The State of New Jersey Department of Environmental Protection

2003 Annual Report

New Jersey Enhanced Inspection and Maintenance (I/M) Program Emissions-Related Results From Gasoline-Fueled Motor Vehicles

Acknowledgments

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Acronyms and Abbreviations

ASM Acceleration Simulation Mode CIF Centralized Inspection Facility

CO Carbon monoxide

ERF Emission Repair Facility
ERT Emission Repair Technician

Fed. Reg. Federal Register HC Hydrocarbons

I/M Inspection and Maintenance MIT Mobile Inspection Team

MY Model Year

NAAQS National Ambient Air Quality Standards

NJDEP New Jersey Department of Environmental Protection

NJMVC New Jersey Motor Vehicle Commission NJDOT New Jersey Department of Transportation

NO Nitric Oxide

NO_x Oxides of Nitrogen

OBDII On-Board Diagnostics Generation II

PIF Private Inspection Facility
PFF Private Fleet Facility
ppm parts per million

RPM Revolutions per Minute
SIP State Implementation Plan
SIF Specialty Inspection Facility

USEPA United States Environmental Protection Agency

VID Vehicle Inspection Database VIN Vehicle Identification Number VOC Volatile Organic Compounds

Executive Summary

This report fulfills the annual reporting requirements at 40 CFR 51.366, the data analysis and reporting section of the United States Environmental Protection Agency's (USEPA's) final rule on inspection and maintenance program requirements, revised July 1, 2004. This report covers calendar year 2003 (January 1, 2003 through December 31, 2003). It provides summary statistics and evaluations of the following four data reporting areas: test data, quality assurance, quality control, and enforcement. This report is specific to the emissions portion of the State's enhanced Inspection and Maintenance (I/M) program; no statistical information on the safety portion of the State's inspection program is included in this report.

New Jersey's enhanced I/M program is designed to detect gasoline-fueled motor vehicles of model year 1981 and newer operating with excessive emissions under test conditions that represent realistic driving conditions. The enhanced exhaust emission tailpipe test used in New Jersey is the Acceleration Simulation Mode 5015 (ASM5015), which measures vehicle tailpipe emissions of hydrocarbons (HC), carbon monoxide (CO), and nitric oxide (NO) while the vehicle is driven on a dynamometer under load at a steady state speed of 15 mph.

During the year 2003, two significant changes were made to New Jersey's enhanced I/M program design. The first was an increase in new vehicle exemptions from the first two to the first four model years, which began in January of 2003. The second was an update to include testing of the on-board diagnostic second generation (OBDII) system of model year 1996 and newer light-duty vehicles and trucks.

New Jersey conducted OBDII pilot testing from March through May of 2003 and July through August 3, 2003. Vehicles of model year 1996 and newer were OBDII tested. Although vehicles that failed the OBDII pilot test were given an automatic pass for that portion of the emissions inspection, motorists were made aware of any failures found and advised to make repairs. This created a unique situation in that these "pilot fails" were not retest-eligible.

As a result, all initial emission inspection data presented in this report includes the OBDII pilot testing data because it presents the actual picture of initial emission inspection activity that occurred during this year. However, OBDII pilot fails are excluded from all reinspection analyses since they received an automatic pass and were therefore not subject to OBDII reinspection.

In addition, vehicles of model year 1996 and 1997 were included in the OBDII pilot testing, but were not included when OBDII testing officially began on August 4, 2003. On that date, through a model year phase-in approach, official OBDII testing of model year 1998 and newer vehicles began. Official OBDII testing of 1996 and 1997 model

year vehicles began on January 12, 2004 after we were confident that the inspection system could manage the potential impact of the readiness issues with these early OBD vehicles.

The OBDII system monitors virtually every component that can affect the emission performance of the vehicle. The OBDII test is a predictive test, because it does not actually measure vehicle exhaust emissions, but rather checks the OBDII computer system to see if it has detected any emissions systems problems and ensures that the system itself is functioning properly.

Because the OBDII system makes it possible to detect malfunctions before they lead to high emissions, a vehicle that fails the OBDII test may not necessarily have high emissions like a vehicle that fails a tailpipe exhaust emissions test.

Two additional tailpipe exhaust emissions tests are performed in New Jersey on those vehicles that are either model year 1980 or older, or are model year 1981 and newer that are not amenable to dynamometer testing (i.e., full time four wheel drive vehicles or vehicles with non-switchable traction control). These tests are the idle test (measures vehicle tailpipe emissions of HC and CO while the engine idles) and the 2500 RPM test (measures vehicle tailpipe emissions of HC and CO while the vehicle's engine is not in gear and the engine speed is increased from idle to 2500 RPM).

The three remaining tests that are performed as part of an emission inspection in New Jersey are the catalytic converter check (ensures the presence of a catalytic converter), the visible smoke test (checks for the presence of any visible continuous smoke emitted from either the tailpipe or the crankcase), and the evaporative gas cap test (detects any leaks in the gas cap itself or the cap seal by pressurizing the cap and monitoring the pressure decay or flow rate over time).

New Jersey's enhanced I/M program is biennial, requiring vehicles to be inspected once every other year. The program design is a hybrid network system that consists of both centralized (test-only) and decentralized (test-and-repair) inspection facilities. The Centralized Inspection Facilities (CIFs) are operated by a private contractor to the State, while the Private Inspection Facilities (PIFs) are small businesses that are licensed by the State to perform inspections.

Any vehicle that fails any of part of an emission inspection (i.e. tailpipe exhaust test, OBDII test, catalytic converter test, visible smoke test, or gas cap test) in New Jersey is required to be repaired by a registered Emission Repair Facility (ERF), or by the vehicle's owner, and reinspected. Emission Repair Facilities are small businesses that are registered by the State to perform emission-related repairs on vehicles that fail the emissions inspection in New Jersey.

New Jersey has extensive quality assurance and quality control programs in place to monitor the performance of all aspects of the enhanced I/M program. In addition, enforcement measures are in place to ensure the integrity of the entire system.

In this 2003 Annual Report, the test data section includes information on the number and types of inspections performed at both the centralized network and the decentralized network, and the final outcomes of those inspections. The quality assurance and quality control sections present data and results of inspector performance audits and inspection equipment audits for both the centralized and decentralized networks. Finally, the enforcement section provides a description of New Jersey's program enforcement measures and the results of program compliance surveys.

A summary of the key statistics of each of the above reporting areas is presented in Table 1 on the following page.

Table 1: Year 2003 Key Statistics

<u>lable 1</u> : Year 2003 Key Statistics	
Number of Total Emission Inspections*	2,646,712
Total Emission Inspections – Centralized/Decentralized Split	75%/25%
Total Emission Inspections – Initial/Reinspection Split	84%/16%
Number of Initial Emission Inspections*	2,214,245
Overall Initial Emission Failure Rate	11.1%
Centralized Initial Emission Failure Rate	11.3%
Decentralized Initial Emission Failure Rate	10.2%
OBDII 1 st Retest Pass Rate**	77.2%
ASM 1 st Retest Pass Rate	78.2%
Emission Reductions from Repairing to the ASM5015 Exhaust	
Emissions Test	
Hydrocarbons (HC)	51.8%
Carbon Monoxide (CO)	65.3%
Nitrogen Oxides (NOx)	44.3%
Number of Waivers Issued	136
Waiver Rate (as % of Initial Emission Inspections)	0.006%
Sticker Compliance Rate	96.5%
CIF Covert Performance Audit Fail Rate	15.8%
PIF Covert Performance Audit Fail Rate	50.9%
CIF Equipment Audit Fail Rate	24%
PIF Equipment Audit Fail Rate	26%

^{*} Total and initial emission inspection results include the 2003 OBDII Pilot Study tests.
** OBDII retest results do not include the 2003 OBDII Pilot Study test failures, since these were not retest eligible.

I. Purpose

This report fulfills the annual reporting requirements at 40 CFR 51.366, the data analysis and reporting section of the United States Environmental Protection Agency's (USEPA's) rule on inspection and maintenance program requirements, revised July 1, 2004. 40 CFR 51.366 was designed to allow for monitoring and evaluation of the program by program management and the USEPA. It also provides a basis for reporting various information on the types of program activities performed and their final outcomes. This information includes summary statistics and evaluations of the enforcement mechanisms, the quality assurance system, the quality control program, and the testing element. This report covers calendar year 2003 (January 1, 2003 through December 31, 2003).

II. Introduction

In accordance with the requirements of the Clean Air Act (CAA), the State of New Jersey implemented an enhanced inspection and maintenance (I/M) program on December 13, 1999. At that time, the enhanced I/M program was designed to detect gasoline-fueled motor vehicles operating with excessive emissions under test conditions that represented more realistic driving conditions compared to New Jersey's previous basic I/M program, through implementation of a dynamometer-based tailpipe test known as the Acceleration Simulation Mode 5015 (ASM5015). In addition, the ASM5015 test inspected vehicles to detect excess emissions of nitric oxide (NO), a pollutant that was not measured as part of the basic I/M program. Oxides of nitrogen (NO_x) and volatile organic compounds (VOCs¹) are precursors to the formation of ozone.

The CAA also requires I/M programs to incorporate on-board diagnostic (OBD) testing as part of vehicle emission testing. All model year 1996 and newer light-duty vehicles and trucks have an advanced powertrain control computer which uses second generation OBD technology (OBDII) to manage and monitor the operation of the engine and transmission. The OBDII system monitors virtually every component that can affect the emission performance of the vehicle. If a problem is detected, the OBDII system illuminates a warning lamp on the vehicle instrument panel (Malfunction Indicator Light, or MIL) to alert the driver. The system will also store important information (Diagnostic Trouble Codes, or DTCs) about the detected malfunction so that a repair technician can accurately find and fix the problem.

New Jersey conducted OBDII pilot testing from March through May of 2003 and July through August 3, 2003. Vehicles of model year 1996 and newer were OBDII tested. Although vehicles that failed the OBDII pilot test were given an automatic pass for that portion of the emissions inspection, motorists were made aware of any failures found and advised to make repairs.

This OBDII pilot testing effort was instrumental in the resulting relatively smooth transition to official OBDII testing that New Jersey experienced. States were originally required by the USEPA to begin OBDII testing on January 1, 2002, but states that showed good cause were allowed up to an additional 12 months delay. This flexibility was granted to states to better meet local needs, to update requirements based upon technological advances, and to optimize program efficiency and cost effectiveness.

The start date for official OBDII testing was originally set for June 2, 2003; however, due to the need for additional testing of the system and time for installation of the OBDII testing software throughout New Jersey's decentralized network, the start date was

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¹ VOCs are a subset of the hydrocarbons (HCs) category of pollutants, and HCs are directly measured by the enhanced I/M test analyzers. Similarly, nitric oxide (NO), a subset of the NO_x category of pollutants, is measured by the enhanced I/M test analyzers.

delayed to August 4, 2003. On that date, through a model year phase-in approach, official OBDII testing of model year 1998 and newer vehicles began. Official OBDII testing of vehicles of model year 1996 and 1997 began on January 12, 2004.

New Jersey's enhanced I/M program consists of a hybrid network with both centralized (test-only) and decentralized (test-and-repair) inspection facilities. Parsons, a private company under contract with the State, operates the centralized portion of the inspection network (centralized inspection facilities or CIFs) for the State.

There are 32 CIFs located throughout the State, consisting of a combined total of 127 inspection lanes. Of these 127 inspection lanes, only 124 are dedicated to daily inspection operations, with one also capable of the inspection of All Wheel Drive (AWD) vehicles using an Acceleration Simulation Mode (ASM) 5015 exhaust emission test. The remaining three lanes are adapted for Mass Emission Transient Testing (METT) for program evaluation purposes.

In the year 2003, the Jersey City CIF was permanently shut down by the State. The reason for this closure was because the expense to perform necessary maintenance on the old building exceeded the value of the building. The Secaucus CIF, which is within 5 miles of Jersey City, had sufficient excess capacity to handle the vehicles from Jersey City. The last inspection performed at the Jersey City CIF was on November 29, 2003, and the CIF was permanently closed the following day, November 30, 2003. However, because it did operate for most of the year, it is still included in the data and tables presented in this year 2003 Annual Report.

In addition, the State has three (3) specialty sites (Specialty Inspection Facilities, or SIFs), consisting of one lane each. These are where specialized inspections are conducted and customer disputes are resolved. These specialty sites are run by the State and are not in general use for inspection purposes. The 32 CIFs range from individual one-lane stations (of which there are four (4) in the State) to one eight (8) lane station. Table 2 on the following page lists each of the centralized facilities within the State and the total number of lanes in each facility.

Table 2: New Jersey's Centralized Inspection Facilities

Centralized Inspection Facility	# of Lanes
Baker's Basin	6
Bridgeton	1
Cape May	1
Cherry Hill	6
Delanco	3
Deptford	4
Eatontown	6
Flemington	3
Freehold	6
Jersey City	3
Kilmer	6
Lakewood	6
Lodi	5
Manahawkin	3
Mays Landing	4
Millville	2
Montclair	2
Newark	5
Newton	2
Paramus	5
Plainfield	3
Rahway	6
Randolph	6
Ridgewood	2
Salem	1
Secaucus	6
South Brunswick	6
Southampton	4
Washington	1
Wayne	8
Westfield	2
Winslow	3
Total	127

The decentralized network is comprised of privately owned and operated Private Inspection Facilities (PIFs) and Private Fleet Facilities (PFFs) that are licensed by the New Jersey Motor Vehicle Commission (NJMVC) to perform vehicle inspections. The PFFs perform inspections only on their own fleet of vehicles, while the PIFs perform inspections on citizens' vehicles. In 2003, there were 1,406 decentralized facilities operating in the State at some point during the year, and 80 operating only a portion of the year.

Figure 1 shows the locations of the CIFs and PIFs in New Jersey.

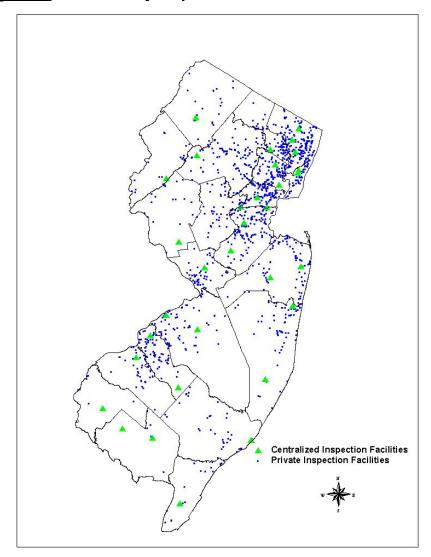


Figure 1: New Jersey Inspection and Maintenance Facilities

In addition, the NJMVC registers Emission Repair Facilities (ERFs) to perform emission-related repairs on vehicles that fail the emissions portion of the enhanced I/M test. All such emission failure-related repairs must be made by an ERF and are recorded to the Vehicle Inspection Database (VID) upon re-inspection. An ERF is required to have at least one certified Emission Repair Technician (ERT), specially trained in motor vehicle emissions repair, to perform or supervise these repairs. Alternatively, vehicle owners are permitted to make repairs to their own vehicles for reinspection purposes.

As of December 31, 2003, there were 2,525 registered ERFs. In addition, 1,406 licensed PIFs and 131 licensed PFFs remained active. Of all these facilities, 1,195 were registered and licensed as both ERFs and PIFs. Alternatively, 211 facilities were licensed only as PIFs, while 1,330 were registered only as ERFs.

The CIF/PIF hybrid network provides New Jersey's motorists a choice as to where to have their vehicles inspected, and if necessary, re-inspected. In calendar year 2003, the CIFs performed 1,969,039 emission inspections, or approximately 75 percent of the over 2.6 million total emission inspections performed. The PIFs performed 663,039 emission inspections, or approximately 25 percent of the total emission inspections performed.

The total emission inspection volume includes initial inspections and re-inspections for those vehicles that failed either their initial inspection or a subsequent re-inspection. Also included are roadside inspections of vehicles by NJMVC's Mobile Inspection Teams (MITs), and the inspection of vehicles that failed an on-road inspection and are required to be repaired and re-inspected at a licensed inspection facility as a result of that on-road failure.

For more detailed statistics regarding the inspections performed during the year 2003, please refer to Section III.A. – Test Data Report, and Appendix I – Test Data Report Tables and Figures.

III. Data Analysis and Reporting

New Jersey's enhanced I/M program has been biennial since its implementation in 1999, requiring vehicles to be inspected once every other year, with the first two model years (i.e. new vehicles) being exempt from inspection. In the year 2003, the test frequency remained biennial; however, beginning in January of 2003, new vehicle exemptions were increased from the first two to the first four model years.

The biennial test frequency was initially implemented at program startup in 1999 by requiring all odd model year vehicles to be inspected in the odd calendar years and all even model year vehicles to be inspected in the even calendar years. The result is a "sawtooth" effect whenever the program's statistical data is graphically presented by model year. For the year 2003 data, the "sawtooth" effect is evident in the fact that the odd model years have a significantly higher inspection volume then the even model years (see Appendix I, Part D, Figure D-2).

In addition, the data presented in this document and its appendices is based on "create date" rather than actual "test date." This means that the data is sorted by the date it was received by the Vehicle Inspection Database (VID) rather than by the actual date the inspection was performed. In most cases, this date is the same. In fact, for the CIFs, which are on-line to the VID continuously when in operation, there are very few cases where the dates differ, and these are cases where there were VID interruptions with the CIF. However, it is possible for a PIF to perform a series of inspections without transmitting those inspection results to the VID immediately.² As demonstrated by the monthly reports in Appendix II³, the number of inspection facilities not transmitting inspection records to the VID on the same date the inspection was performed is minimal.

Various anomalies also exist within the data itself. Most of these anomalies are the result of how the data is summarized and queried for use in this report. For instance, some discrepancies in the totals presented in this section may be the result of how the State retrieves data from the VID. If the inspector is unable to determine any piece of information about a vehicle at the time of inspection, the system is designed to leave that field in the inspection record blank. For example, if the vehicle category (LDGV, LDGT1, etc.) cannot be determined, the vehicle category field is left blank, but the remainder of the record containing the inspection results remains valid. However, if the field requested as part of the query is invalid or null (that is, the field is blank) for any given

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² The VID has a parameter for each PIF that sets a limit based on time and number of inspections. If this limit is exceeded, the PIF is locked out until records are transmitted. To date, this parameter has never been changed for any PIF nor has any PIF been locked out for a violation of this default setting.

³ Appendix II contains monthly reports that show: 1) the number of inspection facilities with create dates greater than or equal to 24 hours (1 day) from the test date, and 2) those facilities with create dates greater than or equal to 120 hours (5 days) from the test date.

inspection record, the retrieval process ignores that record as not existing for the purposes of that specific query. If the system was then queried using another set of criteria (for example, inspection type - initial, re-inspection, etc.) for which the record had information, it would be included in this query result. Therefore, depending on which field one selects for a query, the total numbers will vary slightly.

In addition to the query anomalies, certain reports have summaries that do not match due to the report architecture. For example, the sum of the emission component test failures is usually greater than the total number of emissions inspections because one emissions inspection can produce multiple component test failures.

However, a scenario occurs when analyzing reinspections that may cause the sum of the emission component tests to actually be lower than the total number of emissions inspections. The overall number of initial emission inspection failures includes those vehicles that failed the emission inspection automatically due to a safety reason (i.e. unsafe tires for an ASM5015 test) which inhibited emission testing. These vehicles will not receive any type of emission test until a passing subsequent inspection which rectifies the safety prohibition. When the initial inspection data is broken down by test type, these failures are not included, since they never received an emission test during the initial inspection.

Another factor affecting the reinspection results is that those vehicles that are "unclassified" (i.e. model year or vehicle type) at their initial inspection are often, upon reinspection, re-classified into the correct model year or vehicle type. This sometimes causes the retest pass rate to exceed 100%, which we have capped at 100% in the applicable tables in this report.

The OBDII pilot testing and the official start of OBDII testing that occurred in the year 2003 created some additional data anomalies. For instance, some vehicles may have received an initial OBDII test at a CIF, failed, and then were switched to the ASM5015 test upon re-inspection at a PIF due to program implementation issues. This caused the ASM5015 pass rate to exceed 100% if the total number passing the ASM5015 retest was greater than the total number that failed the initial ASM5015 test, for any given model year or vehicle type. Again, these numbers are capped at 100% in the applicable tables in this report.

The OBDII pilot testing that occurred in New Jersey this year created a unique situation in that any vehicle that failed OBDII during pilot testing got an automatic pass for that portion of the emissions inspection (although motorists were made aware of any failures found and advised to make repairs). As such, these "pilot fails" were not retest-eligible.

In addition, vehicles of model year 1996 and 1997 were included in the OBDII pilot testing, but were not included when OBDII testing officially began on August 4, 2003.

Official OBDII testing of 1996 and 1997 model years began on January 12, 2004 after we were confident that the inspection system could manage the potential impact of the readiness issues with these early OBD vehicles.

All initial emission inspection data presented in this report includes the OBDII pilot testing data because it presents the actual picture of initial emission inspection activity that occurred during this year. However, OBDII pilot fails are excluded from all reinspection analyses since they received an automatic pass and were therefore not subject to OBDII reinspection.

For comparison purposes, the OBDII pilot testing data is also broken out separately into its own table. It should be noted that, over time, it was discovered that many vehicles of model year 1996 and 1997 were OBDII problem vehicles with readiness and communication issues. The pilot analysis led to a deferral of 1996 and 1997 OBDII testing, during which program improvements increased accuracy to appropriate levels for a January 12, 2004 implementation. However, during pilot testing, these vehicles were included. Hence, there is a noticeable reduction in the OBDII failure rate following the conclusion of the pilot study and the commencement of official OBDII testing on model year 1998 and newer vehicles.

In addition, although vehicles that failed the OBDII pilot test were not required to be retested, there were some that did get retested. Likewise, when official OBDII testing began, some 1996 and 1997 model year vehicles were OBDII tested even though such testing was not required.

40 CFR 51.366 of the USEPA's final rule for the implementation of an enhanced I/M program covers data analysis and reporting. Specifically, this section requires the submission of annual reports to the USEPA to allow for monitoring and evaluation of the program. These reports must provide information regarding the types of program activities performed and their final outcomes, including summary statistics and effectiveness evaluations of the enforcement mechanism, the quality assurance system, the quality control program, and the testing elements. 40 CFR 51.366 is divided into four (4) data reporting areas: test data, quality assurance, quality control, and enforcement. As such, the remainder of this report discusses each of the areas in detail.

A. Test Data Report

This report includes statistical data from the fourth year of operation of New Jersey's enhanced gasoline-fueled I/M program. The report includes information on the number and types of inspections performed at both the centralized network and the decentralized network, and the final outcomes of these inspections. This report is specific to the emissions portion of the State's I/M program; no statistical information on the safety portion of the State's inspection program is included in this report.

Many of the inspection results in this report are presented by vehicle type. For the purpose of this analysis, the gasoline-fueled vehicle type categories are as follows:

<u>Light-Duty Gasoline-Fueled Vehicles (LDGVs)</u>: vehicles fueled on gasoline, which have a Gross Vehicle Weight Rating (GVWR), up to 8500 lb. (passenger cars).

<u>Light-Duty Gasoline-Fueled Trucks 1 (LDGT1s)</u>: trucks fueled on gasoline, which have a GVWR up to 6000 lb. (e.g., pick-ups, minivans, passenger vans, and sport-utility vehicles).

<u>Light-Duty Gasoline-Fueled Trucks 2 (LDGT2s)</u>: trucks fueled on gasoline that have a GVWR of 6001-8500 lb. (heavier version of LDGT1s; the categories are modeled separately because numerically different emission standards are established under the Clean Air Act (CAA) for LDGT1s and LDGT2s).

<u>Heavy-Duty Gasoline-Fueled Vehicles (HDGVs)</u>: vehicles fueled on gasoline which have a GVWR of 8501 lb. and higher and are equipped with heavy-duty gas engines.

There are four types of emission-related tests performed in New Jersey. They are the OBDII test, which is predictive and does not measure exhaust pollutants, and the three tailpipe exhaust emissions tests - the ASM5015 test, the 2500 revolutions per minute (RPM) test, and the idle test.

The OBDII test was implemented in New Jersey on August 4, 2003. Under a phase-in schedule, the OBDII test was performed on all model year 1998 and newer LDGVs, LDGT1s, and LDGT2s throughout the remainder of the year 2003, with OBDII testing of model year 1996 and 1997 LDGVs, LDGT1s, and LDGT2s scheduled to begin on January 12, 2004.

Prior to implementation, OBDII pilot testing was conducted at centralized inspection stations on model year 1996 and newer vehicles from March through May of 2003 and July through August 3, 2003. During pilot testing, any vehicle that failed the OBDII test was given an automatic pass for that portion of the emissions inspection. The motorists were made aware of any failures found and advised to make repairs.

The ASM5015 test is performed on all model year 1981 and newer LDGVs, LDGT1s, and LDGT2s that are amenable to dynamometer testing. The ASM5015 exhaust emission test measures vehicle tailpipe emissions of hydrocarbons (HC), carbon monoxide (CO) and nitric oxide (NO) while the vehicle is driven on a dynamometer under load at a steady state speed of 15 mph.

The 2500 RPM test is performed on those model year 1981 and newer LDGVs, LDGT1s, and LDGT2s that are not amenable to dynamometer testing (i.e., full time four wheel drive vehicles or vehicles with non-switchable traction control). This test measures vehicle tailpipe emissions of HC and CO while the vehicle's engine is not in gear and the engine speed is increased from idle to 2500 RPM.

Finally, the idle test is performed on pre-1981 LDGVs, LDGT1s, and LDGT2s, as well as all HDGVs regardless of model year. The idle test measures vehicle tailpipe emissions of HC and CO while the engine idles. The idle test is the test that was previously given to all vehicles under the State's basic I/M program.

The remainder of this section is divided into separate topics: total emission inspections, initial emission inspections, OBDII inspections, random roadside inspections, emission re-inspections, waivers, tests with no known final outcome, and emission repairs. Each of these topics presents data and figures representing inspection volumes and percentages for the year 2003.

Total Emissions Inspections

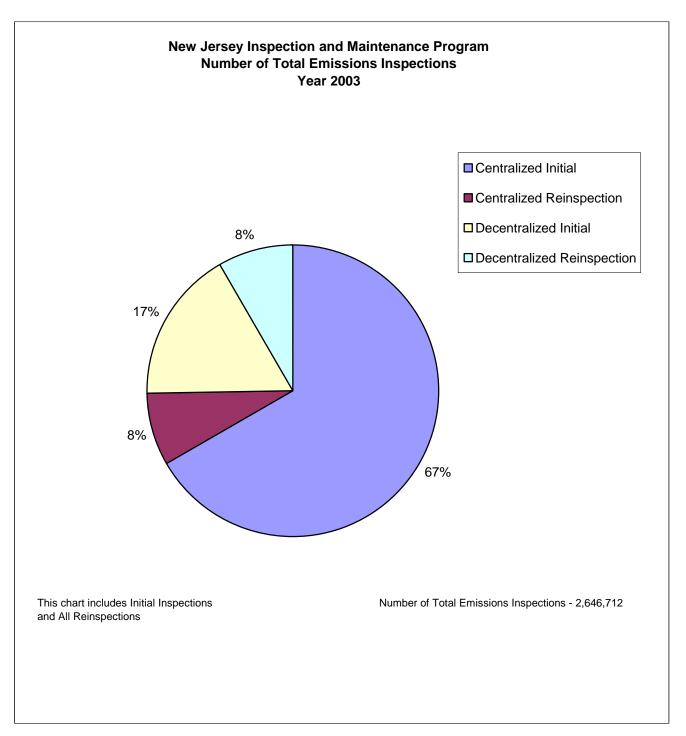
There were 2,646,712 total emissions inspections performed in New Jersey during calendar year 2003. This includes initial inspections and all re-inspections. Of the total emissions inspections performed, 2,214,245 (83.7 percent) were initial inspections, and 432,467 (16.3 percent) were re-inspections (first re-inspections and second and subsequent re-inspections). Table 3 provides a detailed summary of the total emissions inspections performed.

Table 3: Total Emissions Inspections

Test Station	Data	Initial	Reinspection	Grand Total
Centralized	# of Inspections	1,759,452	209,587	1,969,039
Inspection Facility	# Fail	198,672	49,956	248,628
	# Pass	1,560,780	159,631	1,720,411
Mobile Inspection	# of Inspections	3,151	3,268	6,419
Team	# Fail	591	587	1,178
	# Pass	2,560	2,681	5,241
Private Fleet Facility	# of Inspections	7,066	787	7,853
,	# Fail	337	112	449
	# Pass	6,729	675	7,404
Private Inspection	# of Inspections	444,312	218,727	663,039
Facility	# Fail	45,538	21,511	67,049
·	# Pass	398,774	197,216	595,990
Specialty Inspection	# of Inspections	264	98	362
Facility	# Fail	29	12	41
	# Pass	235	86	321
Total # of inspections		2,214,245	432,467	2,646,712
Total # Fail		245,167	72,178	317,345
Total # Pass		1,969,078	360,289	2,329,367
% of Grand Total # of Inspections		83.7%	16.3%	·

Of the total number of emissions inspections, 1,975,820 (74.7 percent) were performed by the centralized network (CIFs, SIFs, and MITs), while 670,892 (25.3 percent) were performed by the decentralized network (PIFs and PFFs). A graphical representation of this centralized/decentralized split is shown in Figure 2 on the following page.

<u>Figure 2</u>: Total Emissions Inspections – Centralized/Decentralized Split



Initial Emission Inspections

Initial overall emission inspection results by model year and station type for the year 2003 are shown in Appendix I – Part B. There were 2,214,245 initial overall emission inspections conducted in New Jersey in the year 2003. Of the total number of initial overall emission inspections, 1,762,833 (79.6%) were performed by the centralized network, while the remaining 451,412 (20.4%) were performed by the decentralized network.

The initial overall emission failure rate for the entire network was 11.1%. The centralized initial overall emission failure rate was 11.3% and the decentralized initial overall emission failure rate was 10.2%.

A further look at the initial overall emission inspection results by each individual CIF is presented in Appendix I – Part C. The initial overall emission failure rates at the CIFs ranged from 6.5% (Ridgewood) to 17.2% (Newark). The highest volume CIF was Wayne (eight lanes), with a total of 98,903 initial overall emission inspections and a 10.8% initial overall emission failure rate, and the lowest was Bridgeton (one lane), with a total of 16,237 initial overall emission inspections and an 13.9% initial overall emission failure rate.

A breakdown of the initial emission inspection volume by model year and vehicle type is presented in Appendix I – Part D. The initial emission inspection volume consisted of 1,459,616 (65.9%) LDGVs, 524,908 (23.7%) LDGT1s, 157,402 (7.1%) LDGT2s, 59,645 (2.7%) HDGVs, and 12,674 (0.6%) vehicles of unknown type.

An overall emission inspection consists of several components. These components include an OBDII test or a tailpipe exhaust emission test (ASM5015, 2500 RPM, or idle), and three additional emission-related tests that vehicles may be subjected to. The three additional emission-related tests are a visual anti-tampering inspection (also called the catalytic converter check), a visible smoke inspection, and an evaporative gas cap inspection.

The visual anti-tampering inspection, or catalytic converter check, is performed on all 1975 and later model year vehicles originally equipped with a catalytic converter. It is designed to ensure the presence of a catalytic converter. The visible smoke inspection is performed on all gasoline-fueled vehicles, regardless of model year, and checks for the presence of any visible continuous smoke emitted from either the tailpipe or the crankcase. The evaporative gas cap inspection is performed on all 1971 and later vehicles originally equipped with a sealed gas cap. This test is designed to detect any leaks in the gas cap itself or the cap seal by pressurizing the cap and monitoring the pressure decay or flow rate over time.

Of the 2,214,245 initial overall emission inspections, 1,969,078 (88.9%) passed, while 245,167 (11.1%) failed at least one emission inspection component. Table 4 shows the number of failures and failure rate for each initial emission inspection test type. As some initial overall emission inspections resulted in multiple test type failures, Table 4 reflects multiple counting of any such inspection.

In addition, the OBDII data in Table 4 is presented both with the pilot fails and without the pilot fails. During pilot testing, any vehicle that failed the OBDII test was given an automatic pass for that portion of the emissions inspection, although motorists were made aware of any failures found and advised to make repairs. In addition, pilot testing included model year 1996 and 1997 vehicles, which were not included when OBDII testing was officially implemented on August 4, 2003.

Table 4: Initial Failure Rate by Emission Test Type

Test Type	# Fail	Failure Rate
OBDII, including pilot fails	25,144	5.4%
OBDII, pilot fails excluded	13,769	3.0%
ASM5015	121,886	8.2%
2500 RPM	7,323	5.2%
Idle	9,976	11.0%
Gas Cap	57,970	2.7%
Catalytic Converter	997	0.05%
Visible Smoke	15,955	0.72%

More detailed information on the initial emission inspection failures by test type is presented by model year and vehicle type in Appendix I – Part E.

OBDII Inspections

As discussed previously, OBDII testing of model year 1998 and newer LDGVs, LDGT1s, and LDGT2s was implemented on August 4, 2003.

The OBDII system monitors virtually every component that can affect the emission performance of the vehicle. If a problem is detected, the OBDII system illuminates a warning lamp (Malfunction Indicator Light, or MIL) on the vehicle instrument panel to alert the driver. The system will also store important information (Diagnostic Trouble Codes, or DTCs) about the detected malfunction so that a repair technician can accurately find and fix the problem.

The OBDII test allows inspectors to read a vehicle's OBDII computer to determine if there have been any malfunctions in the emissions-related systems, and replaces the traditional tailpipe emissions test for these vehicles. The OBDII test also ensures that the OBDII system itself is functioning properly.

New Jersey conducted OBDII pilot testing from March through May of 2003 and July through August 3, 2003. Vehicles of model year 1996 and newer were OBDII tested. The purpose of the pilot testing was to ensure that the OBDII testing system was functioning properly before official implementation began.

The OBDII test was officially implemented in New Jersey on August 4, 2003. Under a phase-in schedule, the OBDII test was performed on all model year 1998 and newer LDGVs, LDGT1s, and LDGT2s throughout the remainder of the year 2003, with OBDII testing of model year 1996 and 1997 LDGVs, LDGT1s, and LDGT2s scheduled to begin on January 12, 2004.

Elements of the OBDII Test

The OBDII test encompasses a visual check of the dashboard display function and status and an electronic examination of the OBDII computer itself. It consists of the following individual elements: the Malfunction Indicator Light (MIL) bulb check, the data link connector (DLC) status, the vehicle readiness status, the MIL status (whether commanded on or off), and the Diagnostic Trouble Codes (DTCs) check for those vehicles with MILs commanded on.

In New Jersey, the DLC status is checked first; if the DLC is damaged, missing, or obstructed, the motor vehicle has failed the OBDII test. If the DLC is present and accessible, the OBDII analyzer is connected to the DLC with the motor vehicle's engine turned off. The MIL bulb check test is then performed by briefly turning the motor vehicle ignition system to the Key On Engine Off (KOEO) position. If the MIL is not functional, the motor vehicle has failed the OBDII test.

For the remainder of the OBDII inspection, the motor vehicle is then started and left running (Key On Engine Running, or KOER) to allow the OBDII analyzer to attempt to communicate with the motor vehicle's OBDII system. If the analyzer cannot successfully communicate with the motor vehicle's OBDII system, the motor vehicle has failed the OBDII test. There are some vehicles of certain makes and models that have known OBDII communication problems. These vehicles are exempt from OBDII testing and instead are given an ASM5015 tailpipe emissions test. This is explained in more detail further in this section.

If the OBDII analyzer successfully communicates with the motor vehicle OBDII system, it will then retrieve stored information relating to the identification of the motor vehicle and any malfunctions recorded by the OBDII system. If the analyzer determines that the OBDII system or the motor vehicle is malfunctioning, the motor vehicle has failed the OBDII test. During this element of the OBDII test, the MIL command status is the ultimate determinant of pass/fail status. If any DTCs are present and the MIL status (as indicated by the OBDII analyzer) is commanded on, the motor vehicle has failed the OBDII test. A vehicle with DTCs present and the MIL status (as indicated by the OBDII analyzer) is commanded off, the motor vehicle does not fail the OBDII test.

If the analyzer indicates that the motor vehicle does not meet the USEPA's criteria for "readiness", that is, if the vehicle's OBDII system does not indicate that the critical number of supported readiness monitors have been set, the motor vehicle is deemed "not ready" for an OBDII test and has failed the OBDII test. There are certain makes and models of vehicles that have known readiness problems. These vehicles are exempt from the readiness element of the OBDII test, but still subject to all of the other elements of the OBDII test. This is explained in more detail further in this section.

If the analyzer indicates that the motor vehicle is deemed "ready" and determines that all components of the OBDII system are functioning properly, and the OBDII system is not indicating any malfunctions of the motor vehicle, then the motor vehicle has passed the OBDII test.

Exemptions from Readiness and/or OBDII

The OBDII system monitors the status of up to eleven emission control related subsystems by performing either continuous or periodic functional tests of specific components and vehicle conditions. The periodic, or non-continuous, monitors only run after a certain set of conditions has been met. The algorithms for running these non-continuous monitors are unique to each motor vehicle manufacturer and involve such things as ambient temperature as well as driving conditions.

When a motor vehicle is OBDII-tested, these monitors can appear as either "ready" (the monitor has been evaluated), "not ready" (the monitor has not been evaluated), or "not applicable" (the motor vehicle is not equipped with the monitor in question).

In New Jersey, the USEPA's document "Performing Onboard Diagnostic System Checks as Part of a Vehicle Inspection and Maintenance Program", June 2001, (see Appendix V) is followed. This guidance allows two monitors to be "not ready" for model year 1996 through 2000 motor vehicles and one monitor to be "not ready" for model year 2001 and newer motor vehicles. Motor vehicles not ready fail the OBDII test.

For those OBDII motor vehicles with known readiness problems (from USEPA OBDII guidance), New Jersey maintains a lookup table on the inspection analyzers that will ignore readiness status on those vehicles. Motor vehicles exempted from readiness still get an OBDII test, but the readiness result is ignored.

This lookup table is also used to exempt motor vehicles with known communications problems from the OBDII test. For those vehicles unable to communicate, the MIL itself, rather than the MIL command status, is used to determine pass/fail status. If the MIL illuminates continuously or flashes in KOER position, the vehicle has failed the OBDII test. Otherwise, the vehicle will get the ASM5015 tailpipe exhaust emissions test.

New Jersey also has a mechanism available to the decentralized network (PIFs) to manually "bypass" the OBDII test (and run an ASM5015 test) for those motor vehicles that they have demonstrated they can't get ready or can't communicate with. Each time the bypass is used, the PIF Inspector is required to fill out and fax an OBDII Bypass Form to the NJDEP explaining why it was used. The NJDEP monitors the bypasses closely to ensure that it is not widely abused. During the year 2003, there were 3,303 bypasses, which is approximately 1% of the total number of initial OBDII tests.

This option is not available to the centralized Inspectors because they don't have the time and diagnostic tools to verify communications, run drive cycles, etc. like a PIF garage can. This bypass mechanism serves as an acceptable alternative inspection method for the undocumented and one-of-a-kind OBDII problem vehicles, and allows the State to look for pattern communications problems with certain vehicles or analyzers.

Summary of OBDII Test Data

During the OBDII pilot testing phase, vehicles that failed the OBDII pilot test were given an automatic pass for that portion of the emissions inspection, since the OBDII test was not yet an officially required test. The motorists were made aware of any failures found and advised to make repairs. As such, these vehicles were not subject to a reinspection for that portion of the emissions inspection.

All initial emission inspection data presented in this 2003 Annual Report includes the OBDII pilot testing data. Even though it was not yet a required test, including this data presents the actual picture of initial emission inspection activity that occurred during this year. However, OBDII pilot fails are excluded from all reinspection analyses since they received an automatic pass and were therefore not subject to OBDII reinspection. There were a total of 465,605 initial OBDII tests in the year 2003. Of these, 11,375 (2.4%) were OBDII pilot fails, 449,396 (96.5%) passed either initially or a first or subsequent retest, and approximately 4,844 (1%) failed and dropped out of the inspection cycle without ever having passed. This information is presented in more detail by model year and vehicle type in Appendix I - Part F, Table F-1.

OBDII initial test results were further analyzed by direct comparison to initial gas cap evaporative test results, by a comparison of the MIL status in relation to the presence of DTCs, and by readiness status.

There were 444,977 initial tests for both OBDII and gas cap. Table 5 presents a direct comparison of the results of these two tests.

Table 5: Comparison of Initial OBDII and Gas Cap Test Results

Scenario	# of Tests	% of Tests
Passed Both OBDII and Gas Cap	431,735	97%
Passed OBDII and Failed Gas Cap	11,010	2.5%
Failed OBDII and Passed Gas Cap	2,089	0.5%
Failed Both OBDII and Gas Cap	143	0.03%
Totals	444,977	100%

More detailed information on OBDII and gas cap testing by model year and vehicle type is presented in Appendix I - Part F, Table F-2.

There were 460,815 initial OBDII MIL tests. Table 6 presents the results of the OBDII MIL tests in comparison to the presence of DTCs.

<u>Table 6</u>: OBDII Malfunction Indicator Light (MIL) Test Results

Scenario	# of Tests	% of Tests
MIL Off with No DTCs	446,458	96.9%
MIL Off with DTCs	0	0.0%
MIL On with No DTCs	234	0.1%
MIL On with DTCs	14,123	3.1%
Totals	460,815	100%

More detailed information on OBDII MIL tests by model year and vehicle type is presented in Appendix I - Part F, Table F-3.

There were 460,876 initial readiness tests. Of these, 429,239 (93.1%) had all monitors set, while 31,637 (6.9%) had unset monitors. More detailed information by model year and vehicle type is presented in Appendix I - Part F, Table F-4.

In the year 2003, there were 735 OBDII failures that were switched to tailpipe testing upon retest. This situation mainly occurs when a vehicle fails the OBDII test at a CIF and then is re-tested at a PIF. The reason this occurs varies, but can generally be grouped into one of the following categories:

<u>By-Passes</u>: The vehicle should have been on the OBDII exemption list when initially tested, but wasn't recognized due to a variant year/make/or model Inspector entry that differed from that appearing on the exemption list. It is then recognized at the retest. <u>Communications</u>: The PIF is unable to communicate with the vehicle's OBDII system. This could be due to a vehicle that needed to be added to the exemption list, or again, a variant in the year/make/or model Inspector entry that differed from that appearing on the exemption list. In another communications scenario, a PIFs OBDII tester may not communicate, but an independent scan tool will. In this case a by-pass of the OBDII test is allowed.

<u>Software Issues</u>: At OBDII program start-up, some PIFs were not capable of doing OBDII inspections due to software issues.

<u>Procedural Issues</u>: Some Inspectors initially had difficulty recognizing OBDII vehicles during rollout of the program.

Of the 735 OBDII failures switched to tailpipe testing, 716 (97.4%) passed the first or subsequent tailpipe retest, while 19 (2.6%) failed tailpipe testing and dropped out of the inspection cycle without ever having passed. This information is presented in more detail by model year and vehicle type in Appendix I - Part F, Table F-5.

For comparison purposes, the OBDII pilot tests are also broken out and analyzed separately. There were 158,128 initial OBDII pilot tests. Of these, 146,753 (92.8%) passed, while 11,375 (7.2%) failed. More detailed information is presented by model year and vehicle type in Appendix I - Part F, Table F-6.

Finally, Appendix I - Part F, Table F-7 presents a breakdown of the OBDII pilot fails only by model year and vehicle type. Of the 25,144 total initial OBDII failures, 11,375 (45.2%) were pilot fails.

Random Roadside Inspections

Random roadside inspections are conducted in New Jersey by MVC's Mobile Inspection Teams (MITs). The MITs perform either an idle test (if the vehicle is a pre-1981 model year) or a 2500 RPM test (if the vehicle is a 1981 or newer model year).

A total of 6,419 MIT inspections were performed in the year 2003. This is 0.3% of the total number of initial emissions inspections. Of these roadside inspections, 5,241 (81.6%) vehicles passed while 1,178 (18.4%) failed. Those failing require repair and reinspection at an authorized inspection facility (either CIF or PIF). Table 7 shows the pass/fail breakdown of MIT inspections.

Table 7: Random Roadside Inspections

Table 1 Random Reducide mepeensie					
	# of Inspections	Pass/Fail Rates			
Pass	5,241	81.6%			
Fail	1,178	18.4%			
Total	6,419				

Emission Re-Inspections

There were 245,167 overall initial emission inspection failures out of the 2,214,245 total initial overall emission inspections conducted in the year 2003. Vehicles failing their initial inspection are required to be repaired and re-inspected. In some cases, initially failed vehicles required multiple re-inspections before either passing or receiving a waiver from the inspection requirements.

For the purposes of this report, the re-inspection data is analyzed by emission inspection test type (i.e., OBDII test, ASM5015 test, 2500 RPM test, idle test, gas cap, catalytic converter, and visible smoke). Re-inspections are also broken down into two categories: first re-tests, and second or subsequent re-tests.

In addition, all re-inspection data is presented as a fraction of initially failed tests. By presenting the data in this manner, all initially failed tests can be tracked and grouped by number and fraction into one of the following final outcomes: passing a first retest, passing a second or subsequent retest, receiving a waiver, or dropping out of the cycle (i.e. failed and never returned and/or never received a passing emission inspection).

When analyzing the data by total test failures, there were 239,251 initially failed emission inspection tests in the year 2003. This number is simply the sum of the number of initially failed tests for each emission test type. Normally this number would be higher than the number of overall initial emission inspection failures (245,167) noted above (since a vehicle can fail more than one emission test type). However, the overall number of initial emission inspection failures includes those vehicles that failed the emission inspection automatically due to a safety reason that inhibited emission testing (i.e. unsafe tires for ASM5015 testing), and were not emission tested during the initial inspection. There were approximately 31,342 initial inspection failures of this type. When the inspection data is broken down by test type, these failures are not included, since they are emission tested only after a subsequent inspection rectifies the safety prohibition.

