4.34%	0.23%	14.45%	35.94%	Not Clean:	1,612	7.63%	0.5992	94.6577	489.5686	1.11	50.40%
2006															
P	16,300	0	1757	25	4,115	10,403	Clean:	13,381	92.17%	0.0381	10.5635	38.2214	0.79		
			0.00%	10.78%	0.15%	25.25%	63.82%	Not Clean:	1,137	7.83%	0.6384	100.9403	427.9547	1.20	89.07%
T	25,250	0	1107	247	6,783	17,113	Clean:	22,544	94.34%	0.0326	9.6456	36.9781	0.74		
			0.00%	4.38%	0.98%	26.86%	67.77%	Not Clean:	1,352	5.66%	0.5224	100.4419	436.8330	1.05	94.64%
U	32,906	32,877	8	0	0	21	Clean:	17	80.95%	0.0579	26.6176	84.3971	1.24		
			99.91%	0.02%	0.00%	0.00%	0.06%	Not Clean:	4	19.05%	1.1325	36.9375	168.2875	1.52	0.06%
Total For 2006	74,456	32,877	2,872	272	10,898	27,537	Clean:	35,942	93.51%	0.0346	9.9954	37.4634	0.76		
			44.16%	3.86%	0.37%	14.64%	36.98%	Not Clean:	2,493	6.49%	0.5763	100.5673	432.3529	1.12	51.62%
2007															
P	7,781	0	845	23	1,896	5,017	Clean:	6,432	93.04%	0.0380	10.7567	35.1654	0.78		
			0.00%	10.86%	0.30%	24.37%	64.48%	Not Clean:	481	6.96%	0.6166	89.6687	299.4313	1.25	88.84%
T	12,041	0	605	73	3,277	8,086	Clean:	10,784	94.90%	0.0333	9.6302	32.3098	0.74		
			0.00%	5.02%	0.61%	27.22%	67.15%	Not Clean:	579	5.10%	0.6722	95.1921	273.3939	1.13	94.37%
U	15,110	15,092	8	0	0	10	Clean:	9	90.00%	0.0394	9.5500	57.9333	1.42		
			99.88%	0.05%	0.00%	0.00%	0.07%	Not Clean:	1	10.00%	0.0050	114.9500	0.0000	-0.25	0.07%
Total For 2007	34,932	15,092	1,458	96	5,173	13,113	Clean:	17,225	94.20%	0.0351	10.0508	33.3895	0.76		
			43.20%	4.17%	0.27%	14.81%	37.54%	Not Clean:	1,061	5.80%	0.6464	92.7067	284.9402	1.19	52.35%
2008															
P	19,663	0	3817	40	3,278	12,528	Clean:	14,791	93.58%	0.0411	10.9383	35.6622	0.90		
			0.00%	19.41%	0.20%	16.67%	63.71%	Not Clean:	1,015	6.42%	0.6606	78.2581	312.9442	1.30	80.38%
T	32,119	0	3313	296	6,618	21,892	Clean:	26,882	94.29%	0.0414	10.3916	32.5637	0.83		
			0.00%	10.31%	0.92%	20.60%	68.16%	Not Clean:	1,628	5.71%	0.5779	80.2938	247.3174	1.15	88.76%
U	38,241	38,158	24	0	0	59	Clean:	50	84.75%	0.1221	17.9910	78.7850	1.10		
			99.78%	0.06%	0.00%	0.00%	0.15%	Not Clean:	9	15.25%	0.3328	70.2444	622.8056	1.59	0.15%
Total For 2008	90,023	38,158	7,154	336	9,896	34,479	Clean:	41,723	94.02%	0.0414	10.5945	33.7175	0.86		
			42.39%	7.95%	0.37%	10.99%	38.30%	Not Clean:	2,652	5.98%	0.6087	79.4806	273.7090	1.21	49.29%

Model Year	Veh. Type	Emis. Due Veh.	Meet Time and Location Criteria					Total	Percent	CO	HC	NOX	Accel	Emis. Due Veh. Evaluated	
			No			Yes									
			0 Hits	1 Hit	2+ Hits	1 Hit	2+ Hits								
2009															
	P	976	0	196	1	145	634	Clean:	728	93.45%	0.0422	11.8558	31.8098	0.92	
			0.00%	20.08%	0.10%	14.86%	64.96%	Not Clean:	51	6.55%	0.7142	170.8127	268.1686	1.23	79.82%
	T	794	0	181	4	72	537	Clean:	584	95.89%	0.0469	11.4073	38.5836	1.01	
			0.00%	22.80%	0.50%	9.07%	67.63%	Not Clean:	25	4.11%	0.6404	82.9620	180.2960	1.07	76.70%
	U	10,729	5,304	1803	12	0	3,610	Clean:	3,389	93.88%	0.0474	14.6595	44.4124	1.10	
			49.44%	16.80%	0.11%	0.00%	33.65%	Not Clean:	221	6.12%	0.5558	83.3477	195.3541	1.25	33.65%
Total For 2009	12,499	5,304	2,180	17	217	4,781	Clean:	4,701	94.06%	0.0465	13.8213	41.7366	1.06		
			42.44%	17.44%	0.14%	1.74%	38.25%	Not Clean:	297	5.94%	0.5901	98.3345	206.5901	1.23	39.99%
2010															
	U	75,710	31,693	14629	90	0	29,298	Clean:	27,497	93.85%	0.0448	13.5929	40.6389	1.14	
			41.86%	19.32%	0.12%	0.00%	38.70%	Not Clean:	1,801	6.15%	0.6069	75.7842	211.8126	1.26	38.70%
Total For 2010	75,710	31,693	14,629	90	0	29,298	Clean:	27,497	93.85%	0.0448	13.5929	40.6389	1.14		
			41.86%	19.32%	0.12%	0.00%	38.70%	Not Clean:	1,801	6.15%	0.6069	75.7842	211.8126	1.26	38.70%
Overall Total	873,931	447,882	88,979	2,135	65,923	269,012	Clean:	283,170	84.54%	0.0477	12.5213	68.8512	0.82		
			51.25%	10.18%	0.24%	7.54%	30.78%	Not Clean:	51,765	15.46%	0.6921	114.1248	769.5754	1.10	38.33%