In the year 2003, there were also 11,375 OBDII pilot failures that were not required to be repaired and re-inspected. The motorists were made aware of any failures found and advised to make repairs. As such, these vehicles are not retest eligible and are therefore not included in the re-inspection analyses presented in this report. Instead, additional information can be found on these OBDII pilot failures in the OBDII Section beginning on page 19 of this report. These 11,375 OBDII pilot failures represent 4.8% of the total number of initially failed emission inspection tests (239,251). Subtracting them gives a total number of 227,876 initially failed tests that are retest eligible.

Table 8 on the following page shows the number of initial fails, number failing first retest, number passing first retest, percent failing first retest, and percent passing first retest for

each emission test type for the year 2003. Note that the percentages failing and passing the first retest do not add up to 100% because they are shown as percentages of the number of initial failures, rather than the number of first retests.

<u>Table 8</u>: Initially Failed Tests Failing/Passing First Retest by Emission Test Type

				%	%
		# Fail	# Pass	Failing	Passing
	# Initial	First	First	First	First
Test Type	Fails	Retest	Retest	Retest	Retest
OBDII, pilot fails excluded	13,769	2,238	7,564	16.3%	54.9%
ASM5015	121,886	20,239	72,517	16.6%	59.5%
2500 RPM	7,323	1,014	4,015	13.8%	54.8%
Idle	9,976	1,457	6,495	14.6%	65.1%
Gas Cap	57,970	901	37,554	1.6%	64.8%
Catalytic Converter	997	26	496	2.6%	49.7%
Visible Smoke	15,955	1,009	10,205	6.3%	64.0%
Total	227,876	26,884	138,846	11.8%	60.9%

Table 9 shows the number of initial fails and the number and percent of second or subsequent retest passes for each emission test type for the year 2003.

<u>Table 9</u>: Initially Failed Vehicles Passing Second or Subsequent Retest by Emission Test Type

	# Initial	# Pass 2 nd or	% Pass 2 nd or
Test Type	Fails	Subsequent Retest	Subsequent Retest
OBDII, pilot fails excluded	13,769	1,384	10.1%
ASM5015	121,886	15,406	12.6%
2500 RPM	7,323	799	10.9%
Idle	9,976	1,149	11.5%
Gas Cap	57,970	687	1.2%
Catalytic Converter	997	24	2.4%
Visible Smoke	15,955	1,178	7.4%
Total	227,876	20,627	9.1%

Appendix I – Part G contains more detailed information on first re-tests by model year and vehicle type, while Appendix I – Part H contains more detailed information on second or subsequent re-tests by model year and vehicle type.

<u>Waivers</u>

In New Jersey, a vehicle that fails its ASM5015 exhaust emission test or its OBDII test can be waived from the inspection requirement. To receive a waiver, the vehicle must be able to pass an idle exhaust emission test (the inspection test used by the State for all vehicles in its basic I/M program, when no waivers were available), as well as the other emission-related component tests. In addition, the vehicle owner must have invested a minimum amount of monies toward emission-related repairs appropriate to the cause of the test failure. In the year 2003, that minimum cost expenditure was \$450.00.

In the case of repairs conducted by a registered ERF, both parts and labor costs may be applied towards a waiver. In the case of owner-performed repairs, only the cost of parts may be applied towards a waiver. Non-ERF or non-owner repairs are not eligible when applying for a waiver.

In the year 2003, a total of 136 vehicles were granted waivers after initially failing an ASM5015 exhaust emission test or an OBDII test. This accounts for only 0.1 percent of the 135,655 vehicles that initially failed the ASM5015 exhaust emission test or OBDII test (OBDII pilot fails excluded). Table 10 on the following page shows more details on the waivers issued by model year and vehicle type.

Table 10: Waiver Report by Model Year and Vehicle Type

Model	Vehicles Initially Failing ASM5015 or	Waivers Received		Waivers for	Waivers for LDGT1	Waivers for LDGT2
Year	OBD Test	Number	%	Vehicles	Vehicles	Vehicles
Unknown	54	0	0.00%	0	0	0
1981	989	1	0.10%	1	0	0
1982	596	2	0.34%	2	0	0
1983	2,382	2	0.08%	2	0	0
1984	1,953	3	0.15%	3	0	0
1985	6,516	8	0.12%	8	0	0
1986	3,871	8	0.21%	8	0	0
1987	11,350	8	0.07%	8	0	0
1988	5,966	3	0.05%	2	0	1
1989	13,361	17	0.13%	13	3	1
1990	6,833	6	0.09%	5	1	0
1991	18,601	25	0.13%	22	3	0
1992	7,927	7	0.09%	6	1	0
1993	17,327	25	0.15%	16	8	1
1994	4,857	8	0.17%	5	3	0
1995	9,223	8	0.09%	7	1	0
1996	3,207	3	0.09%	1	2	0
1997	4,526	2	0.04%	0	2	0
1998	4,503	0	0.00%	0	0	0
1999	5,168	0	0.00%	0	0	0
2000	3,675	0	0.00%	0	0	0
2001	1800	0	0.00%	0	0	0
2002	670	0	0.00%	0	0	0
2003	241	0	0.00%	0	0	0
2004	59	0	0.00%	0	0	0
TOTAL	135,655	136	0.10%	109	24	3
% of Waiv	ers Issued by Vehicle	80%	18%	2%		

Report includes only inspection records where the vehicle failed the Initial ASM 5015 or OBD test.

Tests With No Known Final Outcome

As mentioned previously, some vehicles were subject to multiple re-inspections before either passing emission inspection or being waived from the inspection requirements.

Of the 227,876 initial emission inspection test failures (OBDII pilot fails excluded), 138,846 (60.9%) passed a first retest, 20,627 (9.1%) passed a second or subsequent retest, 136 (.06%) received a waiver, and 68,530 (30.1%) failed initial tests had no known final outcome (i.e. dropped out of the inspection cycle without ever having passed an emission inspection or received a waiver).

Table 11 shows the number of initial fails and the number and percent of "dropped" tests for each emission test type for the year 2003.

Table 11: Initially Failed Tests with No Known Final Outcome by Test Type

	# Initial		
Test Type	Fails	# Dropped Tests	% Dropped Tests
OBDII, pilot fails excluded	13,769	4,844	35.2%
ASM5015	121,886	34,015	27.9%
2500 RPM	7,323	2,510	34.3%
Idle	9,976	2,366	23.7%
Gas Cap	57,970	19,732	34.0%
Catalytic Converter	997	481	48.2%
Visible Smoke	15,955	4,582	28.7%
Total	227,876	68,530	30.1%

There was a total of 68,530 emissions tests with no known final outcome for the year 2003. This analysis takes into consideration vehicles inspected late in the year 2003 that returned for inspection in the early months of 2004. In the year 2003, there were 8,764,708 total initial emissions tests (this number is simply the sum of the number of initial tests for each emission test type; there are usually multiple emissions tests per vehicle/inspection). As such, the overall drop rate (tests with no known final outcome) as a percentage of total initial emissions tests is 0.8%.

Table 12 on the following page presents a detailed breakdown of this data by model year and vehicle type.

Table 12: Tests With No Known Final Outcome

Table 12. Test					Vehicle Type		
	Overall # Tests	% of Total Tests	# LDGV	# LDGT1	# LDGT2	# HDGV	# Unknown
Model Year	Dropped	Dropped	Tests	Tests	Tests	Tests	Tests
Pre79/Unknown	1,402	2.05%	881	192	185	108	36
1979	479	0.70%	263	77	99	34	6
1980	177	0.26%	88	35	21	32	1
1981	456	0.67%	303	87	25	39	2
1982	347	0.51%	215	68	27	31	6
1983	949	1.38%	685	143	70	43	8
1984	1,115	1.63%	719	183	93	114	6
1985	2,599	3.79%	1,773	465	211	137	13
1986	2,143	3.13%	1,493	360	133	145	12
1987	4,471	6.52%	3,441	588	240	188	14
1988	2,871	4.19%	1,910	635	189	118	19
1989	5,263	7.68%	3,546	1,132	298	267	20
1990	3,225	4.71%	2,382	580	129	118	16
1991	6,531	9.53%	4,858	1,207	190	260	16
1992	3,278	4.78%	2,273	642	136	201	26
1993	6,375	9.30%	4,302	1,469	246	313	45
1994	2,588	3.78%	1,610	548	134	272	24
1995	4,573	6.67%	2,754	962	315	531	11
1996	1,960	2.86%	1,069	491	87	300	13
1997	3,380	4.93%	1,806	713	214	614	33
1998	3,037	4.43%	1,847	695	179	306	10
1999	4,023	5.87%	2,408	815	223	541	36
2000	3,656	5.33%	2,183	930	299	224	20
2001	2,322	3.39%	1,151	648	203	311	9
2002	947	1.38%	494	302	68	79	4
2003	282	0.41%	135	59	24	61	3
2004	81	0.12%	34	3	3	40	
Totals	68,530	100.00%	44,623	14,029	4,041	5,427	410
Percent of Total			65.1%	20.5%	5.9%	7.9%	0.6%

Emissions Repair

An analysis of the first retest pass rate is presented here as an indicator of repair effectiveness. The data is presented as a fraction of the actual number of first retests conducted, rather than the number of initially failing tests. A higher first retest pass rate could indicate a more effective repair. Table 13 presents first retest fail and pass rates by emission test type.

Table 13: First Retest Fail/Pass Rates by Emission Test Type

	# First				
Test Type	Retests	# Fail	# Pass	Fail Rate	Pass Rate
OBDII, pilot fails excluded	9,802	2,238	7,564	22.8%	77.2%
ASM5015	92,756	20,239	72,517	21.8%	78.2%
2500 RPM	5,029	1,014	4,015	20.2%	79.8%
Idle	7,952	1,457	6,495	18.3%	81.7%
Gas Cap	38,455	901	37,554	2.3%	97.7%
Catalytic Converter	522	26	496	5.0%	95.0%
Visible Smoke	11,214	1,009	10,205	9.0%	91.0%

Additional information on first retest fail and pass rates by model year and vehicle type is presented in Appendix I – Part K.

In addition, average emission results prior to and after repairs were used to determine the effectiveness of repairs. The vehicles included in this analysis were those that failed the applicable exhaust emission test, were repaired, and subsequently passed a reinspection.

For those vehicles which failed the ASM5015 exhaust emission test and were subsequently repaired to pass re-inspection, the program resulted in a 51.8 percent reduction in hydrocarbon emissions, a 65.3 percent reduction in carbon monoxide emissions and a 44.3 percent reduction in nitrogen oxide (NO_x) emissions. These are combined totals from those vehicles tested in both the CIFs and PIFs.

Table 14 on the following page presents a breakdown of the emissions reductions data by CIF and PIF. Emissions reductions are attributed to a CIF if both the "before" and "after" repair inspections were performed at a CIF, and to a PIF if both the "before" and "after" repair inspections were performed at a PIF.

Table 14: Percent Reductions from Repairing to the ASM5015 Exhaust Emissions Test

	CIF	PIF	Total
Hydrocarbons	32.9%	65.5%	51.8%
Carbon Monoxide	47.9%	79.4%	65.3%
Nitrogen Oxide	27.9%	60.8%	44.3%

A more detailed analysis by model year and vehicle type is presented in Appendix I – Part L.

B. Quality Assurance Report

Every enhanced I/M program is required to have an on-going quality assurance program designed to discover, correct, and prevent fraud, waste, and abuse of the system. In addition, the quality assurance program should help the State assess whether or not inspection procedures are being properly implemented and are adequate to address the emissions problems for that area. New Jersey's quality assurance program primarily focuses on audits of the inspectors and the inspection process.

In New Jersey, overt and covert performance audits are conducted by the NJMVC at both the CIFs and the PIFs. Overt performance audits are open audits (i.e., the auditor's presence is known by the inspectors and facility management/owners) of the inspectors' performance of procedures and their ability to correctly apply vehicle characteristics to ensure the correct test and standards are used on the vehicle. Covert performance audits, on the other hand, allow the State to evaluate overall facility and inspector performance when the CIF or PIF is unaware they are being observed.

As discussed previously, in the year 2003, New Jersey's I/M program network consisted of 32 CIFs, with a combined total of 124 ASM lanes, and 1,406 licensed PIFs. Each of these facilities received at least one overt performance audit in 2003. This information is shown in Table 15. The NJMVC auditors generally conduct these performance audits by observing the inspectors under real world conditions and conducting record checks at the CIF and PIF facilities.

Table 15: Overt Performance Audits

	CIFs	PIFs
# receiving overt performance audits	32	1,406
# not receiving overt performance audits	0	0
# shut down as a result of overt performance audits	0	25

Covert performance audits are more time consuming and resource intensive. The covert vehicle is often set to fail inspection, so that the State already knows what the results of the inspection should be prior to the actual inspection. The test results are then monitored to see if the inspection results are correct to the conditions of the audit scenario. Covert audits can be conducted with the vehicle set to fail the appropriate exhaust emission test, the visual anti-tampering (catalytic converter) inspection, the evaporative gas cap inspection, or any combination of two or more of these inspections.

Covert performance audits detect one of two situations: either the vehicle fails inspection when it should have passed or the vehicle falsely passes inspection. The first situation, failing a vehicle that should have passed inspection, is most likely due to an equipment

malfunction or poor inspector training and is a consumer protection issue. The covert audits from the year 2003 indicate that this first situation does not often occur. The second situation, passing vehicles that should have failed inspection, occurs more often. This type of situation is indicative of the program not correctly identifying those vehicles that need repair, and therefore not successfully meeting its intended goal. A "false pass" happens when an inspected item that was intentionally set to fail inspection is passed by the inspector or the equipment through improper testing, equipment malfunction, or fraudulent activity (i.e., purposefully passing a vehicle even though the vehicle has a known emissions problem). The covert performance audits are specifically designed to detect and correct these situations, either through increased training, equipment repairs, and if necessary, disciplinary action for fraudulent activity.

In the year 2003, the NJMVC had 10 covert auditors and 50 covert vehicles available to conduct covert performance audits. During the year 2003, all 32 CIFs and 1,326 of the 1,406 PIFs received covert performance audits. A total of 1,805 covert audits were performed on the CIFs and 1,326 were performed on the PIFs.

Table 16 shows the number of covert performance audits set to fail the various emissions-related inspection components. Because a covert vehicle may be set to fail multiple components, the data in Table 16 reflects double counting of any such vehicle.

Table 16: Covert Performance Audits

Note: Data in this table reflects double counting of vehicles set to fail multiple components.					
	CIFs	PIFs			
# conducted with the vehicle set to fail the exhaust test	51	85			
# conducted with the vehicle set to fail the component check	246	163			
# conducted with the vehicle set to fail the evaporative gas cap test	1,409	1,028			
# conducted with the vehicle set to fail any combination of two or more of the above tests	34	38			
# conducted with the vehicle not set to fail any emission inspection component	133	78			
Total # of Covert Audits	1,805	1,326			

Table 17 provides the breakdown by emissions-related component for those vehicles falsely passed during a covert performance audit. Because a covert performance audit may result in a false pass for multiple components, the data in Table 17 reflects double counting of any such audit.

Table 17: False Pass Results From Covert Performance Audits

Note: Data in this table reflects double counting of audits falsely passing multiple components.					
	CIFs	PIFs			
Total # of Covert Audits	1,805	1,326			
# of audits resulting in a false pass for the exhaust test	1	25			
# of audits resulting in a false pass for the component check	18	37			
# of audits resulting in a false pass for the evaporative gas cap test	11	138			
# of audits resulting in a false pass for any combination of two or more of the above tests	0	2			
# of audits resulting in a false pass for any non-emissions related component	132	76			
# of audits resulting in a proper inspection	1,520	651			

In the year 2003, the overall covert performance audit failure rate was 30.7%. The failure rate for the centralized network alone was 15.8%, while that for the decentralized network was 50.9%. This information is presented in Table 18.

Table 18: Covert Performance Audit Results

Network	Total Audits	Number Fail	Failure Rate	Number Pass	Pass Rate
Centralized	1,805	285	15.8%	1,520	84.2%
Decentralized	1,326	675	50.9%	651	49.1%
Total	3,131	960	30.7%	2,171	69.3%

The covert audit failure rate for the decentralized network is much higher than that of the centralized network. However, it is important to note that the decentralized network covert audits are quite different than those of the centralized network, and they contain some elements, such as invoicing and bookkeeping checks, that are not applicable to the centralized network.

New Jersey had 4,142 licensed inspectors conducting emission tests in both the CIFs and PIFs during the year 2003. Of these inspectors, 37 were suspended, fired, or otherwise prohibited from conducting emission inspections as a result of covert performance audits. In addition, 12 inspectors were suspended, fired, or otherwise prohibited from testing for other causes (such as stealing/selling inspection stickers, official misconduct, fraudulent/improper record keeping, or overcharging for inspection). A total of 96 inspectors were fined during the year 2003.

The NJMVC conducted 282 hearings to consider adverse actions against inspectors and inspection facilities, and 208 of these hearings resulted in adverse actions against inspectors and inspection facilities. The remaining 74 resulted in no adverse action. A total of \$98,300 in fines was collected from either the State's centralized contractor, or from individual PIFs. The amount of the individual fine varies depending on the specific violation. Table 19 summarizes the results of all adjudicated actions only during the year 2003.

Table 19: Fines and Hearings

	Inspectors	Facilities
# suspended, fired, or otherwise prohibited from testing as a result of covert audits	37	13
# suspended, fired, or otherwise prohibited from testing for other causes	12	12
# that received fines	96	45
# of hearings held to consider adverse actions	215	67
# of hearings held resulting in adverse actions	150	58
Total amount collected in fines	\$54,300	\$44,000

C. Quality Control Report

New Jersey's quality control program is designed to ensure that emission measurement equipment is calibrated and maintained properly, and that inspection, calibration records, and control charts are accurately created, recorded and maintained. Unlike the quality assurance program discussed in Section B, the quality control program focuses more directly on the emission testing equipment and its performance, rather than the overall performance of the inspectors and the inspection process.

The primary component of New Jersey's quality control program is system-wide equipment audits. An equipment audit is an evaluation of the performance of the emission testing equipment itself. Since New Jersey's inspection system network is hybrid, consisting of both centralized and decentralized testing facilities, the quality control program is more complex than in other states.

A CIF equipment audit consists of the following tests: inspection of the weather station, system leak check, five (5) point gas analysis, zero air generator inspection, RPM adapter inspection, inspection of the OBDII reader, dynamometer coastdown inspection, dynamometer roll speed inspection, and gas cap audits. A PIF equipment audit is almost identical, but does not include the zero air generator inspection or the dynamometer roll speed inspection.

In New Jersey, there are five equipment manufacturers – ESP, Dynotech, Snap-On, SPX, and Worldwide - approved to provide and service inspection equipment to the PIFs. Each PIF is free to select their choice of one of these approved equipment vendors, depending on their individual needs and preferences. The NJMVC is responsible for performing audits of this equipment in the PIFs.

Of the 1,406 PIFs, 550 (39%) failed an equipment audit during the year and were shut down as a result (PIFs are immediately shut down upon failure of an equipment audit and are reinstated when the equipment is repaired). This number does not match the total number of equipment audit failures, as some PIFs may have received more than one audit during the year.

The overall initial decentralized equipment audit failure rate for the year 2003 was 26%. One way to look at the PIF equipment audit data is by equipment manufacturer rather than by individual PIF. Table 20 summarizes the decentralized network initial equipment audit results by equipment manufacturer.

Table 20: Decentralized Initial Equipment Audit Summary

Manufacturer	# Audits	# Fail	% Fail	# Pass	% Pass
ESP	761	241	32%	520	68%
Dynotech	86	63	73%	23	27%
Snap-On	697	94	13%	603	87%
SPX	445	109	24%	336	76%
Worldwide	215	77	36%	138	64%
Overall	2,204	584	26%	1620	74%

The low audit pass rate for Dynotech was recognized and investigated by the NJDEP. It was discovered that during this time period, Dynotech had a component supply problem related to NOx cells. The manufacturer of the NOx cells had altered their design slightly, resulting in excessive NOx audit failures. The problem has subsequently been addressed by modifications to the analyzer to ensure compatibility with the new NOx cell.

In the year 2003 the NJDEP performed 1,264 lane audits of the equipment in the CIFs. These audits are conducted on the lanes in "as-is" condition without prior notice to the centralized contractor, except for the 1 and 2 lane facilities, which are audited by appointment to avoid any impact on lane availability or vehicle throughput. In addition, audits are limited to non-peak periods and as such, are not conducted at the beginning or the end of each month.

A total of 30 of the 35 stations (86%), including the three state inspection facilities, failed at least one equipment audit during the year 2003. There were 14% (5 stations) that never failed an audit in 2003. When the emission testing equipment fails a particular test in an audit, a re-audit (re-evaluation of the emission testing equipment that failed the initial audit) is performed on the equipment for that particular test after the necessary repairs are completed. In general, most of the equipment that fails an audit in the CIFs requires only minor repairs to return to compliance. As such, these repairs are usually performed either during or directly after the audit, to avoid having a lane out of service for any length of time.

For the purposes of this report, only those CIF lanes where the equipment could not be repaired to pass a re-audit on the same day as the initial audit are classified "shutdown". As shown in Table 21 on the following page, 18 centralized stations (51%) had at least one lane shut down as a result of equipment audits during the year 2003.

Table 21: Centralized Equipment Audit Summary

# of centralized stations	35
Total # of equipment audits	1,264
# of stations that have failed equipment audits	30
% of stations that have failed equipment audits	86%
# of stations with at least one lane shut down as a result of equipment audits	18
% of stations with at least one lane shut down as a result of equipment audits	51%
# of lanes shut down as a result of equipment audits	32
% of lanes shut down as a result of equipment audits	25%

The overall initial centralized equipment audit failure rate for the year 2003 was 24%. A detailed breakdown of equipment audits by station is shown in Table 22 on the following page. An additional breakdown by lane is presented in Appendix III.

Table 22: CIF Equipment Audit Pass/Fail Rates by Station

Table 22: CIF Equipm Station				Number Pass	Pass Rate
Asbury Park Specialty	1 Julia Addits	1	100%		0%
Bakers Basin	46	21	46%		
Bridgeton	12	0	0%		
Cape May	11	5	45%		
Cherry Hill	59		3%		97%
Delanco	35		31%		
Deptford	41	8	20%		
Eatontown	66		32%		
Flemington	30		47%		
Freehold	64	10	16%		
Jersey City	27	2	7%		
Kilmer	53		26%		
Lakewood	72	24	33%		
Lodi	50		24%		
Manahawkin	35		31%		
Mays Landing	44	17	39%		61%
Millville	23	1	4%	22	96%
Montclair	22	3	14%	19	86%
Morristown Specialty	2	1	50%	1	50%
Newark	47	5	11%	42	89%
Newton	21	0	0%	21	100%
Paramus	45	10	22%	35	78%
Plainfield	32	14	44%	18	56%
Rahway	60	25	42%	35	58%
Randolph	42	15	36%	27	64%
Ridgewood	24	0	0%	24	100%
Salem	11	0	0%	11	100%
Secaucus	63	10	16%	53	84%
South Brunswick	44	15	34%	29	66%
Southampton	47	10	21%	37	79%
Washington	11	0	0%	11	100%
Wayne	70		10%	63	90%
Westfield	17	7	41%	10	59%
Winslow	35	4	11%	31	89%
Winslow Specialty	2	1	50%	1	50%
Totals	1,264	301	24%	963	76%

D. Enforcement Report

New Jersey's inspection data is stored on a Vehicle Inspection Database (VID). As soon as an inspection is completed, the data collected on the VID is then summarized and transmitted to the NJMVC mainframe computer. This inspection summary record is designed for the State to use in determining vehicle compliance.

New Jersey currently uses a sticker-based enforcement program. Windshield stickers are placed on vehicles that meet the inspection requirements. An expired sticker or no sticker indicates non-compliance. Police in New Jersey are authorized to issue summonses to motorists for expired or missing windshield inspection stickers.

Inspection Sticker Compliance

As mentioned previously, New Jersey performed over 2.6 million inspections in the year 2003. During that year, the State conducted inspection sticker compliance surveys. A compliance survey is when vehicles are audited in a parking lot, or parked on the street, and compliance is determined by the inspection sticker expiration dates.

Both the NJDEP and the NJMVC conduct sticker surveys. The NJDEP sticker surveys are conducted on a regular monthly basis (an average of 1,600 vehicles per month) throughout the year, while the NJMVC conducts one survey every six months (approximately 5,000 vehicles per survey). Both agencies conduct random surveys in various areas throughout the northern, central, and southern portions of the State. The NJMVC's overall compliance rate for the year 2003 was slightly lower (94.8%) than the NJDEP's (97.4%).

For the purposes of this report, both agencies" surveys were combined for an overall result. A total of 28,955 vehicles were surveyed in the year 2003. Of these, 27,943 (96.5%) were compliant with the program requirements. Detailed information on these sticker compliance surveys is presented in Appendix IV.

Inspection Sticker Enforcement

The NJMVC developed a sticker Standard Operating Procedure (SOP) to track all stickers assigned to inspection facilities. This SOP was designed to prevent fraudulent issuance of approval stickers and in the event of missing stickers, an avenue in determining which responsible party may have been last to handle them. Sticker inventory audits are conducted two times per year at the CIFs in addition to monthly audits of the PIFs. Administrative action is taken against the inspector and/or facility if warranted. Table 23 presents inspection sticker enforcement activity for the year 2003.

Table 23: Inspection Sticker Enforcement

Total # of compliance documents (stickers) issued to	3,173,067
inspection stations	
# of missing compliance documents (stickers)	2,397
# of time extensions & other exemptions granted to motorists	11,370

In New Jersey, motorists falsely registering vehicles outside of the program area is not a concern because the entire State is classified as an enhanced I/M area. Registering the vehicle outside of the program area would entail actually registering the vehicle in another state.

In addition, fuel type and weight class screening is conducted during the State's process of vehicle registration, thereby almost eliminating the possibility of motorists falsely changing fuel type or weight class to avoid complying with the program requirements.

APPENDIX I TEST DATA REPORT TABLES AND FIGURES

APPENDIX I -PART A

TOTAL EMISSION INSPECTIONS

New Jersey Enhanced Inspection and Maintenance Program Summary of Total Emissions Inspections Year 2003

Test Station	Data	Initial	Reinspection	Grand Total
Centralized Inspection Facility	# of Inspections	1,759,452	209,587	1,969,039
	# Fail	198,672	49,956	248,628
	# Pass	1,560,780	159,631	1,720,411
Mobile Inspection Team	# of Inspections	3,151	3,268	6,419
*Initial - 1st Inspection of 2003	# Fail	591	587	1,178
Retest - 2nd or subsequent Insp 2003	# Pass	2,560	2,681	5,241
Private Fleet Facility	# of Inspections	7,066	787	7,853
	# Fail	337	112	449
	# Pass	6,729	675	7,404
Private Inspection Facility	# of Inspections	444,312	218,727	663,039
	# Fail	45,538	21,511	67,049
	# Pass	398,774	197,216	595,990
Specialty Inspection Facility	# of Inspections	264	98	362
	# Fail	29	12	41
	# Pass	235	86	321
Total # of Inspections		2,214,245	432,467	2,646,712
Total # Fail		245,167	72,178	317,345
Total # Pass	al # Pass		360,289	2,329,367
% of Grand Total # of Inspections		83.7%	16.3%	

Total Emissions Inspections - Co	entralized/Decent	ralized Summary	Initial	Reinspection
Centralized	1,975,820	74.7%	1,762,867	212,953
Decentralized	670,892	25.3%	451,378	219,514
Total	2,646,712		2,214,245	432,467

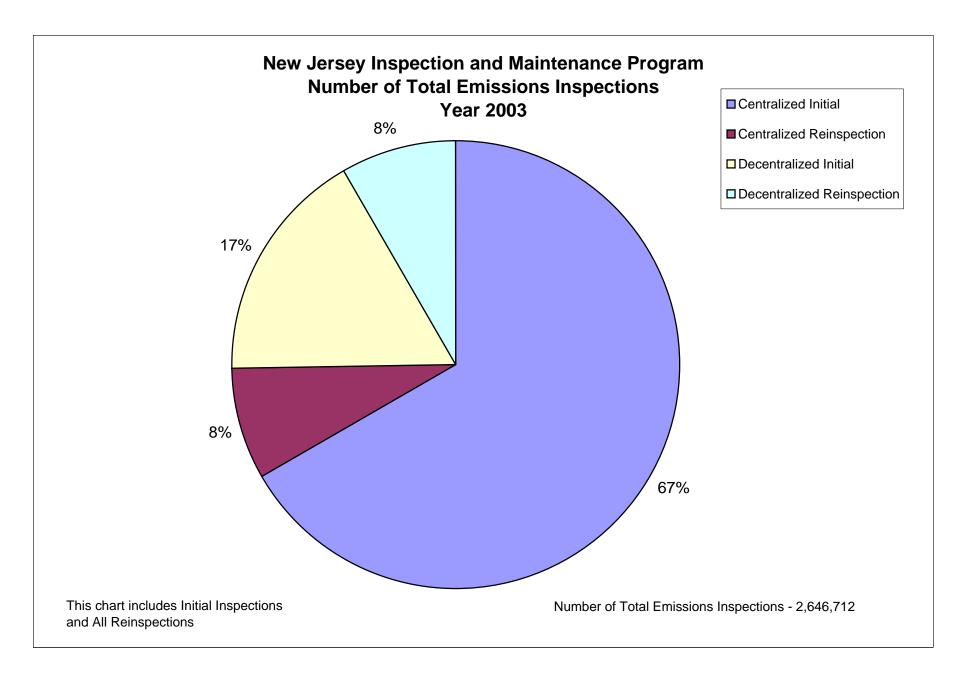


Figure A-1

APPENDIX I - PART B

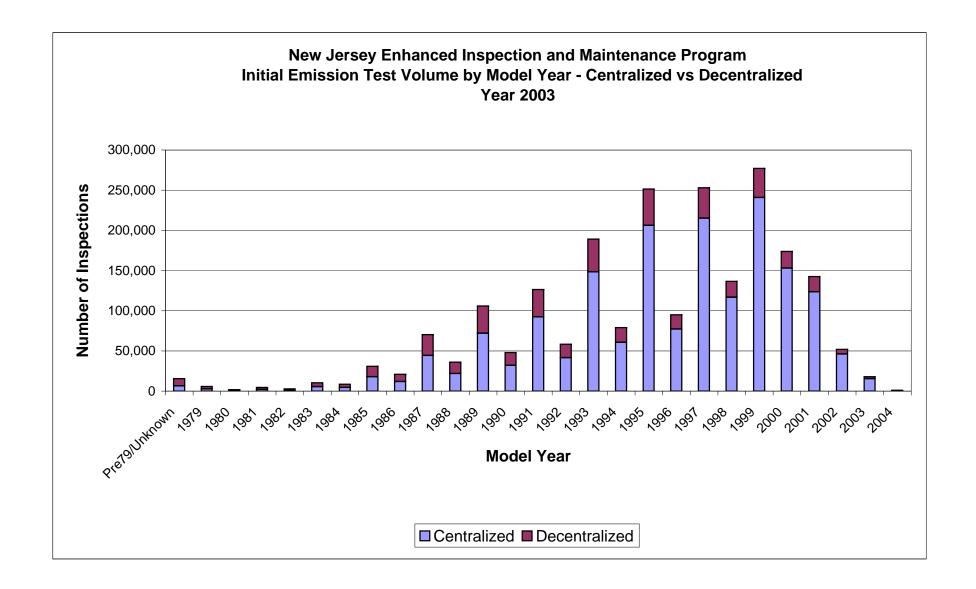
INITIAL EMISSION
TEST VOLUME &
FAILURE RATE
BY MODEL YEAR &
STATION TYPE

New Jersey Enhanced Inspection and Maintenance Program Initial Emission Test Volume and Pass/Fail Rate by Model Year/Station Type Year 2003

Model Yr	Station Type	# Insps	# Fail	Fail Rate	# Pass	Pass Rate
Pre79/Unknown	Centralized	6,541	2,737	41.8%	3,804	58.2%
Pre79/Unknown	Decentralized	8,980	1,589	17.7%	7,391	82.3%
1979	Centralized	2,697	1,098	40.7%	1,599	59.3%
1979	Decentralized	3,063	661	21.6%	2,402	78.4%
1980	Centralized	885	354	40.0%	531	60.0%
1980	Decentralized	1,006	186	18.5%	820	81.5%
1981	Centralized	2,194	970	44.2%	1,224	55.8%
1981	Decentralized	2,297	540	23.5%	1,757	76.5%
1982	Centralized	1,361	670	49.2%	691	50.8%
1982	Decentralized	1,386	267	19.3%	1,119	80.7%
1983	Centralized	5,552	2,353	42.4%	3,199	57.6%
1983	Decentralized	4,813	1,068	22.2%	3,745	77.8%
1984	Centralized	4,567	2,138	46.8%	2,429	53.2%
1984	Decentralized	3,910	811	20.7%	3,099	79.3%
1985	Centralized	17,932	6,736	37.6%	11,196	62.4%
1985	Decentralized	12,994	2,716	20.9%	10,278	79.1%
1986	Centralized	11,898	4,553	38.3%	7,345	61.7%
1986	Decentralized	8,949	1,582	17.7%	7,367	82.3%
1987	Centralized	44,296	12,375	27.9%	31,921	72.1%
1987	Decentralized	26,003	4,181	16.1%	21,822	83.9%
1988	Centralized	21,973	6,843	31.1%	15,130	68.9%
1988	Decentralized	14,138	2,291	16.2%	11,847	83.8%
1989	Centralized	72,100	15,848	22.0%	56,252	78.0%
1989	Decentralized	33,730	4,548	13.5%	29,182	86.5%
1990	Centralized	31,993	8,206	25.6%	23,787	74.4%
1990	Decentralized	15,950	2,225	13.9%	13,725	86.1%
1991	Centralized	92,438	21,163	22.9%	71,275	77.1%
1991	Decentralized	33,989	5,168	15.2%	28,821	84.8%
1992	Centralized	41,638	9,427	22.6%	32,211	77.4%
1992	Decentralized	16,632	2,346	14.1%	14,286	85.9%
1993	Centralized	148,519	22,739	15.3%	125,780	84.7%
1993	Decentralized	40,574	4,676	11.5%	35,898	88.5%
1994	Centralized	60,637	7,603	12.5%	53,034	87.5%
1994	Decentralized	18,312	1,595		16,717	91.3%
1995	Centralized	206,183	15,455		190,728	92.5%
1995	Decentralized	45,189	2,585	5.7%	42,604	94.3%
1996	Centralized	77,272	7,005	9.1%	70,267	90.9%
1996	Decentralized	17,731	988	5.6%	16,743	94.4%
1997	Centralized	215,205	12,077	5.6%	203,128	94.4%
1997	Decentralized	37,831	1,431	3.8%	36,400	96.2%
1998	Centralized	116,872	8,010	6.9%	108,862	93.1%
1998	Decentralized	19,705	1,261	6.4%	18,444	93.6%
1999	Centralized	240,811	12,700	5.3%	228,111	94.7%
1999	Decentralized	36,308	1,578	4.3%	34,730	95.7%

New Jersey Enhanced Inspection and Maintenance Program Initial Emission Test Volume and Pass/Fail Rate by Model Year/Station Type Year 2003

Model Yr	Station Type	# Insps	# Fail	Fail Rate	# Pass	Pass Rate
2000	Centralized	153,181	8,244	5.4%	144,937	94.6%
2000	Decentralized	20,647	870	4.2%	19,777	95.8%
2001	Centralized	123,666	7,561	6.1%	116,105	93.9%
2001	Decentralized	18,965	472	2.5%	18,493	97.5%
2002	Centralized	46,142	1,881	4.1%	44,261	95.9%
2002	Decentralized	5,721	154	2.7%	5,567	97.3%
2003	Centralized	15,520	478	3.1%	15,042	96.9%
2003	Decentralized	2,406	78	3.2%	2,328	96.8%
2004	Centralized	760	64	8.4%	696	91.6%
2004	Decentralized	183	12	6.6%	171	93.4%
Total	Centralized	1,762,833	199,288	11.3%	1,563,545	88.7%
Total	Decentralized	451,412	45,879	10.2%	405,533	89.8%
Grand Total		2,214,245	245,167	11.1%	1,969,078	88.9%



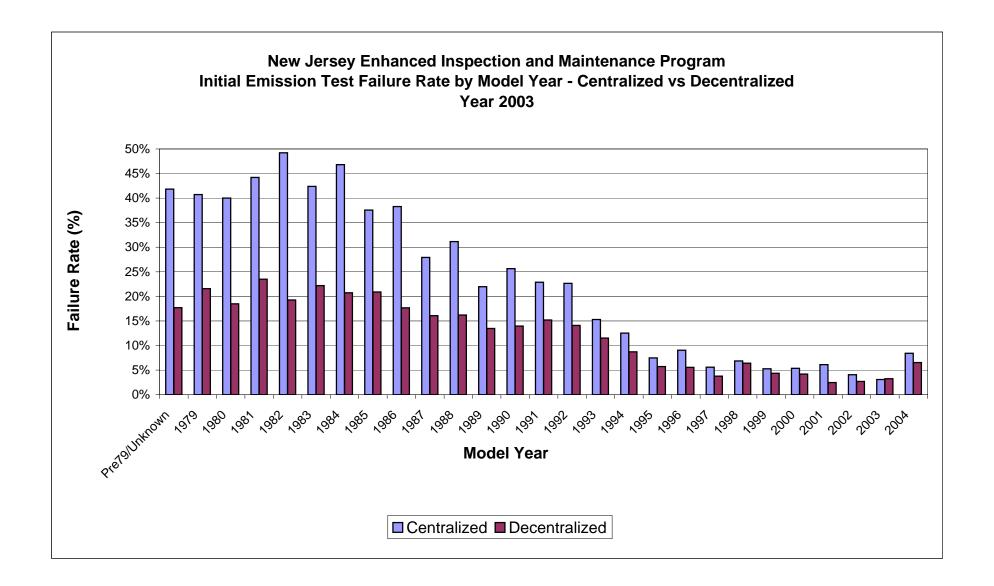


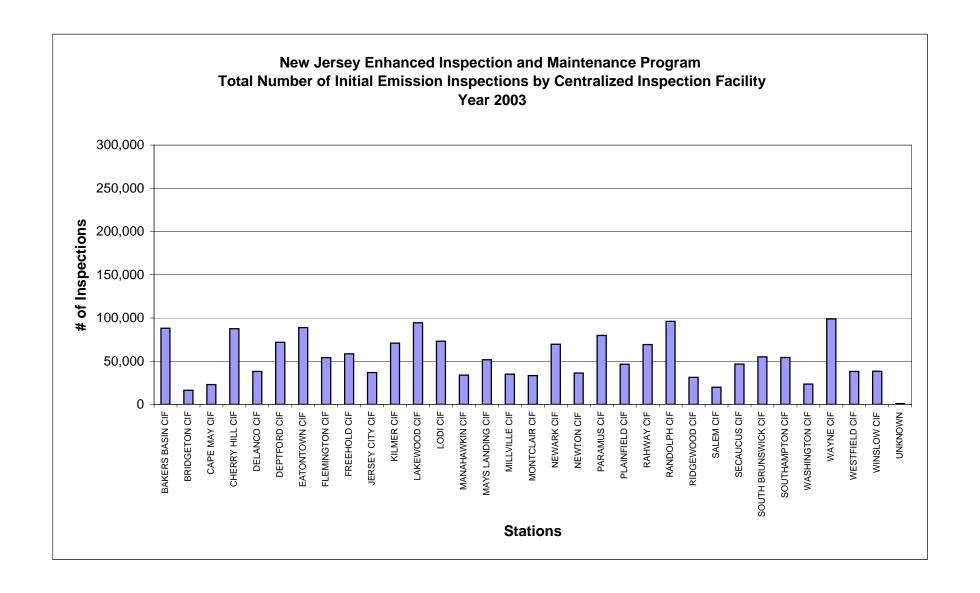
Figure B-2

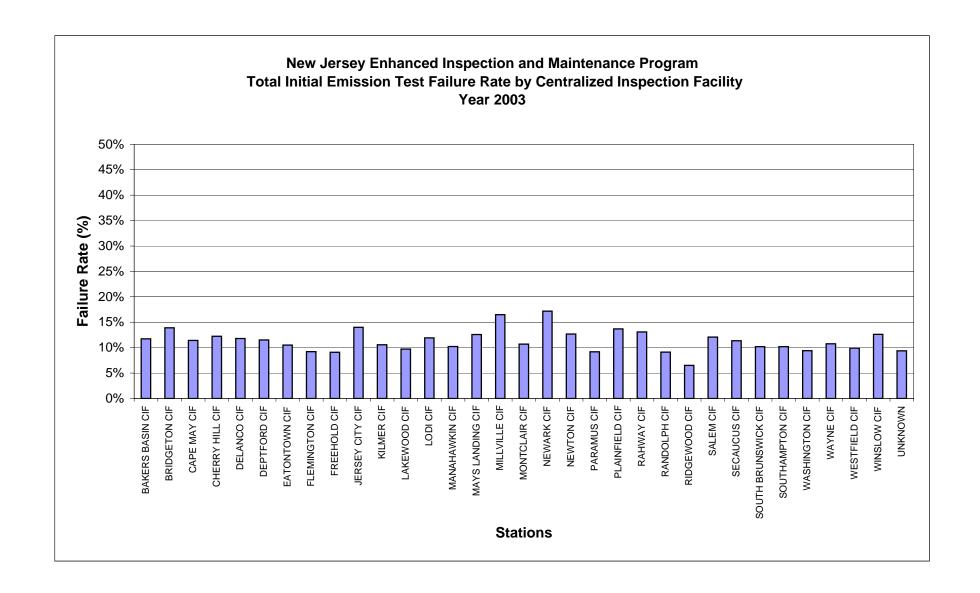
APPENDIX I - PART C

INITIAL EMISSION
TEST VOLUME &
FAILURE RATE BY
CENTRALIZED
INSPECTION
FACILITY

New Jersey Enhanced Inspection and Maintenance Program Total Initial Emission Inspections - Centralized Inspection Facilities (CIFs) Year 2003

STATION NAME	# of Lanes	Inspections	# Pass	# Fail	% Fail
BAKERS BASIN CIF	6	88,082	77,749	10,333	11.7%
BRIDGETON CIF	1	16,237	13,979	2,258	13.9%
CAPE MAY CIF	1	23,014	20,386	2,628	11.4%
CHERRY HILL CIF	6	87,562	76,846	10,716	12.2%
DELANCO CIF	3	38,162	33,661	4,501	11.8%
DEPTFORD CIF	4	71,727	63,459	8,268	11.5%
EATONTOWN CIF	6	88,924	79,571	9,353	10.5%
FLEMINGTON CIF	3	53,977	49,000	4,977	9.2%
FREEHOLD CIF	6	58,428	53,116	5,312	9.1%
JERSEY CITY CIF	3	36,916	31,748	5,168	14.0%
KILMER CIF	6	70,851	63,368	7,483	10.6%
LAKEWOOD CIF	6	94,391	85,213	9,178	9.7%
LODI CIF	5	73,084	64,368	8,716	11.9%
MANAHAWKIN CIF	3	33,866	30,405	3,461	10.2%
MAYS LANDING CIF	4	51,685	45,187	6,498	12.6%
MILLVILLE CIF	2	34,966	29,204	5,762	16.5%
MONTCLAIR CIF	2	33,274	29,715	3,559	10.7%
NEWARK CIF	5	69,548	57,590	11,958	17.2%
NEWTON CIF	2	36,343	31,740	4,603	12.7%
PARAMUS CIF	5	79,849	72,520	7,329	9.2%
PLAINFIELD CIF	3	46,473	40,112	6,361	13.7%
RAHWAY CIF	6	69,241	60,170	9,071	13.1%
RANDOLPH CIF	6	96,049	87,295	8,754	9.1%
RIDGEWOOD CIF	2	31,241	29,211	2,030	6.5%
SALEM CIF	1	19,794	17,404	2,390	12.1%
SECAUCUS CIF	6	46,638	41,342	5,296	11.4%
SOUTH BRUNSWICK CIF	6	54,910	49,305	5,605	10.2%
SOUTHAMPTON CIF	4	54,318	48,788	5,530	10.2%
WASHINGTON CIF	1	23,593	21,375	2,218	9.4%
WAYNE CIF	8	98,903	88,256	10,647	10.8%
WESTFIELD CIF	2	38,069	34,297	3,772	9.9%
WINSLOW CIF	3	38,355	33,510	4,845	12.6%
UNKNOWN	Unknown	982	890	92	9.4%
TOTAL	127	1,759,452	1,560,780	198,672	11.3%





APPENDIX I -PART D

INITIAL EMISSION INSPECTION VOLUME BY MODEL YEAR & VEHICLE TYPE

New Jersey Enhanced Inspection and Maintenance Program Initial Emission Inspection Volume - Year 2003

			# of Vehicl	les Tested		
Model Year	HDGV	LDGT1	LDGT2	LDGV	Unknown	Total
Pre 79/Unknown	1,020	1,934	1,259	10,837	471	15,521
1979	366	888	832	3,533	141	5,760
1980	177	326	136	1,207	45	1,891
1981	407	923	244	2,827	90	4,491
1982	272	558	212	1,637	68	2,747
1983	657	1,919	820	6,807	162	10,365
1984	623	1,681	683	5,335	155	8,477
1985	1,669	5,413	2,074	21,403	367	30,926
1986	1,327	4,340	1,388	13,489	303	20,847
1987	2,633	14,164	4,480	48,435	587	70,299
1988	1,713	7,781	2,761	23,532	324	36,111
1989	3,733	19,327	7,210	74,876	684	105,830
1990	1,388	8,229	2,402	35,677	247	47,943
1991	2,107	25,171	4,870	93,939	340	126,427
1992	1,148	11,530	2,462	42,943	187	58,270
1993	2,976	41,766	9,235	134,532	584	189,093
1994	2,015	20,159	5,063	51,396	316	78,949
1995	6,348	59,848	17,302	166,840	1,034	251,372
1996	2,158	25,379	5,786	61,323	357	95,003
1997	7,342	63,929	16,819	163,511	1,435	253,036
1998	2,264	38,589	10,535	84,660	529	136,577
1999	7,297	68,663	27,450	172,187	1,522	277,119
2000	3,919	45,882	13,548	109,465	1,014	173,828
2001	4,503	38,135	13,986	84,847	1,160	142,631
2002	1,025	14,125	4,005	32,374	334	51,863
2003	543	4,042	1,772	11,362	207	17,926
2004	15	207	68	642	11	943
Totals	59,645	524,908	157,402	1,459,616	12,674	2,214,245
% of Grand Total	2.7%	23.7%	7.1%	65.9%	0.6%	

HDGV - Heavy-Duty Gasoline Fueled Vehicle

LDGT1 - Light-Duty Gasoline-Fueled Truck 1 (GVWR up to 6000 lb)

LDGT2 - Light-Duty Gasoline-Fueled Truck 2 (GVWR 6001 - 8500 lb)

LDGV - Light-Duty Gasoline-Fueled Vehicle

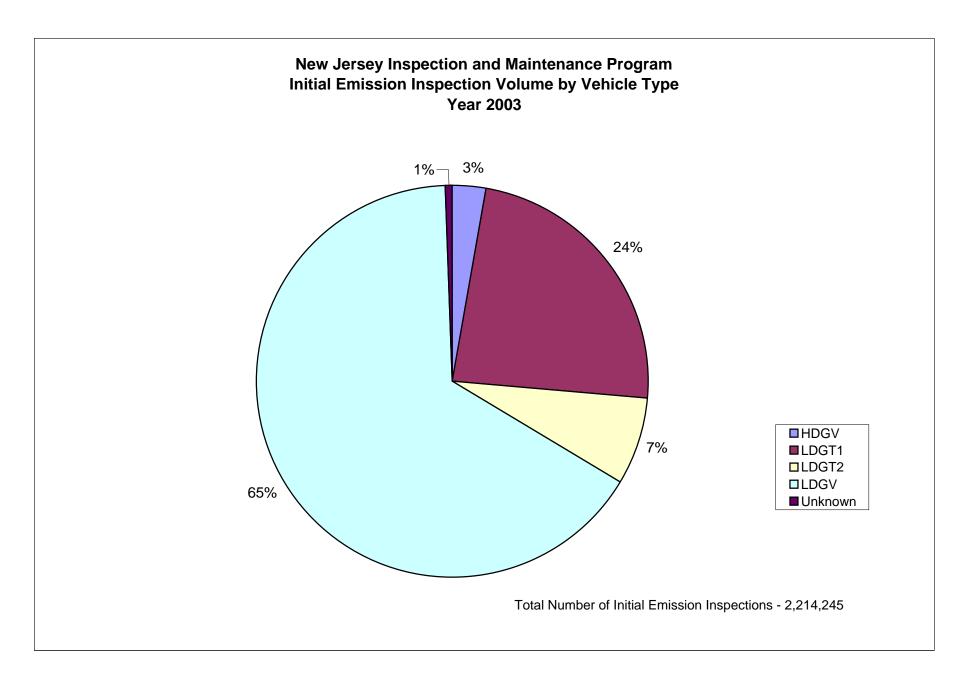


Figure D-1

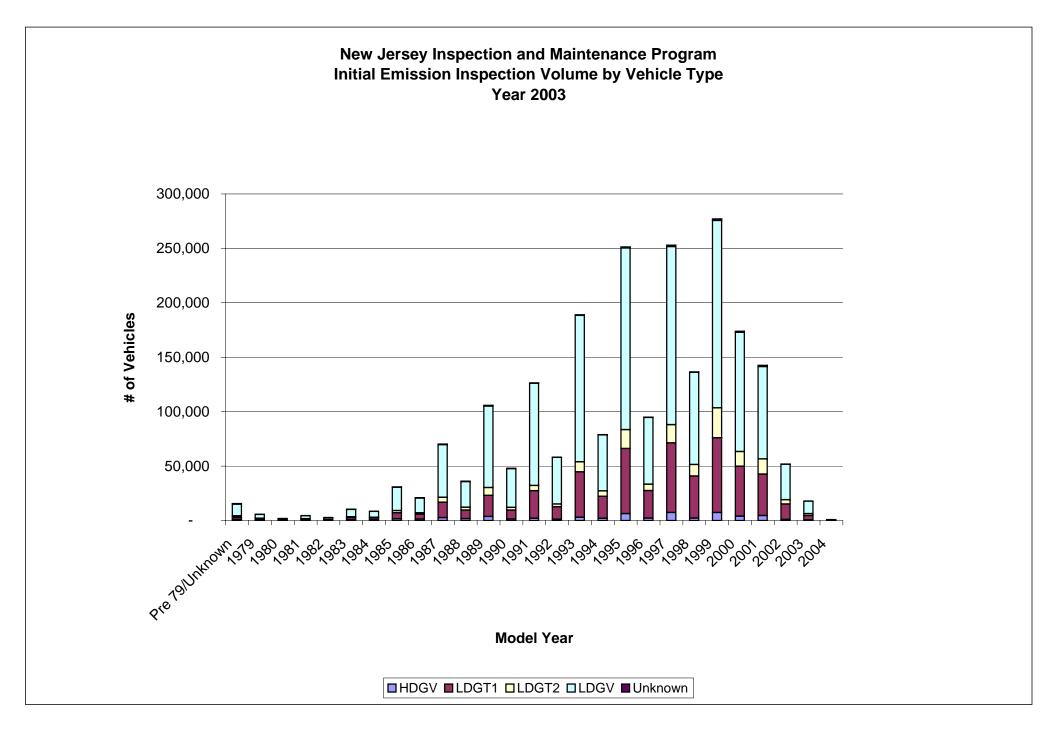


Figure D-2

APPENDIX I -PART E

INITIAL EMISSION INSPECTION FAILURES BY TEST TYPE

Madal Va	Veh	Overall Emissions	Overall Emissions	Overall Emissions	Overall Emissions	OBD Toots	OBD Fail *	OBD	OBD	OBD Pilot	OBD Fail/ Pilot Fails	OBD Fail Rate/ Pilot Fails
Model Yr Pre 79/Unknown	Type	Insps 1,020	Fail 248	Pass 772	Fail Rate 24.3%	Tests	Faii 0	Pass 0	Fail Rate	Fails	Excluded 0	Excluded
Pre 79/Unknown	_	1,934	575	1,359	29.7%	25	4	21	16.0%	1	3	12.0%
Pre 79/Unknown		1,259	479	780	38.0%	10	1	9	10.0%	0	1	10.0%
Pre 79/Unknown		10,837	2,880	7,957	26.6%	70	28	42	40.0%	6	22	31.4%
Pre 79/Unknown		471	144	327	30.6%	1	0	1	0.0%	0	0	0.0%
	HDGV	366	94	272	25.7%	0	0	0	-	0	0	-
	LDGT1	888	269	619	30.3%	0	0	0	_	0	0	_
	LDGT2	832	293	539	35.2%	0	0	0	_	0	0	_
1979	LDGV	3,533	1,054	2,479	29.8%	0	0	0	-	0	0	-
	Unknown	141	49	92	34.8%	0	0	0	-	0	0	-
1980	HDGV	177	52	125	29.4%	0	0	0	-	0	0	-
1980	LDGT1	326	109	217	33.4%	0	0	0	-	0	0	-
1980	LDGT2	136	57	79	41.9%	0	0	0	-	0	0	-
1980	LDGV	1,207	304	903	25.2%	0	0	0	-	0	0	-
1980	Unknown	45	18	27	40.0%	0	0	0	-	0	0	-
1981	HDGV	407	116	291	28.5%	0	0	0	-	0	0	-
1981	LDGT1	923	276	647	29.9%	0	0	0	-	0	0	-
1981	LDGT2	244	81	163	33.2%	0	0	0	-	0	0	-
1981	LDGV	2,827	1,006	1,821	35.6%	0	0	0	-	0	0	-
	Unknown	90	31	59	34.4%	0	0	0	-	0	0	-
	HDGV	272	74	198	27.2%	0	0	0	-	0	0	-
	LDGT1	558	174	384	31.2%	0	0	0	-	0	0	-
1982	LDGT2	212	75	137	35.4%	0	0	0	-	0	0	-
1982	LDGV	1,637	591	1,046	36.1%	0	0	0	-	0	0	-
1982	Unknown	68	23	45	33.8%	0	0	0	-	0	0	-
	HDGV	657	154	503	23.4%	0	0	0	-	0	0	-
	LDGT1	1,919	525	1,394	27.4%	0	0	0	-	0	0	-
	LDGT2	820	249	571	30.4%	0	0	0	-	0	0	-
	LDGV	6,807	2,446	4,361	35.9%	0	0	0	-	0	0	-
	Unknown	162	47	115	29.0%	0	0	0	-	0	0	-
	HDGV	623	162	461	26.0%	0	0	0	-	0	0	-
	LDGT1	1,681	549	1,132	32.7%	0	0	0	-	0	0	-
	LDGT2	683	255	428	37.3%	0	0	0	-	0	0	-
	LDGV	5,335	1,926	3,409	36.1%	0	0	0	-	0	0	-
1984	Unknown	155	57	98	36.8%	0	0	0	-	0	0	-

	Veh	Overall Emissions	Overall Emissions	Overall Emissions	Overall Emissions	OBD	OBD	OBD	OBD	OBD Pilot	OBD Fail/ Pilot Fails	OBD Fail Rate/ Pilot Fails
Model Yr	Type	Insps	Fail	Pass	Fail Rate	Tests	Fail *	Pass	Fail Rate	Fails	Excluded	Excluded
1985	HDGV	1,669	429	1,240	25.7%	0	0	0	-	0	0	-
	LDGT1	5,413	1,607	3,806	29.7%	0	0	0	-	0	0	-
1985	LDGT2	2,074	657	1,417	31.7%	0	0	0	-	0	0	-
1985	LDGV	21,403	6,618	14,785	30.9%	0	0	0	-	0	0	-
1985	Unknown	367	141	226	38.4%	0	0	0	-	0	0	-
1986	HDGV	1,327	371	956	28.0%	0	0	0	-	0	0	-
1986	LDGT1	4,340	1,093	3,247	25.2%	0	0	0	-	0	0	-
1986	LDGT2	1,388	420	968	30.3%	0	0	0	-	0	0	-
1986	LDGV	13,489	4,149	9,340	30.8%	0	0	0	-	0	0	-
1986	Unknown	303	102	201	33.7%	0	0	0	-	0	0	-
1987	HDGV	2,633	561	2,072	21.3%	0	0	0	-	0	0	-
1987	LDGT1	14,164	2,572	11,592	18.2%	0	0	0	-	0	0	-
1987	LDGT2	4,480	954	3,526	21.3%	0	0	0	-	0	0	-
1987	LDGV	48,435	12,295	36,140	25.4%	0	0	0	-	0	0	-
1987	Unknown	587	174	413	29.6%	0	0	0	-	0	0	-
1988	HDGV	1,713	339	1,374	19.8%	0	0	0	-	0	0	-
1988	LDGT1	7,781	2,180	5,601	28.0%	0	0	0	-	0	0	-
1988	LDGT2	2,761	662	2,099	24.0%	0	0	0	-	0	0	-
1988	LDGV	23,532	5,881	17,651	25.0%	0	0	0	-	0	0	-
1988	Unknown	324	72	252	22.2%	0	0	0	-	0	0	-
1989	HDGV	3,733	709	3,024	19.0%	0	0	0	-	0	0	-
1989	LDGT1	19,327	4,626	14,701	23.9%	0	0	0	-	0	0	-
1989	LDGT2	7,210	1,267	5,943	17.6%	0	0	0	-	0	0	-
1989	LDGV	74,876	13,608	61,268	18.2%	0	0	0	-	0	0	-
1989	Unknown	684	186	498	27.2%	0	0	0	-	0	0	-
1990	HDGV	1,388	246	1,142	17.7%	0	0	0	-	0	0	-
1990	LDGT1	8,229	2,072	6,157	25.2%	0	0	0	-	0	0	-
1990	LDGT2	2,402	463	1,939	19.3%	0	0	0	-	0	0	-
1990	LDGV	35,677	7,590	28,087	21.3%	0	0	0	-	0	0	-
1990	Unknown	247	60	187	24.3%	0	0	0	-	0	0	
1991	HDGV	2,107	268	1,839	12.7%	0	0	0	-	0	0	
1991	LDGT1	25,171	5,100	20,071	20.3%	0	0	0	-	0	0	
1991	LDGT2	4,870	901	3,969	18.5%	0	0	0	-	0	0	-
1991	LDGV	93,939	19,993	73,946	21.3%	0	0	0	-	0	0	-
1991	Unknown	340	69	271	20.3%	0	0	0	-	0	0	-

	Veh	Overall Emissions	Overall Emissions	Overall Emissions	Overall Emissions	OBD	OBD	OBD	OBD	OBD Pilot	OBD Fail/ Pilot Fails	OBD Fail Rate/ Pilot Fails
Model Yr	Type	Insps	Fail	Pass	Fail Rate	Tests	Fail *	Pass	Fail Rate	Fails	Excluded	Excluded
	HDGV	1,148	127	1,021	11.1%	0	0	0		ŭ	, ,	-
	LDGT1	11,530	2,684	8,846	23.3%	0	0	0		0	·	-
	LDGT2	2,462	485	1,977	19.7%	0	0	0		0	·	-
	LDGV	42,943	8,437	34,506	19.6%	0	0	0		0	·	-
	Unknown	187	40	147	21.4%	0	0	0		0	·	-
	HDGV	2,976	331	2,645	11.1%	0	0	0		0		-
	LDGT1	41,766	7,079	34,687	16.9%	0	0	0		0		-
	LDGT2	9,235	1,147	8,088	12.4%	0	0	0		0	_	
	LDGV	134,532	18,756	115,776	13.9%	0	0	0		0		
	Unknown	584	102	482	17.5%	0	0	0		0	·	
	HDGV	2,015	215	1,800	10.7%	0	0	0		0		
	LDGT1	20,159	2,473	17,686	12.3%	0	0	0		0		-
	LDGT2	5,063	595	4,468	11.8%	0	0	0		0	·	-
	LDGV	51,396	5,857	45,539	11.4%	0	0	0		0	·	
	Unknown	316	58	258	18.4%	0	0	0		0	·	
	HDGV	6,348	520	5,828	8.2%	0	0	0		0	·	
	LDGT1	59,848	4,606	55,242	7.7%	0	0	0		0	ŭ	
	LDGT2	17,302	1,253	16,049	7.2%	0	0	0		0		
	LDGV	166,840	11,534	155,306	6.9%	0	0	0	-	0		-
	Unknown	1,034	127	907	12.3%	0	0	0	-	0	0	-
	HDGV	2,158	144	2,014	6.7%	0	0	0	-	0	0	-
1996	LDGT1	25,379	2,267	23,112	8.9%	2,252	478	1,774	21.2%	475	3	0.1%
1996	LDGT2	5,786	474	5,312	8.2%	465	127	338	27.3%	126	1	0.2%
1996	LDGV	61,323	5,070	56,253	8.3%	6,488	1,052	5,436	16.2%	1,051	1	0.0%
1996	Unknown	357	38	319	10.6%	1	0	1	0.0%	0	0	0.0%
1997	HDGV	7,342	352	6,990	4.8%	0	0	0	-	0	0	-
1997	LDGT1	63,929	3,482	60,447	5.4%	6,752	914	5,838	13.5%	899	15	0.2%
1997	LDGT2	16,819	1,031	15,788	6.1%	1,660	303	1,357	18.3%	294	9	0.5%
1997	LDGV	163,511	8,505	155,006	5.2%	19,157	1,898	17,259	9.9%	1,869	29	0.2%
1997	Unknown	1,435	138	1,297	9.6%	4	0	4	0.0%	0	0	0.0%
1998	HDGV	2,264	89	2,175	3.9%	0	0	0	-	0	0	-
	LDGT1	38,589	2,586	36,003	6.7%	20,283	1,547	18,736	7.6%	480	1067	5.3%
	LDGT2	10,535	667	9,868	6.3%	5,279	468	4,811	8.9%	125	343	6.5%
	LDGV	84,660	5,895	78,765	7.0%	47,086	3,395	43,691	7.2%	1,102	2293	4.9%
1998	Unknown	529	34	495	6.4%	14	1	13		1	0	0.0%

		Overall	Overall	Overall	Overall					OBD	OBD Fail/	OBD Fail Rate/
	Veh	Emissions	Emissions	Emissions	Emissions	OBD	OBD	OBD	OBD	Pilot	Pilot Fails	Pilot Fails
Model Yr	Type	Insps	Fail	Pass	Fail Rate	Tests	Fail *	Pass	Fail Rate	Fails	Excluded	Excluded
	HDGV	7,297	262	7,035	3.6%	0	0	0	-	0	0	-
	LDGT1	68,663	3,233	65,430	4.7%	36,184	1,590	34,594	4.4%	625	965	2.7%
	LDGT2	27,450	1,076	26,374	3.9%	14,617	695	13,922	4.8%	242	453	3.1%
	LDGV	172,187	9,594	162,593	5.6%	92,978	4,467	88,511	4.8%	1,701	2766	3.0%
	Unknown	1,522	113	1,409	7.4%	24	0	24	0.0%	0	0	0.0%
	HDGV	3,919	110	3,809	2.8%	0	0	0	-	0	0	-
	LDGT1	45,882	2,407	43,475	5.2%	27,702	1,139	26,563	4.1%	268	871	3.1%
	LDGT2	13,548	687	12,861	5.1%	8,171	295	7,876	3.6%	63	232	2.8%
	LDGV	109,465	5,841	103,624	5.3%	70,616	2,999	67,617	4.2%	743	2256	3.2%
	Unknown	1,014	69	945	6.8%	11	0	11	0.0%	0	0	0.0%
	HDGV	4,503	130	4,373	2.9%	0	0	0	-	0	0	-
	LDGT1	38,135	2,381	35,754	6.2%	16,670	710	15,960	4.3%	262	448	2.7%
2001	LDGT2	13,986	727	13,259	5.2%	6,093	325	5,768	5.3%	103	222	3.6%
2001	LDGV	84,847	4,750	80,097	5.6%	38,424	1,517	36,907	3.9%	610	907	2.4%
2001	Unknown	1,160	45	1,115	3.9%	12	3	9	25.0%	2	1	8.3%
2002	HDGV	1,025	12	1,013	1.2%	0	0	0	-	0	0	ı
2002	LDGT1	14,125	667	13,458	4.7%	9,003	228	8,775	2.5%	55	173	1.9%
2002	LDGT2	4,005	152	3,853	3.8%	2,643	79	2,564	3.0%	13	66	2.5%
2002	LDGV	32,374	1,196	31,178	3.7%	20,214	520	19,694	2.6%	121	399	2.0%
2002	Unknown	334	8	326	2.4%	2	0	2	0.0%	0	0	0.0%
2003	HDGV	543	6	537	1.1%	0	0	0	-	0	0	-
2003	LDGT1	4,042	103	3,939	2.5%	2,835	42	2,793	1.5%	13	29	1.0%
2003	LDGT2	1,772	63	1,709	3.6%	1,079	34	1,045	3.2%	16	18	1.7%
2003	LDGV	11,362	380	10,982	3.3%	8,030	213	7,817	2.7%	95	118	1.5%
2003	Unknown	207	4	203	1.9%	6	0	6	0.0%	0	0	0.0%
2004	HDGV	15	0	15	0.0%	0	0	0	-	0	0	-
2004	LDGT1	207	7	200	3.4%	166	6	160	3.6%	0	6	3.6%
2004	LDGT2	68	4	64	5.9%	51	3	48	5.9%	0	3	5.9%
	LDGV	642	65	577	10.1%	527	63	464	12.0%	14	49	9.3%
	Unknown	11	0	11	0.0%	0	0	0	-	0	0	-
Totals		2,214,245	245,167	1,969,078	11.1%	465,605	25,144	440,461	5.4%	11,375	13,769	3.0%

	Veh	ASM	ASM	ASM	ASM	2500	2500	2500	2500	ldle		ldle	ldle
Model Yr	Type	Tests	Fail	Pass	Fail Rate	Tests	Fail	Pass	Fail Rate	Tests	Idle Fail	Pass	Fail Rate
Pre 79/Unknown		0	0	0		0	0	0	-	997	182	815	
Pre 79/Unknown		85	9	76		51	5	46	9.8%	1,742	436	1,306	
Pre 79/Unknown		18	2	16	11.1%	14	0	14		1,181	368	813	
Pre 79/Unknown		183	17	166	9.3%	97	18	79	18.6%	10,296	2,281	8,015	
Pre 79/Unknown		0	0	0	-	0	0	0	-	462	101	361	21.9%
	HDGV	0	0	0	-	0	0	0	-	362	81	281	22.4%
	LDGT1	0	0	0	-	0	ŭ	0	-	874	222	652	25.4%
	LDGT2	0	0	0		0		0	-	808	225	583	
	LDGV	0	0	0	-	0	0	0	-	3,471	871	2,600	
	Unknown	0	0	0	-	0	0	0	-	140	41	99	29.3%
1980	HDGV	0	0	0	-	0	0	0	-	176	39	137	22.2%
1980	LDGT1	0	0	0	-	0	0	0	-	317	79	238	24.9%
1980	LDGT2	0	0	0	-	0	0	0	-	131	47	84	35.9%
1980	LDGV	0	0	0	-	0	0	0	-	1,157	238	919	20.6%
1980	Unknown	0	0	0	-	0	0	0	-	42	14	28	33.3%
1981	HDGV	3	1	2	33.3%	0	0	0	-	400	92	308	23.0%
1981	LDGT1	820	155	665	18.9%	46	13	33	28.3%	0	0	0	-
1981	LDGT2	212	45	167	21.2%	20	6	14	30.0%	0	0	0	-
1981	LDGV	2,491	788	1,703	31.6%	193	44	149	22.8%	0	0	0	-
1981	Unknown	0	0	0	-	0	0	0	-	89	29	60	32.6%
1982	HDGV	0	0	0	-	0	0	0	-	263	59	204	22.4%
1982	LDGT1	498	101	397	20.3%	32	12	20	37.5%	1	1	0	100.0%
1982	LDGT2	165	38	127	23.0%	23	9	14	39.1%	0	0	0	-
1982	LDGV	1,464	457	1,007	31.2%	71	19	52	26.8%	1	0	1	0.0%
1982	Unknown	0	0	0	-	0	0	0	-	65	19	46	29.2%
1983	HDGV	4	0	4	0.0%	1	0	1	0.0%	644	117	527	18.2%
1983	LDGT1	1,754	328	1,426	18.7%	77	17	60	22.1%	0	0	0	-
	LDGT2	738	142	596	19.2%	43	18	25	41.9%	1	1	0	100.0%
	LDGV	6,153	1,912	4,241	31.1%	288	54	234	18.8%	8	2	6	
	Unknown	0	0	,	-	0	0	0	-	161	37	124	23.0%
	HDGV	4	0	4	0.0%	0	0	0	-	604	132	472	21.9%
	LDGT1	1,518	360	1,158	23.7%	64	17	47	26.6%	0		0	
	LDGT2	598	149	449	24.9%	39	16	23	41.0%	0	0	0	-
	LDGV	4,806	1,444	3,362	30.0%	207	39	168	18.8%	19	5	14	26.3%
	Unknown	0	, O	0		0		0	-	151	39	112	25.8%

	Veh	ASM	ASM	ASM	ASM	2500	2500	2500	2500	Idle		Idle	Idle
Model Yr	Type	Tests	Fail	Pass	Fail Rate	Tests	Fail	Pass	Fail Rate	Tests	Idle Fail	Pass	Fail Rate
	HDGV	18	3	15	16.7%	0	0	0		1,624	345	1,279	
	LDGT1	4,984	1,073	3,911	21.5%	186	38	148	20.4%	3	1	2	
	LDGT2	1,853	421	1,432	22.7%	119	38	81	31.9%	1	1	0	
	LDGV	19,564	5,019	14,545	25.7%	753	139	614	18.5%	58			
	Unknown	0	0	0		1	0	1	0.0%	358	105		
	HDGV	11	4	7	36.4%	1	0	1	0.0%	1,284	296	988	
	LDGT1	3,933	649	3,284	16.5%	179	49	130	27.4%	1	0	1	0.0%
	LDGT2	1,236	256	980	20.7%	78	23	55	29.5%	0	·	0	
	LDGV	12,298	2,962	9,336	24.1%	371	103	268	27.8%	47	6		
	Unknown	0	0	0	-	3	2	1	66.7%	291	81	210	
	HDGV	15	5	10	33.3%	2	0	2	0.0%	2,568	433	2,135	16.9%
1987	LDGT1	13,210	1,509	11,701	11.4%	388	84	304	21.6%	1	1	0	100.0%
1987	LDGT2	4,144	581	3,563	14.0%	168	32	136	19.0%	0	0	0	-
1987	LDGV	45,289	9,254	36,035	20.4%	1,278	211	1,067	16.5%	113	16	97	14.2%
1987	Unknown	1	1	0	100.0%	1	0	1	0.0%	574	129	445	22.5%
1988	HDGV	8	1	7	12.5%	0	0	0	-	1,670	255	1,415	15.3%
1988	LDGT1	7,177	1,591	5,586	22.2%	273	59	214	21.6%	0	0	0	-
1988	LDGT2	2,530	429	2,101	17.0%	94	14	80	14.9%	1	1	0	100.0%
1988	LDGV	21,774	3,945	17,829	18.1%	592	122	470	20.6%	30	5	25	16.7%
	Unknown	0	0	0	-	1	1	0	100.0%	319	53	266	16.6%
1989	HDGV	39	7	32	17.9%	1	0	1	0.0%	3,625	581	3,044	16.0%
	LDGT1	18,162	3,423	14,739	18.8%	471	72	399	15.3%	4	0	,	
	LDGT2	6,803	861	5,942	12.7%	227	45	182	19.8%	0	0	0	
	LDGV	70,890	9,070	61,820	12.8%	1,490	242	1,248	16.2%	35	5	30	14.3%
1989	Unknown	1	0	1	0.0%	1	0	1	0.0%	677	138	539	
	HDGV	11	5	6	45.5%	1	0	1	0.0%	1,324	167	1,157	12.6%
	LDGT1	7,563	1,430	6,133	18.9%	326	62	264	19.0%	1	0		
	LDGT2	2,254	297	1,957	13.2%	81	16	65	19.8%	1	0	1	0.0%
	LDGV	33,244	5,101	28,143	15.3%	1,092	198	894	18.1%	16	2	14	
	Unknown	0	0,101	0	-	2	0	2	0.0%	239	37	202	
	HDGV	27	2	25	7.4%	1	0	1	0.0%	2,039	190	1,849	
	LDGT1	23,116	3,573	19,543	15.5%	1,318	217	1,101	16.5%	3	1	2	
	LDGT2	4,410	543	3,867	12.3%	325	68	257	20.9%	1	0	1	
	LDGV	86,758	14,483	72,275	16.7%	4,128	498	3,630	12.1%	27	4	23	
	Unknown	1	0	12,213	0.0%	1,120	0	1	0.0%	328	45	283	

	Veh	ASM	ASM	ASM	ASM	2500	2500	2500	2500	Idle		ldle	ldle
Model Yr	Type	Tests	Fail	Pass	Fail Rate	Tests	Fail	Pass	Fail Rate	Tests	Idle Fail	Pass	Fail Rate
	HDGV	11	1	10		1	1	0	100.070	1,089		1,014	
	LDGT1	10,586	1,931	8,655	18.2%	527	90	437	17.1%	3		2	
	LDGT2	2,246	325	1,921	14.5%	159	29	130	18.2%	0		0	
	LDGV	38,785	5,670	33,115	14.6%	2,432	301	2,131	12.4%	11	2	9	
	Unknown	0	0	0		0	0	0		183	20	163	10.9%
	HDGV	43	7	36	16.3%	6	1	5	16.7%	2,844	189	2,655	6.6%
	LDGT1	36,958	4,592	32,366	12.4%	3,735	681	3,054	18.2%	7	1	6	
	LDGT2	8,677	704	7,973	8.1%	412	60	352	14.6%	2	_	2	0.070
	LDGV	123,298	12,023	111,275	9.8%	7,571	885	6,686	11.7%	23		17	26.1%
	Unknown	1	1	0		1	0	1	0.0%	567	68	499	12.0%
1994	HDGV	18	4	14	22.2%	1	1	0	100.0%	1,928	118	1,810	6.1%
1994	LDGT1	17,458	1,220	16,238	7.0%	2,226	375	1,851	16.8%	5	0	5	0.0%
1994	LDGT2	4,566	318	4,248	7.0%	412	62	350	15.0%	0	0	0	-
1994	LDGV	47,047	3,315	43,732	7.0%	3,126	337	2,789	10.8%	16	5	11	31.3%
1994	Unknown	1	0	1	0.0%	3	0	3	0.0%	305	25	280	8.2%
1995	HDGV	25	3	22	12.0%	3	0	3	0.0%	6,180	277	5,903	4.5%
1995	LDGT1	54,660	2,699	51,961	4.9%	4,578	377	4,201	8.2%	7	2	5	28.6%
1995	LDGT2	15,978	616	15,362	3.9%	1,186	98	1,088	8.3%	1	0	1	0.0%
	LDGV	155,221	5,905	149,316	3.8%	9,292	573	8,719	6.2%	35	2	33	
1995	Unknown	. 3	, 0	3	0.0%	1	0	1	0.0%	1,008	51	957	5.1%
	HDGV	8	0	8	0.0%	1	0	1	0.0%	2,045	74	1,971	3.6%
	LDGT1	20,215	894	19,321	4.4%	2,734	46	2,688	1.7%	5		5	
	LDGT2	4,664	156	4,508	3.3%	623	25	598	4.0%	0		0	
	LDGV	51,090	2,152	48,938	4.2%	3,155	82	3,073	2.6%	15	2	13	13.3%
	Unknown	0	0	0		0,100	0	0,010		346	19	327	5.5%
	HDGV	36	2	34	5.6%	4	0	4	0.0%	7,075		6,945	
	LDGT1	42,016	841	41,175	2.0%	14,929	140	14,789	0.9%	20		20	
	LDGT2	13,621	308	13,313	2.3%	1,469	42	1,427	2.9%	2	0	2	
	LDGV	133,403	3,322	130,081	2.5%	10,096	236	9,860	2.3%	36	•	34	0.070
	Unknown	2	0,022	2	0.0%	0	0	0,000		1,390		1,351	2.8%
	HDGV	10	0	10	0.0%	4	0	4	0.0%	2,171	30	2,141	1.4%
	LDGT1	13,713	199	13,514	1.5%	4,488	38	4,450	0.8%	5		5	
	LDGT2	4,487	42	4,445	0.9%	744	14	730	1.9%	4	0	4	
	LDGV	34,032	559	33,473	1.6%	3,242	46	3,196	1.4%	17	1	16	
	Unknown	04,002	000	00,470		0,242	0	0,130	1.77	504	9	495	

	Veh	ASM	ASM	ASM	ASM	2500	2500	2500	2500	Idle		Idle	Idle
Model Yr	Type	Tests	Fail	Pass	Fail Rate	Tests	Fail	Pass	Fail Rate	Tests	Idle Fail	Pass	Fail Rate
	HDGV	13	0	13	0.0%	9	0	9	0.070	7,052	101	6,951	1.4%
	LDGT1	24,120	190	23,930	0.8%	8,271	40	8,231	0.5%	13	0	13	
	LDGT2	9,338	51	9,287	0.5%	3,449	16	3,433	0.5%	4	0	4	0.0,0
	LDGV	72,011	743	71,268	1.0%	6,810	53	6,757	0.8%	19		19	
	Unknown	1	0	1	0.0%	3	0	3	0.0%	1,477	36	.,	2.4%
	HDGV	12	1	11	8.3%	3	0	3	0.0%	3,751	3	٥,: :٥	
	LDGT1	13,574	29	13,545	0.2%	4,556	10	4,546	0.2%	8	1	7	
	LDGT2	3,027	7	3,020	0.2%	2,324	2	2,322	0.1%	4	0		0.0,0
	LDGV	35,489	279	35,210	0.8%	3,222	17	3,205	0.5%	21	1	20	
	Unknown	0	0	0	-	1	0	1	0.0%	974	12	962	1.2%
	HDGV	9	0	9	0.0%	4	0	4	0.0%	4,285	5	,	
2001	LDGT1	15,204	37	15,167	0.2%	6,216	9	6,207	0.1%	18	0	18	0.0%
2001	LDGT2	4,250	5	4,245	0.1%	3,604	2	3,602	0.1%	12	0	12	0.0%
2001	LDGV	40,386	180	40,206	0.4%	5,831	9	5,822	0.2%	36	0	36	0.0%
2001	Unknown	0	0	0	-	2	0	2	0.0%	1,099	2	1,097	0.2%
2002	HDGV	0	0	0	-	0	0	0	-	991	2	989	0.2%
2002	LDGT1	3,158	5	3,153	0.2%	1,955	1	1,954	0.1%	3	0	3	0.0%
2002	LDGT2	716	1	715	0.1%	640	0	640	0.0%	4	0	4	0.0%
2002	LDGV	10,999	26	10,973	0.2%	1,136	4	1,132	0.4%	5	0	5	0.0%
2002	Unknown	0	0	0	-	0	0	0	-	320	1	319	0.3%
2003	HDGV	1	0	1	0.0%	0	0	0	-	507	0	507	0.0%
2003	LDGT1	710	9	701	1.3%	495	0	495	0.0%	1	0	1	0.0%
2003	LDGT2	325	9	316	2.8%	363	0	363	0.0%	5	0	5	0.0%
2003	LDGV	2,674	58	2,616	2.2%	649	0	649	0.0%	2	0	2	0.0%
2003	Unknown	0	0	0	-	0	0	0	-	198	0	198	0.0%
2004	HDGV	0	0	0	_	0	0	0	-	15	0	15	0.0%
2004	LDGT1	11	0	11	0.0%	30	0	30	0.0%	0	0	0	
2004	LDGT2	6	0	6	0.0%	11	0	11	0.0%	0	0	0	-
	LDGV	90	1	89	1.1%	24	0	24	0.0%	1	0	1	0.0%
	Unknown	0	0	0	-	0	0	0	-	11	0	11	0.0%
Totals		1,481,841	121,886	1,359,955	8.2%	141,988	7,323	134,665	5.2%	90,511	9,976	80,535	

	Veh	Gas Cap	Gas Cap	Gas Cap	Gas Cap	Cat Conv	Cat Conv	Cat Conv	Cat Conv	Smoke	Smoke	Smoke	Smoke
Model Yr	Type	Tests	Fail	Pass	Fail Rate	Tests	Fail	Pass	Fail Rate	Tests	Fail	Pass	Fail Rate
Pre 79/Unknown	HDGV	711	80	631	11.3%	258	2	256		1,020	11	1,009	1.08%
Pre 79/Unknown	LDGT1	1,320	152	1,168	11.5%	832	16	816		1,933		1,910	
Pre 79/Unknown	LDGT2	955	157	798	16.4%	479	13	466		1,259		1,238	1.67%
Pre 79/Unknown	LDGV	6,020	531	5,489	8.8%	4,225	42	4,183		10,829	158	10,671	1.46%
Pre 79/Unknown		258	59	199	22.9%	66	2	64		470		466	
	HDGV	307	15	292	4.9%	188	2	186		366		364	
	LDGT1	870	66	804	7.6%	827	14	813	1.69%	888		880	
	LDGT2	794	93	701	11.7%	775	11	764		832		822	1.20%
	LDGV	3,281	208	3,073	6.3%	3,427	34	3,393		3,527	36	3,491	1.02%
1979	Unknown	82	10	72	12.2%	52	2	50	3.85%	141	0	141	0.00%
1980	HDGV	149	18	131	12.1%	88	1	87	1.14%	177	1	176	0.56%
1980	LDGT1	317	38	279	12.0%	311	11	300	3.54%	326		321	1.53%
1980	LDGT2	134	14	120	10.4%	123	3	120	2.44%	136	1	135	0.74%
1980	LDGV	1,092	50	1,042	4.6%	1,168	12	1,156	1.03%	1,194	15	1,179	1.26%
1980	Unknown	31	4	27	12.9%	18	0	18	0.00%	44	0	44	0.00%
1981	HDGV	357	22	335	6.2%	231	10	221	4.33%	407	1	406	0.25%
	LDGT1	894	92	802	10.3%	900	14	886		917	11	906	1.20%
1981	LDGT2	236	29	207	12.3%	227	3	224	1.32%	243		237	2.47%
1981	LDGV	2,661	156	2,505	5.9%	2,781	6	2,775	0.22%	2,794	35	2,759	1.25%
1981	Unknown	65	6	59	9.2%	43	0	43	0.00%	90	1	89	1.11%
1982	HDGV	255	15	240	5.9%	160	3	157	1.88%	270		266	1.48%
1982	LDGT1	541	58	483	10.7%	547	9	538	1.65%	555	12	543	2.16%
1982	LDGT2	205	16	189	7.8%	203	3	200	1.48%	211	7	204	3.32%
1982	LDGV	1,520	89	1,431	5.9%	1,611	9	1,602	0.56%	1,618	29	1,589	1.79%
1982	Unknown	55	3	52	5.5%	35	1	34	2.86%	67	0	67	0.00%
1983	HDGV	614	39	575	6.4%	396	9	387	2.27%	654	1	653	0.15%
1983	LDGT1	1,874	140	1,734	7.5%	1,898	11	1,887	0.58%	1,918	26	1,892	1.36%
1983	LDGT2	803	68	735	8.5%	801	8	793	1.00%	817	12	805	1.47%
1983	LDGV	6,487	343	6,144	5.3%	6,733	11	6,722	0.16%	6,761	130	6,631	1.92%
1983	Unknown	117	15	102	12.8%	70	0	70	0.00%	162	0	162	0.00%
1984	HDGV	572	44	528	7.7%	396	6	390	1.52%	621	4	617	0.64%
1984	LDGT1	1,652	120	1,532	7.3%	1,667	14	1,653	0.84%	1,681	35	1,646	2.08%
1984	LDGT2	666	69	597	10.4%	663	9	654	1.36%	680	10	670	1.47%
1984	LDGV	5,169	335	4,834	6.5%	5,275	20	5,255	0.38%	5,307	108	5,199	2.04%
1984	Unknown	130	24	106	18.5%	66	2	64	3.03%	154	2	152	1.30%

	Veh	Gas Cap	Gas Cap	Gas Cap	Gas Cap	Cat Conv	Cat Conv	Cat Conv	Cat Conv	Smoke	Smoke	Smoke	Smoke
Model Yr	Type	Tests	Fail	Pass	Fail Rate	Tests	Fail	Pass	Fail Rate	Tests	Fail	Pass	Fail Rate
1985	HDGV	1,528	93	1,435	6.1%	1,016	17	999	1.67%	1,663	8	1,655	0.48%
1985	LDGT1	5,342	371	4,971	6.9%	5,377	25	5,352	0.46%	5,410	96	5,314	1.77%
1985	LDGT2	2,040	169	1,871	8.3%	2,034	9	2,025	0.44%	2,070	41	2,029	1.98%
1985	LDGV	21,041	843	20,198	4.0%	21,278	25	21,253	0.12%	21,352	457	20,895	2.14%
1985	Unknown	281	37	244	13.2%	141	2	139	1.42%	364	3	361	0.82%
1986	HDGV	1,242	92	1,150	7.4%	794	12	782	1.51%	1,314	7	1,307	0.53%
1986	LDGT1	4,282	278	4,004	6.5%	4,299	15	4,284	0.35%	4,337	87	4,250	2.01%
1986	LDGT2	1,374	110	1,264	8.0%	1,355	6	1,349	0.44%	1,385	27	1,358	1.95%
1986	LDGV	13,277	593	12,684	4.5%	13,416	21	13,395	0.16%	13,479	347	13,132	2.57%
1986	Unknown	248	33	215	13.3%	137	2	135	1.46%	299	1	298	0.33%
1987	HDGV	2,444	128	2,316	5.2%	2,076	12	2,064	0.58%	2,618	15	2,603	0.57%
1987	LDGT1	14,075	569	13,506	4.0%	14,109	19	14,090	0.13%	14,163	238	13,925	1.68%
1987	LDGT2	4,425	225	4,200	5.1%	4,452	6	4,446	0.13%	4,474	62	4,412	1.39%
1987	LDGV	47,980	1,724	46,256	3.6%	48,262	53	48,209	0.11%	48,400	648	47,752	1.34%
1987	Unknown	484	51	433	10.5%	363	2	361	0.55%	585	3	582	0.51%
1988	HDGV	1,630	94	1,536	5.8%	1,607	5	1,602	0.31%	1,697	13	1,684	0.77%
1988	LDGT1	7,736	341	7,395	4.4%	7,740	5	7,735	0.06%	7,780	137	7,643	1.76%
1988	LDGT2	2,721	124	2,597	4.6%	2,741	8	2,733	0.29%	2,754	39	2,715	1.42%
1988	LDGV	23,305	1,055	22,250	4.5%	23,436	28	23,408	0.12%	23,531	436	23,095	1.85%
1988	Unknown	284	21	263	7.4%	249	2	247	0.80%	322	2	320	0.62%
1989	HDGV	3,585	134	3,451	3.7%	3,598	3	3,595	0.08%	3,707	15	3,692	0.40%
1989	LDGT1	19,244	720	18,524	3.7%	19,281	20	19,261	0.10%	19,324	363	18,961	1.88%
1989	LDGT2	7,192	240	6,952	3.3%	7,193	4	7,189	0.06%	7,208	65	7,143	0.90%
1989	LDGV	74,410	2,414	71,996	3.2%	74,683	42	74,641	0.06%	74,870	1,164	73,706	1.55%
1989	Unknown	596	68	528	11.4%	576	0	576	0.00%	681	2	679	0.29%
1990	HDGV	1,318	69	1,249	5.2%	1,325	5	1,320	0.38%	1,376	7	1,369	0.51%
1990	LDGT1	8,199	368	7,831	4.5%	8,208	11	8,197	0.13%	8,229	172	8,057	2.09%
1990	LDGT2	2,391	104	2,287	4.3%	2,390	2	2,388	0.08%	2,399	26	2,373	1.08%
1990	LDGV	35,473	1,380	34,093	3.9%	35,541	31	35,510	0.09%	35,673	644	35,029	1.81%
1990	Unknown	224	29	195	12.9%	216	1	215	0.46%	243		242	
1991	HDGV	2,062	74	1,988	3.6%	2,067	1	2,066	0.05%	2,095	11	2,084	0.53%
1991	LDGT1	25,117	750	24,367	3.0%	25,119	14	25,105	0.06%	25,170	317	24,853	1.26%
	LDGT2	4,857	196	4,661	4.0%	4,863	2	4,861	0.04%	4,866		4,818	
1991	LDGV	93,526	2,700	90,826	2.9%	93,734	26	93,708	0.03%	93,917	1,742	92,175	1.85%
1991	Unknown	286	22	264	7.7%	306	0	306		334	2	332	

	Veh	Gas Cap	Gas Cap	Gas Cap	Gas Cap	Cat Conv	Cat Conv	Cat Conv	Cat Conv	Smoke	Smoke	Smoke	Smoke
Model Yr	Type	Tests	Fail	Pass	Fail Rate	Tests	Fail	Pass	Fail Rate	Tests	Fail	Pass	Fail Rate
	HDGV	1,097	47	1,050	4.3%	1,103	1	1,102	0.09%	1,130		1,127	
	LDGT1	11,517	328	11,189	2.8%	11,495	4	11,491	0.03%	11,530		11,321	1.81%
	LDGT2	2,458	89	2,369	3.6%	2,455	5	2,450		2,460		2,448	
1992	LDGV	42,800	1,035	41,765	2.4%	42,821	23	42,798		42,932		41,935	2.32%
1992	Unknown	168	21	147	12.5%	180	1	179		185	1	184	0.54%
1993	HDGV	2,888	132	2,756	4.6%	2,898	4	2,894		2,931	5	2,926	
1993	LDGT1	41,627	912	40,715	2.2%	41,672	6	41,666		41,765	670	41,095	
	LDGT2	9,218	284	8,934	3.1%	9,225	4	9,221	0.04%	9,229		9,192	
	LDGV	134,208	2,621	131,587	2.0%	134,331	29	134,302	0.02%	134,525	2,300	132,225	1.71%
1993	Unknown	536	34	502	6.3%	557	0	557	0.00%	571	0	571	0.00%
1994	HDGV	1,936	98	1,838	5.1%	1,944	4	1,940	0.21%	1,980	4	1,976	0.20%
1994	LDGT1	20,137	466	19,671	2.3%	20,112	4	20,108	0.02%	20,154	300	19,854	1.49%
1994	LDGT2	5,052	145	4,907	2.9%	5,059	4	5,055	0.08%	5,059	40	5,019	0.79%
1994	LDGV	51,208	1,147	50,061	2.2%	51,300	23	51,277	0.04%	51,396	701	50,695	1.36%
1994	Unknown	288	32	256	11.1%	305	0	305	0.00%	312	0	312	0.00%
1995	HDGV	6,170	233	5,937	3.8%	6,233	6	6,227	0.10%	6,271	10	6,261	0.16%
1995	LDGT1	59,801	1,023	58,778	1.7%	59,765	2	59,763	0.00%	59,844	256	59,588	0.43%
1995	LDGT2	17,255	457	16,798	2.6%	17,274	3	17,271	0.02%	17,285	38	17,247	0.22%
1995	LDGV	166,140	3,035	163,105	1.8%	166,621	24	166,597	0.01%	166,826	1,188	165,638	0.71%
1995	Unknown	953	81	872	8.5%	980	1	979	0.10%	1,017	0	1,017	0.00%
1996	HDGV	2,048	71	1,977	3.5%	2,093	1	2,092	0.05%	2,108	2	2,106	0.09%
1996	LDGT1	25,157	721	24,436	2.9%	25,340	1	25,339	0.00%	25,376	80	25,296	0.32%
1996	LDGT2	5,771	157	5,614	2.7%	5,771	2	5,769	0.03%	5,783	6	5,777	0.10%
1996	LDGV	61,007	1,319	59,688	2.2%	61,232	13	61,219	0.02%	61,321	290	61,031	0.47%
1996	Unknown	330	19	311	5.8%	337	1	336	0.30%	348	0	348	0.00%
1997	HDGV	7,080	214	6,866	3.0%	7,148	2	7,146	0.03%	7,193	5	7,188	0.07%
1997	LDGT1	63,724	1,432	62,292	2.2%	63,879	4	63,875	0.01%	63,929	77	63,852	0.12%
1997	LDGT2	16,764	361	16,403	2.2%	16,796	3	16,793	0.02%	16,809	9	16,800	0.05%
1997	LDGV	161,964	2,341	159,623	1.4%	163,373	23	163,350	0.01%	163,494	345	163,149	0.21%
1997	Unknown	1,351	100	1,251	7.4%	1,376	2	1,374	0.15%	1,399	0	1,399	0.00%
1998	HDGV	2,179	58	2,121	2.7%	2,221	1	2,220		2,236		2,236	
	LDGT1	38,523	754	37,769	2.0%	38,557	1	38,556		38,588		38,555	
	LDGT2	10,500	146	10,354	1.4%	10,516	1	10,515		10,530		10,529	
	LDGV	83,255	1,681	81,574	2.0%	84,568	16	84,552	0.02%	84,640		84,486	
	Unknown	496	24	472	4.8%	505	0	505		513		513	

	Veh	Gas Cap	Gas Cap	Gas Cap	Gas Cap	Cat Conv	Cat Conv	Cat Conv	Cat Conv	Smoke	Smoke	Smoke	Smoke
Model Yr	Type	Tests	Fail	Pass	Fail Rate	Tests	Fail	Pass	Fail Rate	Tests	Fail	Pass	Fail Rate
1999	HDGV	7,056	161	6,895	2.3%	7,182	0	7,182	0.00%	7,175	3	7,172	0.04%
1999	LDGT1	68,450	1,378	67,072	2.0%	68,622	1	68,621	0.00%	68,663		68,641	0.03%
1999	LDGT2	27,362	300	27,062	1.1%	27,422	0	27,422	0.00%	27,438	9	27,429	0.03%
1999	LDGV	169,022	4,155	164,867	2.5%	172,063	15	172,048	0.01%	172,153	122	172,031	0.07%
	Unknown	1,458	77	1,381	5.3%	1,496	0	1,496		1,492		1,492	
2000	HDGV	3,744	104	3,640	2.8%	3,829	1	3,828	0.03%	3,855	1	3,854	0.03%
2000	LDGT1	45,612	1,239	44,373	2.7%	45,856	2	45,854		45,881	4	45,877	0.01%
2000	LDGT2	13,412	384	13,028	2.9%	13,539	0	13,539	0.00%	13,545	1	13,544	0.01%
2000	LDGV	105,147	2,553	102,594	2.4%	109,398	1	109,397	0.00%	109,454	25	109,429	0.02%
2000	Unknown	958	57	901	5.9%	979	0	979		981	0	981	0.00%
2001	HDGV	4,253	123	4,130	2.9%	4,355	0	4,355	0.00%	4,415		4,415	0.00%
2001	LDGT1	37,610	1,632	35,978	4.3%	38,109	1	38,108	0.00%	38,133	2	38,131	0.01%
	LDGT2	13,211	396	12,815	3.0%	13,970	0	13,970	0.00%	13,979	1	13,978	0.01%
2001	LDGV	80,588	2,993	77,595	3.7%	84,805	5	84,800	0.01%	84,819	13	84,806	0.02%
2001	Unknown	1,089	41	1,048	3.8%	1,124	0	1,124	0.00%	1,109	0	1,109	0.00%
2002	HDGV	986	10	976	1.0%	998	0	998	0.00%	1,013	0	1,013	0.00%
2002	LDGT1	13,868	439	13,429	3.2%	14,117	1	14,116	0.01%	14,124	0	14,124	0.00%
2002	LDGT2	3,811	73	3,738	1.9%	4,005	0	4,005	0.00%	4,005	2	4,003	0.05%
	LDGV	30,850	637	30,213	2.1%	32,364	1	32,363	0.00%	32,371	1	32,370	
2002	Unknown	315	7	308	2.2%	323	0	323	0.00%	323		323	0.00%
	HDGV	502	6	496	1.2%	517	0	517	0.00%	537		537	0.00%
2003	LDGT1	3,851	52	3,799	1.4%	4,042	0	4,042	0.00%	4,042	1	4,041	0.02%
	LDGT2	1,690	20	1,670	1.2%	1,769	0	1,769	0.00%	1,772	0	1,772	0.00%
2003	LDGV	10,305	111	10,194	1.1%	11,356	0	11,356	0.00%	11,359	0	11,359	0.00%
2003	Unknown	196	3	193	1.5%	201	1	200	0.50%	201	0	201	0.00%
2004	HDGV	13	0	13	0.0%	15	0	15	0.00%	15	0	15	0.00%
2004	LDGT1	193	1	192	0.5%	207	0	207	0.00%	207	0	207	0.00%
2004	LDGT2	62	1	61	1.6%	68	0	68	0.00%	68	0	68	0.00%
2004	LDGV	565	2	563	0.4%	641	0	641	0.00%	642	0	642	0.00%
2004	Unknown	9	0	9	0.0%	11	0	11	0.00%	11	0	11	0.00%
Totals		2,177,207	57,970	2,119,237	2.7%	2,194,947	997	2,193,950	0.05%	2,212,609	15,955	2,196,654	0.72%

New Jersey Enhanced Inspection and Maintenance Program Initial Overall Emissions Inspections Volume & Failure Rate by Model Year and Vehicle Type Year 2003

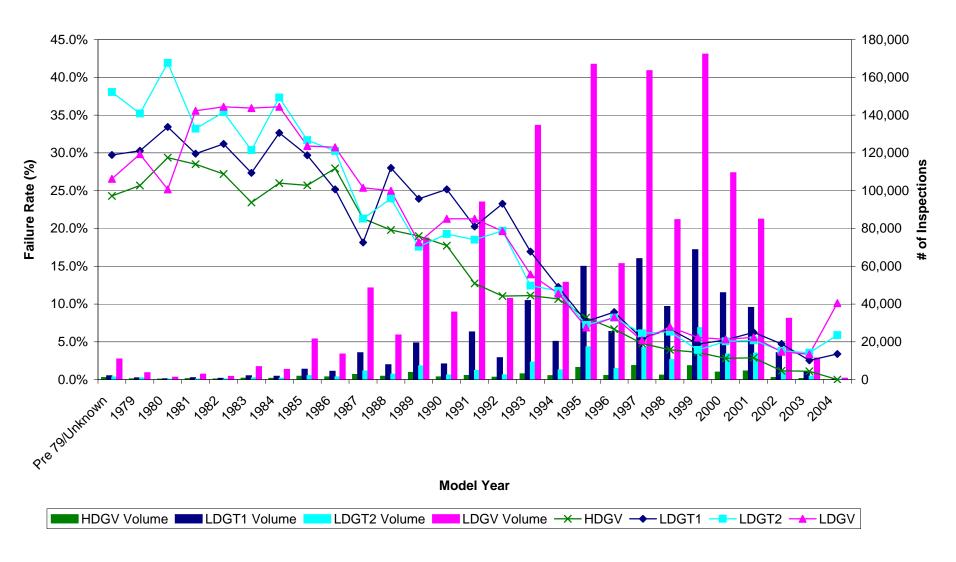


Figure E-1

New Jersey Enhanced Inspection and Maintenance Program Initial OBDII Test Volume & Failure Rate by Model Year and Vehicle Type - Includes OBDII Pilot Fails Year 2003

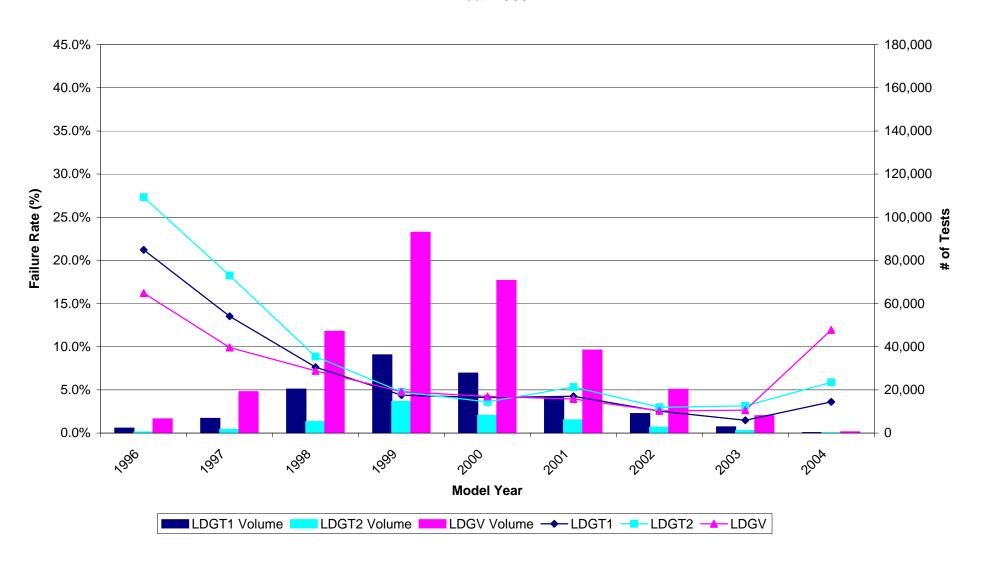


Figure E-2

New Jersey Enhanced Inspection and Maintenance Program Initial OBDII Test Volume & Failure Rate by Model Year and Vehicle Type - OBDII Pilot Fails Excluded Year 2003

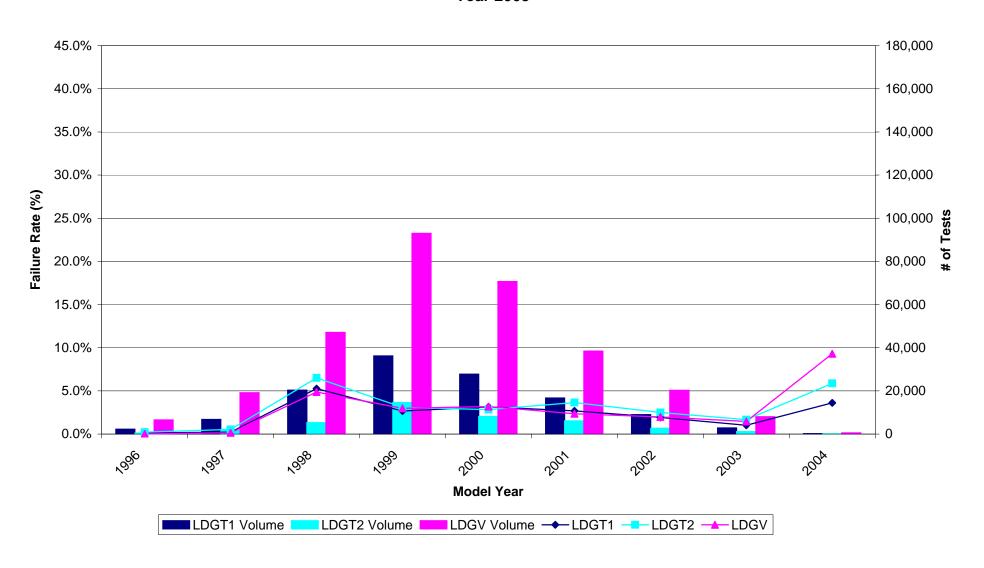


Figure E-3

New Jersey Enhanced Inspection and Maintenance Program Initial ASM Test Volume & Failure Rate by Model Year and Vehicle Type Year 2003

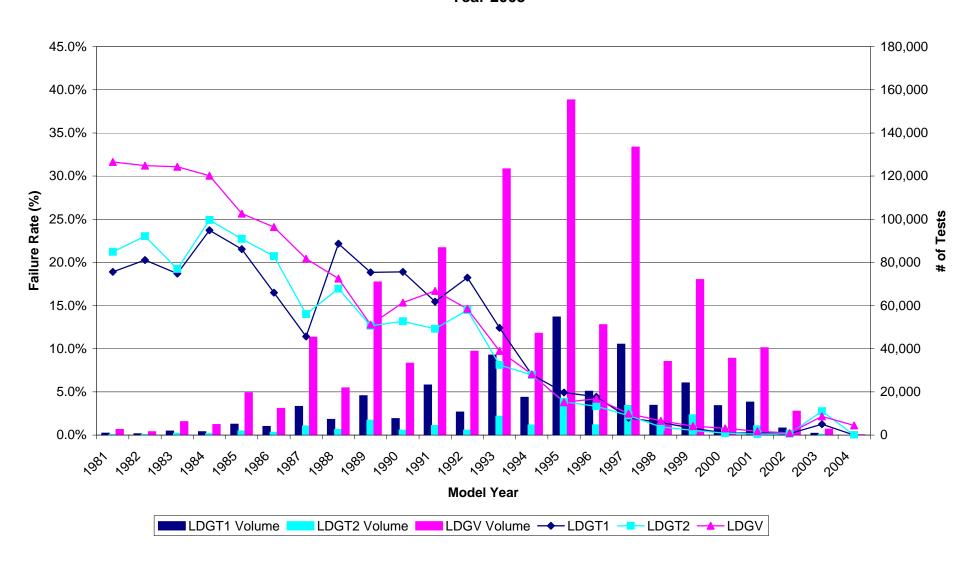


Figure E-4

New Jersey Enhanced Inspection and Maintenance Program Initial 2500 RPM Test Volume & Failure Rate by Model Year and Vehicle Type Year 2003

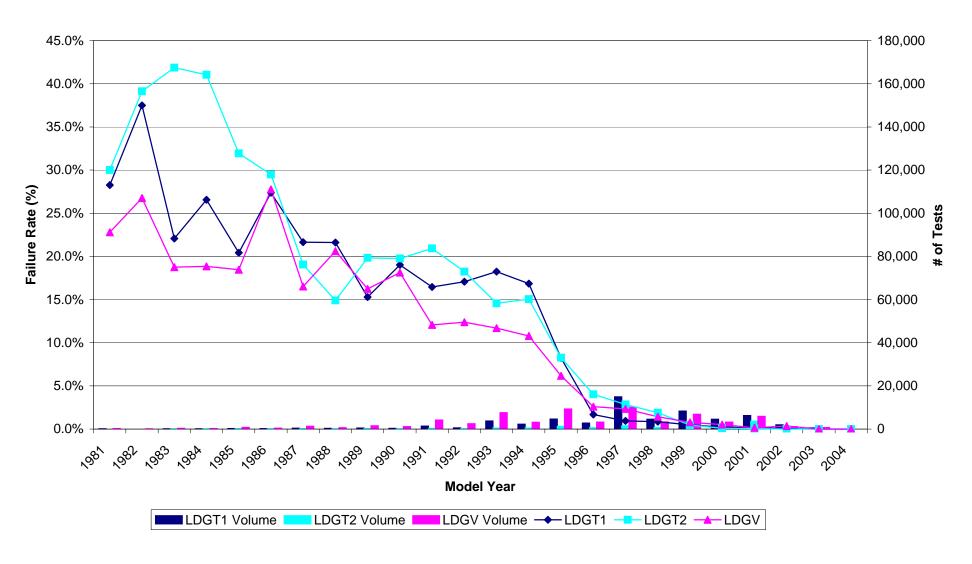


Figure E-5

New Jersey Enhanced Inspection and Maintenance Program Initial Idle Test Volume & Failure Rate by Model Year and Vehicle Type Year 2003

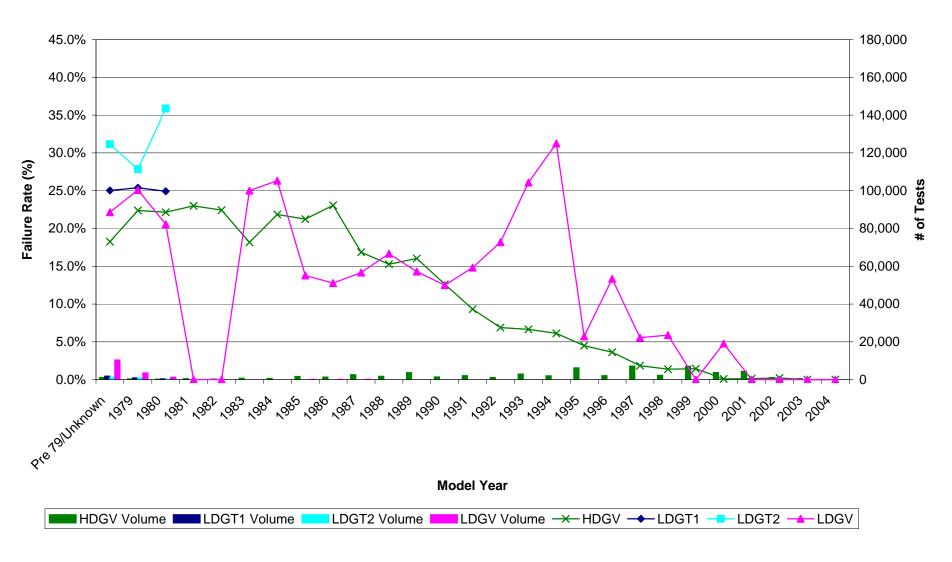


Figure E-6

New Jersey Enhanced Inspection and Maintenance Program Initial Gas Cap Test Volume & Failure Rate by Model Year and Vehicle Type Year 2003

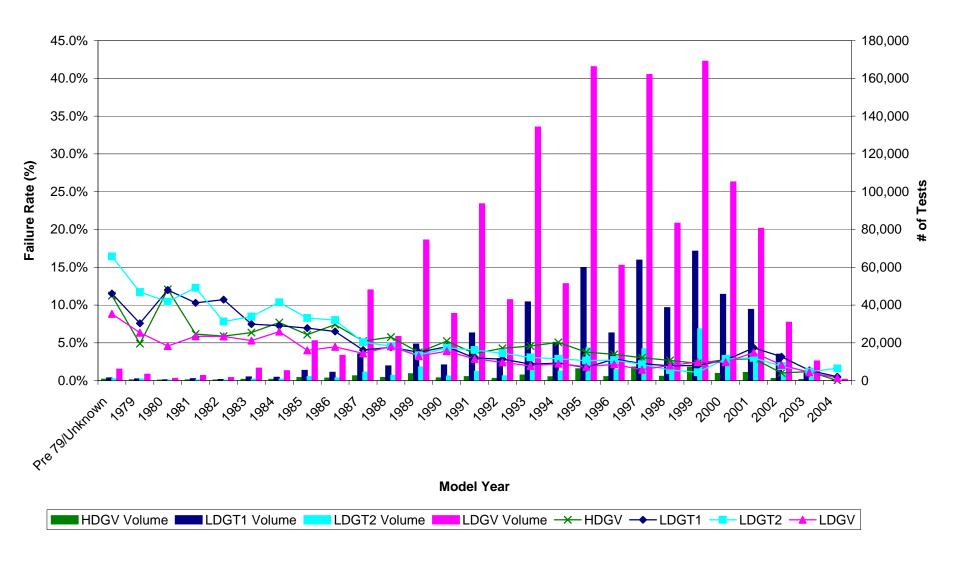


Figure E-7

New Jersey Enhanced Inspection and Maintenance Program Initial Catalytic Converter Test Volume & Failure Rate by Model Year and Vehicle Type Year 2003

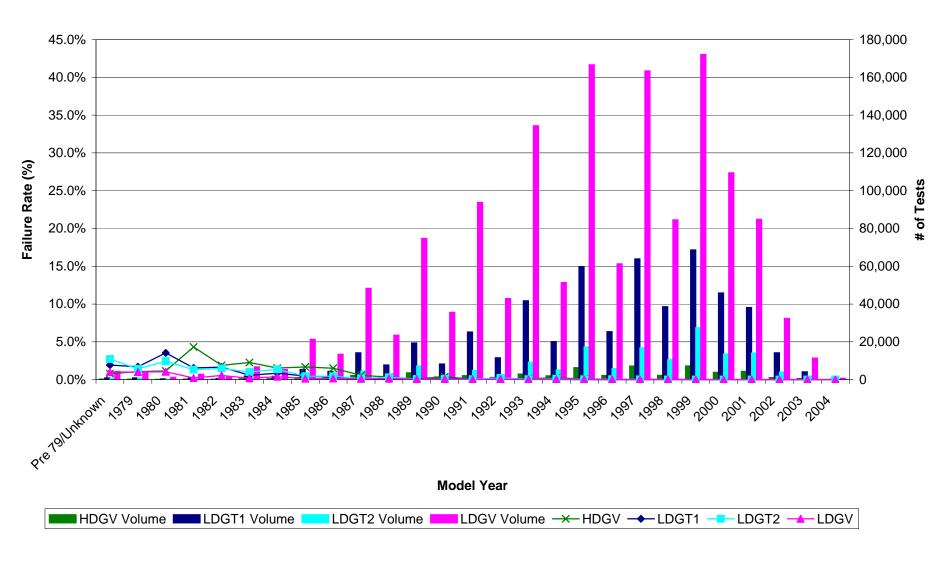


Figure E-8

New Jersey Enhanced Inspection and Maintenance Program Initial Smoke Test Volume & Failure Rate by Model Year and Vehicle Type Year 2003

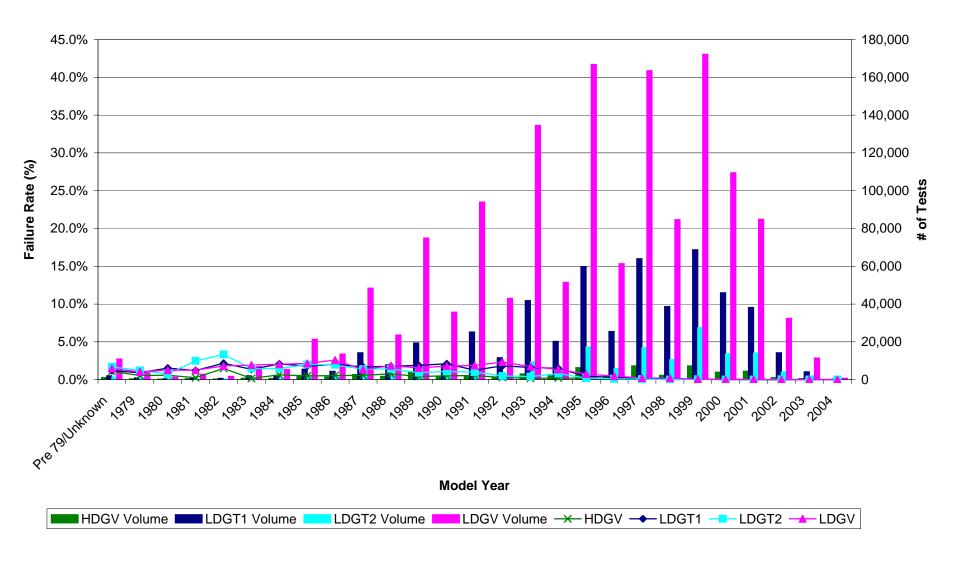


Figure E-9

APPENDIX I -PART F

ON-BOARD DIAGNOSTICS II (OBDII) INSPECTIONS

New Jersey Enhanced Inspection and Maintenance Program Overall OBDII Inspections - Initial and All Retests Year 2003

Model Yr	Veh Type	OBDII Initial Tests	Initial and 1st or Subsequent Retest Passes	Overall OBDII Pass Rate	OBDII Pilot Fails (not retest eligible)	% OBDII Pilot Fails	Overall OBDII Failed (Dropped)	Overall OBDII Fail Rate
Unknown	LDGT1	25	25	100.0%	1	4.0%	0	0.0%
Unknown	LDGT2	10	9	90.0%	0	0.0%	1	10.0%
Unknown	LDGV	70	60	85.7%	6	8.6%	4	5.7%
Unknown	Unknown	1	1	100.0%	0	0.0%	0	0.0%
1996	LDGT1	2,252	1,776	78.9%	475	21.1%	1	0.0%
1996	LDGT2	465	340	73.1%	126	27.1%	0	0.0%
1996	LDGV	6,488	5,444	83.9%	1,051	16.2%	0	0.0%
1996	Unknown	1	1	100.0%	0	0.0%	0	0.0%
1997	LDGT1	6,752	5,854	86.7%	899	13.3%	0	0.0%
1997	LDGT2	1,660	1,361	82.0%	294	17.7%	5	0.3%
1997	LDGV	19,157	17,286	90.2%	1,869	9.8%	2	0.0%
1997	Unknown	4	4	100.0%	0	0.0%	0	0.0%
1998	LDGT1	20,283	19,425	95.8%	480	2.4%	378	1.9%
1998	LDGT2	5,279	5,035	95.4%	125	2.4%	119	2.3%
1998	LDGV	47,086	45,018	95.6%	1,102	2.3%	966	2.1%
1998	Unknown	14	13	92.9%	1	7.1%	0	0.0%
1999	LDGT1	36,184	35,220	97.3%	625	1.7%	339	0.9%
1999	LDGT2	14,617	14,259	97.6%	242	1.7%	116	0.8%
1999	LDGV	92,978	90,390	97.2%	1,701	1.8%	887	1.0%
1999	Unknown	24	24	100.0%	0	0.0%	0	0.0%
2000	LDGT1	27,702	27,104	97.8%	268	1.0%	330	1.2%
2000	LDGT2	8,171	8,019	98.1%	63	0.8%	89	1.1%
2000	LDGV	70,616	69,043	97.8%	743	1.1%	830	1.2%
2000	Unknown	11	11	100.0%	0	0.0%	0	0.0%
2001	LDGT1	16,670	16,270	97.6%	262	1.6%	138	0.8%
2001	LDGT2	6,093	5,917	97.1%	103	1.7%	73	1.2%
2001	LDGV	38,424	37,524	97.7%	610	1.6%	290	0.8%
2001	Unknown	12	10	83.3%	2	16.7%	0	0.0%
2002	LDGT1	9,003	8,890	98.7%	55	0.6%	58	0.6%
2002	LDGT2	2,643		98.8%				
2002	LDGV	20,214	19,965	98.8%	121	0.6%	128	0.6%
2002	Unknown	2	2	100.0%	0	0.0%	0	0.0%
2003	LDGT1	2,835	2,811	99.2%	13	0.5%	11	0.4%
2003	LDGT2	1,079	1,059	98.1%	16	1.5%	4	0.4%
2003	LDGV	8,030	7,912	98.5%	95	1.2%	23	0.3%
2003	Unknown	6	6	100.0%		0.0%	0	0.0%
2004	LDGT1	166	163	98.2%	0	0.0%	3	
2004	LDGT2	51	50	98.0%	0	0.0%	1	2.0%
2004	LDGV	527	484	91.8%	14	2.7%	29	5.5%
2004	Unknown	0	0	-	0	-	0	-
Totals		465,605	449,396	96.5%	11,375	2.4%	4,844	1.0%

New Jersey Enhanced Inspection and Maintenance Program OBDII and Gas Cap (GC) Evaporative Test Report Year 2003

		# Initial	# Pass	% Pass			# Fail OBD /	% Fail		
		OBD &	OBD /	OBD/	# Pass	% Pass	Pass	OBD/	# Fail	% Fail
Model Yr	Veh Type	GC Tests	Fail GC	Fail GC	Both	Both	GC	Pass GC	Both	Both
Unknown	LDGT1	21	0	0.0%	21	100.0%	0	0.0%	0	0.00%
Unknown	LDGT2	9	0	0.0%	9	100.0%	0		0	0.00%
Unknown	LDGV	47	0	0.0%	46	97.9%	1	2.1%	0	0.00%
Unknown	Unknown	1	0	0.0%	1	100.0%	0	0.0%	0	0.00%
1996	LDGT1	2,500	71	2.8%	2,402	96.1%	27	1.1%	0	0.00%
1996	LDGT2	508	12	2.4%	493	97.0%	3	0.6%	0	0.00%
1996	LDGV	6,221	148	2.4%	6,003	96.5%	70		0	0.00%
1996	Unknown	1	0	0.0%	1	100.0%	0	0.0%	0	0.00%
1997	LDGT1	6,461	145	2.2%	6,206	96.1%	101	1.6%	9	0.14%
1997	LDGT2	1,513	46	3.0%	1,455	96.2%	11	0.7%	1	0.07%
1997	LDGV	18,377	246	1.3%	17,949	97.7%	177	1.0%	5	0.03%
1997	Unknown	4	0	0.0%	4	100.0%	0	0.0%	0	0.00%
1998	LDGT1	19,614	372	1.9%	19,075	97.3%	159	0.8%	8	0.04%
1998	LDGT2	5,057	82	1.6%	4,942	97.7%	29	0.6%	4	0.08%
1998	LDGV	44,921	906	2.0%	43,559	97.0%	431	1.0%	25	0.06%
1998	Unknown	13	0	0.0%	13	100.0%	0	0.0%	0	0.00%
1999	LDGT1	35,388	722	2.0%	34,552	97.6%	109	0.3%	5	0.01%
1999	LDGT2	14,250	166	1.2%	14,044	98.6%	39	0.3%	1	0.01%
1999	LDGV	89,522	2,358	2.6%	86,803	97.0%	339	0.4%	22	0.02%
1999	Unknown	24	0	0.0%	24	100.0%	0	0.0%	0	0.00%
2000	LDGT1	26,924	795	3.0%	26,053	96.8%	60	0.2%	16	0.06%
2000	LDGT2	7,964	268	3.4%	7,674	96.4%	19	0.2%	3	0.04%
2000	LDGV	66,474	1,370	2.1%	64,881	97.6%	207	0.3%	16	0.02%
2000	Unknown	11	0	0.0%	11	100.0%	0	0.0%	0	0.00%
2001	LDGT1	16,209	795	4.9%	15,338	94.6%	67	0.4%	9	0.06%
2001	LDGT2	5,563	190	3.4%	5,342	96.0%	23	0.4%	8	0.14%
2001	LDGV	35,726	1,313	3.7%	34,268	95.9%	138	0.4%	7	0.02%
2001	Unknown	10	0	0.0%	10	100.0%	0	0.0%	0	0.00%
2002	LDGT1	8,735	323	3.7%	8,391	96.1%	18	0.2%	3	0.03%
2002	LDGT2	2,473	61	2.5%	2,408	97.4%	4	0.2%	0	0.00%
2002	LDGV	19,021	469	2.5%	18,510	97.3%	42	0.2%	0	0.00%
2002	Unknown	2	0	0.0%	2	100.0%	0	0.0%	0	0.00%
2003	LDGT1	2,663	47	1.8%	2,611	98.0%	4	0.2%	1	0.04%
2003	LDGT2	1,007	17	1.7%	986	97.9%	4	0.4%	0	0.00%
2003	LDGV	7,125	86	1.2%	7,033	98.7%	6	0.1%	0	0.00%
2003	Unknown	6	0	0.0%	6	100.0%	0	0.0%	0	0.00%
2004	LDGT1	152	1	0.7%	151	99.3%	0	0.0%	0	0.00%
2004	LDGT2	45	1	2.2%	43	95.6%	1	2.2%	0	0.00%
2004	LDGV	415	0		415	100.0%	0	0.0%	0	0.00%
2004	Unknown	0	0	-	0		0		0	
Totals		444,977	11,010	2.5%	431,735	97.0%	2,089	0.5%	143	0.03%

New Jersey Enhanced Inspection and Maintenance Program OBDII Malfunction Indicator Lamp (MIL) Report Year 2003

Madal VII	Walt True	# Initial	# MIL Off/	% MIL Off/	# MIL Off With	% MIL Off With	# MIL On/ No	% MIL On/ No	# MIL On With	% MIL On With
Model Yr			No DTCs	No DTCs	DTCs	DTCs	DTCs	DTCs	DTCs	DTCs
	LDGT1	23	23	100.0%	0	0%	0	0.0%		0.0%
	LDGT2	10	10	100.0%	0	0%	0		0	0.0%
	LDGV	52	47	90.4%	0	0%	0		5	9.6%
	Unknown	7	1 004	100.0%	0	0%	0		0	
	LDGT1	2,204	1,834	83.2%	0	0%	0		370	16.8%
1996	LDGT2	433	347	80.1%	0	0%	0		86	19.9%
1996	LDGV	6,347	5,543	87.3%	0	0%	7	0.1%	797	12.6%
1996	Unknown	1	1	100.0%	0	0%	0	0.0%		0.0%
1997	LDGT1	6,631	5,978	90.2%	0	0%	0	0.0%	653	9.8%
	LDGT2	1,538	1,386	90.1%	0	0%	0	0.0%	152	9.9%
1997	LDGV	18,880	17,502	92.7%	0	0%	4	0.0%	1,374	7.3%
1997	Unknown	4	4	100.0%	0	0%	0		0	0.0%
1998	LDGT1	20,077	19,157	95.4%	0	0%	2	0.0%	918	
1998	LDGT2	5,198	4,946	95.2%	0	0%	4	0.1%	248	4.8%
1998	LDGV	46,633	44,552	95.5%	0	0%	27	0.1%	2,054	4.4%
1998	Unknown	14	13	92.9%	0	0%	0	0.0%	1	7.1%
1999	LDGT1	35,974	35,013	97.3%	0	0%	9	0.0%	952	2.6%
1999	LDGT2	14,487	14,126	97.5%	0	0%	11	0.1%	350	2.4%
1999	LDGV	92,077	89,456	97.2%	0	0%	66	0.1%	2,555	2.8%
1999	Unknown	24	24	100.0%	0	0%	0	0.0%	0	0.0%
2000	LDGT1	27,254	26,803	98.3%	0	0%	1	0.0%	450	1.7%
2000	LDGT2	8,088	7,964	98.5%	0	0%	1	0.0%	123	1.5%
2000	LDGV	69,830	68,290	97.8%	0	0%	48	0.1%	1,492	2.1%
2000	Unknown	11	11	100.0%	0	0%	0	0.0%	0	0.0%
2001	LDGT1	16,594	16,199	97.6%	0	0%	10	0.1%	385	2.3%
2001	LDGT2	6,029	5,907	98.0%	0	0%	1	0.0%	121	2.0%
2001	LDGV	38,141	37,404	98.1%	0	0%	22	0.1%	715	1.9%
2001	Unknown	12	12	100.0%	0	0%	0	0.0%	0	0.0%
2002	LDGT1	8,950	8,858	99.0%	0	0%	2	0.0%	90	1.0%
2002	LDGT2	2,623	2,602	99.2%	0	0%	2	0.1%	19	0.7%
	LDGV	20,080	19,893		0					0.9%
2002	Unknown	. 2	2	100.0%	0	0%				0.0%
2003	LDGT1	2,822	2,811	99.6%	0	0%		0.0%		
2003	LDGT2	1,067	1,060		0	0%	0			0.7%
2003	LDGV	7,958	7,938		0	0%	0			0.3%
2003	Unknown	6	6	100.0%	0	0%	0			
2004	LDGT1	166	166	100.0%	0	0%	0			0.0%
2004	LDGT2	51	50	98.0%	0	0%				2.0%
2004	LDGV	523	519	99.2%	0	0%	0	0.0%	4	0.8%
2004	Unknown	020	0	-	0	-	0	-	0	- 0.070
Totals	÷ · · · ·	460,815	446,458	96.9%		0%	_	0.1%	14,123	3.1%

New Jersey Enhanced Inspection and Maintenance Program OBDII Readiness Status Report Year 2003

		# Initial			
		Readiness	# With Unset	# With All	
Model Yr	Veh Type	Tests	Monitors	Monitors Set	Unset Rate
Unknown	LDGT1	10	1	9	10.0%
Unknown	LDGT2	1	0	1	0.0%
Unknown	LDGV	18	9	9	50.0%
Unknown	Unknown	1	1	0	100.0%
1996	LDGT1	2,227	359	1,868	16.1%
1996	LDGT2	454	71	383	15.6%
1996	LDGV	6,378	1,159	5,219	18.2%
1996	Unknown	1	0	1	0.0%
1997	LDGT1	6,632	985	5,647	14.9%
1997	LDGT2	1,538	168	1,370	10.9%
1997	LDGV	18,894	1,760	17,134	9.3%
1997	Unknown	4	0	4	0.0%
1998	LDGT1	20,080	2,083	17,997	10.4%
1998	LDGT2	5,198	691	4,507	13.3%
1998	LDGV	46,657	4,352	42,305	9.3%
1998	Unknown	14	1	13	7.1%
1999	LDGT1	35,974	2,746	33,228	7.6%
1999	LDGT2	14,487	1,812	12,675	12.5%
1999	LDGV	92,077	5,220	86,857	5.7%
1999	Unknown	24	3	21	12.5%
2000	LDGT1	27,254	1,402	25,852	5.1%
2000	LDGT2	8,088	619	7,469	7.7%
2000	LDGV	69,830	3,821	66,009	5.5%
2000	Unknown	11	0	11	0.0%
2001	LDGT1	16,594	670	15,924	4.0%
2001	LDGT2	6,029	387	5,642	6.4%
2001	LDGV	38,141	1,613	36,528	4.2%
2001	Unknown	12	2	10	16.7%
2002	LDGT1	8,950	306	8,644	3.4%
2002	LDGT2	2,623	96	2,527	3.7%
2002	LDGV	20,080	615	19,465	3.1%
2002	Unknown	2	1	1	50.0%
2003	LDGT1	2,822	128	2,694	4.5%
2003	LDGT2	1,067	96	971	9.0%
2003	LDGV	7,958	323	7,635	4.1%
2003	Unknown	6	0	6	0.0%
2004	LDGT1	166	13	153	7.8%
2004	LDGT2	51	18	33	35.3%
2004	LDGV	523	106	417	20.3%
2004	Unknown	0	0	0	
Totals		460,876	ŭ	429,239	6.9%

New Jersey Enhanced Inspection and Maintenance Program OBDII Failures Switched to Tailpipe Testing Year 2003

Model Yr	Veh Type	# OBDII Fails Switched to Tailpipe Test	# Pass Tailpipe R1	# Fail Tailpipe R1	# Pass Tailpipe R2 and Sub	Overall Switched to Tailpipe Pass Rate	Overall # Fail (Dropped) Tailpipe Test	Overall Switched to Tailpipe Fail/Drop Rate
Unknown	LDGT1	4	4	0	0	100.0%	0	0.0%
Unknown	LDGT2	0	0	0	0	-	0	-
Unknown	LDGV	17	15	2	1	94.1%	1	5.9%
Unknown	Unknown	0	0	0	0	-	0	-
1996	LDGT1	1	1	0	0	100.0%	0	0.0%
1996	LDGT2	0	0	0	0	-	0	-
1996	LDGV	5	4	1	0	80.0%	1	20.0%
1996	Unknown	0	0	0	0	-	0	-
1997	LDGT1	7	7	0	0	100.0%	0	0.0%
1997	LDGT2	2	2	0	0	100.0%	0	0.0%
1997	LDGV	14	13	1	1	100.0%	0	0.0%
1997	Unknown	0	0	0	0	-	0	-
1998	LDGT1	50	48	2	1	98.0%	1	2.0%
1998	LDGT2	14	14	0	0	100.0%	0	0.0%
1998	LDGV	81	75	6	1	93.8%	5	6.2%
1998	Unknown	0	0	0	0	-	0	-
1999	LDGT1	29	27	2	1	96.6%	1	3.4%
1999	LDGT2	17	16	1	1	100.0%	0	0.0%
1999	LDGV	112	106	6	2	96.4%	4	3.6%
1999	Unknown	4	4	0	0	100.0%	0	0.0%
2000	LDGT1	110	109	1	1	100.0%	0	0.0%
2000	LDGT2	12	12	0	0	100.0%	0	0.0%
2000	LDGV	158	152	6	0	96.2%	6	3.8%
2000	Unknown	0	0	0	0	-	0	-
2001	LDGT1	18	18	0	0	100.0%	0	0.0%
2001	LDGT2	10	8	2	2	100.0%	0	0.0%
2001	LDGV	27	27	0	0	100.0%	0	0.0%
2001	Unknown	5	5	0	0	100.0%	0	0.0%
2002	LDGT1	5	5	0	0	100.0%	0	0.0%
2002	LDGT2	2		1	1	100.0%	0	0.0%
2002	LDGV	10	10	0	0	100.0%	0	0.0%
2002	Unknown	2	2	0	0	100.0%	0	0.0%
2003	LDGT1	0	0	0	0	-	0	-
2003	LDGT2	0	0	0	0	-	0	-
2003	LDGV	17	17	0	0	100.0%	0	0.0%
2003	Unknown	0	0	0	0	-	0	-
2004	LDGT1	0	0	0	0	-	0	-
2004	LDGT2	0	0	0	0	-	0	-
2004	LDGV	2	2	0	0	100.0%	0	0.0%
2004	Unknown	0	0	0	0	-	0	-
Totals		735	704	31	12	97.4%	19	2.6%

New Jersey Enhanced Inspection and Maintenance Program OBDII Pilot Test Initial Pass/Fail Results by Model Year and Vehicle Type Year 2003

		# Initial OBDII			
Madaly	V. I. T	Pilot	" –	" D	F-11 D-4-
Model Yr	Veh Type	Tests	# Fail	# Pass	Fail Rate
Unknown	LDGT1	1	1	0	100.0%
Unknown	LDGT2	1	0	1	0.0%
Unknown	LDGV	7	6	1	85.7%
Unknown	Unknown	30	0	30	0.0%
1996	LDGT1	2,211	475	1,736	21.5%
1996	LDGT2	459	126	333	27.5%
1996	LDGV	6,412	1,051	5,361	16.4%
1996	Unknown	1	0	1	0.0%
1997	LDGT1	6,657	899	5,758	13.5%
1997	LDGT2	1,618	294	1,324	18.2%
1997	LDGV	18,927	1,869	17,058	9.9%
1997	Unknown	3	0	3	0.0%
1998	LDGT1	5,329	480	4,849	9.0%
1998	LDGT2	1,307	125	1,182	9.6%
1998	LDGV	13,196	1,102	12,094	8.4%
1998	Unknown	2	1	1	50.0%
1999	LDGT1	12,678	625	12,053	4.9%
1999	LDGT2	4,457	242	4,215	5.4%
1999	LDGV	32,392	1,701	30,691	5.3%
1999	Unknown	6	0	6	0.0%
2000	LDGT1	5,655	268	5,387	4.7%
2000	LDGT2	1,616	63	1,553	3.9%
2000	LDGV	13,856	743	13,113	5.4%
2000	Unknown	0	0	0	0.0%
2001	LDGT1	5,865	262	5,603	4.5%
2001	LDGT2	2,021	103	1,918	5.1%
2001	LDGV	13,942	610	13,332	4.4%
2001	Unknown	7	2	5	28.6%
2002	LDGT1	2,002	55	1,947	2.7%
2002	LDGT2	442	13	429	2.9%
2002	LDGV	4,678	121	4,557	2.6%
2002	Unknown	0	0	0	0.0%
2003	LDGT1	599	13	586	2.2%
2003	LDGT2	220	16	204	7.3%
2003	LDGV	1,455	95	1,360	6.5%
2003	Unknown	3	0	3	0.0%
2004	LDGT1	10	0	10	0.0%
2004	LDGT2	1	0	1	0.0%
2004	LDGV	62	14	48	22.6%
2004	Unknown	0	0	0	0.0%
Totals		158,128	11,375	146,753	7.2%

New Jersey Enhanced Inspection and Maintenance Program OBDII Pilot Fail Report by Model Year and Vehicle Type Year 2003

Model	Vehicles Initially Failing	OBDII Pi	lot Fails	LDGV	LDGT1	LDGT2	Unknown Veh Type
Year	OBDII Test	Number	%	Pilot Fails	Pilot Fails	Pilot Fails	Pilot Fails
Unknown	33	7	21.21%	6	1	0	0
1996	1,657	1,652	99.70%	1,051	475	126	0
1997	3,115	3,062	98.30%	1,869	899	294	0
1998	5,411	1,708	31.57%	1,102	480	125	1
1999	6,752	2,568	38.03%	1,701	625	242	0
2000	4,433	1,074	24.23%	743	268	63	0
2001	2555	977	38.24%	610	262	103	2
2002	827	189	22.85%	121	55	13	0
2003	289	124	42.91%	95	13	16	0
2004	72	14	19.44%	14	0	0	0
TOTAL	25,144	11,375	45.24%	7,312	3,078	982	3
% of Pilot F	ails by Veh	icle Type		64%	27%	9%	0%

Report includes only inspection records where the vehicle failed the Initial OBDII test.

APPENDIX I - PART G

INITIALLY FAILED VEHICLES PASSING/FAILING EMISSION INSPECTION FIRST RETEST BY TEST TYPE

Pre 79/Unknown LDGT1	% ASM Fail 0 - 9 22.2%	% ASM Pass
Pre 79/Unknown HDGV	0 - 9 22.2%	
Pre 79/Unknown LDGT1	9 22.2%	Fa55
Pre 79/Unknown LDGT2		400.00/
Pre 79/Unknown LDGV 22 5 17 22.7% 77.3% 17 1 1 1 1 1 1 1 1	4 0 00/	
Pre 79/Unknown Unknown 0 0 0 - - 0 0 1979 HDGV 0 0 0 - - 0 0 1979 LDGT1 0 0 0 - - 0 0 1979 LDGV 0 0 0 - - 0 0 1979 Unknown 0 0 0 - - 0 0 1980 HDGV 0 0 0 - - 0 0 1980 LDGT1 0 0 0 - - 0 0 1980 LDGV2 0 0 0 - - 0 0 1980 Unknown 0 0 0 - - 0 0 1981 HDGV 0 0 0 - - 0 0 1981 LDGT1 0 0 0 - - 45 12 2	1 0.0%	
1979 HDGV	5.9%	100.0%
1979 LDGT1	0 -	-
1979 LDGT2 0 0 0 - - 0 0 1979 LDGV 0 0 0 - - 0 0 1979 Unknown 0 0 0 - - 0 0 1980 HDGV 0 0 0 - - 0 0 1980 LDGT2 0 0 0 - - 0 0 1980 LDGV 0 0 0 - - 0 0 1980 LDGV 0 0 0 - - 0 0 1980 LDGV 0 0 0 - - 0 0 1981 HDGV 0 0 0 - - 1 0 1981 LDGT1 0 0 0 - - 45 12 2 1981 LDGV 0 0 0 - - 788 145 45 198	0 -	-
1979 LDGV 0 0 0 - - 0 0 1979 Unknown 0 0 0 - - 0 0 1980 HDGV 0 0 0 - - 0 0 1980 LDGT2 0 0 0 - - 0 0 1980 LDGV 0 0 0 - - 0 0 1980 LDGV 0 0 0 - - 0 0 1980 Unknown 0 0 0 - - 0 0 1981 HDGV 0 0 0 - - 1 0 1981 LDGT2 0 0 0 - - 45 12 2 1981 Unknown 0 0 0 - - 788 145 45 1982 LDGT1 0 0 0 - - 0 0 <	0 -	-
1979 Unknown 0 0 - - 0 0 1980 HDGV 0 0 0 - - 0 0 1980 LDGT1 0 0 0 - - 0 0 1980 LDGT2 0 0 0 - - 0 0 1980 LDGV 0 0 0 - - 0 0 1980 Unknown 0 0 0 - - 0 0 1981 HDGV 0 0 0 - - 1 0 1981 LDGT2 0 0 0 - - 45 12 2 1981 LDGV 0 0 0 - - 788 145 45 1982 HDGV 0 0 0 - - 0 0 1982 LDGT1 0 0 0 - - 10 0 1982 LDGV	0 -	_
1980 HDGV 0 0 0 - - 0 0 1980 LDGT1 0 0 0 - - 0 0 1980 LDGT2 0 0 0 - - 0 0 1980 LDGV 0 0 0 - - 0 0 1980 Unknown 0 0 0 - - 0 0 1981 HDGV 0 0 0 - - 1 0 1981 LDGT1 0 0 0 - - 45 12 2 1981 LDGV 0 0 0 - - 788 145 45 1981 Unknown 0 0 0 - - 0 0 1982 LDGT1 0 0 0 - - 0 0 1982 LDGV 0 0 0 - - 38 8 1	0 -	-
1980 LDGT1 0 0 - - 0 0 1980 LDGV 0 0 0 - - 0 0 1980 LDGV 0 0 0 - - 0 0 1980 Unknown 0 0 0 - - 0 0 1981 HDGV 0 0 0 - - 155 31 8 1981 LDGT2 0 0 0 - - 45 12 2 1981 LDGV 0 0 0 - - 788 145 45 1981 Unknown 0 0 0 - - 0 0 1982 HDGV 0 0 0 - - 0 0 1982 LDGT2 0 0 0 - - 38 8 1 1982 Unknown 0 0 0 - - 0 0 <	0 -	-
1980 LDGT2 0 0 0 - - 0 0 1980 LDGV 0 0 0 - - 0 0 1980 Unknown 0 0 0 - - 0 0 1981 HDGV 0 0 0 - - 155 31 8 1981 LDGT2 0 0 0 - - 45 12 2 1981 LDGV 0 0 0 - - 788 145 45 1981 Unknown 0 0 0 - - 0 0 1982 HDGV 0 0 0 - - 0 0 1982 LDGT2 0 0 0 - - 38 8 1 1982 Unknown 0 0 0 - - 457 81 23 1983 HDGV 0 0 - - 0	0 -	_
1980 LDGV 0 0 0 - - 0 0 1980 Unknown 0 0 0 - - 0 0 1981 HDGV 0 0 0 - - 1 0 1981 LDGT2 0 0 0 - - 45 12 2 1981 LDGV 0 0 0 - - 788 145 45 1981 Unknown 0 0 0 - - 0 0 1982 HDGV 0 0 0 - - 0 0 1982 LDGT1 0 0 0 - - 101 13 5 1982 LDGT2 0 0 0 - - 38 8 1 1982 Unknown 0 0 0 - - 0 0 1983 HDGV 0 0 0 - - 0	0 -	-
1980 Unknown 0 0 0 - - 0 0 1981 HDGV 0 0 0 - - 1 0 1981 LDGT1 0 0 0 - - 155 31 8 1981 LDGT2 0 0 0 - - 45 12 2 1981 LDGV 0 0 0 - - 788 145 45 1981 Unknown 0 0 0 - - 0 0 1982 LDGT0 0 0 0 - - 101 13 5 1982 LDGT2 0 0 0 - - 38 8 1 1982 LDGV 0 0 0 - - 457 81 23 1983 HDGV 0 0 - - 0 0 - - 0 0	0 -	_
1981 HDGV 0 0 0 - - 1 0 1981 LDGT1 0 0 0 - - 155 31 8 1981 LDGT2 0 0 0 - - 45 12 2 1981 LDGV 0 0 0 - - 788 145 45 1981 Unknown 0 0 0 - - 0 0 1982 HDGV 0 0 0 - - 0 0 1982 LDGT2 0 0 0 - - 38 8 1 1982 LDGV 0 0 0 - - 457 81 23 1982 Unknown 0 0 0 - - 0 0 1983 HDGV 0 0 - - 0 0	0 -	_
1981 LDGT1 0 0 0 - - 155 31 8 1981 LDGT2 0 0 0 - - 45 12 2 1981 LDGV 0 0 0 - - 788 145 45 1981 Unknown 0 0 0 - - 0 0 1982 HDGV 0 0 0 - - 101 13 5 1982 LDGT2 0 0 0 - - 38 8 1 1982 LDGV 0 0 0 - - 457 81 23 1982 Unknown 0 0 0 - - 0 0 1983 HDGV 0 0 - - 0 0	0 -	_
1981 LDGT2 0 0 0 - - 45 12 2 1981 LDGV 0 0 0 - - 788 145 45 1981 Unknown 0 0 0 - - 0 0 1982 HDGV 0 0 0 - - 0 0 1982 LDGT1 0 0 0 - - 101 13 5 1982 LDGT2 0 0 0 - - 38 8 1 1982 LDGV 0 0 0 - - 457 81 23 1982 Unknown 0 0 0 - - 0 0 1983 HDGV 0 0 - - 0 0	0 0.0%	0.0%
1981 LDGV 0 0 0 - - 788 145 45 1981 Unknown 0 0 0 - - 0 0 1982 HDGV 0 0 0 - - 0 0 1982 LDGT1 0 0 0 - - 101 13 5 1982 LDGT2 0 0 0 - - 38 8 1 1982 LDGV 0 0 0 - - 457 81 23 1982 Unknown 0 0 0 - - 0 0 1983 HDGV 0 0 - - 0 0	20.0%	52.3%
1981 Unknown 0 0 0 - - 0 0 1982 HDGV 0 0 0 - - 0 0 1982 LDGT1 0 0 0 - - 101 13 5 1982 LDGT2 0 0 0 - - 38 8 1 1982 LDGV 0 0 0 - - 457 81 23 1982 Unknown 0 0 0 - - 0 0 1983 HDGV 0 0 0 - - 0 0	25 26.7%	55.6%
1982 HDGV 0 0 0 - - 0 0 1982 LDGT1 0 0 0 - - 101 13 5 1982 LDGT2 0 0 0 - - 38 8 1 1982 LDGV 0 0 0 - - 457 81 23 1982 Unknown 0 0 0 - - 0 0 1983 HDGV 0 0 0 - - 0 0	55 18.4%	57.7%
1982 LDGT1 0 0 0 - - 101 13 5 1982 LDGT2 0 0 0 - - 38 8 1 1982 LDGV 0 0 0 - - 457 81 23 1982 Unknown 0 0 0 - - 0 0 1983 HDGV 0 0 0 - - 0 0	0 -	-
1982 LDGT1 0 0 0 - - 101 13 5 1982 LDGT2 0 0 0 - - 38 8 1 1982 LDGV 0 0 0 - - 457 81 23 1982 Unknown 0 0 - - 0 0 1983 HDGV 0 0 - - 0 0	0 -	-
1982 LDGT2 0 0 0 - - 38 8 1 1982 LDGV 0 0 0 - - 457 81 23 1982 Unknown 0 0 0 - - 0 0 1983 HDGV 0 0 0 - - 0 0	12.9%	51.5%
1982 LDGV 0 0 0 - - 457 81 23 1982 Unknown 0 0 0 - - 0 0 1983 HDGV 0 0 0 - - 0 0	8 21.1%	47.4%
1982 Unknown 0 0 0 0 0 1983 HDGV 0 0 0 0 0		50.5%
1983 HDGV 0 0 0 0 0	0 -	-
	0 -	-
1983 LDGT1 0 0 0 328 63 19		58.8%
	13.4%	62.0%
1983 LDGV		59.4%
	0 -	-
	0 -	_
1984 LDGT1 0 0 0 360 77 18	ŭ	51.1%
	7 14.1%	
1984 LDGV 0 0 0 - 1,444 245 72		49.9%
	0 -	-5.570

	Veh	OBD Initial	# OBD	# OBD	% OBD	% OBD	ASM Initial	# ASM	# ASM	% ASM	% ASM
Model Yr	Type	Fails *	Fail	Pass	Fail	Pass	Fails	Fail	Pass	Fail	Pass
1985	HDGV	0	0	0	-	-	3	0	1	0.0%	33.3%
1985	LDGT1	0	0	0	-	-	1,073	194	598	18.1%	55.7%
1985	LDGT2	0	0	0	-	-	421	75	239	17.8%	56.8%
1985	LDGV	0	0	0	-	-	5,019	904	2,911	18.0%	58.0%
1985	Unknown	0	0	0	-	-	0	0	0	-	-
1986	HDGV	0	0	0	-	-	4	0	0	0.0%	0.0%
1986	LDGT1	0	0	0	-	-	649	92	355	14.2%	54.7%
1986	LDGT2	0	0	0	-	-	256	36	143	14.1%	55.9%
1986	LDGV	0	0	0	1	-	2,962	513	1,457	17.3%	49.2%
1986	Unknown	0	0	0	1	-	0	0	0	-	-
1987	HDGV	0	0	0	-	-	5	1	1	20.0%	20.0%
1987	LDGT1	0	0	0	1	-	1,509	259	906	17.2%	60.0%
1987	LDGT2	0	0	0	1	-	581	108	336	18.6%	57.8%
1987	LDGV	0	0	0	1	-	9,254	1,591	5,351	17.2%	57.8%
1987	Unknown	0	0	0	ı	-	1	0	0	0.0%	0.0%
1988	HDGV	0	0	0	1	-	1	0	0	0.0%	0.0%
1988	LDGT1	0	0	0	1	-	1,591	286	883	18.0%	55.5%
1988	LDGT2	0	0	0	-	-	429	80	227	18.6%	52.9%
1988	LDGV	0	0	0	-	-	3,945	615	2,074	15.6%	52.6%
1988	Unknown	0	0	0	-	-	0	0	0	-	-
1989	HDGV	0	0	0	1	-	7	0	3	0.0%	42.9%
1989	LDGT1	0	0	0	1	-	3,423	649	2,047	19.0%	59.8%
1989	LDGT2	0	0	0	1	-	861	154	533	17.9%	61.9%
1989	LDGV	0	0	0	-	-	9,070	1,426	5,408	15.7%	59.6%
1989	Unknown	0	0	0	1	-	0	0	0	-	-
1990	HDGV	0	0	0	1	-	5	0	0	0.0%	0.0%
1990	LDGT1	0	0	0	1	-	1,430	234	819	16.4%	57.3%
1990	LDGT2	0	0	0	1	-	297	36	185	12.1%	62.3%
1990	LDGV	0	0	0	ı	-	5,101	823	2,790	16.1%	54.7%
1990	Unknown	0	0	0	-	-	0	0	,	-	-
	HDGV	0	0	0	_	-	2	0	1	0.0%	50.0%
	LDGT1	0		0	_	-	3,573	600	2,206	16.8%	61.7%
	LDGT2	0	0	0	_	-	543	94	355	17.3%	65.4%
	LDGV	0	0	0	-	-	14,483	2,615	8,751	18.1%	60.4%
	Unknown	0	0	0	-	-	0	0			-

		OBD					ASM				
	Veh	Initial	# OBD	# OBD	% OBD	% OBD	Initial	# ASM	# ASM	% ASM	% ASM
Model Yr	Туре	Fails *	Fail	Pass	Fail	Pass	Fails	Fail	Pass	Fail	Pass
	HDGV	0		0	-	-	1	0	0	0.070	0.0%
	LDGT1	0	0	0	-	-	1,931	354	1,133	18.3%	58.7%
	LDGT2	0		0	-	-	325	72	184	22.2%	56.6%
	LDGV	0		0	-	-	5,670	894	3,281	15.8%	57.9%
	Unknown	0	·	0	-	-	0	0	0		-
	HDGV	0	·	0	-	-	7	0	3	0.070	42.9%
	LDGT1	0	·	0	-	-	4,592	748	2,965	16.3%	64.6%
	LDGT2	0	_	0	-	-	704	110	486		69.0%
	LDGV	0	·	0	-	-	12,023	2,011	7,416		61.7%
	Unknown	0		0	-	-	1	0	0	0.070	0.0%
	HDGV	0		0	-	-	4	0	0	0.070	0.0%
	LDGT1	0	0	0	-	-	1,220	239	734	19.6%	60.2%
1994	LDGT2	0	0	0	-	-	318	63	202	19.8%	63.5%
1994	LDGV	0	0	0	-	-	3,315	511	1,923	15.4%	58.0%
1994	Unknown	0	0	0	-	-	0	0	0	-	-
1995	HDGV	0	0	0	-	-	3	0	1	0.0%	33.3%
1995	LDGT1	0	0	0	-	-	2,699	455	1,767	16.9%	65.5%
1995	LDGT2	0	0	0	-	-	616	117	397	19.0%	64.4%
1995	LDGV	0	0	0	-	-	5,905	933	3,689	15.8%	62.5%
1995	Unknown	0	0	0	-	-	0	0	0	-	-
1996	HDGV	0	0	0	-	-	0	0	0	-	-
1996	LDGT1	3	0	2	0.0%	66.7%	894	155	534	17.3%	59.7%
1996	LDGT2	1	0	2	0.0%	100.0%	156	21	97	13.5%	62.2%
1996	LDGV	1	2	7	100.0%	100.0%	2,152	293	1,352	13.6%	62.8%
1996	Unknown	0	0	0	-	-	0	0	0	-	-
1997	HDGV	0	0	0	-	-	2	0	1	0.0%	50.0%
1997	LDGT1	15	6	13	40.0%	86.7%	841	124	534	14.7%	63.5%
1997	LDGT2	9	5	3	55.6%	33.3%	308	41	190	13.3%	61.7%
1997	LDGV	29	9	22	31.0%	75.9%	3,322	435	2,151	13.1%	64.8%
1997	Unknown	0	0	0	-	-	,	0	0		-
1998	HDGV	0	0	0	-	-	0	0	0	-	-
	LDGT1	1,067	180	567	16.9%	53.1%	199	20	131	10.1%	65.8%
1998	LDGT2	343	58	186	16.9%	54.2%	42	1	36	2.4%	85.7%
	LDGV	2,293	387	1,108	16.9%	48.3%	559	58	359	10.4%	64.2%
	Unknown	0		0	-	-	0	0	0		-

		OBD					ASM				
	Veh	Initial	# OBD	# OBD	% OBD	% OBD	Initial	# ASM	# ASM	% ASM	% ASM
Model Yr	Туре	Fails *	Fail	Pass	Fail	Pass	Fails	Fail	Pass	Fail	Pass
	HDGV	0	Ū	0	-	-	0	0	0	-	-
	LDGT1	965	156	525	16.2%	54.4%	190	14	138	7.4%	72.6%
	LDGT2	453	62	294	13.7%	64.9%	51	3	43	5.9%	84.3%
	LDGV	2,766	461	1,576	16.7%	57.0%	743	86	479	11.6%	64.5%
	Unknown	0	0	5	-	-	0	0	0	-	-
	HDGV	0	0	0	-	-	1	0	0	0.0%	0.0%
	LDGT1	871	146	477	16.8%	54.8%	29	3	20	10.3%	69.0%
	LDGT2	232	14	133	6.0%	57.3%	7	1	13	14.3%	100.0%
2000	LDGV	2,256	324	1,246	14.4%	55.2%	279	28	169	10.0%	60.6%
2000	Unknown	0	0	0	-	-	0	0	0	-	-
2001	HDGV	0	0	0	-	-	0	0	0	-	-
2001	LDGT1	448	87	240	19.4%	53.6%	37	6	26	16.2%	70.3%
2001	LDGT2	222	40	125	18.0%	56.3%	5	0	21	0.0%	100.0%
2001	LDGV	907	176	499	19.4%	55.0%	180	15	102	8.3%	56.7%
2001	Unknown	1	0	5	0.0%	100.0%	0	0	0	-	-
2002	HDGV	0	0	0	-	-	0	0	0	-	-
2002	LDGT1	173	30	97	17.3%	56.1%	5	0	7	0.0%	100.0%
2002	LDGT2	66	7	42	10.6%	63.6%	1	1	7	100.0%	100.0%
2002	LDGV	399	56	230	14.0%	57.6%	26	0	29	0.0%	100.0%
2002	Unknown	0	0	2	-	-	0	0	0	-	-
2003	HDGV	0	0	0	-	-	0	0	0	-	-
2003	LDGT1	29	3	17	10.3%	58.6%	9	0	2	0.0%	22.2%
2003	LDGT2	18	5	10	27.8%	55.6%	9	1	4	11.1%	44.4%
2003	LDGV	118	14	86	11.9%	72.9%	58	10	23	17.2%	39.7%
2003	Unknown	0	0	0	-	-	0	0	0	-	-
2004	HDGV	0	0	0	-	-	0	0	0	-	-
	LDGT1	6	1	2	16.7%	33.3%	0	0	0	-	-
2004	LDGT2	3	0	2	0.0%	66.7%	0	0	0	-	-
2004	LDGV	49	3	19	6.1%	38.8%	1	0	0	0.0%	0.0%
2004	Unknown	0	0	0		-	0	0	0	-	-
Totals		13,769	2,238	7,564	16.3%	54.9%	121,886	20,239	72,517	16.6%	59.5%

	Veh	2500 Initial	# 2500	# 2500	% 2500	% 2500	Idle Initial	# Idle	# Idle	% Idle	% Idle
Model Yr	Type	Fails	Fail	Pass	Fail	Pass	Fails	Fail	Pass	Fail	Pass
Pre 79/Unknown		0	0	0	-	-	182	28	115	15.4%	63.2%
Pre 79/Unknown	LDGT1	5	2	3	40.0%	60.0%	436	67	267	15.4%	61.2%
Pre 79/Unknown	LDGT2	0	0	1	-	-	368	68	221	18.5%	60.1%
Pre 79/Unknown	LDGV	18	0	3	0.0%	16.7%	2,281	322	1,411	14.1%	61.9%
Pre 79/Unknown	Unknown	0	0	0	-	-	101	21	73	20.8%	72.3%
1979	HDGV	0	0	0	-	-	81	10	54	12.3%	66.7%
1979	LDGT1	0	0	0	-	-	222	35	150	15.8%	67.6%
	LDGT2	0	0	0	-	-	225	35	143	15.6%	63.6%
1979	LDGV	0	0	0	-	-	871	135	582	15.5%	66.8%
1979	Unknown	0	0	0	-	-	41	16	25	39.0%	61.0%
1980	HDGV	0	0	0	-	-	39	4	16	10.3%	41.0%
1980	LDGT1	0	0	0	-	-	79	11	51	13.9%	64.6%
1980	LDGT2	0	0	0	-	-	47	9	27	19.1%	57.4%
1980	LDGV	0	0	0	-	-	238	36	151	15.1%	63.4%
1980	Unknown	0	0	0	-	-	14	2	16	14.3%	100.0%
	HDGV	0	0	0	-	-	92	12	56	13.0%	60.9%
	LDGT1	13	2	7	15.4%	53.8%	0	0	0	-	-
	LDGT2	6	1	2	16.7%	33.3%	0	0	0		-
1981	LDGV	44	5	26	11.4%	59.1%	0	0	0	-	-
1981	Unknown	0	0	0	-	-	29	12	24	41.4%	82.8%
1982	HDGV	0	0	0	-	-	59	9	34	15.3%	57.6%
1982	LDGT1	12	3	5	25.0%	41.7%	1	0	1	0.0%	100.0%
	LDGT2	9	2	4	22.2%	44.4%	0	0	0	-	•
1982	LDGV	19	1	10	5.3%	52.6%	0	0	0	-	•
1982	Unknown	0	0	0	-	-	19	3	12	15.8%	63.2%
	HDGV	0	0	0	-	-	117	16	78	13.7%	66.7%
1983	LDGT1	17	1	13	5.9%	76.5%	0	0	0	-	-
	LDGT2	18	4	10	22.2%	55.6%	1	0	1	0.0%	100.0%
1983	LDGV	54	3	33	5.6%	61.1%	2	0	2	0.0%	100.0%
1983	Unknown	0	0	0	-	-	37	9	28	24.3%	75.7%
1984	HDGV	0	0	0	-	-	132	17	78	12.9%	59.1%
1984	LDGT1	17	1	8	5.9%	47.1%	0	0	0	-	-
1984	LDGT2	16	3	8	18.8%	50.0%	0	0	0	-	-
1984	LDGV	39	3	19	7.7%	48.7%	5	1	1	20.0%	20.0%
1984	Unknown	0	0	0	-	-	39	13	28	33.3%	71.8%

	Veh	2500 Initial	# 2500	# 2500	% 2500	% 2500	Idle Initial	# Idle	# Idle	% Idle	% Idle
Model Yr	Type	Fails	Fail	Pass	Fail	Pass	Fails	Fail	Pass	Fail	Pass
1985	HDGV	0	0	0	-	-	345	42	225	12.2%	65.2%
1985	LDGT1	38	5	22	13.2%	57.9%	1	0	0	0.0%	0.0%
1985	LDGT2	38	6	21	15.8%	55.3%	1	0	0	0.0%	0.0%
1985	LDGV	139	9	82	6.5%	59.0%	8	2	4	25.0%	50.0%
1985	Unknown	0	0	0	-	-	105		78	23.8%	74.3%
1986	HDGV	0	0	0	-	-	296	22	180	7.4%	60.8%
	LDGT1	49	5	17	10.2%	34.7%	0	0	0		-
	LDGT2	23	1	14	4.3%	60.9%	0	0	0	-	•
	LDGV	103	11	39	10.7%	37.9%	6	1	5	16.7%	83.3%
1986	Unknown	2	0	0	0.0%	0.0%	81	20	65	24.7%	80.2%
1987	HDGV	0	0	0	-	-	433	39	293	9.0%	67.7%
1987	LDGT1	84	14	50	16.7%	59.5%	1	0	1	0.0%	100.0%
1987	LDGT2	32	5	14	15.6%	43.8%	0	0	0	-	-
1987	LDGV	211	34	103	16.1%	48.8%	16	0	9	0.0%	56.3%
1987	Unknown	0	0	0	-	-	129	23	111	17.8%	86.0%
1988	HDGV	0	0	0	-	-	255	31	162	12.2%	63.5%
1988	LDGT1	59	11	29	18.6%	49.2%	0	0	0	-	•
1988	LDGT2	14	0	9	0.0%	64.3%	1	0	1	0.0%	100.0%
1988	LDGV	122	13	51	10.7%	41.8%	5	0	6	0.0%	100.0%
1988	Unknown	1	1	0	100.0%	0.0%	53	14	37	26.4%	69.8%
1989	HDGV	0	0	0	-	-	581	73	355	12.6%	61.1%
1989	LDGT1	72	5	34	6.9%	47.2%	0	0	0	-	-
1989	LDGT2	45	6	26	13.3%	57.8%	0	0	0	-	-
1989	LDGV	242	37	110	15.3%	45.5%	5	0	5	0.0%	100.0%
1989	Unknown	0	0	0	-	-	138	39	110	28.3%	79.7%
1990	HDGV	0	0	0	-	-	167	27	102	16.2%	61.1%
	LDGT1	62	12	21	19.4%	33.9%	0	0	0	-	-
1990	LDGT2	16	1	7	6.3%	43.8%	0	0	0	-	_
1990	LDGV	198	32	80	16.2%	40.4%	2	1	1	50.0%	50.0%
1990	Unknown	0	0	0	-	-	37	9	28	24.3%	75.7%
1991	HDGV	0	0	0	-	-	190	29	120	15.3%	63.2%
1991	LDGT1	217	30	123	13.8%	56.7%	1	0	1	0.0%	100.0%
1991	LDGT2	68	18	36	26.5%	52.9%	0	0	0	-	-
1991	LDGV	498	68	232	13.7%	46.6%	4	0	3	0.0%	75.0%
1991	Unknown	0	0	0	-	-	45	7	36	15.6%	80.0%

		2500					Idle				
	Veh	Initial	# 2500	# 2500	% 2500	% 2500	Initial	# Idle	# Idle	% Idle	% Idle
Model Yr	Туре	Fails	Fail	Pass	Fail	Pass	Fails	Fail	Pass	Fail	Pass
	HDGV	1	0	0	0.0%	0.0%	75				
	LDGT1	90	14	41	15.6%	45.6%	1	0		0.070	100.0%
	LDGT2	29	5	13	17.2%	44.8%	0				-
	LDGV	301	51	127	16.9%	42.2%	2	0		0.0%	50.0%
	Unknown	0	0	0	-	-	20	6		30.0%	70.0%
	HDGV	1	0	0	0.0%	0.0%	189	27	123		65.1%
	LDGT1	681	107	429	15.7%	63.0%	1	0		0.0%	100.0%
	LDGT2	60	10	32	16.7%	53.3%	0	0	0	-	-
1993	LDGV	885	147	470	16.6%	53.1%	6	-		0.0%	66.7%
	Unknown	0	0	0	-	-	68	11	47	16.2%	69.1%
	HDGV	1	0	0	0.0%	0.0%	118	16	77	13.6%	65.3%
1994	LDGT1	375	69	211	18.4%	56.3%	0	0	0	-	-
1994	LDGT2	62	8	39	12.9%	62.9%	0	0	0	-	-
1994	LDGV	337	47	175	13.9%	51.9%	5	0	3	0.0%	60.0%
1994	Unknown	0	0	0	-	-	25	5	23	20.0%	92.0%
1995	HDGV	0	0	0	-	-	277	26	188	9.4%	67.9%
1995	LDGT1	377	50	233	13.3%	61.8%	2	0	1	0.0%	50.0%
1995	LDGT2	98	9	59	9.2%	60.2%	0	0	0	-	-
1995	LDGV	573	79	360	13.8%	62.8%	2	0	1	0.0%	50.0%
1995	Unknown	0	0	0	-	-	51	11	45	21.6%	88.2%
1996	HDGV	0	0	0	-	-	74	13	40	17.6%	54.1%
1996	LDGT1	46	2	29	4.3%	63.0%	0	0	0	-	-
1996	LDGT2	25	3	17	12.0%	68.0%	0	0	0	-	-
1996	LDGV	82	8	45	9.8%	54.9%	2	0	1	0.0%	50.0%
1996	Unknown	0	0	0	-	-	19	2	21	10.5%	100.0%
	HDGV	0	0	0	-	-	130				68.5%
	LDGT1	140	8	107	5.7%	76.4%	0				-
	LDGT2	42	3	26	7.1%	61.9%	0	0	0	-	-
	LDGV	236	20	159	8.5%	67.4%	2	0			0.0%
	Unknown	0	0	0	-	-	39	3		7.7%	69.2%
	HDGV	0	0	0	-	-	30	1	22	3.3%	73.3%
	LDGT1	38	2	23	5.3%	60.5%	0	•			- 0.070
	LDGT2	14	2	10	14.3%	71.4%	0				-
	LDGV	46	4	27	8.7%	58.7%	1	0		0.0%	100.0%
	Unknown	0		0	-	-	9		7	22.2%	77.8%

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	Veh	Initial	# 2500	# 2500	% 2500	% 2500	Initial	# Idle	# Idle	% Idle	% Idle
Model Yr	Type	Fails	Fail	Pass	Fail	Pass	Fails	Fail	Pass	Fail	Pass
	HDGV	0	0	0	-	-	101	10	80		79.2%
	LDGT1	40	1	32	2.5%	80.0%	0	0	0	-	-
	LDGT2	16	1	11	6.3%	68.8%	0	0	0	-	-
	LDGV	53	5	35	9.4%	66.0%	0	0	0	-	-
	Unknown	0	0	0	-	-	36	5	27	13.9%	75.0%
	HDGV	0	0	0	-	-	3	0	3	0.0%	100.0%
	LDGT1	10	1	6	10.0%	60.0%	1	0	0	0.0%	0.0%
	LDGT2	2	0	1	0.0%	50.0%	0	0	0	-	-
	LDGV	17	0	11	0.0%	64.7%	1	0	1	0.0%	100.0%
	Unknown	0	0	0	-	-	12	3	7	25.0%	58.3%
	HDGV	0	0	0	-	-	5	0	5	0.0%	100.0%
	LDGT1	9	1	3	11.1%	33.3%	0	0	0	-	-
2001	LDGT2	2	0	2	0.0%	100.0%	0	0	0	-	-
	LDGV	9	2	5	22.2%	55.6%	0	0	0	-	-
	Unknown	0	0	0	-	-	2	0	0	0.0%	0.0%
2002	HDGV	0	0	0	-	-	2	1	1	50.0%	50.0%
	LDGT1	1	0	1	0.0%	100.0%	0	0	0	-	-
2002	LDGT2	0	0	0	-	-	0	0	0	-	-
2002	LDGV	4	0	4	0.0%	100.0%	0	0	0	-	-
2002	Unknown	0	0	0	-	-	1	1	0	100.0%	0.0%
2003	HDGV	0	0	0	-	-	0	0	0	-	-
2003	LDGT1	0	0	0	-	-	0	0	0	-	-
2003	LDGT2	0	0	0	-	-	0	0	0	-	_
2003	LDGV	0	0	0	-	-	0	0	0	-	-
2003	Unknown	0	0	0	-	-	0	0	0	-	-
2004	HDGV	0	0	0	-	-	0	0	0	-	-
2004	LDGT1	0	0	0	-	-	0	0	0	-	-
2004	LDGT2	0	0	0	-	-	0	0	0	-	-
2004	LDGV	0	0	0	-	-	0	0	0	-	-
2004	Unknown	0	0	0	-	-	0	0	0	-	-
Totals		7,323	1,014	4,015	13.8%	54.8%	9,976	1,457	6,495	14.6%	65.1%

		Gas Cap	# Gas	# Gas			Cat Conv	# Cat	# Cat		% Cat	Smoke	#			
	Veh	Initial	Сар	Сар	% Gas	% Gas	Initial	Conv	Conv	% Cat	Conv	Initial	Smoke	# Smoke	% Smoke	% Smoke
Model Yr	Type	Fails	Fail	Pass	Cap Fail	Cap Pass	Fails	Fail	Pass	Conv Fail	Pass	Fails	Fail	Pass	Fail	Pass
Pre 79/Unknown	HDGV	80	1	45	1.3%	56.3%	2	0	1	0.0%	50.0%	11	0	7	0.0%	63.6%
Pre 79/Unknown	LDGT1	152	8	83	5.3%	54.6%	16	1	7	6.3%	43.8%	23	2	15	8.7%	65.2%
Pre 79/Unknown	LDGT2	157	9	78	5.7%	49.7%	13	0	1	0.0%	7.7%	21	2	14	9.5%	66.7%
Pre 79/Unknown	LDGV	531	17	311	3.2%	58.6%	42	4	12	9.5%	28.6%	158	9	99	5.7%	62.7%
Pre 79/Unknown	Unknown	59	5	32	8.5%	54.2%	2	0	0	0.0%	0.0%	4	0	4	0.0%	100.0%
1979	HDGV	15	1	7	6.7%	46.7%	2	0	0	0.0%	0.0%	2		1	0.0%	50.0%
1979	LDGT1	66	2	41	3.0%	62.1%	14	0	6		42.9%	8		5	0.0%	62.5%
	LDGT2	93	1	55	1.1%	59.1%	11	_		0.070	36.4%	10		9	0.070	90.0%
	LDGV	208	4	146	1.9%	70.2%	34	0	14		41.2%	36	1	25	2.8%	69.4%
	Unknown	10	0	7	0.0%	70.0%	2	0	0	0.0%	0.0%	0			-	-
	HDGV	18	0	9	0.0%	50.0%	1	0	0	0.0%	0.0%	1		0	0.0%	0.0%
	LDGT1	38	2	22	5.3%	57.9%	11	0	8		72.7%	5	0	2	0.0%	40.0%
	LDGT2	14	4	7	28.6%	50.0%	3	0	2	0.0%	66.7%	1		1	0.0%	100.0%
1980	LDGV	50	1	32	2.0%	64.0%	12	0	7	0.0%	58.3%	15	0	9	0.0%	60.0%
1980	Unknown	4	0	3	0.0%	75.0%	0	0	0	-	-	0	0	0	-	-
1981	HDGV	22	1	18	4.5%	81.8%	10	0	3	0.0%	30.0%	1	0	0	0.0%	0.0%
1981	LDGT1	92	4	62	4.3%	67.4%	14	0	8	0.0%	57.1%	11	0	7	0.0%	63.6%
1981	LDGT2	29	0	20	0.0%	69.0%	3	0	2	0.0%	66.7%	6	1	3	16.7%	50.0%
1981	LDGV	156	1	93	0.6%	59.6%	6	0	3	0.0%	50.0%	35	1	17	2.9%	48.6%
1981	Unknown	6	0	4	0.0%	66.7%	0	0	0	-	-	1	0	0	0.0%	0.0%
1982	HDGV	15	0	4	0.0%	26.7%	3	0	1	0.0%	33.3%	4	1	0	25.0%	0.0%
1982	LDGT1	58	2	39	3.4%	67.2%	9	0	3	0.0%	33.3%	12	1	8	8.3%	66.7%
1982	LDGT2	16	0	10	0.0%	62.5%	3	0	1	0.0%	33.3%	7	0	2	0.0%	28.6%
1982	LDGV	89	2	50	2.2%	56.2%	9	0	4	0.0%	44.4%	29	5	15	17.2%	51.7%
1982	Unknown	3	2	4	66.7%	100.0%	1	0	0	0.0%	0.0%	0	0	1	-	-
1983	HDGV	39	0	26	0.0%	66.7%	9	0	4	0.0%	44.4%	1	0	0	0.0%	0.0%
1983	LDGT1	140	9	89	6.4%	63.6%	11	1	4	9.1%	36.4%	26	2	16	7.7%	61.5%
1983	LDGT2	68	0	47	0.0%	69.1%	8	0	5	0.0%	62.5%	12	0	5	0.0%	41.7%
1983	LDGV	343	8	224	2.3%	65.3%	11	0	5	0.0%	45.5%	130	8	69	6.2%	53.1%
1983	Unknown	15	2	10	13.3%	66.7%	0	0	0	-	-	0	0	0	-	-
1984	HDGV	44	2	21	4.5%	47.7%	6	0	3	0.0%	50.0%	4	0	4	0.0%	100.0%
1984	LDGT1	120	4	74	3.3%	61.7%	14	1	5	7.1%	35.7%	35	0	15	0.0%	42.9%
	LDGT2	69	1	45	1.4%	65.2%	9	0	4		44.4%	10		5		50.0%
1984	LDGV	335	12	199	3.6%	59.4%	20	1	8	5.0%	40.0%	108	11	52	10.2%	48.1%
	Unknown	24	3	20	12.5%	83.3%	2				0.0%	2				0.0%

		Gas Cap	# Gas	# Gas			Cat Conv	# Cat	# Cat		% Cat	Smoke	#			
	Veh	Initial	Сар	Сар	% Gas	% Gas	Initial	Conv	Conv	% Cat	Conv	Initial	Smoke	# Smoke	% Smoke	% Smoke
Model Yr	Type	Fails	Fail	Pass	Cap Fail	Cap Pass	Fails	Fail	Pass	Conv Fail	Pass	Fails	Fail	Pass	Fail	Pass
1985	HDGV	93	2	59	2.2%	63.4%	17	0	7	0.0%	41.2%	8	0	6	0.0%	75.0%
1985	LDGT1	371	9	245	2.4%	66.0%	25	1	13	4.0%	52.0%	96	4	53	4.2%	55.2%
	LDGT2	169	6	101	3.6%	59.8%	9	0	5	0.0%	55.6%	41	1	27	2.4%	65.9%
1985	LDGV	843	12	537	1.4%	63.7%	25	0	14	0.0%	56.0%	457	26	250	5.7%	54.7%
	Unknown	37	1	32	2.7%	86.5%	2	0	0	0.070	0.0%	3	0	1	0.0%	33.3%
	HDGV	92	1	66	1.1%	71.7%	12		1	0.070	8.3%	7	_	4	0.0%	57.1%
	LDGT1	278	8	165	2.9%	59.4%	15	1	7	0,0	46.7%	87		40	5.7%	46.0%
	LDGT2	110	1	70	0.9%	63.6%	6	_	3	0.0%	50.0%	27	2	18	7.4%	66.7%
1986	LDGV	593	17	348	2.9%	58.7%	21	0	6	0.070	28.6%	347	20	159	5.8%	45.8%
1986	Unknown	33	2	27	6.1%	81.8%	2	0	4	0.0%	100.0%	1	0	1	0.0%	100.0%
1987	HDGV	128	3	73	2.3%	57.0%	12)		41.7%	15		_	0.0%	60.0%
1987	LDGT1	569	20	387	3.5%	68.0%	19	0	15	0.0%	78.9%	238	19	134	8.0%	56.3%
1987	LDGT2	225	3	156	1.3%	69.3%	6	0	5	0.0%	83.3%	62	5	36	8.1%	58.1%
1987	LDGV	1,724	42	1,088	2.4%	63.1%	53	1	30	1.9%	56.6%	648	45	385	6.9%	59.4%
1987	Unknown	51	1	44	2.0%	86.3%	2	0	1	0.0%	50.0%	3	0	6	0.0%	100.0%
1988	HDGV	94	4	58	4.3%	61.7%	5	0	3	0.0%	60.0%	13	1	7	7.7%	53.8%
1988	LDGT1	341	12	229	3.5%	67.2%	5	0	5	0.0%	100.0%	137	12	79	8.8%	57.7%
1988	LDGT2	124	3	82	2.4%	66.1%	8	2	4	25.0%	50.0%	39	1	17	2.6%	43.6%
1988	LDGV	1,055	31	647	2.9%	61.3%	28	1	13	3.6%	46.4%	436	34	219	7.8%	50.2%
1988	Unknown	21	0	15	0.0%	71.4%	2	0	0	0.0%	0.0%	2	0	2	0.0%	100.0%
	HDGV	134	1	92	0.7%	68.7%	3	0	2	0.0%	66.7%	15		12	0.0%	80.0%
1989	LDGT1	720	22	473	3.1%	65.7%	20	1	9	5.0%	45.0%	363	28	231	7.7%	63.6%
1989	LDGT2	240	3	157	1.3%	65.4%	4	0	3	0.0%	75.0%	65	4	43	6.2%	66.2%
1989	LDGV	2,414	47	1,576	1.9%	65.3%	42	0	24	0.0%	57.1%	1,164	70	705	6.0%	60.6%
1989	Unknown	68	3	48	4.4%	70.6%	0	0	0	-	-	2	0	3	0.0%	100.0%
1990	HDGV	69	2	45	2.9%	65.2%	5	0	3	0.0%	60.0%	7	0	5	0.0%	71.4%
1990	LDGT1	368	13	257	3.5%	69.8%	11	0	6	0.0%	54.5%	172	10	94	5.8%	54.7%
1990	LDGT2	104	1	70	1.0%	67.3%	2	0	0	0.0%	0.0%	26	0	18	0.0%	69.2%
1990	LDGV	1,380	33	893	2.4%	64.7%	31	2	15	6.5%	48.4%	644	41	355	6.4%	55.1%
1990	Unknown	29	0	28	0.0%	96.6%	1	0	0	0.0%	0.0%	1	0	1	0.0%	100.0%
1991	HDGV	74	1	47	1.4%	63.5%	1	0	1	0.0%	100.0%	11	0	9	0.0%	81.8%
1991	LDGT1	750	6	514	0.8%	68.5%	14	1	4	7.1%	28.6%	317	21	207	6.6%	65.3%
1991	LDGT2	196	6	132	3.1%	67.3%	2	0	1	0.0%	50.0%	48	3	33	6.3%	68.8%
1991	LDGV	2,700	47	1,762	1.7%	65.3%	26	0	11	0.0%	42.3%	1,742	113	1,111	6.5%	63.8%
1991	Unknown	22	1	15	4.5%	68.2%	0	0	0	-	-	2	0	2	0.0%	100.0%

		Gas Cap	# Gas	# Gas			Cat Conv	# Cat	# Cat		% Cat	Smoke	#			
	Veh	Initial	Сар	Сар	% Gas	% Gas	Initial	Conv	Conv	% Cat	Conv	Initial	Smoke	# Smoke	% Smoke	% Smoke
Model Yr	Type	Fails	Fail	Pass	Cap Fail	Cap Pass	Fails	Fail	Pass	Conv Fail	Pass	Fails	Fail	Pass	Fail	Pass
1992	HDGV	47	1	31	2.1%	66.0%	1	0	0	0.0%	0.0%	3	0	2	0.0%	66.7%
1992	LDGT1	328	5	230	1.5%	70.1%	4	1	2	25.0%	50.0%	209	16	121	7.7%	57.9%
1992	LDGT2	89	1	56	1.1%	62.9%	5	0	2	0.0%	40.0%	12	1	6	8.3%	50.0%
1992	LDGV	1,035	20	695	1.9%	67.1%	23	0	13	0.0%	56.5%	997	80	622	8.0%	62.4%
	Unknown	21	1	17	4.8%	81.0%	1	0	1	0.0%	100.0%	1	0	1	0.0%	100.0%
	HDGV	132	0	96	0.0%	72.7%	4	0		0.0%	50.0%	5	-	2	20.0%	40.0%
	LDGT1	912	12	620	1.3%	68.0%	6	0	3	0.0%	50.0%	670	_	472	5.1%	70.4%
	LDGT2	284	6	190	2.1%	66.9%	4	-	1	25.0%	25.0%	37	_	29		78.4%
	LDGV	2,621	26	1,704	1.0%	65.0%	29	0	19	0.0%	65.5%	2,300	141	1,638	6.1%	71.2%
	Unknown	34		22	2.9%	64.7%	0	0	0	-	-	0	0	1	-	-
	HDGV	98		53	3.1%	54.1%	4	0	3	0.0%	75.0%	4	1	2	25.0%	50.0%
	LDGT1	466	11	320	2.4%	68.7%	4	0	4	0.0%	100.0%	300	15	209		69.7%
	LDGT2	145	2	98	1.4%	67.6%	4	•	1	0.0%	25.0%	40		25		62.5%
1994	LDGV	1,147	13	782	1.1%	68.2%	23	1	12	4.3%	52.2%	701	49	474	7.0%	67.6%
1994	Unknown	32	1	29	3.1%	90.6%	0	0	0	-	•	0	0	1	-	-
1995	HDGV	233		136	0.4%	58.4%	6	1	3	16.7%	50.0%	10	2	5	20.0%	50.0%
	LDGT1	1,023	12	704	1.2%	68.8%	2	0	1	0.0%	50.0%	256		189		73.8%
	LDGT2	457	5	297	1.1%	65.0%	3		2	33.3%	66.7%	38		28	10.5%	73.7%
	LDGV	3,035	31	1,993	1.0%	65.7%	24	1	17	4.2%	70.8%	1,188	73	827	6.1%	69.6%
	Unknown	81	2	76	2.5%	93.8%	1	0	1	0.0%	100.0%	0	0	0	-	-
	HDGV	71	0	44	0.0%	62.0%	1	0	1	0.0%	100.0%	2		1	0.0%	50.0%
	LDGT1	721	15	472	2.1%	65.5%	1	0	•	0.0%	100.0%	80		63		78.8%
	LDGT2	157	1	118	0.6%	75.2%	2	0	2	0.0%	100.0%	6	2	4	33.3%	66.7%
1996	LDGV	1,319	13	930	1.0%	70.5%	13	0	8	0.0%	61.5%	290	19	195	6.6%	67.2%
1996	Unknown	19		19	5.3%	100.0%	1		1	0.0%	100.0%	0	0	0	-	-
	HDGV	214		132	0.9%	61.7%	2	0	1	0.0%	50.0%	5	-	1	0.0%	20.0%
	LDGT1	1,432	11	952	0.8%	66.5%	4	0	_	0.0%	50.0%	77	5	61	6.5%	79.2%
	LDGT2	361	8	242	2.2%	67.0%	3	_		0.0%	66.7%	9	_	7	0.0%	77.8%
1997	LDGV	2,341	23	1,508	1.0%	64.4%	23	0	13	0.0%	56.5%	345	25	249	7.2%	72.2%
	Unknown	100	2	78	2.0%	78.0%	2	0	2	0.0%	100.0%	0	_	1	-	-
	HDGV	58	1	34	1.7%	58.6%	1	0	2	0.0%	100.0%	0		0	-	-
1998	LDGT1	754	10	495	1.3%	65.6%	1	0	1	0.0%	100.0%	33	1	23	3.0%	69.7%
1998	LDGT2	146	1	96	0.7%	65.8%	1	0	0	0.0%	0.0%	1	0	0	0.0%	0.0%
1998	LDGV	1,681	12	1,126	0.7%	67.0%	16	0	10	0.0%	62.5%	154	9	104	5.8%	67.5%
1998	Unknown	24	0	22	0.0%	91.7%	0	0	0	-	-	0	0	0	-	-

		Gas														
	N/ 1	Сар	# Gas	# Gas	0/ 0	0/ 0	Cat Conv			0/ 0 /	% Cat	Smoke	#	" • • • • • •	04 0	0/ 0 - 1
	Veh	Initial	Сар	Сар	% Gas	% Gas	Initial	Conv	Conv	% Cat	Conv	Initial	Smoke		% Smoke	
Model Yr	Type	Fails	Fail	Pass		Cap Pass		Fail		Conv Fail	Pass	Fails	Fail	Pass	Fail	Pass
	HDGV	161	1	97	0.6%	60.2%	0	Ŭ	0	- 0.00/	400.00/	3	_	2	0.0%	66.7%
	LDGT1	1,378	17	933	1.2%	67.7%	1	0		0.0%	100.0%	22		18		81.8%
	LDGT2	300	7	200	0.3%	66.7%	0	•	Ū	0.00/	- 00.00/	9		6	, 0	66.7%
	LDGV	4,155 77	35	2,886	0.8%	69.5%	15		Ū	0.0%	60.0%	122	5 0	85		69.7%
	Unknown		0	54 50	0.0%	70.1%	0		0	400.00/	0.00/	0	0	·		0.00/
	HDGV LDGT1	104 1,239	16	50 637	1.0% 1.3%	48.1% 51.4%	2		·	100.0%	0.0% 100.0%		·	v	0.070	0.0% 75.0%
	LDGT1 LDGT2	384	6	172		44.8%	0			0.0%	100.0%	4	0		0.070	
	LDG12	2,553	27	1,336	1.6% 1.1%	52.3%	1	_	·	0.0%	100.0%	25		-	0.0%	100.0% 72.0%
	Unknown	2,553 57	4	42	7.0%	73.7%	0	·		0.0%	100.0%	0		. 0	0.070	72.0%
	HDGV	123	5	81	4.1%	65.9%	0		Ū		-	0		0	-	-
	LDGT1	1,632	17	1,120	1.0%	68.6%	1	0		0.0%	0.0%	2		1	0.0%	50.0%
	LDGT1 LDGT2	396	4	262	1.0%	66.2%	0	·	Ū	0.0%	0.0%	1	0	1	0.0%	100.0%
	LDG12	2,993	26	2,191	0.9%	73.2%	5	_	3	0.0%	60.0%	13		11		84.6%
	Unknown	2,993 41	3	32	7.3%	78.0%	0		0	0.0%	00.0%	0		0		04.0%
	HDGV	10	1	52	10.0%	50.0%	0		·			0		0		_
	LDGT1	439	4	193	0.9%	44.0%	1	·		0.0%	0.0%	0		V		_
	LDGT1	73	0	28	0.9%	38.4%	0	·	·	0.078	0.076	2		2		100.0%
	LDG12	637	5	275	0.8%	43.2%	1	Ŭ	·	0.0%	100.0%	1	0		0.0%	
	Unknown	7	0	5	0.0%	71.4%	0			0.070	100.070	0				100.070
	HDGV	6	0	3	0.0%	50.0%	0		·	_	_	0				_
	LDGT1	52	0	11	0.0%	21.2%	0		0			1	0	ŭ	0.0%	100.0%
	LDGT2	20	0	5	0.0%	25.0%	0			_	_	0			-	100.070
	LDGV	111	2	40	1.8%	36.0%	0			_	-	0		0	_	_
	Unknown	3	0	1	0.0%	33.3%	1	·		0.0%	100.0%	0		0	_	_
	HDGV	0	0	0	-	-	0		0	-	-	0		0	_	_
	LDGT1	1	0	1	0.0%	100.0%	0	_		-	_	0		V		-
	LDGT2	1	0	0	0.0%	0.0%	0	•		-	-	0		·	-	-
	LDGV	2	0	2	0.0%	100.0%	0		0	-	-	0		0	-	-
	Unknown	0	Ö	0	-	-	0	Ö	_	-	-	0		0	-	-
Totals		57,970	901	37,554	1.6%	64.8%	997	26	496	2.6%	49.7%	15,955	1,009	10,205	6.3%	64.0%

APPENDIX I -PART H

INITIALLY FAILED
VEHICLES PASSING
SECOND OR SUBSEQUENT
EMISSION INSPECTION
RETEST
BY TEST TYPE

		OBD			ASM			2500			Idle		
	Veh	Initial	# OBD	% OBD	Initial	# ASM	% ASM	Initial	# 2500	% 2500	Initial	# Idle	% Idle
Model Yr	Type	Fails *	Pass R2	Pass R2	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2
Pre 79/Unknown	HDGV	0	0	-	0	0	-	0	0	-	182	22	12.1%
Pre 79/Unknown		3	1	33.3%	9	1	11.1%	5		20.0%	436	52	11.9%
Pre 79/Unknown		1	0	0.0%	2	0	0.0%	0	0	-	368	51	13.9%
Pre 79/Unknown	LDGV	22	1	4.5%	17	7	41.2%	18	0	0.0%	2,281	243	10.7%
Pre 79/Unknown		0	0	-	0	0	-	0	0	-	101	16	15.8%
1979	HDGV	0	0	-	0	0	-	0	0	-	81	9	11.1%
	LDGT1	0	0	-	0	0	-	0		-	222	26	11.7%
	LDGT2	0	0	-	0	0	-	0		-	225	27	12.0%
	LDGV	0	0	-	0	0	-	0		-	871	106	12.2%
	Unknown	0	0	-	0	0	-	0		-	41	15	36.6%
	HDGV	0	0	-	0	0	-	0		-	39	3	
	LDGT1	0	0	-	0	0	-	0		-	79		
	LDGT2	0	0	-	0	0	-	0	0	-	47	5	10.6%
	LDGV	0	0	-	0	0	-	0	0	-	238	22	9.2%
	Unknown	0	0	-	0	0	-	0		-	14	2	14.3%
	HDGV	0	0	-	1	0	0.0%	0	-	-	92	9	9.8%
	LDGT1	0	0	-	155	26	16.8%	13	2	15.4%	0		-
	LDGT2	0	0	-	45	9	20.0%	6	0	0.0%	0	0	-
	LDGV	0	0	-	788	109	13.8%	44	4	9.1%	0		
	Unknown	0	0	-	0	0	-	0		-	29	10	
	HDGV	0	0	-	0	0	-	0		-	59	7	11.9%
	LDGT1	0	0	-	101	9	8.9%	12	2	16.7%	1	0	0.0%
	LDGT2	0	0	-	38	5	13.2%	9	1	11.1%	0		-
	LDGV	0	0	-	457	62	13.6%	19	1	5.3%	0		-
	Unknown	0	0	-	0	0	-	0	0	-	19		10.5%
	HDGV	0	0	-	0	0	-	0	0	-	117	14	12.0%
	LDGT1	0	0	-	328	46	14.0%	17	1	5.9%	0	v	
	LDGT2	0	0	-	142	16	11.3%	18	4	22.2%	1	0	
	LDGV	0	0	-	1,912	235	12.3%	54	3	5.6%	2	0	0.070
	Unknown	0	0	-	0	0	-	0		-	37	7	18.9%
	HDGV	0	0	-	0	0	-	0		-	132	13	9.8%
	LDGT1	0	0	-	360	53	14.7%	17	0	0.0%	0	_	-
	LDGT2	0	0	-	149	14	9.4%	16		12.5%	0		
	LDGV	0	0	-	1,444	169	11.7%	39	3	7.7%	5		
1984	Unknown	0	0	-	0	0	-	0	0	-	39	9	23.1%

		OBD			ASM			2500			ldle		
	Veh	Initial	# OBD	% OBD	Initial	# ASM	% ASM	Initial	# 2500	% 2500	Initial	# Idle	% Idle
Model Yr	Type	Fails *	Pass R2	Pass R2	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2
	HDGV	0	0	-	3	0	0.0%	0	0	-	345	38	11.0%
1985	LDGT1	0	0	-	1,073	149	13.9%	38	5	13.2%	1	0	0.0%
	LDGT2	0	0	-	421	52	12.4%	38		15.8%	1	0	0.0%
	LDGV	0	0	-	5,019	696	13.9%	139	8	5.8%	8	2	25.0%
	Unknown	0	0	-	0	0	-	0	0	-	105	20	19.0%
	HDGV	0	0	-	4	0	0.0%	0	_	-	296	17	5.7%
	LDGT1	0	0	-	649	73	11.2%	49	5	10.2%	0	0	-
	LDGT2	0	0	-	256	31	12.1%	23	1	4.3%	0	0	-
	LDGV	0	0	-	2,962	325	11.0%	103	7	6.8%	6	1	16.7%
	Unknown	0	0	-	0	0	-	2	0	0.0%	81	13	16.0%
	HDGV	0	0	-	5	1	20.0%	0	v	-	433	31	7.2%
	LDGT1	0	0	-	1,509	210	13.9%	84	10	11.9%	1	0	0.0%
	LDGT2	0	0	-	581	90	15.5%	32	5	15.6%	0	0	-
1987	LDGV	0	0	-	9,254	1,182	12.8%	211	25	11.8%	16	0	0.070
	Unknown	0	0	-	1	0	0.070	0	0	-	129	26	20.2%
	HDGV	0	0	-	1	0	0.0%	0	0	-	255	24	9.4%
1988	LDGT1	0	0	-	1,591	199	12.5%	59	8	13.6%	0	0	-
	LDGT2	0	0	-	429	58	13.5%	14	0	0.0%	1	0	0.0%
	LDGV	0	0	-	3,945	432	11.0%	122	10	8.2%	5		0.0%
	Unknown	0	0	-	0	0	-	1	0	0.0%	53	13	24.5%
	HDGV	0	0	-	7	0	0.0%	0	0	-	581	60	10.3%
	LDGT1	0	0	-	3,423	516	15.1%	72	5	6.9%	0	0	-
	LDGT2	0	0	-	861	126	14.6%	45	5	11.1%	0	0	
	LDGV	0	0	-	9,070	1,057	11.7%	242	30	12.4%	5		0.0%
	Unknown	0	0	-	0	0	-	0	0	-	138	34	24.6%
	HDGV	0	0	-	5	0	0.0%	0	Ü	-	167	25	15.0%
	LDGT1	0	0	-	1,430	171	12.0%	62	11	17.7%	0	0	-
	LDGT2	0	0	-	297	28	9.4%	16		6.3%	0	0	
	LDGV	0	0	-	5,101	541	10.6%	198	22	11.1%	2	1	50.0%
	Unknown	0	0	-	0	0	-	0	_	-	37	7	18.9%
	HDGV	0	0	-	2	0	0.0%	0		-	190	24	12.6%
	LDGT1	0	0	-	3,573	471	13.2%	217	25	11.5%	1	0	0.070
	LDGT2	0	0	-	543	80	14.7%	68	13	19.1%	0	0	
	LDGV	0	0	-	14,483	2,052	14.2%	498	50	10.0%	4	0	
1991	Unknown	0	0	-	0	0	-	0	0	-	45	6	13.3%

		OBD			ASM			2500			ldle		
	Veh	Initial	# OBD	% OBD	Initial	# ASM	% ASM	Initial	# 2500	% 2500	Initial	# Idle	% Idle
Model Yr	Type	Fails *	Pass R2	Pass R2	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2
1992	HDGV	0	0	-	1	1	100.0%	1	0	0.0%	75	6	8.0%
1992	LDGT1	0	0	-	1,931	288	14.9%	90	10	11.1%	1	0	0.0%
	LDGT2	0	0	-	325	57	17.5%	29	5	17.2%	0	0	-
	LDGV	0	0	-	5,670	675	11.9%	301	34	11.3%	2	0	0.0%
	Unknown	0	0	-	0	0	-	0	0	-	20	5	25.0%
	HDGV	0	0	-	7	0	0.0%	1	0	0.0%	189	21	11.1%
	LDGT1	0	0	-	4,592	605	13.2%	681	95	14.0%	1	0	0.0%
	LDGT2	0	0	-	704	89	12.6%	60	6	10.0%	0		-
	LDGV	0	0	-	12,023	1,557	13.0%	885	117	13.2%	6		0.070
	Unknown	0	0	-	1	0	0.0%	0		-	68	8	
	HDGV	0	0	-	4	0	0.0%	1	0	0.0%	118	13	
	LDGT1	0	0	-	1,220	186	15.2%	375	54	14.4%	0		-
	LDGT2	0	0	-	318	52	16.4%	62	5	8.1%	0		-
	LDGV	0	0	-	3,315	375	11.3%	337	37	11.0%	5		0.070
	Unknown	0	0	-	0	0		0	_	-	25	4	16.0%
	HDGV	0	0	-	3	0	0.0%	0	ŭ	-	277	20	7.2%
	LDGT1	0	0	-	2,699	382	14.2%	377	43	11.4%	2	0	0.0%
	LDGT2	0	0	-	616	94	15.3%	98	7	7.1%	0	0	-
	LDGV	0	0	-	5,905	711	12.0%	573	63	11.0%	2	0	0.0,0
	Unknown	0	0	-	0	0	-	0	0	-	51	9	
	HDGV	0	0	-	0	0	-	0		-	74	10	
	LDGT1	3	0	0.0%	894	121	13.5%	46		4.3%	0	_	
	LDGT2	1	0	0.0%	156	18	11.5%	25	2	8.0%	0		
	LDGV	1	1	100.0%	2,152	234	10.9%	82	6	7.3%	2	0	0.070
	Unknown	0	0	-	0	0	-	0	0	-	19	2	10.5%
	HDGV	0	0	-	2	0	0.0%	0	0	-	130	7	5.4%
	LDGT1	15	3	20.0%	841	93	11.1%	140	6	4.3%	0		
	LDGT2	9	1	11.1%	308	37	12.0%	42	1	2.4%	0	0	
	LDGV	29	5	17.2%	3,322	331	10.0%	236	15	6.4%	2	0	0.070
	Unknown	0	0	-	0	0	-	0	0	-	39	2	
	HDGV	0	0	-	0	0	-	0		-	30	0	
	LDGT1	1,067	122	11.4%	199	16	8.0%	38	2	5.3%	0		
	LDGT2	343	38	11.1%	42	0	0.0%	14	2	14.3%	0		
	LDGV	2,293	219	9.6%	559	43	7.7%	46		6.5%	1	0	
1998	Unknown	0	0	-	0	0	-	0	0	-	9	3	33.3%

		OBD			ASM			2500			Idle		
	Veh	Initial	# OBD	% OBD	Initial	# ASM	% ASM	Initial	# 2500	% 2500	Initial	# Idle	% Idle
Model Yr	Type	Fails *	Pass R2	Pass R2	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2
1999	HDGV	0	0	-	0	0	-	0	0	-	101	10	9.9%
1999	LDGT1	965	101	10.5%	190	11	5.8%	40	1	2.5%	0	0	-
	LDGT2	453	43	9.5%	51	6		16	1	6.3%	0	ŭ	
	LDGV	2,766	303	11.0%	743	71	9.6%	53	2	3.8%	0	0	-
1999	Unknown	0	0	-	0	0	-	0	0	-	36	3	8.3%
2000	HDGV	0	0	-	1	0	0.0%	0		-	3	0	0.0%
	LDGT1	871	64	7.3%	29	3	10.3%	10	1	10.0%	1	0	0.0%
2000	LDGT2	232	10	4.3%	7	1	14.3%	2	0	0.0%	0	0	
2000	LDGV	2,256	180	8.0%	279	20	7.2%	17	0	0.0%	1	0	0.0%
	Unknown	0	0	-	0	0	-	0	0	-	12	2	
2001	HDGV	0	0	-	0	0	-	0	0	-	5	0	0.0%
2001	LDGT1	448	70	15.6%	37	5	13.5%	9	1	11.1%	0	0	-
2001	LDGT2	222	24	10.8%	5	1	20.0%	2	0	0.0%	0	0	-
2001	LDGV	907	118	13.0%	180	12	6.7%	9	2	22.2%	0	0	-
2001	Unknown	1	0	0.0%	0	0	-	0	0	-	2	0	0.0%
2002	HDGV	0	0	-	0	0	-	0	0		2	1	50.0%
2002	LDGT1	173	18	10.4%	5	0	0.0%	1	0	0.0%	0	0	-
2002	LDGT2	66	5	7.6%	1	1	100.0%	0	0	-	0	0	-
	LDGV	399	41	10.3%	26	7	26.9%	4	0	0.0%	0	0	-
2002	Unknown	0	0	-	0	0	-	0	0	-	1	1	100.0%
2003	HDGV	0	0	-	0	0	-	0	0		0	0	-
	LDGT1	29	1	3.4%	9	0	0.0%	0	0	-	0	0	-
	LDGT2	18	4	22.2%	9	0	0.0%	0	0	-	0	0	-
	LDGV	118	9	7.6%	58	2	3.4%	0	0	-	0	0	-
	Unknown	0	0	-	0	0	-	0	0	-	0	0	-
2004	HDGV	0	0	-	0	0	-	0	0	-	0	0	-
2004	LDGT1	6	1	16.7%	0	0	-	0	0	-	0	0	-
2004	LDGT2	3	0	0.0%	0	0	-	0	0	-	0	0	-
	LDGV	49	1	2.0%	1	0	0.0%	0	_	-	0	0	
2004	Unknown	0	0	-	0	0	-	0	0	-	0	0	
Totals		13,769	1,384	10.1%	121,886	15,406	12.6%	7,323	799	10.9%	9,976	1,149	11.5%

		Gas Cap	# Gas	% Gas	Cat Conv	# Cat	% Cat	Smoke		
	Veh	Initial	Сар	Сар	Initial	Conv	Conv	Initial	# Smoke	% Smoke
Model Yr	Type	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2
Pre 79/Unknown	HDGV	80	0	0.0%	2	0	0.0%	122	10	8.2%
Pre 79/Unknown		152	4	2.6%	16	0	0.0%	0	0	
Pre 79/Unknown	LDGT2	157	5	3.2%	13	0	0.0%	1	0	0.0%
Pre 79/Unknown		531	14	2.6%	42	2	4.8%	4	0	0.0%
Pre 79/Unknown	Unknown	59	5	8.5%	2	0	0.0%	1	0	0.0%
1979	HDGV	15	1	6.7%	2	0	0.0%	25	0	0.0%
	LDGT1	66	2	3.0%	14	0	0.0%	0	0	-
	LDGT2	93	1	1.1%	11	0	0.0%	0	0	-
	LDGV	208	3	1.4%	34	0	0.0%	2	0	0.0%
	Unknown	10	0	0.0%	2	0	0.0%	1	0	0.0%
	HDGV	18	0	0.0%	1	0	0.0%	13	0	0.0%
	LDGT1	38	2	5.3%	11	0	0.0%	0	0	-
	LDGT2	14	2	14.3%	3	0	0.0%	0	0	-
	LDGV	50	0	0.0%	12	0	0.0%	0	0	-
	Unknown	4	0	0.0%	0	0	-	2	0	0.0%
	HDGV	22	0	0.0%	10	0	0.0%	1	0	0.0%
1981	LDGT1	92	1	1.1%	14	0	0.0%	0	0	-
1981	LDGT2	29	0	0.0%	3	0	0.0%	0	0	-
1981	LDGV	156	1	0.6%	6	0	0.0%	1	0	0.0%
1981	Unknown	6	0	0.0%	0	0	-	0	0	-
	HDGV	15	0	0.0%	3	0	0.0%	0	0	-
1982	LDGT1	58	2	3.4%	9	0	0.0%	0	0	-
	LDGT2	16	0	0.0%	3	0	0.0%	0	0	-
1982	LDGV	89	1	1.1%	9	0	0.0%	0	0	-
	Unknown	3	2	66.7%	1	0	0.0%	0	0	-
	HDGV	39	0	0.0%	9	0	0.0%	0	0	-
1983	LDGT1	140	7	5.0%	11	0	0.0%	0	0	-
1983	LDGT2	68	0	0.0%	8	0	0.0%	11	0	0.0%
1983	LDGV	343	5	1.5%	11	0	0.0%	23	2	8.7%
1983	Unknown	15	2	13.3%	0	0	-	21	4	19.0%
1984	HDGV	44	2	4.5%	6	0	0.0%	158	10	6.3%
1984	LDGT1	120	4	3.3%	14	0	0.0%	4	0	0.0%
1984	LDGT2	69	1	1.4%	9	0	0.0%	2	0	0.0%
	LDGV	335	8	2.4%	20	0	0.0%	8	0	0.0%
1984	Unknown	24	3	12.5%	2	0	0.0%	10	0	0.0%

		Gas Cap	# Gas	% Gas	Cat Conv	# Cat	% Cat	Smoke		
	Veh	Initial	Сар	Сар	Initial	Conv	Conv	Initial	# Smoke	% Smoke
Model Yr	Type	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2
1985	HDGV	93	2	2.2%	17	0	0.0%	36	0	0.0%
	LDGT1	371	9	2.4%	25	2	8.0%	0	0	-
	LDGT2	169	4	2.4%	9	0	0.0%	1	0	0.0%
1985	LDGV	843	10	1.2%	25	0	0.0%	5	0	0.0%
1985	Unknown	37	1	2.7%	2	0	0.0%	1	0	0.0%
1986	HDGV	92	1	1.1%	12	0	0.0%	15	0	0.0%
	LDGT1	278		2.5%	15	2	13.3%	0	0	
	LDGT2	110	1	0.9%	6	0	0.0%	1	0	0.0%
	LDGV	593	8	1.3%	21	0	0.0%	11	0	0.070
	Unknown	33	2	6.1%	2	0	0.0%	6	0	0.0%
	HDGV	128	2	1.6%	12	0	0.0%	35	2	
	LDGT1	569	16	2.8%	19	0	0.0%	1	0	0.0%
	LDGT2	225	2	0.9%	6	0	0.0%	4	0	0.0%
	LDGV	1,724	33	1.9%	53	0	0.0%	12	0	0.070
	Unknown	51	0	0.0%	2	0	0.0%	7	0	0.070
	HDGV	94	2	2.1%	5	0	0.0%	29	2	6.9%
	LDGT1	341	8	2.3%	5	0	0.0%	0	0	
	LDGT2	124	3	2.4%	8	4	50.0%	1	0	
1988	LDGV	1,055	19	1.8%	28	2	7.1%	26	2	7.7%
	Unknown	21	0	0.0%	2	0	0.0%	12	0	0.070
	HDGV	134	1	0.7%	3	0	0.0%	130	6	4.6%
	LDGT1	720	17	2.4%	20	2	10.0%	0	0	
	LDGT2	240		0.8%	4	0	0.0%	4	0	
	LDGV	2,414	37	1.5%	42	0	0.0%	35	0	0.0%
	Unknown	68	3	4.4%	0	0	-	10	2	
	HDGV	69	1	1.4%	5	0	0.0%	108	8	
	LDGT1	368	8	2.2%	11	0	0.0%	2	0	0.070
	LDGT2	104	1	1.0%	2	0	0.0%	8	0	0.070
	LDGV	1,380	24	1.7%	31	0	0.0%	96	6	0.070
	Unknown	29	0	0.0%	1	0	0.0%	41	2	4.9%
	HDGV	74	1	1.4%	1	0	0.0%	457	20	4.4%
	LDGT1	750	6	0.8%	14	0	0.0%	3	0	0.070
	LDGT2	196		2.6%	2	0	0.0%	7	0	0.070
	LDGV	2,700		1.3%	26	0	0.0%	87	4	4.6%
1991	Unknown	22	1	4.5%	0	0	-	27	2	7.4%

		Gas Cap	# Gas	% Gas	Cat Conv	# Cat	% Cat	Smoke		
	Veh	Initial	Сар	Сар	Initial	Conv	Conv	Initial	# Smoke	% Smoke
Model Yr	Type	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2
1992	HDGV	47	1	2.1%	1	0	0.0%	347	22	6.3%
1992	LDGT1	328	5	1.5%	4	2	50.0%	1	0	0.0%
	LDGT2	89	1	1.1%	5		0.0%	15		0.0%
1992	LDGV	1,035	16	1.5%	23	0	0.0%	238	20	8.4%
1992	Unknown	21	1	4.8%	1	0	0.0%	62		0.070
1993	HDGV	132	0	0.0%	4	0	0.0%	648	38	5.9%
	LDGT1	912	5	0.5%	6	0		3		0.0%
	LDGT2	284	6	2.1%	4	2		13		
	LDGV	2,621	17	0.6%	29	0	0.0%	137		
	Unknown	34	1	2.9%	0	0		39		
	HDGV	98	2	2.0%	4	0		436		5.0%
	LDGT1	466	8	1.7%	4	0		2		
	LDGT2	145	1	0.7%	4	0	0.0%	15		0.0%
1994	LDGV	1,147	8	0.7%	23	0	0.0%	363	34	
	Unknown	32	1	3.1%	0			65		0.070
	HDGV	233	1	0.4%	6	2		1,164		
	LDGT1	1,023	10	1.0%	2	0	0.070	2	0	0.0%
1995	LDGT2	457	4	0.9%	3	2		7	0	
1995	LDGV	3,035	17	0.6%	24	2		172		
	Unknown	81	2	2.5%	1	0	0.0,0	26		
1996	HDGV	71	0	0.0%	1	0		644	40	6.2%
	LDGT1	721	13	1.8%	1	0		1	0	
	LDGT2	157	1	0.6%	2	0	0.070	11	0	,
	LDGV	1,319	9	0.7%	13	0	0.070	317		7.6%
	Unknown	19	0	0.0%	1	0		48		
	HDGV	214	1	0.5%	2	0	0.070	1,742		
	LDGT1	1,432	10	0.7%	4	0	0.070	2		0.070
	LDGT2	361	8	2.2%	3		0.070	3		0.070
	LDGV	2,341	17	0.7%	23	0	0.070	209		
	Unknown	100	3	3.0%	2	0	0.070	12		
	HDGV	58	1	1.7%	1	0		997	100	
	LDGT1	754	7	0.9%	1	0		1	Ü	0.070
	LDGT2	146	0	0.0%	1	0	0.070	5		
	LDGV	1,681	11	0.7%	16			670		
1998	Unknown	24	0	0.0%	0	0	-	37	0	0.0%

		Gas Cap	# Gas	% Gas	Cat Conv	# Cat	% Cat	Smoke		
	Veh	Initial	Сар	Сар	Initial	Conv	Conv	Initial	# Smoke	% Smoke
Model Yr	Type	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2	Fails	Pass R2	Pass R2
	HDGV	161	0	0.0%	0	0		2,300	196	8.5%
	LDGT1	1,378	17	1.2%	1	0	0.0%	0	0	-
	LDGT2	300	1	0.3%	0	0	-	4	0	0.0%
	LDGV	4,155	30	0.7%	15	0	0.0%	300	24	8.0%
1999	Unknown	77	0	0.0%	0	0	-	40	8	20.0%
2000	HDGV	104	1	1.0%	1	0	0.0%	701	58	8.3%
2000	LDGT1	1,239	12	1.0%	2	0	0.0%	0	0	-
2000	LDGT2	384	6	1.6%	0	0	-	10	2	20.0%
	LDGV	2,553	21	0.8%	1	0	0.0%	256		
2000	Unknown	57	4	7.0%	0	0	-	38	4	10.5%
2001	HDGV	123	4	3.3%	0	0	-	1,188	88	7.4%
2001	LDGT1	1,632	14	0.9%	1	0	0.0%	0	0	-
2001	LDGT2	396	5	1.3%	0	0	-	2	0	0.0%
2001	LDGV	2,993	22	0.7%	5	0	0.0%	80	6	7.5%
2001	Unknown	41	2	4.9%	0	0	-	6	4	66.7%
2002	HDGV	10	1	10.0%	0	0	-	290	20	6.9%
2002	LDGT1	439	3	0.7%	1	0	0.0%	0	0	-
2002	LDGT2	73	0	0.0%	0	0	-	5	0	0.0%
2002	LDGV	637	4	0.6%	1	0	0.0%	77	8	10.4%
2002	Unknown	7	0	0.0%	0	0	-	9	0	0.0%
2003	HDGV	6	0	0.0%	0	0	-	345	38	11.0%
2003	LDGT1	52	0	0.0%	0	0	-	0	0	-
2003	LDGT2	20	0	0.0%	0	0	-	0	0	-
2003	LDGV	111	2	1.8%	0	0	-	33	0	0.0%
2003	Unknown	3	0	0.0%	1	0	0.0%	1	0	0.0%
2004	HDGV	0	0	-	0	0	-	154	10	6.5%
2004	LDGT1	1	0	0.0%	0	0	-	0	0	-
2004	LDGT2	1	0	0.0%	0	0	-	3	0	0.0%
	LDGV	2	0	0.0%	0	0	-	22	0	0.0,0
2004	Unknown	0	0	-	0	0	-	9	2	22.2%
Totals		57,970	687	1.2%	997	24	2.4%	15,955	1,178	7.4%

APPENDIX I -PART I

WAIVERS

New Jersey Enhanced Inspection and Maintenance Program Waiver Report by Model Year and Vehicle Type Year 2003

	Vehicles					
	Initially 			Waivers	Waivers	Waivers
Model	Failing ASM5015 or	Waivers	Received	for LDGV	for LDGT1	for LDGT2
Year	OBD Test	Number	%	Vehicles	Vehicles	Vehicles
Unknown	54	0	0.00%	0	0	0
1981	989	1	0.10%	1	0	0
1982	596	2	0.34%	2	0	0
1983	2,382	2	0.08%	2	0	0
1984	1,953	3	0.15%	3	0	0
1985	6,516	8	0.12%	8	0	0
1986	3,871	8	0.21%	8	0	0
1987	11,350	8	0.07%	8	0	0
1988	5,966	3	0.05%	2	0	1
1989	13,361	17	0.13%	13	3	1
1990	6,833	6	0.09%	5	1	0
1991	18,601	25	0.13%	22	3	0
1992	7,927	7	0.09%	6	1	0
1993	17,327	25	0.14%	16	8	1
1994	4,857	8	0.16%	5	3	0
1995	9,223	8	0.09%	7	1	0
1996	3,207	3	0.09%	1	2	0
1997	4,526	2	0.04%	0	2	0
1998	4,503	0	0.00%	0	0	0
1999	5,168	0	0.00%	0	0	0
2000	3,675	0	0.00%	0	0	0
2001	1800	0	0.00%	0	0	0
2002	670	0	0.00%	0	0	0
2003	241	0	0.00%	0	0	0
2004	59	0	0.00%	0	0	0
TOTAL	135,655	136	0.10%	109	24	3
% of Waive	rs Issued by	y Vehicle Ty	/pe	80%	18%	2%

Report includes only inspection records where the vehicle failed the Initial ASM 5015 or OBD test.

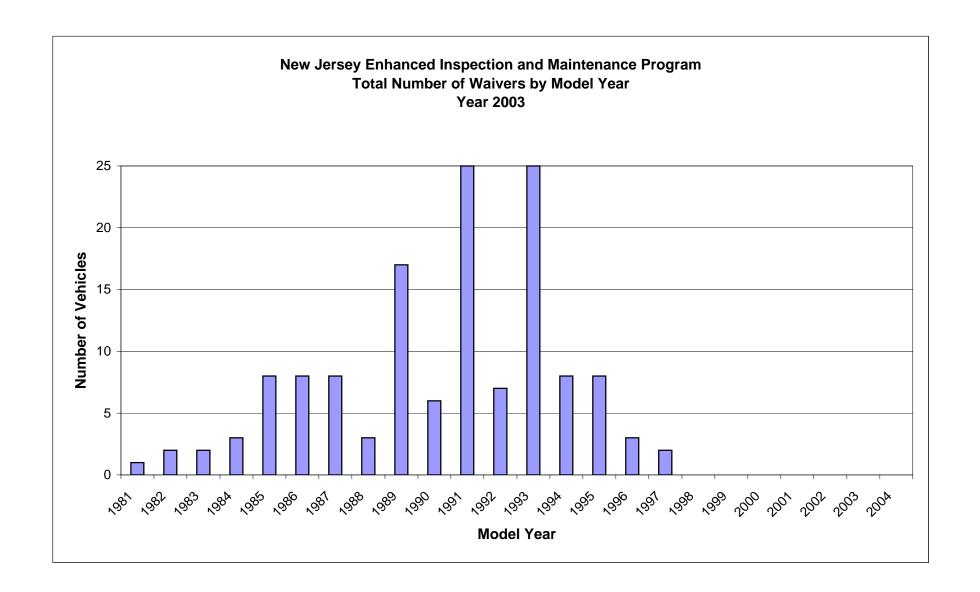


Figure I-1

APPENDIX I - PART J

TESTS WITH NO KNOWN FINAL OUTCOME

	W.1	OBD	# 0 DD	0/ ODD	ASM	" 4 014	0/ 4014	2500	" 0500	0/ 0500	Idle	"11	0/ 1 11
Model Yr	Veh Type	Initial Fails *	# OBD Dropped	% OBD Dropped	Initial Fails	# ASM Dropped	% ASM Dropped	Initial Fails	# 2500 Dropped	% 2500 Dropped	Initial Fails	# Idle Dropped	% Idle Dropped
Pre 79/Unknown		0	Diopped 0	ыоррец	Falls 0	Dropped 0	Dropped	0	Dropped 0	Dioppeu	182	45	
Pre 79/Unknown	I DGT1	3	ŭ	0.0%	9	0	0.0%	5	1	20.0%	436		26.8%
Pre 79/Unknown		1	1	100.0%	2	1	50.0%	0	0	20.070	368		26.1%
Pre 79/Unknown		22	4	18.2%	17	0	0.0%	18	15	83.3%	2,281	627	27.5%
Pre 79/Unknown		0	-	-	0	0	-	0	0	-	101	12	11.9%
	HDGV	0		-	0	0	-	0	0	-	81	18	22.2%
	LDGT1	0	0	-	0	0	-	0	0	-	222	46	20.7%
	LDGT2	0	0	-	0	0	-	0	0	-	225	55	24.4%
	LDGV	0	0	-	0	0	-	0	0	-	871	183	21.0%
	Unknown	0	0	-	0	0	-	0	0	-	41	1	2.4%
1980	HDGV	0	0	-	0	0	-	0	0	-	39	20	51.3%
1980	LDGT1	0	0	-	0	0	-	0	0	-	79	18	
1980	LDGT2	0	0	-	0	0	-	0	0	-	47	15	31.9%
1980	LDGV	0	0	-	0	0	-	0	0	-	238	65	27.3%
1980	Unknown	0	0	-	0	0	-	0	0	-	14	0	0.0%
1981	HDGV	0	0	-	1	1	100.0%	0	0	-	92	27	29.3%
1981	LDGT1	0	0	-	155	48	31.0%	13	4	30.8%	0	0	-
1981	LDGT2	0	0	-	45	11	24.4%	6	4	66.7%	0	0	-
1981	LDGV	0	0	-	788	224	28.4%	44	14	31.8%	0	-	-
	Unknown	0	0	-	0	0	-	0	0	-	29		0.0%
	HDGV	0	0	-	0	0	-	0	0	-	59	18	30.5%
	LDGT1	0	0	-	101	40	39.6%	12	5	41.7%	1	0	0.0%
	LDGT2	0	0	-	38	15	39.5%	9	4	44.4%	0	0	-
1982	LDGV	0	0	-	457	164	35.9%	19	8	42.1%	0	_	-
1982	Unknown	0	0	-	0	0	-	0	0	-	19	5	26.3%
	HDGV	0	0	-	0	0	-	0	0	-	117	25	21.4%
	LDGT1	0	ŭ	-	328	89	27.1%	17	3	17.6%	0		
	LDGT2	0	ŭ	-	142	38	26.8%	18	4	22.2%	1	0	0.070
	LDGV	0	ŭ	-	1,912	541	28.3%	54	18	33.3%	2		0.0%
	Unknown	0	ŭ	-	0	0	-	0	0	-	37	2	5.4%
	HDGV	0		-	0	0	-	0	0	-	132	41	31.1%
	LDGT1	0		-	360	123	34.2%	17	9	52.9%	0		-
	LDGT2	0	-	-	149	58	38.9%	16	6	37.5%	0		
	LDGV	0	_	-	1,444	555	38.4%	39	17	43.6%	5		00.070
1984	Unknown	0	0	-	0	0	-	0	0	-	39	2	5.1%

		OBD			ASM			2500			ldle		
Model Yr	Veh Type	Initial Fails *	# OBD Dropped	% OBD Dropped	Initial Fails	# ASM	% ASM	Initial Fails	# 2500 Dropped	% 2500	Initial Fails	# Idle Dropped	% Idle
	HDGV	() ()	Dropped 0	Dropped	3	Dropped 2	Dropped 66.7%	0	Dropped 0	Dropped	345	82	Dropped 23.8%
	LDGT1	0	Ŭ		1,073	326	30.4%	38	11	28.9%	1	1	100.0%
	LDGT1	0	-	_	421	130	30.4%	38	11	28.9%	1	1	100.0%
	LDGV	0	-	_	5,019	1,412	28.1%	139	49	35.3%	8		25.0%
	Unknown	0		_	0,010	0	20.170	0	0	-	105	7	6.7%
	HDGV	0		_	4	4	100.0%	0	0	_	296	99	33.4%
	LDGT1	0	0	_	649	221	34.1%	49	27	55.1%	0		-
	LDGT2	0	0	-	256	82	32.0%	23	8	34.8%	0		-
	LDGV	0	0	-	2,962	1,180	39.8%	103	57	55.3%	6	0	0.0%
	Unknown	0	0	-	,	,	-	2	2	100.0%	81	3	3.7%
1987	HDGV	0	0	-	5	3	60.0%	0	0	-	433	109	25.2%
1987	LDGT1	0	0	-	1,509	393	26.0%	84	24	28.6%	1	0	0.0%
1987	LDGT2	0	0	-	581	155	26.7%	32	13	40.6%	0	0	-
1987	LDGV	0	0	-	9,254	2,721	29.4%	211	83	39.3%	16	7	43.8%
1987	Unknown	0	0	-	1	1	100.0%	0	0	-	129	0	0.0%
1988	HDGV	0	0	-	1	1	100.0%	0	0	-	255	69	27.1%
1988	LDGT1	0	0	-	1,591	509	32.0%	59	22	37.3%	0	0	-
1988	LDGT2	0	0	-	429	144	33.6%	14	5	35.7%	1	0	0.0%
1988	LDGV	0	0	-	3,945	1,439	36.5%	122	61	50.0%	5		0.0%
1988	Unknown	0	0	-	0	0	-	1	1	100.0%	53	3	5.7%
	HDGV	0	0	-	7	4	57.1%	0	0	-	581	166	28.6%
	LDGT1	0	0	-	3,423	860	25.1%	72	33	45.8%	0	0	
	LDGT2	0	0	-	861	202	23.5%	45	14	31.1%	0	0	-
1989	LDGV	0	0	-	9,070	2,605	28.7%	242	102	42.1%	5		0.0%
1989	Unknown	0	0	-	0	0	-	0	0	-	138	0	0.0%
	HDGV	0	Ŭ	-	5	5	100.0%	0	0	-	167	40	24.0%
	LDGT1	0	Ŭ	-	1,430	440	30.8%	62	30	48.4%	0		
	LDGT2	0	Ŭ	-	297	84	28.3%	16	8	50.0%	0		
	LDGV	0	Ŭ	-	5,101	1,770	34.7%	198	96	48.5%	2		0.0%
	Unknown	0	Ŭ	-	0	0	-	0	0	-	37	2	5.4%
	HDGV	0		-	2	1	50.0%	0	0	-	190	46	24.2%
	LDGT1	0	-	-	3,573	896	25.1%	217	69	31.8%	1	0	0.0%
	LDGT2	0		-	543	108	19.9%	68	19	27.9%	0	0	-
	LDGV	0	-	-	14,483	3,680	25.4%	498	216	43.4%	4		25.0%
1991	Unknown	0	0	-	0	0	-	0	0	-	45	3	6.7%

	W.I	OBD	# 6 DD	°′ 000	ASM	" 401	0/ 4014	2500	# 0500	0/ 0500	Idle	"11	0/ 1 !!
Model Yr	Veh Type	Initial Fails *	# OBD Dropped	% OBD Dropped	Initial Fails	# ASM Dropped	% ASM Dropped	Initial Fails	# 2500 Dropped	% 2500 Dropped	Initial Fails	# Idle Dropped	% Idle Dropped
	HDGV	()	Dropped 0	-	1 Tall 5	Dropped 0	0.0%	1 Tall 5	Droppeu 1	100.0%	75		
	LDGT1	0	0	_	1,931	510	26.4%	90	39	43.3%	1	0	
	LDGT1	0	0	_	325	84	25.8%	29	11	37.9%	0		
	LDGV	0	0	_	5,670	1,714	30.2%	301	140	46.5%	2		
	Unknown	0	0	_	0,070		-	0		-	20		
	HDGV	0	0	_	7	4	57.1%	1	1	100.0%	189	45	
	LDGT1	0	0	-	4,592	1,022	22.3%	681	157	23.1%	1	0	
	LDGT2	0	0	-	704	129	18.3%	60	22	36.7%	0	0	
	LDGV	0	0	-	12,023	3,050	25.4%	885	298	33.7%	6	2	33.3%
	Unknown	0	0	-	1	1	100.0%	0	0	-	68		
1994	HDGV	0	0	-	4	4	100.0%	1	1	100.0%	118	28	
1994	LDGT1	0	0	-	1,220	300	24.6%	375	110	29.3%	0	0	-
1994	LDGT2	0	0	-	318	64	20.1%	62	18	29.0%	0	0	-
1994	LDGV	0	0	-	3,315	1,017	30.7%	337	125	37.1%	5	2	40.0%
1994	Unknown	0	0	-	0	0	-	0	0	-	25	0	0.0%
1995	HDGV	0	0	-	3	2	66.7%	0	0	-	277	69	24.9%
1995	LDGT1	0	0	-	2,699	550	20.4%	377	101	26.8%	2	1	50.0%
1995	LDGT2	0	0	-	616	125	20.3%	98	32	32.7%	0	0	-
1995	LDGV	0	0	-	5,905	1,505	25.5%	573	150	26.2%	2	1	50.0%
1995	Unknown	0	0	-	0	0	-	0	0	-	51	0	0.0%
	HDGV	0	0	-	0	0	-	0	0	-	74	24	32.4%
1996	LDGT1	3	1	33.3%	894	239	26.7%	46	15	32.6%	0	0	-
	LDGT2	1	0	0.0%	156	41	26.3%	25	6	24.0%	0	0	-
1996	LDGV	1	0	0.0%	2,152	566	26.3%	82	31	37.8%	2	1	50.0%
1996	Unknown	0	0	-	0	0	-	0	0	-	19	0	0.0%
1997	HDGV	0	0	-	2	1	50.0%	0)	-	130	34	26.2%
	LDGT1	15	0	0.0%	841	214	25.4%	140	27	19.3%	0	0	-
	LDGT2	9	5	55.6%	308	81	26.3%	42	15	35.7%	0	0	-
1997	LDGV	29	2	6.9%	3,322	840	25.3%	236	62	26.3%	2		100.0%
1997	Unknown	0	0	-	0	0	-	0	0	-	39		25.6%
	HDGV	0	0	-	0	•	-	0	ŭ	-	30	8	26.7%
	LDGT1	1,067	378	35.4%	199	52	26.1%	38	13	34.2%	0	0	-
	LDGT2	343	119	34.7%	42	6	14.3%	14	2	14.3%	0	0	-
1998	LDGV	2,293	966	42.1%	559	157	28.1%	46	16	34.8%	1	0	0.0%
1998	Unknown	0	0	-	0	0	-	0	0	-	9	0	0.0%

	Veh	OBD Initial	# OBD	% OBD	ASM Initial	# ASM	% ASM	2500 Initial	# 2500	% 2500	Idle Initial	# Idle	% Idle
Model Yr	Type	Fails *	Dropped	Dropped	Fails	Dropped	Dropped	Fails	Dropped	Dropped	Fails	Dropped	Dropped
1999	HDGV	0	0	-	0	0	-	0	0	-	101	11	10.9%
1999	LDGT1	965	339	35.1%	190	41	21.6%	40	7	17.5%	0	0	-
1999	LDGT2	453	116	25.6%	51	2	3.9%	16	4	25.0%	0	0	-
1999	LDGV	2,766	887	32.1%	743	193	26.0%	53	16	30.2%	0	0	-
1999	Unknown	0	0	-	0	0	-	0	0	-	36	6	16.7%
2000	HDGV	0	0	-	1	1	100.0%	0	0	•	3	0	0.0%
2000	LDGT1	871	330	37.9%	29	6	20.7%	10	3	30.0%	1	1	100.0%
	LDGT2	232	89	38.4%	7	0	0.0%	2	1	50.0%	0	0	-
2000	LDGV	2,256	830	36.8%	279	90	32.3%	17	6	35.3%	1	0	0.0%
2000	Unknown	0	0	-	0	0	ı	0	0	ı	12	3	25.0%
	HDGV	0	Ŭ	-	0	0	ı	0	0	ı	5	0	0.0%
2001	LDGT1	448	138	30.8%	37	6	16.2%	9	5	55.6%	0	0	-
2001	LDGT2	222	73	32.9%	5	0	0.0%	2	0	0.0%	0	0	-
2001	LDGV	907	290	32.0%	180	66	36.7%	9	2	22.2%	0	0	-
2001	Unknown	1	0	0.0%	0	0	-	0	0	-	2	2	100.0%
2002	HDGV	0	0	-	0	0	ı	0	0	ı	2	0	0.0%
2002	LDGT1	173	58	33.5%	5	0	0.0%	1	0	0.0%	0	0	-
2002	LDGT2	66	19	28.8%	1	0	0.0%	0	0	ı	0	0	-
2002	LDGV	399	128	32.1%	26	0	0.0%	4	0	0.0%	0	0	-
2002	Unknown	0	0	-	0	0	-	0	0	-	1	0	0.0%
2003	HDGV	0	0	-	0	0	-	0	0	-	0	0	-
2003	LDGT1	29	11	37.9%	9	7	77.8%	0	0	ı	0	0	-
2003	LDGT2	18		22.2%	9	5	55.6%	0	0	-	0	0	-
2003	LDGV	118	23	19.5%	58	33	56.9%	0	0	-	0	0	-
	Unknown	0	0	-	0	0	-	0	0	-	0	0	-
	HDGV	0	v	-	0	0	-	0	0	-	0	0	-
	LDGT1	6	3	50.0%	0	0	-	0	0	-	0	0	-
	LDGT2	3	1	33.3%	0	0	-	0	0	-	0	0	-
	LDGV	49	29	59.2%	1	1	100.0%	0	v	-	0	0	-
2004	Unknown	0	0	-	0	0	-	0	0	-	0	0	-
Totals		13,769	4,844	35.2%	121,886	34,015	27.9%	7,323	2,510	34.3%	9,976	2,366	23.7%

	Voh	Gas Cap	# Gas	% Gas	Cat Conv	# Cat	% Cat	Smoke	# Consolve	0/ Crooks
Model Vr	Veh	Initial	Cap	Cap	Initial	Conv	Conv	Initial		% Smoke
Model Yr	Type	Fails	Dropped		Fails	Dropped	Dropped	Fails	Dropped	
Pre 79/Unknown		80 152	35	43.8% 42.8%	2 16	1	50.0% 56.3%	122 0		22.1%
Pre 79/Unknown		152	65 74		13	9 12		0		
Pre 79/Unknown		531		47.1% 38.8%	42		92.3% 66.7%	4	1	
Pre 79/Unknown			206 22	38.8%		28 2	100.0%	1	1	25.0% 0.0%
Pre 79/Unknown		59	22	46.7%	2				7	
	HDGV	15	/		2	2	100.0%	25	· ·	28.0%
	LDGT1	66	23	34.8%	14	8	57.1%	0		
	LDGT2	93	37	39.8%	11	7	63.6%	0	ŭ	
	LDGV	208	59	28.4%	34	20	58.8%	2		50.0%
	Unknown	10	3	30.0%	2	2	100.0%	1	0	0.070
	HDGV	18	9	50.0%	1	1	100.0%	13		15.4%
	LDGT1	38	14	36.8%	11	3	27.3%	0		-
	LDGT2	14	5	35.7%	3	1	33.3%	0		-
	LDGV	50	18	36.0%	12	5	41.7%	0		
	Unknown	4	1	25.0%	0	0		2	0	
	HDGV	22	4	18.2%	10	7	70.0%	1	0	0.0%
	LDGT1	92	29	31.5%	14	6	42.9%	0	ŭ	
	LDGT2	29	9	31.0%	3	1	33.3%	0	ŭ	
	LDGV	156	62	39.7%	6	3	50.0%	1	0	0.0%
	Unknown	6	2	33.3%	0	0	-	0	0	-
	HDGV	15	11	73.3%	3	2	66.7%	0	0	-
1982	LDGT1	58	17	29.3%	9	6	66.7%	0	0	-
1982	LDGT2	16	6	37.5%	3	2	66.7%	0	0	-
1982	LDGV	89	38	42.7%	9	5	55.6%	0	0	-
1982	Unknown	3	0	0.0%	1	1	100.0%	0	0	-
1983	HDGV	39	13	33.3%	9	5	55.6%	0	0	-
1983	LDGT1	140	44	31.4%	11	7	63.6%	0	0	-
	LDGT2	68	21	30.9%	8	3	37.5%	11	4	36.4%
1983	LDGV	343	114	33.2%	11	6	54.5%	23	6	
	Unknown	15	3	20.0%	0	0	-	21	3	14.3%
	HDGV	44	21	47.7%	6	3	50.0%	158	49	31.0%
	LDGT1	120	42	35.0%	14	9	64.3%	4	0	
	LDGT2	69	23	33.3%	9	5		2		50.0%
	LDGV	335	128	38.2%	20	12	60.0%	8		
	Unknown	24	1	4.2%	2	2	100.0%	10		10.0%

	V.1	Gas Cap	# Gas	% Gas	Cat Conv	# Cat	% Cat	Smoke		o/ 0 l
Model Yr	Veh Type	Initial Fails	Cap Dropped	Cap Dropped	Initial Fails	Conv Dropped	Conv Dropped	Initial Fails	# Smoke Dropped	% Smoke Dropped
	HDGV	93	32	34.4%	17	10		36		30.6%
	LDGT1	371	117	31.5%	25	10		0		
	LDGT1	169	64	37.9%	9	4		1	1	100.0%
	LDGV	843	296	35.1%	25	11	44.0%	5		
	Unknown	37	4	10.8%	2	2		1		
	HDGV	92	25	27.2%	12	11	91.7%	15		
	LDGT1	278	106	38.1%	15	6		0		
1986	LDGT2	110	39	35.5%	6	3	50.0%	1	1	100.0%
1986	LDGV	593	237	40.0%	21	15	71.4%	11	4	36.4%
1986	Unknown	33	4	12.1%	2	0	0.0%	6	3	50.0%
1987	HDGV	128	53	41.4%	12	7	58.3%	35	16	45.7%
1987	LDGT1	569	166	29.2%	19	4	21.1%	1	1	100.0%
1987	LDGT2	225	67	29.8%	6	1	16.7%	4	4	100.0%
1987	LDGV	1,724	603	35.0%	53	23	43.4%	12	4	33.3%
1987	Unknown	51	7	13.7%	2	1	50.0%	7	5	71.4%
	HDGV	94	34	36.2%	5	2	40.0%	29	12	41.4%
	LDGT1	341	104	30.5%	5	0	0.070	0	0	
	LDGT2	124	39	31.5%	8	0	0.0%	1		100.0%
	LDGV	1,055	389	36.9%	28	13	46.4%	26		
	Unknown	21	6	28.6%	2	2		12		58.3%
	HDGV	134	41	30.6%	3	1	00.070	130	55	42.3%
	LDGT1	720	230	31.9%	20	9		0	-	
	LDGT2	240	81	33.8%	4	1	25.0%	4	_	
	LDGV	2,414	801	33.2%	42	18		35		
	Unknown	68	17	25.0%	0	0		10		
	HDGV	69	23	33.3%	5	2		108		
	LDGT1	368	103	28.0%	11	5		2		
	LDGT2	104	33	31.7%	2	2	100.0%	8		25.0%
	LDGV	1,380	463	33.6%	31	16	51.6%	96		38.5%
	Unknown	29	1	3.4%	1	1	100.0%	41	12	
	HDGV	74	26	35.1%	1	0	0.070	457	187	40.9%
	LDGT1	750	230	30.7%	14	10		3		
	LDGT2	196	59	30.1%	2	1	50.0%	7	_	
	LDGV	2,700	903	33.4%	26	15	57.7%	87	43	
1991	Unknown	22	6	27.3%	0	0	-	27	7	25.9%

	Veh	Gas Cap Initial	# Gas Cap	% Gas Cap	Cat Conv Initial	# Cat Conv	% Cat Conv	Smoke Initial	# Smoke	% Smoke
Model Yr	Type	Fails	Dropped		Fails	Dropped	Dropped		Dropped	Dropped
	HDGV	47	15	31.9%	1	1				
	LDGT1	328	93	28.4%	4	0		1	Ü	
	LDGT2	89	32	36.0%	5	3		15		
	LDGV	1,035	324	31.3%	23	10		238		
	Unknown	21	3	14.3%	1	0	0.070	62		
	HDGV	132	36	27.3%	4	2		648		
	LDGT1	912	287	31.5%	6			3		0.070
	LDGT2	284	88	31.0%	4	1		13		
	LDGV	2,621	900	34.3%	29	10	0 1.0 70	137		
	Unknown	34	11	32.4%	0			39		
	HDGV	98	43	43.9%	4	1	_0.070	436		
	LDGT1	466	138	29.6%	4	0	0.0,0	2		
	LDGT2	145	46	31.7%	4	3		15		
1994	LDGV	1,147	357	31.1%	23	11	47.8%	363	98	
	Unknown	32	2	6.3%	0			65		00.070
1995	HDGV	233	96	41.2%	6	1		1,164	363	31.2%
1995	LDGT1	1,023	309	30.2%	2	1	50.0%	2		0.0%
1995	LDGT2	457	156	34.1%	3	0	0.0%	7	2	28.6%
	LDGV	3,035	1,025	33.8%	24	5	20.8%	172	68	39.5%
	Unknown	81	3	3.7%	1	0	0.0%	26	8	30.8%
	HDGV	71	27	38.0%	1	0	0.0%	644	249	38.7%
1996	LDGT1	721	236	32.7%	1	0	0.0%	1	0	0.0%
1996	LDGT2	157	38	24.2%	2	0	0.0%	11	2	18.2%
1996	LDGV	1,319	380	28.8%	13	5	38.5%	317	86	27.1%
1996	Unknown	19	0	0.0%	1	0	0.0%	48	13	27.1%
1997	HDGV	214	81	37.9%	2	1	50.0%	1,742	497	28.5%
	LDGT1	1,432	470	32.8%	4	2		2		
	LDGT2	361	111	30.7%	3	1	33.3%	3		
	LDGV	2,341	816	34.9%	23	10		209		
	Unknown	100	19	19.0%	2	0		12		
	HDGV	58	23	39.7%	1	0		997	275	
	LDGT1	754	252	33.4%	1	0		1	0	
	LDGT2	146	50	34.2%	1	1		5		
	LDGV	1,681	544	32.4%	16			670		
	Unknown	24	2	8.3%	0			37		

		Gas Cap	# Gas	% Gas	Cat Conv	# Cat	% Cat	Smoke		
	Veh	Initial	Cap	Сар	Initial	Conv	Conv	Initial	# Smoke	% Smoke
Model Yr	Туре	Fails	Dropped	Dropped	Fails	Dropped	Dropped	Fails	Dropped	Dropped
	HDGV	161	64	39.8%	0	0		2,300		
	LDGT1	1,378	428	31.1%	1	0		0		
	LDGT2	300	99	33.0%	0	0		4	2	
	LDGV	4,155	1,239	29.8%	15	6		300	67	22.3%
	Unknown	77	23	29.9%	0	0		40		17.5%
	HDGV	104	53	51.0%	1	1	.00.070	701	169	
	LDGT1	1,239	590	47.6%	2	0		0		
	LDGT2	384	206	53.6%	0	0		10		
	LDGV	2,553	1,196	46.8%	1	0	0.070	256		23.8%
	Unknown	57	11	19.3%	0	0		38		
	HDGV	123	38	30.9%	0	0		1,188		
	LDGT1	1,632	498	30.5%	1	1	100.070	0	Ţ	
	LDGT2	396	129	32.6%	0	0		2		50.0%
	LDGV	2,993	780	26.1%	5	2		80		13.8%
	Unknown	41	7	17.1%	0	0		6		0.070
	HDGV	10	4	40.0%	0	0	-	290	75	25.9%
	LDGT1	439	243	55.4%	1	1	.00.070	0	_	
	LDGT2	73	45	61.6%	0	0		5		
2002	LDGV	637	358	56.2%	1	0	0.0%	77	8	
	Unknown	7	2	28.6%	0	0	-	9		
2003	HDGV	6	3	50.0%	0	0	-	345	58	16.8%
2003	LDGT1	52	41	78.8%	0	0	-	0	0	-
2003	LDGT2	20	15	75.0%	0	0	-	0	0	-
2003	LDGV	111	69	62.2%	0	0	-	33	10	30.3%
2003	Unknown	3	2	66.7%	1	0	0.0%	1	1	100.0%
2004	HDGV	0	0	-	0	0	-	154	40	26.0%
2004	LDGT1	1	0	0.0%	0	0	-	0	0	-
2004	LDGT2	1	1	100.0%	0	0	-	3	1	33.3%
	LDGV	2	0	0.0%	0	0	-	22	4	
2004	Unknown	0	0	-	0	0	-	9	1	11.1%
Totals		57,970	19,732	34.0%	997	481	48.2%	15,955	4,582	28.7%

APPENDIX I -PART K

FIRST RETEST EMISSION INSPECTION PASSES & FAILURES BY TEST TYPE

		000									
	Vala	OBD	ODD	ODD		ODD	A CM Fine4	A CNA	A CN4	A CM Fail	ASM
Model Vr	Veh	First	OBD Fail	OBD	OBD Fail		ASM First	ASM Fail	ASM	ASM Fail	
Model Yr Pre 79/Unknown	Type	Retests 0	Faii 0	Pass 0	Rate	Pass Rate	Retests 0	Faii 0	Pass 0	Rate	Pass Rate
Pre 79/Unknown		6	1	5	16.7%	83.3%	11	2	9		81.8%
Pre 79/Unknown		0	0	0	10.7 /0	03.370	1	0	1	0.0%	100.0%
Pre 79/Unknown		22	5	17	22.7%	77.3%	19	1	18	5.3%	94.7%
Pre 79/Unknown		0	0	0			0	0	0		
	HDGV	0	0	0	_	-	0	0	0		_
	LDGT1	0	0	0	-	-	0	0	0	-	_
	LDGT2	0	0	0	-	-	0	0	0	-	-
	LDGV	0	0	0	_	-	0	0	0	-	-
1979	Unknown	0	0	0	-	-	0	0	0	-	-
1980	HDGV	0	0	0	-	-	0	0	0	-	-
1980	LDGT1	0	0	0	-	-	0	0	0	-	-
1980	LDGT2	0	0	0	-	-	0	0	0	-	-
1980	LDGV	0	0	0	-	-	0	0	0	-	-
1980	Unknown	0	0	0	-	-	0	0	0	-	-
1981	HDGV	0	0	0	-	-	0	0	0	-	-
	LDGT1	0	0	0	-	-	112	31	81	27.7%	72.3%
	LDGT2	0	0	0	-	-	37	12	25	32.4%	67.6%
1981	LDGV	0	0	0	-	-	600	145	455	24.2%	75.8%
	Unknown	0	0	0	1	-	0	0	0	-	-
	HDGV	0	0	0	-	-	0	0	0		-
	LDGT1	0	0	0	-	-	65	13	52		80.0%
	LDGT2	0		0	-	-	26	8	18		69.2%
	LDGV	0	0	0	-	-	312	81	231	26.0%	74.0%
	Unknown	0	0	0	-	-	0	0	0		-
	HDGV	0	0	0	-	-	0	0	0		-
	LDGT1	0	0	0	-	-	256	63	193		75.4%
	LDGT2	0	0	0	-	-	107	19	88	17.8%	82.2%
	LDGV	0	0	0	-	-	1,449	313	1,136		78.4%
	Unknown	0	0	0	-	-	0	0	0		-
	HDGV	0	0	0	-	-	0	0	0		
	LDGT1	0	0	0	-	-	261	77	184	29.5%	70.5%
	LDGT2	0	0	0	-	-	98	21	77	21.4%	78.6%
	LDGV	0		0	-	-	965	245	720	25.4%	74.6%
1984	Unknown	0	0	0	-	-	0	0	0	-	-

		OBD									
	Veh	First	OBD	OBD	OBD Fail	OBD	ASM First	ASM	ASM	ASM Fail	
Model Yr	Type	Retests	Fail	Pass	Rate	Pass Rate	Retests	Fail	Pass	Rate	Pass Rate
	HDGV	0	0	0	-	-	1	0	1	0.0%	100.0%
	LDGT1	0	0	0	-	-	792	194	598		75.5%
	LDGT2	0	0	0	-	-	314	75	239	23.9%	76.1%
	LDGV	0	0	0	-	-	3,815	904	2,911	23.7%	76.3%
	Unknown	0	0	0	-	-	0	0	0		-
	HDGV	0	0	0	-	-	0	0	0		-
	LDGT1	0	0	0	-	-	447	92	355	20.6%	79.4%
	LDGT2	0	0	0	-	-	179	36	143	20.1%	79.9%
	LDGV	0	0	0	-	-	1,970	513	1,457	26.0%	74.0%
	Unknown	0	0	0	-	-	0	0	0		-
	HDGV	0	0	0	-	-	2	1	1	00.070	
	LDGT1	0	0	0	-	-	1,165	259	906		77.8%
	LDGT2	0	0	0	-	-	444	108	336		75.7%
	LDGV	0	0	0	-	-	6,942	1,591	5,351	22.9%	77.1%
	Unknown	0	0	0	-	-	0	0	0		-
	HDGV	0	0	0	-	-	0	0	0		-
	LDGT1	0	0	0	-	-	1,169	286	883	24.5%	
	LDGT2	0	0	0	-	-	307	80	227	26.1%	73.9%
	LDGV	0	0	0	-	-	2,689	615	2,074	22.9%	77.1%
	Unknown	0	0	0	-	-	0	0	0		-
	HDGV	0	0	0	-	-	3	0	3		100.0%
	LDGT1	0	0	0	-	-	2,696	649	2,047	24.1%	
	LDGT2	0	0	0	-	-	687	154	533	22.4%	77.6%
	LDGV	0	0	0	-	-	6,834	1,426	5,408	20.9%	79.1%
	Unknown	0	0	0	-	-	0	0	0		-
	HDGV	0	0	0	-	-	0	0	0		-
	LDGT1	0	0	0	-	-	1,053	234	819	22.2%	77.8%
	LDGT2	0	0	0	-	-	221	36	185	16.3%	83.7%
	LDGV	0	0	0	-	-	3,613	823	2,790	22.8%	77.2%
	Unknown	0	0	0	-	-	0	0	0		-
	HDGV	0	0	0	-	-	1	0	1	0.0%	100.0%
	LDGT1	0	0	0	-	-	2,806	600	2,206		78.6%
	LDGT2	0	0	0	-	-	449	94	355		79.1%
	LDGV	0	0	0	-	-	11,366	2,615	8,751	23.0%	77.0%
1991	Unknown	0	0	0	-	-	0	0	0	-	-

		OBD									
	Veh	First	OBD	OBD	OBD Fail	OBD	ASM First	ASM	ASM	ASM Fail	ASM
Model Yr	Type	Retests	Fail	Pass	Rate	Pass Rate	Retests	Fail	Pass	Rate	Pass Rate
	HDGV	0	0	0	-	-	0	0	0		-
	LDGT1	0	0	0	-	-	1,487	354	1,133	23.8%	76.2%
	LDGT2	0	0	0	-	-	256	72	184	28.1%	71.9%
	LDGV	0	0	0	-	-	4,175	894	3,281	21.4%	78.6%
	Unknown	0	0	0	-	-	0	0	0		-
	HDGV	0	0	0	-	-	3	0	3		
	LDGT1	0	0	0	-	-	3,713	748	2,965	20.1%	79.9%
	LDGT2	0	0	0	-	-	596	110	486	18.5%	81.5%
	LDGV	0	0	0	-	-	9,427	2,011	7,416		78.7%
	Unknown	0	0	0	-	-	0	0	0	-	-
	HDGV	0	0	0	-	-	0	0	0		-
	LDGT1	0	0	0	-	-	973	239	734	24.6%	
	LDGT2	0	0	0	-	-	265	63	202	23.8%	76.2%
	LDGV	0	0	0	-	-	2,434	511	1,923	21.0%	79.0%
	Unknown	0	0	0	-	-	0	0	0		-
	HDGV	0	0	0	-	-	1	0	1	0.0%	100.0%
	LDGT1	0	0	0	-	-	2,222	455	1,767	20.5%	
	LDGT2	0	0	0	-	-	514	117	397	22.8%	77.2%
1995	LDGV	0	0	0	-	-	4,622	933	3,689	20.2%	79.8%
	Unknown	0	0	0	-	-	0	0	0	-	-
1996	HDGV	0	0	0	-	-	0	0	0		-
	LDGT1	2	0	2	0.0%	100.0%	689	155	534	22.5%	
	LDGT2	2	0	2	0.0%	100.0%	118	21	97	17.8%	82.2%
	LDGV	9	2	7	22.2%	77.8%	1,645	293	1,352	17.8%	82.2%
	Unknown	0	0	0	-	-	0	0	0		-
	HDGV	0	0	0	-	-	1	0	1	0.0%	100.0%
	LDGT1	19	6	13	31.6%	68.4%	658	124	534	18.8%	
1997	LDGT2	8	5	3	62.5%	37.5%	231	41	190	17.7%	82.3%
1997	LDGV	31	9	22	29.0%	71.0%	2,586	435	2,151	16.8%	83.2%
1997	Unknown	0	0	0	-	_	0	0	0	-	-
1998	HDGV	0	0	0	-	_	0	0	0	-	-
1998	LDGT1	747	180	567	24.1%	75.9%	151	20	131	13.2%	86.8%
1998	LDGT2	244	58	186	23.8%	76.2%	37	1	36	2.7%	97.3%
1998	LDGV	1,495	387	1,108	25.9%	74.1%	417	58	359	13.9%	86.1%
1998	Unknown	0	0	0	-	-	0	0	0	-	-

		OBD									
	Veh	First	OBD	OBD	OBD Fail	OBD	ASM First	ASM	ASM	ASM Fail	ASM
Model Yr	Type	Retests	Fail	Pass	Rate	Pass Rate	Retests	Fail	Pass	Rate	Pass Rate
	HDGV	0	0	0	-	-	0	0	0		-
	LDGT1	681	156	525	22.9%	77.1%	152	14	138		
	LDGT2	356	62	294	17.4%	82.6%	46	3	43	6.5%	93.5%
	LDGV	2,037	461	1,576	22.6%	77.4%	565	86	479	15.2%	84.8%
	Unknown	5	0	5	0.0%	100.0%	0	0	0	-	-
2000	HDGV	0	0	0	-	-	0	0	0	-	-
2000	LDGT1	623	146	477	23.4%	76.6%	23	3	20	13.0%	87.0%
2000	LDGT2	147	14	133	9.5%	90.5%	14	1	13	7.1%	92.9%
2000	LDGV	1,570	324	1,246	20.6%	79.4%	197	28	169	14.2%	85.8%
2000	Unknown	0	0	0	1	1	0	0	0	-	-
2001	HDGV	0	0	0	I	ı	0	0	0	-	-
2001	LDGT1	327	87	240	26.6%	73.4%	32	6	26	18.8%	81.3%
2001	LDGT2	165	40	125	24.2%	75.8%	21	0	21	0.0%	100.0%
2001	LDGV	675	176	499	26.1%	73.9%	117	15	102	12.8%	87.2%
2001	Unknown	5	0	5	0.0%	100.0%	0	0	0	-	-
2002	HDGV	0	0	0	-	_	0	0	0	-	-
2002	LDGT1	127	30	97	23.6%	76.4%	7	0	7	0.0%	100.0%
2002	LDGT2	49	7	42	14.3%	85.7%	8	1	7	12.5%	87.5%
2002	LDGV	286	56	230	19.6%	80.4%	29	0	29	0.0%	100.0%
2002	Unknown	2	0	2	0.0%	100.0%	0	0	0	-	-
2003	HDGV	0	0	0	-	-	0	0	0	-	-
2003	LDGT1	20	3	17	15.0%	85.0%	2	0	2	0.0%	100.0%
2003	LDGT2	15	5	10	33.3%	66.7%	5	1	4	20.0%	80.0%
2003	LDGV	100	14	86	14.0%	86.0%	33	10	23	30.3%	69.7%
2003	Unknown	0	0	0	-	-	0	0	0	-	-
2004	HDGV	0	0	0	-	-	0	0	0	-	-
2004	LDGT1	3	1	2	33.3%	66.7%	0	0	0	-	-
2004	LDGT2	2	0	2	0.0%	100.0%	0	0	0	-	-
2004	LDGV	22	3	19	13.6%	86.4%	0	0	0	-	-
2004	Unknown	0	0	0	-	-	0	0	0	-	-
Totals		9,802	2,238	7,564	22.8%	77.2%	92,756	20,239	72,517	21.8%	78.2%

							ldle				
	Veh	2500 First	2500	2500	2500 Fail	2500	First	ldle		Idle Fail	Idle Pass
Model Yr	Type	Retests	Fail	Pass	Rate	Pass Rate	Retests	Fail	Idle Pass	Rate	Rate
Pre 79/Unknown		0	0	0	-	-	143	28	115		80.4%
Pre 79/Unknown		5	2	3	40.0%	60.0%	334	67	267	20.1%	79.9%
Pre 79/Unknown		1	0	1	0.0%	100.0%	289	68	221	23.5%	76.5%
Pre 79/Unknown		3	0	3	0.0%	100.0%	1,733	322	1,411	18.6%	81.4%
Pre 79/Unknown		0	0	0	-	-	94	21	73	22.3%	77.7%
1979	HDGV	0	0	0	-	-	64	10		15.6%	84.4%
	LDGT1	0	0	0	-	-	185	35	150	18.9%	81.1%
	LDGT2	0	0	0	-	-	178	35	143	19.7%	80.3%
1979	LDGV	0	0	0	ı	1	717	135	582	18.8%	81.2%
1979	Unknown	0	0	0	ı	I	41	16	25	39.0%	61.0%
1980	HDGV	0	0	0	ı	1	20	4	16	20.0%	80.0%
1980	LDGT1	0	0	0	1	-	62	11	51	17.7%	82.3%
1980	LDGT2	0	0	0	-	-	36	9	27	25.0%	75.0%
1980	LDGV	0	0	0	-	-	187	36	151	19.3%	80.7%
1980	Unknown	0	0	0	-	-	18	2	16	11.1%	88.9%
1981	HDGV	0	0	0	-	-	68	12	56	17.6%	82.4%
1981	LDGT1	9	2	7	22.2%	77.8%	0	0	0	-	-
1981	LDGT2	3	1	2	33.3%	66.7%	0	0	0	-	-
1981	LDGV	31	5	26	16.1%	83.9%	0	0	0	-	-
1981	Unknown	0	0	0	-	-	36	12	24	33.3%	66.7%
1982	HDGV	0	0	0	-	-	43	9	34	20.9%	79.1%
1982	LDGT1	8	3	5	37.5%	62.5%	1	0	1	0.0%	100.0%
1982	LDGT2	6	2	4	33.3%	66.7%	0	0	0	-	-
1982	LDGV	11	1	10	9.1%	90.9%	0	0	0	-	-
1982	Unknown	0	0	0	-	-	15	3	12	20.0%	80.0%
1983	HDGV	0	0	0	-	-	94	16	78	17.0%	83.0%
1983	LDGT1	14	1	13	7.1%	92.9%	0	0	0	-	-
1983	LDGT2	14	4	10	28.6%	71.4%	1	0	1	0.0%	100.0%
1983	LDGV	36	3	33	8.3%	91.7%	2	0	2	0.0%	100.0%
	Unknown	0	0	0	-	_	37	9		24.3%	75.7%
	HDGV	0	0	0	-	_	95	17	78		82.1%
	LDGT1	9	1	8	11.1%	88.9%	0	0			-
	LDGT2	11	3	8	27.3%	72.7%	0	0	0	-	-
	LDGV	22	3	19	13.6%	86.4%	2	1	1	50.0%	50.0%
	Unknown	0	0	0	-	-	41	13	28	31.7%	68.3%

							المالم				
	Veh	2500 First	2500	2500	2500 Fail	2500	ldle First	ldle		Idle Fail	Idle Pass
Model Yr	Type	Retests	Fail	Pass	Rate	Pass Rate		Fail	Idle Pass	Rate	Rate
	HDGV	0	0	0	Nate	r ass Male	267	42	225	15.7%	84.3%
	LDGT1	27	5	22	18.5%	81.5%	0	0	0		07.070
	LDGT2	27	6	21	22.2%	77.8%	0	0			_
	LDGV	91	9	82	9.9%	90.1%	6	2	4		66.7%
	Unknown	0	0	0	-	-	103	25	78		75.7%
1986	HDGV	0	0	0	-	-	202	22	180		89.1%
	LDGT1	22	5	17	22.7%	77.3%	0	0	0	-	-
	LDGT2	15	1	14	6.7%	93.3%	0	0	0	-	-
	LDGV	50	11	39	22.0%	78.0%	6	1	5	16.7%	83.3%
1986	Unknown	0	0	0	-	-	85	20	65	23.5%	76.5%
1987	HDGV	0	0	0	-	-	332	39	293	11.7%	88.3%
1987	LDGT1	64	14	50	21.9%	78.1%	1	0	1	0.0%	100.0%
1987	LDGT2	19	5	14	26.3%	73.7%	0	0	0	-	-
1987	LDGV	137	34	103	24.8%	75.2%	9	0	9	0.0%	100.0%
1987	Unknown	0	0	0	•	-	134	23	111	17.2%	82.8%
1988	HDGV	0	0	0	•	-	193	31	162	16.1%	83.9%
1988	LDGT1	40	11	29	27.5%	72.5%	0	0	0	-	-
1988	LDGT2	9	0	9	0.0%	100.0%	1	0	1	0.0%	100.0%
1988	LDGV	64	13	51	20.3%	79.7%	6	0	6	0.0%	100.0%
	Unknown	1	1	0	100.0%	0.0%	51	14	37	27.5%	72.5%
	HDGV	0	0	0	-	-	428	73	355	17.1%	82.9%
	LDGT1	39	5	34	12.8%	87.2%	0	0	0		-
	LDGT2	32	6	26	18.8%	81.3%	0	0			-
	LDGV	147	37	110	25.2%	74.8%	5	0	Ŭ		100.0%
	Unknown	0	0	0	-	-	149	39	110	26.2%	73.8%
	HDGV	0	0	0	-	-	129	27	102	20.9%	79.1%
	LDGT1	33	12	21	36.4%	63.6%	0	0			-
	LDGT2	8	1	7	12.5%	87.5%	0	0	0		-
	LDGV	112	32	80	28.6%	71.4%	2	1	1	00.070	50.0%
	Unknown	0	0	0	-	-	37	9	28	24.3%	75.7%
	HDGV	0	0	0	-	-	149	29	120	19.5%	80.5%
	LDGT1	153	30	123	19.6%	80.4%	1	0		0.0%	100.0%
	LDGT2	54	18	36	33.3%	66.7%	0	0			-
	LDGV	300	68	232	22.7%	77.3%	3	0	3	0.0%	100.0%
1991	Unknown	0	0	0	-	-	43	7	36	16.3%	83.7%

							Idle				
	Veh	2500 First		2500	2500 Fail	2500	First	Idle			Idle Pass
Model Yr	Туре	Retests	Fail	Pass	Rate	Pass Rate		Fail	Idle Pass	Rate	Rate
	HDGV	0	0	0	-	-	60	9		15.0%	85.0%
	LDGT1	55	14	41	25.5%	74.5%	1	0	1	0.070	100.0%
	LDGT2	18	5	13	27.8%	72.2%	0	0			-
	LDGV	178	51	127	28.7%	71.3%	1	0		0.070	100.0%
	Unknown	0	0	0	-	-	20	6	14	00.070	70.0%
	HDGV	0	0	0	-	-	150	27	123	18.0%	82.0%
	LDGT1	536	107	429	20.0%	80.0%	1	0	1	0.0%	100.0%
	LDGT2	42	10	32	23.8%	76.2%	0	0	0		-
	LDGV	617	147	470	23.8%	76.2%	4	0	4	0.070	100.0%
	Unknown	0	0	0	-	-	58	11	47	19.0%	81.0%
	HDGV	0	0	0	-	-	93	16		17.2%	82.8%
	LDGT1	280	69	211	24.6%	75.4%	0	0			-
	LDGT2	47	8	39	17.0%	83.0%	0	0	0		-
	LDGV	222	47	175	21.2%	78.8%	3	0			100.0%
	Unknown	0	0	0	-	-	28	5	23	17.9%	82.1%
	HDGV	0	0	0	-	-	214	26	188	12.1%	87.9%
	LDGT1	283	50	233	17.7%	82.3%	1	0		0.0%	100.0%
	LDGT2	68	9	59	13.2%	86.8%	0	0			-
	LDGV	439	79	360	18.0%	82.0%	1	0	1	0.0%	100.0%
	Unknown	0	0	0	-	-	56	11	45	19.6%	80.4%
	HDGV	0	0	0	-	-	53	13	40	24.5%	75.5%
	LDGT1	31	2	29	6.5%	93.5%	0	0	0		-
	LDGT2	20	3	17	15.0%	85.0%	0	0			-
	LDGV	53	8	45	15.1%	84.9%	1	0		0.0%	100.0%
	Unknown	0	0	0	-	-	23	2	21	8.7%	91.3%
	HDGV	0	0	0	-	-	99	10	89	10.1%	89.9%
	LDGT1	115	8	107	7.0%	93.0%	0	0			-
	LDGT2	29	3	26	10.3%	89.7%	0	0	0		-
	LDGV	179	20	159	11.2%	88.8%	0	0			-
	Unknown	0	0	0	-	-	30	3	27	10.0%	90.0%
	HDGV	0	0	0	-	-	23	1	22	4.3%	95.7%
	LDGT1	25	2	23	8.0%	92.0%	0	0		-	-
	LDGT2	12	2	10	16.7%	83.3%	0	0	0		-
	LDGV	31	4	27	12.9%	87.1%	1	0	1	0.0%	100.0%
1998	Unknown	0	0	0	-	-	9	2	7	22.2%	77.8%

							Idle				
	Veh	2500 First	2500	2500	2500 Fail	2500	First	Idle		Idle Fail	Idle Pass
Model Yr	Type	Retests	Fail	Pass	Rate	Pass Rate	Retests	Fail	Idle Pass	Rate	Rate
1999	HDGV	0	0	0		-	90	10	80	11.1%	88.9%
1999	LDGT1	33	1	32	3.0%		0	0	0	-	-
	LDGT2	12	1	11	8.3%	91.7%	0	0	0	-	-
1999	LDGV	40	5	35	12.5%	87.5%	0	0	0	-	-
	Unknown	0	0	0	ı	1	32	5	27	15.6%	84.4%
2000	HDGV	0	0	0		-	3	0	3	0.0%	100.0%
2000	LDGT1	7	1	6	14.3%	85.7%	0	0	0	-	-
2000	LDGT2	1	0	1	0.0%	100.0%	0	0	0	-	-
2000	LDGV	11	0	11	0.0%	100.0%	1	0	1	0.0%	100.0%
2000	Unknown	0	0	0	ı	1	10	3	7	30.0%	70.0%
2001	HDGV	0	0	0	-	-	5	0	5	0.0%	100.0%
2001	LDGT1	4	1	3	25.0%	75.0%	0	0	0	-	-
2001	LDGT2	2	0	2	0.0%	100.0%	0	0	0	-	-
2001	LDGV	7	2	5	28.6%	71.4%	0	0	0	-	-
2001	Unknown	0	0	0	-	-	0	0	0	-	-
2002	HDGV	0	0	0	-	-	2	1	1	50.0%	50.0%
2002	LDGT1	1	0	1	0.0%	100.0%	0	0	0	-	-
2002	LDGT2	0	0	0	-	-	0	0	0	-	-
2002	LDGV	4	0	4	0.0%	100.0%	0	0	0	-	-
2002	Unknown	0	0	0	-	-	1	1	0	100.0%	0.0%
2003	HDGV	0	0	0	-	-	0	0	0		
2003	LDGT1	0	0	0	-	-	0	0	0		
2003	LDGT2	0	0	0	-	-	0	0	0		
2003	LDGV	0	0	0	-	-	0	0	0		
2003	Unknown	0	0	0	-	-	0	0	0		
2004	HDGV	0	0	0	-	-	0	0	0	-	-
2004	LDGT1	0	0	0	-	-	0	0	0	-	-
2004	LDGT2	0	0	0	-	-	0	0	0		
	LDGV	0	0	0	-	-	0	0	0	-	-
2004	Unknown	0	0	0	-	-	0	0	0	-	-
Totals		5,029	1,014	4,015	20.2%	79.8%	7,952	1,457	6,495	18.3%	81.7%

		Gas														
		Cap	Gas	Gas			Cat Conv	Cat	Cat		Cat Conv	Smoke				Smoke
	Veh	First	Cap	Cap	Gas Cap	Gas Cap	First	Conv		Cat Conv	Pass	First	Smoke	Smoke	Smoke	Pass
Model Yr	Type	Retests	Fail	Pass	•	Pass Rate		Fail	Pass	Fail Rate	Rate	Retests	Fail	Pass	Fail Rate	Rate
	HDGV	46	1	45	2.2%	97.8%	1	0	1	0.0%	100.0%	7	0	7	0.0%	100.0%
	LDGT1	91	8	83	8.8%	91.2%	8	1	7	12.5%	87.5%	17	2	15		88.2%
Pre 79/Unknown	LDGT2	87	9	78	10.3%	89.7%	1	0	1	0.0%	100.0%	16	2	14	12.5%	87.5%
Pre 79/Unknown	LDGV	328	17	311	5.2%	94.8%	16	4	12	25.0%	75.0%	108	9	99	8.3%	91.7%
Pre 79/Unknown	Unknown	37	5	32	13.5%	86.5%	0	0	0	-	-	4	0	4	0.0%	100.0%
1979	HDGV	8	1	7	12.5%	87.5%	0	0	0	-	-	1	0	1	0.0%	100.0%
	LDGT1	43	2	41	4.7%	95.3%	6	0	6	0.0%	100.0%	5	0	5	0.0%	100.0%
	LDGT2	56	1	55	1.8%	98.2%	4	•	4	0.070	100.0%	9		9	0.070	100.0%
	LDGV	150	4	146	2.7%	97.3%	14	0	14	0.0%	100.0%	26	1	25	3.8%	96.2%
1979	Unknown	7	0	7	0.0%	100.0%	0	0	0	-	-	0	0	0	-	-
	HDGV	9	0		0.0%	100.0%	0	·	·		-	0		0	-	-
	LDGT1	24	2	22	8.3%	91.7%	8		Ū		100.0%	2		2	0.0%	100.0%
	LDGT2	11	4	7	36.4%	63.6%	2				100.0%	1	0	1	0.0%	100.0%
	LDGV	33	1	32	3.0%	97.0%	7		•	0.070	100.0%	9		9	0.070	100.0%
	Unknown	3	0	•	0.0%	100.0%	0				-	0	_	0		-
	HDGV	19	1	18	5.3%	94.7%	3				100.0%	0	_	0		-
	LDGT1	66	4	5	6.1%	93.9%	8		·		100.0%	7		7	0.0%	100.0%
	LDGT2	20	0		0.0%	100.0%	2				100.0%	4	•	3	=0:070	75.0%
	LDGV	94	1	93	1.1%	98.9%	3		Ŭ		100.0%	18		17	5.6%	94.4%
	Unknown	4	0		0.0%	100.0%	0				-	0		0		-
	HDGV	4	0	•	0.0%	100.0%	1	0	•	0.0%	100.0%	1	1	0	100.070	0.0%
	LDGT1	41	2	39	4.9%	95.1%	3				100.0%	9		8		88.9%
	LDGT2	10	0		0.0%	100.0%	1		•	0.070	100.0%	2		2	0.0%	100.0%
	LDGV	52	2	50	3.8%	96.2%	4			0.070	100.0%	20		15	25.0%	75.0%
	Unknown	6	2	4	33.3%	66.7%	0	Ū			-	1	ŭ	1	0.0%	100.0%
	HDGV	26	0		0.0%	100.0%	4				100.0%	0	·	0		-
	LDGT1	98	9	89	9.2%	90.8%	5		4		80.0%	18		16		88.9%
	LDGT2	47	0		0.0%	100.0%	5)		100.0%	5		5	0.070	100.0%
	LDGV	232	8		3.4%	96.6%	5				100.0%	77	8	69	10.4%	89.6%
	Unknown	12	2	10	16.7%	83.3%	0				-	0	_	0		-
	HDGV	23	2	21	8.7%	91.3%	3		3	0.070	100.0%	4	0	4	0.0%	100.0%
	LDGT1	78	4		5.1%	94.9%	6		5		83.3%	15		15	0.0%	100.0%
	LDGT2	46	1	45	2.2%	97.8%	4		4	0.070	100.0%	6		5	, .	83.3%
	LDGV	211	12	199	5.7%	94.3%	9		8		88.9%	63		52	17.5%	82.5%
1984	Unknown	23	3	20	13.0%	87.0%	0	0	0	-	-	0	0	0	-	-

		Gas														
		Сар	Gas	Gas			Cat Conv	Cat	Cat		Cat Conv	Smoke				Smoke
	Veh	First	Cap	Cap	Gas Cap	Gas Cap	First	Conv		Cat Conv	Pass	First	Smoke	Smoke	Smoke	Pass
Model Yr	Type	Retests	Fail	Pass		Pass Rate	Retests	Fail	Pass	Fail Rate	Rate	Retests	Fail	Pass	Fail Rate	Rate
	HDGV	61	2	59	3.3%	96.7%	7	0	7	0.0%	100.0%	6			0.0,0	100.0%
	LDGT1	254	9	245	3.5%	96.5%	14	1	13	7.1%	92.9%	57	4	53		93.0%
	LDGT2	107	6	101	5.6%	94.4%	5	-	•	0.0,0	100.0%	28		27	3.6%	96.4%
	LDGV	549	12	537	2.2%	97.8%	14	0	14	0.0%	100.0%	276	26	250	9.4%	90.6%
	Unknown	33	1	32	3.0%	97.0%	0				-	1	_	1	0.0%	100.0%
	HDGV	67	1	66	1.5%	98.5%	2		1	50.0%	50.0%	4	ŭ		0.070	100.0%
	LDGT1	173	8	165	4.6%	95.4%	8		7	12.5%	87.5%	45		40		88.9%
	LDGT2	71	1	70	1.4%	98.6%	3				100.0%	20		18		90.0%
1986	LDGV	365	17	348	4.7%	95.3%	6	0	6	0.0%	100.0%	179	20	159	11.2%	88.8%
1986	Unknown	29	2	27	6.9%	93.1%	4	0	4	0.0%	100.0%	1	0	1	0.0%	100.0%
	HDGV	76	3	73	3.9%	96.1%	5		•		100.0%	9	_	9	0.070	100.0%
	LDGT1	407	20	387	4.9%	95.1%	15	0			100.0%	153	19	134	12.4%	87.6%
	LDGT2	159	3	156	1.9%	98.1%	5		5		100.0%	41	5	36		87.8%
	LDGV	1,130	42	1,088	3.7%	96.3%	31	1	30	0	96.8%	430	45	385	10.5%	89.5%
	Unknown	45	1	44	2.2%	97.8%	1	_	1	0.0%	100.0%	6	0	6	0.0,0	100.0%
	HDGV	62	4	58	6.5%	93.5%	3		·		100.0%	8		7	12.5%	87.5%
	LDGT1	241	12	229	5.0%	95.0%	5	0	5		100.0%	91	12	79		86.8%
	LDGT2	85	3	82	3.5%	96.5%	6		4	00.070	66.7%	18		17	5.6%	94.4%
1988	LDGV	678	31	647	4.6%	95.4%	14	1	13	7.1%	92.9%	253	34	219	13.4%	86.6%
1988	Unknown	15	0	15	0.0%	100.0%	0	O	·		-	2	_	2	0.0%	100.0%
	HDGV	93	1	92	1.1%	98.9%	2		2		100.0%	12			0.0%	100.0%
	LDGT1	495	22	473	4.4%	95.6%	10	1	9	10.0%	90.0%	259	28	231	10.8%	89.2%
1989	LDGT2	160	3	157	1.9%	98.1%	3				100.0%	47	4	43		91.5%
	LDGV	1,623	47	1,576	2.9%	97.1%	24	0	24	0.0%	100.0%	775	70	705		91.0%
	Unknown	51	3	48	5.9%	94.1%	0	v			-	3		3		100.0%
	HDGV	47	2	45	4.3%	95.7%	3				100.0%	5		5	0.070	100.0%
1990	LDGT1	270	13	257	4.8%	95.2%	6	0	6	0.0%	100.0%	104	10	94	9.6%	90.4%
	LDGT2	71	1	70	1.4%	98.6%	0		•		-	18		18		100.0%
	LDGV	926	33	893	3.6%	96.4%	17	2	15	11.8%	88.2%	396	41	355	10.4%	89.6%
1990	Unknown	28	0	28	0.0%	100.0%	0	0	0	-	-	1	0	1	0.0%	100.0%
	HDGV	48	1	47	2.1%	97.9%	1	0	1	0.070	100.0%	9	_	9	0.070	100.0%
	LDGT1	520	6	514	1.2%	98.8%	5	1	4		80.0%	228		207	9.2%	90.8%
1991	LDGT2	138	6	132	4.3%	95.7%	1	0	1	0.0%	100.0%	36	3	33	8.3%	91.7%
1991	LDGV	1,809	47	1,762	2.6%	97.4%	11	0	11	0.0%	100.0%	1,224	113	1,111	9.2%	90.8%
1991	Unknown	16	1	15	6.3%	93.8%	0	0	0	-	-	2	0	2	0.0%	100.0%

		Gas														
		Сар	Gas	Gas			Cat Conv	Cat	Cat		Cat Conv	Smoke				Smoke
	Veh	First	Сар	Сар	Gas Cap	Gas Cap	First	Conv	Conv	Cat Conv	Pass	First	Smoke	Smoke	Smoke	Pass
Model Yr	Type	Retests	Fail	Pass	Fail Rate	Pass Rate	Retests	Fail	Pass	Fail Rate	Rate	Retests	Fail	Pass	Fail Rate	Rate
1992	HDGV	32	1	31	3.1%	96.9%	0	0	0		-	2	0	2	0.070	100.0%
	LDGT1	235	5	230	2.1%	97.9%	3	1	2	33.3%	66.7%	137	16	121	11.7%	88.3%
1992	LDGT2	57	1	56	1.8%	98.2%	2	0	2	0.0%	100.0%	7	1	6	14.3%	85.7%
	LDGV	715	20		2.8%	97.2%	13	0	13		100.0%	702	80	622	11.4%	88.6%
	Unknown	18	1	17	5.6%	94.4%	1	•	•	0.070	100.0%	1	_	1	0.0%	100.0%
1993	HDGV	96	0	0.0	0.0%	100.0%	2		_		100.0%	3	-	2	33.3%	66.7%
	LDGT1	632	12		1.9%	98.1%	3		3		100.0%	506		472	6.7%	93.3%
	LDGT2	196	6		3.1%	96.9%	2		1	50.0%	50.0%	29		29		100.0%
1993	LDGV	1,730	26	1,704	1.5%	98.5%	19	0	19	0.0%	100.0%	1,779	141	1,638	7.9%	92.1%
	Unknown	23	1	22	4.3%	95.7%	0	_	0		-	1	0	1	0.0%	100.0%
	HDGV	56	3		5.4%	94.6%	3	_			100.0%	3		2	00.070	66.7%
	LDGT1	331	11	320	3.3%	96.7%	4	_			100.0%	224	15	209		93.3%
	LDGT2	100	2		2.0%	98.0%	1	0		0.0%	100.0%	30		25	16.7%	83.3%
	LDGV	795	13		1.6%	98.4%	13	1	12	7.7%	92.3%	523	49	474		90.6%
1994	Unknown	30	1	29	3.3%	96.7%	0	0			-	1	0	1	0.0%	100.0%
	HDGV	137	1	136	0.7%	99.3%	4	1	3	25.0%	75.0%	7	2	5	=0.070	71.4%
	LDGT1	716	12		1.7%	98.3%	1	0	1	0.0%	100.0%	193		189		97.9%
	LDGT2	302	5		1.7%	98.3%	3		2		66.7%	32		28		87.5%
1995	LDGV	2,024	31	1,993	1.5%	98.5%	18	1	17	5.6%	94.4%	900	73	827	8.1%	91.9%
1995	Unknown	78	2	76	2.6%	97.4%	1	0	1	0.0%	100.0%	0	0	0	-	-
	HDGV	44	0		0.0%	100.0%	1	0	1	0.070	100.0%	1	0	-	0.0%	100.0%
1996	LDGT1	487	15	472	3.1%	96.9%	1	0	1	0.0%	100.0%	69		63		91.3%
1996	LDGT2	119	1	118	0.8%	99.2%	2		2	0.0%	100.0%	6		4	33.3%	66.7%
	LDGV	943	13		1.4%	98.6%	8	0	8		100.0%	214	19	195	8.9%	91.1%
	Unknown	20	1	19	5.0%	95.0%	1	0	•	0.0%	100.0%	0		0		-
	HDGV	134	2		1.5%	98.5%	1	·	•	0.070	100.0%	1	0	1	0.0%	100.0%
1997	LDGT1	963	11	952	1.1%	98.9%	2		2	0.0%	100.0%	66	5	61	7.6%	92.4%
	LDGT2	250	8		3.2%	96.8%	2	0	2		100.0%	7	0	7	0.0%	100.0%
1997	LDGV	1,531	23		1.5%	98.5%	13				100.0%	274	25	249	9.1%	90.9%
1997	Unknown	80	2	78	2.5%	97.5%	2		_		100.0%	1	0	1	0.0%	100.0%
	HDGV	35	1	34	2.9%	97.1%	2	0	2		100.0%	0	_	0		-
	LDGT1	505	10	495	2.0%	98.0%	1	0	1	0.0%	100.0%	24	1	23	4.2%	95.8%
1998	LDGT2	97	1	96	1.0%	99.0%	0	0	0	-	-	0	0	0	-	
1998	LDGV	1,138	12	1,126	1.1%	98.9%	10	0	10	0.0%	100.0%	113	9	104	8.0%	92.0%
1998	Unknown	22	0	22	0.0%	100.0%	0	0	0	-	-	0	0	0	-	-

		Gas	0	0			0-1 0	0-1	0-1		0-1 0	0				0
	V-I-	Cap	Gas	Gas	0 0	0 0	Cat Conv	Cat	Cat		Cat Conv	Smoke	0	0	0	Smoke
Madal Vr	Veh	First	Cap Fail	Сар	Gas Cap	-		Conv	Pass	Cat Conv Fail Rate	Pass Rate	First	Smoke Fail	Smoke Pass	Smoke Fail Rate	Pass Rate
Model Yr	Type HDGV	Retests 98	raii 1	Pass 97	1.0%	Pass Rate 99.0%	Retests	Fail 0			Kate	Retests 2			-	100.0%
	LDGT1	950	17	933	1.8%		1	0		0.0%	100.0%	18	_			100.0%
	LDGT1 LDGT2	201	1/	200	0.5%		0				100.076	7		6		85.7%
	LDGV	2,921	35	2,886	1.2%		9				100.0%	90				94.4%
	Unknown	54	0	54	0.0%		0				-	0				
	HDGV	51	1	50	2.0%		1	1	0	100.0%	0.0%	0	0	0	_	_
	LDGT1	653	16	637	2.5%		2	0	2		100.0%	3	0	3	0.0%	100.0%
	LDGT2	178	6	172	3.4%		0		0		_	1	0			100.0%
2000	LDGV	1,363	27	1,336	2.0%	98.0%	1	0	1	0.0%	100.0%	18	0	18	0.0%	100.0%
2000	Unknown	46	4	42	8.7%	91.3%	0	0	0	-	-	0	0	0	-	-
2001	HDGV	86	5	81	5.8%	94.2%	0	0	0	-	-	0	0	0	-	-
2001	LDGT1	1,137	17	1,120	1.5%	98.5%	0	0	0	-	-	1	0	1	0.0%	100.0%
	LDGT2	266	4	262	1.5%		0		•		-	1	0	1	0.0%	100.0%
2001	LDGV	2,217	26	2,191	1.2%	98.8%	3	0	3	0.0%	100.0%	11	0	11	0.0%	100.0%
	Unknown	35	3	32	8.6%	91.4%	0	0	0	-	-	0	0	0	-	-
	HDGV	6	1	5	16.7%		0	_	0	-	-	0	·	0	-	-
	LDGT1	197	4	193	2.0%		0	0	0	-	-	0	J	0	-	-
	LDGT2	28	0	28	0.0%		0	0	0		-	2				100.0%
2002		280	5	275	1.8%		1	0	1	0.0%	100.0%	1	0	1	0.0%	100.0%
	Unknown	5	0	5			0	_			-	0	0	0	-	-
	HDGV	3	0	3	0.070		0	_			-	0	·	ŭ		-
	LDGT1	11	0	11	0.0%		0	_			-	1	0		0.070	100.0%
	LDGT2	5	0	5	0.070		0	_			-	0	·	ŭ		-
2003		42	2	40	4.8%		0	·	·		-	0	·	ŭ		-
	Unknown	1	0	1	0.0%	100.0%	1	0		0.070	100.0%	0		ŭ		-
	HDGV	0	0	0	-	-	0				-	0		·		-
	LDGT1	1	0	1	0.0%	100.0%	0	·	·		-	0	·	ŭ		-
	LDGT2	0	0	0	-	-	0	_	·		-	0		ŭ		-
2004		2	0	2	0.0%	100.0%	0	0	•		-	0	·	ŭ	_	-
	Unknown	0	0	0	-	-	-:	- 0	0		-	1	0		-	-
Totals		38,455	901	37,554	2.3%	97.7%	522	26	496	5.0%	95.0%	11,214	1,009	10,205	9.0%	91.0%

APPENDIX I -PART L

AVERAGE CHANGE IN VEHICLE EMISSION LEVELS AFTER REPAIRS

New Jersey Enhanced Inspection and Maintenance Program Centralized/Decentralized Network Average Change in Vehicle Emission Levels After Repairs - All Vehicles Year 2003

			Emission Levels Before Repairs After Repairs Average change (%)										
Model	Total Tests	Bef	ore Rep	airs	Af	ter Repa	airs	Avera	ge chang	e (%)			
Year	After Repair	HC(ppm)	CO(%)	NO(ppm)	HC(ppm)	CO(%)	NO(ppm)	HC	CO	NO			
<=1968	199	2,197	6.6		1,053	3.9		-52.1%	-39.8%				
1969	65	1,703	5.9		661	3.6		-61.2%	-39.5%				
1970	29	1,696	4.5		680	3.1		-59.9%	-32.1%				
1971	132	1,115	5.6		477	2.7		-57.2%	-51.5%				
1972	90	1,053	5.3		381	3.1		-63.8%	-42.3%				
1973	144	1,272	4.9		485	2.4		-61.9%	-51.1%				
1974	73	1,254	5.6		546	2.5		-56.5%	-54.8%				
1975	162	914	4.4		447	1.4		-51.1%	-68.5%				
1976	117	737	4.0		251	1.8		-66.0%	-55.1%				
1977	406	674	4.2		291	1.3		-56.8%	-68.4%				
1978	274	792	4.0		340	1.5		-57.0%	-62.8%				
1979	766	712	3.7		300	1.2		-57.8%	-67.8%				
1980	208	803	3.6		312	1.0		-61.2%	-72.8%				
1981	573	257	2.6	1,185	126	0.9	667	-50.8%	-65.9%	-43.7%			
1982	287	323	2.4	1,129	123	0.8	697	-62.1%	-66.4%	-38.2%			
1983	1,197	247	2.1	1,318	110	0.7	775	-55.3%	-68.6%	-41.3%			
1984	877	260	2.5	1,187	127	0.9	769	-51.3%	-63.4%	-35.3%			
1985	3,080	240	2.2	1,226	114	0.8	719	-52.7%	-65.9%	-41.4%			
1986	1,693	264	2.2	1,214	124	0.8	759	-53.1%	-64.1%	-37.5%			
1987	5,029	211	1.8	1,335	107	0.6	785	-49.4%	-66.1%	-41.2%			
1988	2,583	233	1.8	1,399	113	0.5	783	-51.5%	-70.0%	-44.0%			
1989	5,790	208	1.7	1,404	102	0.5	771	-51.0%	-68.1%	-45.1%			
1990	2,722	181	1.6	1,505	92	0.6	840	-48.9%	-62.1%	-44.1%			
1991	7,553	138	1.2	1,366	74	0.4	742	-46.6%	-64.1%	-45.7%			
1992	3,074	150	1.4	1,260	78	0.5	721	-48.0%	-67.3%	-42.8%			
1993	7,306	141	1.2	1,208	74	0.4	692	-47.5%	-63.0%	-42.7%			
1994	2,200	144	1.2	1,132	76	0.4	630	-47.1%	-65.7%	-44.3%			
1995	4,111	133	1.0	1,148	67	0.3	607	-49.7%	-69.0%	-47.1%			
1996	1,212	99	1.0	936	49	0.3	447	-50.4%	-71.8%	-52.3%			
1997	1,818	114	1.0	858	51	0.3	383	-55.0%	-68.4%	-55.3%			
1998	339	127	1.1	801	49	0.2	312	-61.8%	-83.7%	-61.0%			
1999	504	132	0.8	876	49	0.2	243	-63.2%	-78.3%	-72.3%			
2000	117	85	0.8	956	28	0.2	262	-67.1%	-76.4%	-72.6%			
2001	99	75	0.6	798	25	0.1	226	-66.9%	-77.8%	-71.6%			
2002	14	166	0.5	961	26	0.1	150	-84.2%	-70.1%	-84.4%			
2003	19	10	0.0	384	4		248	-60.0%	0.0%	-35.4%			
Total	54,862	214	1.6	1,200	103	0.6	669	-51.8%	-65.3%	-44.3%			

New Jersey Enhanced Inspection and Maintenance Program Centralized/Decentralized Network Average Change in Vehicle Emission Levels After Repair - LDGV Year 2003

		Emission Levels Before Repairs After Repairs Average change (%)									
Model	Total Tests	Bef						Avera	ge chan	ge (%)	
Year	After Repair	HC(ppm)	CO(%)	NO(ppm)	HC(ppm)	CO(%)	NO(ppm)	HC	CO	NO	
<=1968	168	2052	6.7		1048	4.1		-48.9	-39.1		
1969	53	1643	6.1		559	3.8		-66.0	-38.2		
1970	20	1571	5.1		868	3.7		-44.8	-26.8		
1971	96	1051	5.8		488	3.0		-53.6	-47.8		
1972	64	885	5.9		408	3.3		-53.9	-44.5		
1973	103	1245	5.1		488			-60.8	-52.9		
1974	62	1186	5.6		513			-56.8	-50.9		
1975	114	800	4.0		367	1.3		-54.1	-66.5		
1976	73	829	3.7		224	1.6		-73.0	-56.2		
1977	266	624	4.1		263	1.3		- 57.9	-68.9		
1978	132	733	3.9		376	1.5		-48.7	-60.4		
1979	455	665	3.5		282	1.1		-57.6	-69.2		
1980	135	685	3.6		266	1.0		-61.1	-72.8		
1981	411	185	2.4	1225	90	0.8	654	-51.7	-67.2	-46.7	
1982	196	193	2.1	1286	93	0.6	781	-51.9	-70.0	-39.3	
1983	853	176	1.7	1370	93	0.5	712	-47.3	-68.4	-48.0	
1984	560	184	2.0	1392	102	0.8	788	-44.8	-60.6	-43.4	
1985	2117	175	1.8	1351	94	0.6	708	-46.2	-68.1	-47.6	
1986	1127	195	1.8	1344	104	0.7	777	-46.5	-62.9	-42.2	
1987	3764	162	1.5	1452	92	0.5	798	-43.3	-66.5	-45.1	
1988	1501	196	1.7	1417	105	0.5	799	-46.5	-68.4	-43.7	
1989	3495	159	1.6	1454	87	0.5	813	-45.4	-69.1	-44.1	
1990	1902	157	1.5	1591	87	0.6	899	-44.6	-63.0	-43.5	
1991	5578	118	1.0	1430	67	0.4	760	-42.9	-63.2	-46.8	
1992	2101	136	1.3	1279	72	0.4	732	-46.9	-68.2	-42.8	
1993	4782	130	1.1	1285	69	0.4	731	-46.7	-67.8	-43.1	
1994	1313	122	1.0	1180	70	0.4	660	-42.7	-63.7	-44.0	
1995	2417	125	1.0	1087	64	0.3	594	-48.6	-67.1	-45.3	
1996	770	96	1.1	848	49	0.3	407	-48.7	-72.8	-52.1	
1997	1259	88	1.0	782	47	0.3	357	-46.9	-68.7	-54.3	
1998	227	88	1.2	692	39	0.2	269	-55.5	-84.1	-61.1	
1999	307	83	0.9	935	26	0.2	250	-68.7	-83.0	-73.3	
2000	98	59	0.7	914	24	0.2	264	-58.8	-77.4	-71.1	
2001	68	55	0.6	783	23	0.1	235	-58.5	-86.6	-70.0	
2002	9	73	0.5	1261	26	0.1	68	-64.9	-80.0	-94.6	
2003	19	10	0.0	384	4	0.0	248	-62.0	-76.9	-35.3	
Total	36,615	181	1.5	1,257	93	0.5	686	-48.3%	-64.6%	-45.4%	

Report includes only inspection records where the vehicle has both a before and after repair record.

The initial emissions exhaust test failure inspection is the "Before Repairs" and the last emissions exhaust test is the "After Repairs"

New Jersey Enhanced Inspection and Maintenance Program Centralized/Decentralized Network Average Change in Vehicle Emission Levels After Repair - LDGT1 Year 2003

		Emission Levels Before Repairs After Repairs Average change (%)									
Model	Total Tests								ge chan	_ ` /	
Year	After Repair			NO(ppm)		CO(%)	NO(ppm)	HC	CO	NO	
<=1968	23	3187	5.7		786	3.2		-75.3	-43.9		
1969	7	1266	3.8		1459	2.0		15.2	-45.8		
1970	7	1488	3.5		286	1.7		-80.8	-49.9		
1971	22	1225	5.0		537	1.9		-56.2	-61.6		
1972	14	1395	4.5		352	2.1		-74.7	-53.1		
1973	20	853	5.3		284	2.2		-66.7	-58.5		
1974	6	1129	6.9		850	1.4		-24.7	-79.7		
1975	19	1377	5.9		720	1.6		-47.7	-73.6		
1976	16	651	3.9		396	1.9		-39.3	-51.1		
1977	56	638	4.4		276	1.1		-56.7	-74.8		
1978	48	738	3.7		226	1.3		-69.3	-64.5		
1979	135	706	3.8		339	1.2		-52.0	-67.4		
1980	31	1243	4.0		333	0.7		-73.2	-83.9		
1981	84	305	2.7	1644	143	1.0	1030	-53.2	-63.7	-37.4	
1982	48	350	3.2	1030	173	1.4	692	-50.5	-57.7	-32.8	
1983	193	287	3.3	1568	154	1.2	1221	-46.3	-64.6	-22.2	
1984	175	304	3.2	1138	146	1.0	979	-51.8	-67.8	-14.0	
1985	526	231	3.0	1339	120	1.1	1002	-48.1	-63.6	-25.2	
1986	286	242	2.8	1426	113	1.0	1031	-53.3	-64.6	-27.7	
1987	749	276	2.9	1212	143	1.0	941	-48.3	-63.6	-22.4	
1988	750	200	1.8	1607	90	0.5	873	-55.1	-72.3	-45.7	
1989	1555	187	1.9	1537	96	0.6	815	-48.8	-65.8	-47.0	
1990	601	190	2.0	1418	92	0.7	787	-51.7	-66.2	-44.5	
1991	1571	165	1.7	1267	81	0.5	730	-50.8	-72.4	-42.4	
1992	772	148	1.6	1278	81	0.6	721	-45.2	-64.6	-43.6	
1993	2031	136	1.3	1115	74	0.5	648	-45.7	-62.6	-41.9	
1994	653	146	1.3	1089	68	0.3	631	-53.1	-72.1	-42.0	
1995	1226	96	0.9	1316	57	0.3	669	-41.0	-64.7	-49.1	
1996	327	67	0.6	1173	37	0.2	580	-44.4	-68.3	-50.5	
1997	362	74	0.6	1083	37	0.3		-50.0	-60.7	-55.8	
1998	80	90	0.8	1253	56	0.1	448	-37.8	-81.6	-64.3	
1999	106	61	0.7	1153	26	0.1	312	-57.9	-86.7	-73.0	
2000	13	31	1.2	1501	26	0.1	218	-15.8	-95.0	-85.5	
2001	23	47	0.6	1005	17	0.2	191	-63.4	-71.0	-81.0	
2002	3	149	0.6	445	16	0.2	85	-89.5	-71.7	-81.0	
2003	0										
Total	12,538	194	1.8	1,257	96	0.6	729	-50.8%	-66.5%	-42.0%	

New Jersey Enhanced Inspection and Maintenance Program Centralized/Decentralized Network Average Change in Vehicle Emission Levels After Repair - LDGT2 Year 2003

		Emission Levels Before Repairs After Repairs Average change (%)										
Model	Total Tests	Bef	ore Rep	airs	Af	ter Repa	airs	Avera	ge chan	ge (%)		
Year	After Repair	HC(ppm)	CO(%)	NO(ppm)		CO(%)	NO(ppm)	HC	CO	NO		
<=1968	7	2,635	5.2		2,134	1.7		-19	-67.2			
1969	3	4,207	2.8		786	1		-81.3	-63.3			
1970	1	2,014	4.1		174	2.7		-91.4	-32.6			
1971	7	1,099	5.7		258	2.4		-76.5	-58.6			
1972	6	854	4.3		323	2		-62.2	-53.7			
1973	9	1,044	4.3		460	1.5		-56	-64.4			
1974	2	1,757	4		126	0.3		-92.9	-92.5			
1975	14	1,536	3.1		757	0.9		-50.7	-69.7			
1976	17	329	4.3		185	2.2		-43.8	-49.6			
1977	55	696	4		304	1.5		-56.3	-61.9			
1978	76	820	4.2		379	1.6		-53.7	-62.1			
1979	125	804	3.9		377	1.4		-53.1	-64			
1980	24	861	3.8		338	1.3		-60.8	-64.7			
1981	27	214	3	1,378	134	1.1	1,000	-37.3	-63.2	-27.4		
1982	15	353	1.5	1,508	51	0.3	926	-85.7	-81.6	-38.6		
1983	87	328	2.7	1,230	105	0.8		-67.9	-70.7	-21.4		
1984	78	199	3.3	802	106	1.1	789	-46.6	-65	-1.6		
1985	234	281	3	908	100	0.9		-64.4		-11.7		
1986	129	240	3	1,031	132	0.8		-45.2		-14		
1987	290	257	2.1	1,183	107	0.8		-58.3	-63.1	-30.6		
1988	205	279	1.5	1,368	123	0.5		-55.8		-40.2		
1989	460	220	1.4	1,433	112	0.5		-49.1	-62.3	-45.9		
1990	143	187	1.1	1,518	98	0.4		-47.8		-51.8		
1991	319	193	1.3	1,099	93	0.4		-51.7	-67.2	-37.3		
1992	169	205	1.1	1,188	92	0.4		-55.2		-38.9		
1993	406	178	1.4	1,034	93	0.5		-47.5	-67.7	-42		
1994	181	157	1.1	1,267	93	0.6		-40.4		-53		
1995	347	152	0.9	1,377	72	0.4		-52.4	-57.9	-49.9		
1996	85	100	0.9	1,156	39	0.3		-61.4	-70.9	-60.9		
1997	136	106	0.9	1,352	38	0.2		-64.4		-59.5		
1998	19	222	0.6	752	42	0.2		-81	-64.5	-37.7		
1999	34	68	0.4	950	38	0.1	365	-43.6		-61.6		
2000	4	61	0.2	686	23	0.2	481	-62.4		-29.9		
2001	5	64	0.2	520	16	0		-75.6		-22.5		
2002	1	68	0.2	774	87	0.5	1,228	27.9	108.7	58.7		
2003	0											
Total	3,720	269	1.8	1,099	124	0.6	653	-54.0%	-64.9%	-40.6%		

New Jersey Enhanced Inspection and Maintenance Program Centralized/Decentralized Network Average Change in Vehicle Emission Levels After Repairs - HDGV Year 2003

						ission				
Model	Total Tests	Bef	ore Repa	airs	Aft	er Repa	airs	Avera	ge chan	ge (%)
Year	After Repair	HC(ppm)	CO(%)	NO(ppm)	HC(ppm)	CO(%)	NO(ppm)	НС	CO	NO
<=1968	1	720	10.8		486	10.9		-32.5	1.5	
1969	2	1,079	11.8		399	6.3		-63.1	-47.1	
1970	1	5,337	1		187	0.8		-96.5	-22.2	
1971	7	1,670	4.3		355	1.5		-78.8	-65.2	
1972	6	2,241	2.3		223	4.1		-90	79	
1973	12	2,375	3.4		809	3.6		-66	5.1	
1974	3	2,563			892	2.8		-65.2	-30	
1975	15	609	6.3		421	2.1		-30.8	-67.3	
1976	11	884	5.4		316	2.2		-64.3	-58.2	
1977	29	1,154	5.5		553	1.8		-52.1	-66.9	
1978	18	1,252	4.1		221	1.2		-82.3	-69.4	
1979	51	916	4.8		176	1.5		-80.8	-69.8	
1980	18	853	2.8		582	0.9		-31.7	-68.6	
1981	51	779	3.9		388	1.3		-50.2	-66.4	
1982	28	1,172	3.6		281	1.5		-76	-59.5	
1983	64	963	3.8		217	1.2		-77.4	-67.7	
1984	64	882	3.8		315	1.4		-64.3	-61.8	
1985	203	900	3.6		318	1.3		-64.6	-62.9	
1986	151	844	3.8		288	1.2		-65.8	-69.3	
1987	226	763	3.3		237	1.1		-68.9	-65.5	
1988	127	801	3.4		331	1.3		-58.7	-63.4	
1989	280	915	2.6		304	0.9		-66.8	-64.4	
1990	76	702	3.2		222	0.9		-68.4	-72.8	
1991	85	706	3.8		290	1		-58.9	-72.6	
1992	32	868	3.9		346	0.8		-60.1	-79	
1993	87	682	3.1		262	1.2		-61.6	-62.2	
1994	53	635	3.4		283	0.8		-55.3	-76.4	
1995	121	616	3.4		210	0.7		-65.9	-79.7	
1996	30	519	4.2		211	1		-59.4	-76.7	
1997	61	896	3		250	0.8		-72.1	-74.4	
1998	13	906	2		183	0.3		-79.8	-85.3	
1999	57	567	1.1		219	0.3		-61.4	-76.6	
2000	2	1,771	5.6		247	0.5		-86.1	-90.9	
2001	3	777	2.2	,	145	0.8		-81.4	-65	
2002	1	1,158	0.2		0	0		-100	-100	
2003	0									
Total	1,989	838	3.4		287	1.1		-65.8%	-67.1%	

New Jersey Enhanced Inspection and Maintenance Program Centralized Network Average Change in Vehicle Emission Levels After Repairs - All Vehicles Year 2003

			Emission Levels Before Repairs After Repairs Average change (%)										
Model	Total Tests	Be	fore Repa	airs	Af	ter Repa	airs	Avera	ge chang	e (%)			
Year	After Repair	HC(ppm)	CO(%)	NO(ppm)	HC(ppm)	CO(%)	NO(ppm)	HC	СО	NO			
<=1968	70	2,371	5.6		1,777	3.1		-25.1%	-44.4%				
1969	18	1,773	5.5		1,352	3.6		-23.7%	-35.2%				
1970	10	1,298	6.0		1,063	3.6		-18.0%	-40.4%				
1971	49	1,157	4.8		788	3.3		-32.0%	-32.4%				
1972	29	1,069	5.0		575	3.2		-46.2%	-36.4%				
1973	46	1,517	4.5		960	2.7		-36.7%	-40.3%				
1974	27	1,150	5.3		1,018	3.3		-11.5%	-36.6%				
1975	55	1,062	3.7		947	1.9		-10.8%	-48.4%				
1976	37	703	3.8		368	2.4		-47.6%	-37.0%				
1977	130	761	3.4		529	1.7		-30.5%	-48.6%				
1978	97	969	3.4		651	2.0		-32.9%	-42.2%				
1979	249	899	3.3		572	1.5		-36.4%	-52.8%				
1980	61	855			710	1.4		-16.9%	-55.3%				
1981	184	248	2.4	1,393	195	1.7	1,001	-21.3%	-29.5%	-28.1%			
1982	107	229	1.9	1,437	157	1.4	1,147	-31.4%	-25.1%	-20.2%			
1983	446	209	1.8	1,536	152	1.2	1,129	-27.0%	-32.9%	-26.5%			
1984	342	208	2.2	1,378	184	1.6	1,169	-11.8%	-27.4%	-15.2%			
1985	1,163	221	1.9	1,334	156	1.3	1,036	-29.5%	-31.3%	-22.3%			
1986	701	236	1.9	1,356	180	1.3	1,062	-23.7%	-33.6%	-21.7%			
1987	2,208	193	1.7	1,390	133	1.0	1,070	-30.8%	-41.7%	-23.1%			
1988	1,141	220	1.6	1,425	149	0.9	1,119	-32.3%	-46.3%	-21.5%			
1989	2,692	183	1.6	1,436	124	0.8	1,046	-32.4%	-48.7%	-27.1%			
1990	1,345	177	1.6	1,504	110	0.8	1,127	-37.9%	-47.8%	-25.1%			
1991	3,931	127	1.2	1,348	84	0.6	975	-34.1%	-53.8%	-27.7%			
1992	1,523	146	1.4	1,249	93	0.7	962	-36.4%	-49.5%	-23.0%			
1993	4,059	131	1.2	1,236	85	0.6	883	-35.6%	-53.9%	-28.6%			
1994	1,158	138	1.1	1,130	87	0.5	819	-36.8%	-51.0%	-27.5%			
1995	2,383	123	1.0	1,190	74	0.4	773	-39.8%	-59.7%	-35.1%			
1996	636	83	0.9	957	51	0.4	577	-38.6%	-61.2%	-39.7%			
1997	1,039	93	1.0	883	52	0.4	473	-43.4%	-62.3%	-46.4%			
1998	155	113		979	54	0.3	430	-52.1%	-70.4%	-56.0%			
1999	239	118	0.8	1,005	48	0.2	277	-59.1%	-79.6%	-72.4%			
2000	69	56	0.8	1,031	17	0.2	335	-70.2%	-77.5%	-67.5%			
2001	55	67	0.4	936	21	0.1	229	-68.4%	-80.4%	-75.5%			
2002	7	16	0.3	1,660	9	0.1	91	-44.5%	-66.7%	-94.5%			
2003	16	12	0.0	454	4	0.0	294	-66.7%	0.0%	-35.2%			
Total	26,477	186	1.5	1,249	125	0.8	900	-32.9%	-47.9%	-27.9%			

New Jersey Enhanced Inspection and Maintenance Program Centralized Network Average Change in Vehicle Emission Levels After Repairs - LDGV Year 2003

		Emission Levels Before Repairs After Repairs Average change (%)										
Model	Total Tests		ore Rep			ter Repa		Avera	ge chan	ge (%)		
Year	After Repair	HC(ppm)	CO(%)	NO(ppm)	HC(ppm)	CO(%)	NO(ppm)	HC	СО	NO		
<=1968	59	2258	5.7		1740	3.1		-22.9	-44.9			
1969	14	1813	6.1		989	3.9		-45.4	-35.6			
1970	7	1506	5.6		1325	4.3		-12.0	-22.2			
1971	40	1122	5.0		706	3.6		-37.1	-28.3			
1972	23	1156	5.1		661	3.6		-42.9	-28.8			
1973	32	1709	5.1		976	2.7		-42.9	-46.6			
1974	23	1055	5.2		903	3.4		-14.4	-33.5			
1975	37	862	3.6		785	2.0		-8.9	-45.3			
1976	23	874	3.5		254	2.1		-71.0	-41.7			
1977	84	733	3.2		484	1.6		-34.0	-49.9			
1978	50	956	3.3		709	2.0		-25.9	-39.0			
1979	150	832	3.3		511	1.5		-38.6	-56.3			
1980	43	737	3.0		514	1.4		-30.3	-52.6			
1981	134	169	2.4	1302	122	1.6	988	-27.9	-31.6	-24.1		
1982	81	166	1.7	1435	121	1.1	1226	-26.9	-35.4	-14.6		
1983	326	171	1.5	1475	122	1.0	1012	-28.5	-33.9	-31.4		
1984	234	162	1.8	1477	140	1.4	1188	-13.8	-24.7	-19.6		
1985	831	155	1.5	1414	126	1.0	1032	-18.5	-36.0	-27.0		
1986	519	173	1.6	1392	141	1.1	1077	-18.4	-30.1	-22.7		
1987	1728	153	1.4	1470	112	0.8	1093	-26.8	-42.1	-25.6		
1988	703	189	1.6	1401	138	0.9	1109	-26.9	-44.8	-20.8		
1989	1702	145	1.4	1458	102	0.7	1084	-29.5	-49.6	-25.6		
1990	983	162	1.5	1562	102	0.8	1171	-37.2	-45.7	-25.0		
1991	2945	112	1.1	1389	75	0.5	992	-32.4	-48.8	-28.5		
1992	1043	139	1.4	1269	88	0.7	986	-37.0	-52.2	-22.3		
1993	2679	120	1.1	1313	78	0.5	935	-35.2	-53.9	-28.8		
1994	716	115	1.0	1162	78	0.5	845	-32.3	-48.2	-27.3		
1995	1437	119	1.0	1104	73	0.4	745	-38.6	-55.7	-32.5		
1996	418	80	1.0	867	54	0.4	511	-32.7	-57.5	-41.1		
1997	767	83	1.1	797	48	0.4	421	-41.9	-61.5	-47.1		
1998	107	69	1.0	859	38	0.3	385	-45.6	-71.3	-55.2		
1999	172	88	0.9	1004	22	0.2	264	-74.8	-80.9	-73.7		
2000	59	60	0.9	956	15	0.2	336	-75.7	-80.0	-64.9		
2001	39	27	0.3	867	15	0.0	253	-45.7	-85.8	-70.9		
2002	6	18	0.3	1771	10	0.1	102	-43.1	-79.7	-94.2		
2003	16	12	0.0	454	4	0.0	294	-64.1	-76.9	-35.3		
Total	18,230	163	1.3	1,276	111	0.7	917	-31.7%	-48.4%	-28.1%		

New Jersey Enhanced Inspection and Maintenance Program Centralized Network Average Change in Vehicle Emission Levels After Repairs - LDGT1

Year 2003

		Emission Levels Before Repairs After Repairs Average change (%									
Model	Total Tests							Avera	ge chanç	ge (%)	
Year	After Repair	HC(ppm)	CO(%)	NO(ppm)	HC(ppm)	CO(%)	NO(ppm)	HC	CO	NO	
<=1968	6	2919	3.4		1211	3.1		-58.5	-6.6		
1969	3	1832	2.9		2809	3.1		53.3	6.6		
1970	3	811	6.8		453	1.8		-44.1	-72.8		
1971	4	1016	6.0		1931	2.0		90.1	-66.4		
1972	4	773	5.0		325	1.5		-58.0	-71.0		
1973	6	977	1.7		428	1.9		-56.2	13.1		
1974	2	1614	5.6		2093	1.7		29.7	-70.5		
1975	8	1503	5.2		1429	2.3		-4.9	-54.9		
1976	5	567	5.5		930	3.2		64.1	-41.7		
1977	17	525	3.6		331	1.0		-37.0	-73.7		
1978	16	413	4.4		398	1.9		-3.6	-57.3		
1979	34	974	3.2		847	1.7		-13.1	-47.4		
1980	9	1325	2.7		790	0.8		-40.4	-72.6		
1981	29	329	1.9	2216	175	1.8	1370	-46.8	-6.0	-38.2	
1982	16	447	3.4	1331	194	2.9	808	-56.7	-14.0	-39.3	
1983	81	253	2.6	1997	215	1.9	1556	-15.2	-27.1	-22.1	
1984	65	224	2.9	1503	170	2.0	1377	-24.1	-30.5	-8.4	
1985	201	238	2.9	1412	169	2.2	1279	-29.0	-26.6	-9.4	
1986	112	247	2.9	1580	162	1.9	1268	-34.2	-36.3	-19.8	
1987	322	292	3.0	1227	200	1.8	1125	-31.5	-39.3	-8.3	
1988	325	167	1.6	1638	108	0.8	1235	-35.7	-52.6	-24.6	
1989	715	170	1.9	1541	114	1.0	1067	-32.8	-47.1	-30.7	
1990	280	188	1.9	1403	109	1.0	1093	-42.0	-46.2	-22.1	
1991	822	145	1.4	1297	94	0.7	952	-34.9	-53.2	-26.6	
1992	399	129	1.5	1236	93	0.8	918	-27.6	-45.1	-25.8	
1993	1181	130	1.3	1121	84	0.6	803	-35.0	-49.2	-28.3	
1994	356	150	1.1	1074	80	0.5	801	-47.1	-58.7	-25.4	
1995	763	93	1.0	1354	59	0.4	817	-37.3	-59.5	-39.6	
1996	181	71	0.6	1165	35	0.2	740	-50.6	-60.4	-36.5	
1997	197	70	0.6	1138	38	0.3	632	-45.8	-49.6	-44.5	
1998	41	111	0.8	1333	78	0.2	557	-29.9	-81.0	-58.2	
1999	45	73	0.6	1222	23	0.1	386	-68.1	-85.5	-68.4	
2000	8	27	0.2	1668		0.0	233	-16.8	-87.6	-86.0	
2001	12	25	0.7	1420	10	0.2	177	-61.1	-77.3	-87.5	
2002	1	2	0.0	996		0.0		-50.0	0.0	-97.3	
2003	0										
Total	6,269	168	1.6	1,292	112	0.8	926	-33.1%	-47.1%	-28.3%	

New Jersey Enhanced Inspection and Maintenance Program Centralized Network Average Change in Vehicle Emission Levels After Repairs - LDGT2

Year 2003

					Em	ission L	evels			
Model	Total Tests		ore Rep			ter Repa			ge chanç	
Year	After Repair			NO(ppm)			NO(ppm)	HC	CO	NO
<=1968	4	3629	5.6		3487	1.1		-3.9	-80.6	
1969	1	1029	4.7		2071	0.1		101.3	-98.9	
1970	0									
1971	1	617	3.2		474	3.2		-23.2	-2.5	
1972	2	657	3.4		92	1.4		-86.0	-57.6	
1973	4	943	5.1		851	1.4		-9.8	-71.9	
1974	0									
1975	6	2191	1.0		1603	0.5		-26.8	-52.1	
1976	8	278	4.2		241	3.1		-13.3		
1977	21	932	3.3		547	2.7		-41.3		
1978	30	1294	3.3		701	2.1		-45.8	-36.8	
1979	57	947	3.1		603	1.6		-36.3		
1980	6	606	4.5		936	2.4		54.5	-46.8	
1981	12	262	3.0	1465	159	2.0	1004	-39.6	-33.0	-31.5
1982	7	122	1.2	2324	75	0.5	1495	-38.6	-57.5	-35.7
1983	29	358	2.3	1471	123	1.3	1642	-65.6	-45.7	11.6
1984	26	200	3.3	1082	158	2.1	1247	-21.0	-35.8	15.3
1985	83	247	2.8	1114	139	1.9	1087	-44.0	-30.7	-2.4
1986	41	238	2.8	1246	226	1.6	1058	-5.1	-43.6	-15.1
1987	110	238	2.2	1222	139	1.3	1010	-41.6	-39.1	-17.3
1988	78	427	1.5	1400	181	0.7	1228	-57.6	-56.8	-12.3
1989	186	245	1.5	1512	157	0.8	1119	-35.6	-42.3	-26.0
1990	56	202	1.1	1698	123	0.4	1047	-39.4	-58.0	-38.4
1991	131	223	1.6	1098	123	0.7	976	-44.8	-57.9	-11.1
1992	76	274	1.6	1130	115	0.6	936	-58.2	-60.1	-17.1
1993	165	218	1.8	1072	122	0.8	800	-44.3	-58.5	-25.3
1994	70	161	1.5	1341	110	0.9	837	-31.9	-40.2	-37.6
1995	143	187	1.0	1510	87	0.6	1031	-53.6	-45.5	-31.8
1996	28	94	0.8	1256	42	0.5	684	-55.3	-32.6	-45.6
1997	56	103	0.9	1461	46	0.4	790	-55.8	-55.9	-45.9
1998	4	476	0.3	1282	46	0.4	671	-90.3		-47.6
1999	11	62	0.5	1130	36	0.1	312	-42.7	-75.5	-72.3
2000	2	41	0.2	695	41	0.3	706	0.0	33.3	1.6
2001	2	73	0.4	316	14	0.0	302	-80.8	-100.0	-4.4
2002	0									
2003	0									
Total	1,456	312	1.8	1,182	186	1.0	905	-40.5 <u>%</u>	-46.1%	-23.4%

Report includes only inspection records where the vehicle has both a before and after repair record.

The initial emissions exhaust test failure inspection is the "Before Repairs" and the last emissions exhaust test is the "After Repairs"

New Jersey Enhanced Inspection and Maintenance Program Centralized Network verage Change in Vehicle Emission Levels After Repair - HDG

Average Change in Vehicle Emission Levels After Repair - HDGV Year 2003

		Emission Levels Before Repairs After Repairs Average change (%)								
Model	Total Tests									<u> </u>
Year	After Repair			NO(ppm)			NO(ppm)	HC	CO	NO
<=1968	1	720	10.8		486	10.9		-32.5	1.5	
1969	0									
1970	0									
1971	4	1,789	2.5		539	1.3		-69.9	-48.1	
1972	0									
1973	4	1,361	3.6		1,738	5.2		27.7	43.9	
1974	2	1,782	5.6		1,261	4.2		-29.2	-23.9	
1975	4	333	5.5		501	2.3		50.5	-57.9	
1976	1	833	0.4		1,191	0.3		43.0	-25.0	
1977	8	1,102	5.0		1,369	2.2		24.2	-56.0	
1978	1	755	0.2		256	0.1		-66.1	-66.7	
1979	8	1,500	3.7		323	1.0		-78.5	-73.9	
1980	3	1,628			2,828	0.2		73.7	-87.3	
1981	9	1,136	2.5		1,393	1.8		22.7	-27.5	
1982	3	1,017	1.0		1,127	4.5		10.8	335.8	
1983	10	637	2.9		715	1.6		12.3	-43.4	
1984	17	793	3.9		874	2.4		10.1	-38.1	
1985	48	1,257	2.9		652	1.7		-48.1	-42.3	
1986	29	1,314	2.7		879	1.6		-33.1	-41.6	
1987	48	848	2.4		436	1.6		-48.5	-33.8	
1988	35	858	2.3		664	1.2		-22.6	-48.9	
1989	89	888	2.0		547	1.1		-38.4	-45.9	
1990	26	587	3.0		399	1.2		-31.9	-58.5	
1991	33	676			468	1.3		-30.8	-64.4	
1992	5	924	1.7		707	1.9		-23.5	10.4	
1993	34	642	2.7		441	1.9		-31.4	-29.8	
1994	16	787	3.2		551	1.3		-30.0	-59.0	
1995	40	591	3.1		343	0.7		-42.0	-78.3	
1996	9	463	4.4		277	1.2		-40.2	-73.7	
1997	19	679	2.3		396	0.5		-41.7		
1998	3	1,212	0.8		307	0.2		-74.6	-72.1	
1999	11	826	1.3		575	0.1		-30.4	-90.9	
2000	0									
2001	2	1,083	1.8		213	1.2		-80.3	-33.8	
2002	0									
2003	0									
Total	522	879	2.7		593	1.4		-32.5%	-48.8%	

New Jersey Enhanced Inspection and Maintenance Program Decentralized Network Average Change in Vehicle Emission Levels After Repairs - All Vehicles Year 2003

			Emission Levels Before Repairs									
Model	Total Tests	Bef	ore Rep	airs	Af	ter Repa	airs	Aver	age change	: (%)		
Year	After Repair	HC(ppm)	CO(%)	NO(ppm)	HC(ppm)	CO(%)	NO(ppm)	HC	CO	NO		
<=1968	129	2,102	7.0		660	4.4		-68.6%	-38.0%			
1969	47	1,678			396	3.5		-76.4%	-41.6%			
1970	19	1,906	3.7		478	2.8		-74.9%	-23.9%			
1971	83	1,090	6.0		294	2.5		-73.0%	-59.4%			
1972	61	1,046	5.5		289	2.9		-72.4%	-46.0%			
1973	98	1,158	5.1		261	2.2		-77.5%	-56.5%			
1974	46	1,314	5.8		269	2.1		-79.6%	-64.0%			
1975	107	837	4.7		191	1.1		-77.2%	-76.1%			
1976	80	753	4.0		196	1.5		-74.0%	-62.6%			
1977	276	632	4.6		179	1.1		-71.6%	-75.7%			
1978	177	695	4.3		170	1.3		-75.5%	-70.4%			
1979	517	621	3.9		169	1.0		-72.7%	-73.3%			
1980	147	781	3.9		147	0.8		-81.2%	-79.0%			
1981	389	261	2.7	1,087	93	0.5	509	-64.2%	-81.1%	-53.2%		
1982	180	379	2.7	947	101	0.5	431	-73.3%	-83.5%	-54.5%		
1983	751	270	2.4	1,189	85	0.4	564	-68.5%	-82.1%	-52.5%		
1984	535	294	2.7	1,065	91	0.5	512	-69.1%	-81.0%	-51.9%		
1985	1,917	252	2.4	1,161	88	0.4	526	-65.1%	-82.4%	-54.7%		
1986	992	285	2.5	1,115	85	0.4	544	-70.1%	-82.5%	-51.2%		
1987	2,821	226	1.9	1,293	86	0.3	560	-61.8%	-84.0%	-56.7%		
1988	1,442	244	2.0	1,378	85	0.4	516	-65.3%	-81.1%	-62.5%		
1989	3,098	229	1.8	1,377	82	0.3	532	-64.1%	-81.2%	-61.4%		
1990	1,377	185	1.7	1,506	75	0.3	561	-59.5%	-80.0%	-62.7%		
1991	3,622	149	1.2	1,385	62	0.2	490	-58.2%	-82.5%	-64.6%		
1992	1,551	154	1.4	1,271	64	0.2	485	-58.2%	-83.2%	-61.8%		
1993	3,247	153	1.3	1,174	62	0.2	452	-59.8%	-82.9%	-61.5%		
1994	1,042	151	1.2	1,134	65	0.2	421	-57.0%	-81.2%	-62.9%		
1995	1,728	148	1.1	1,089	58	0.2	379	-61.0%	-78.8%	-65.2%		
1996	576	117	1.1	914	47	0.2	303	-59.4%	-83.2%	-66.8%		
1997	779	143	0.9	824	49	0.2	263	-65.5%	-82.0%	-68.1%		
1998	184	140	1.3	652	45	0.1	212	-67.9%	-91.1%	-67.5%		
1999	265	144	0.8	761	48	0.1	211	-66.6%	-82.9%	-72.3%		
2000	48	127	0.9	847	46	0.1	157	-64.3%	-86.9%	-81.5%		
2001	44	86	0.8	625	30	0.1	222	-65.5%	-85.0%	-64.5%		
2002	7	317	0.7	262	43	0.2	208	-86.4%	-67.4%	-20.7%		
2003	3	3		7	2	0.0	5	-33.3%	0.0%	-28.6%		
Total	28,385	239	1.8	1,155	83	0.4	453	-65.5%	-79.4%	-60.8%		

New Jersey Enhanced Inspection and Maintenance Program Decentralized Network Average Change in Vehicle Emission Levels After Repairs - LDGV Year 2003

		Emission Levels Before Repairs After Repairs Average change (%)								
Model	Total Tests		ore Rep			ter Repa				
Year	After Repair		CO(%)	NO(ppm)	HC(ppm)		NO(ppm)	HC	CO	NO
<=1968	109	1940	7.2		673			-65.3	-36.6	
1969	39	1583	6.1		404	3.7		-74.5	-39.1	
1970	13	1606	4.8		621	3.4		-61.3	-29.7	
1971	56	1000	6.4		333	2.7		-66.7	-58.6	
1972	41	734	6.3		266	3.0		-63.7	-51.6	
1973	71	1036	5.1		267	2.2		-74.2	-55.8	
1974	39	1263	5.8		283	2.3		-77.6	-60.1	
1975	77	770	4.2		167	1.0		-78.3	-75.5	
1976	50	808	3.8		210	1.4		-74.0	-62.4	
1977	182	573	4.5		161	1.1		-72.0	-75.1	
1978	82	597	4.3		173	1.3		-71.0	-70.4	
1979	305	583	3.6		169	0.9		-71.0	-75.1	
1980	92	660	3.9		151	0.8		-77.2	-80.1	
1981	277	193	2.4	1189	74	0.4	492	-61.8	-84.7	-58.6
1982	115	212	2.4	1182	72	0.3	468	-65.8	-87.1	-60.4
1983	527	179	1.9	1305	74	0.3	527	-58.4	-85.3	-59.6
1984	326	200	2.2	1330	75	0.4	501	-62.7	-81.6	-62.3
1985	1286	188	1.9	1311	73	0.3	498	-61.0	-85.0	-62.0
1986	608	214	2.0	1304	73	0.3	520	-65.9	-85.3	-60.1
1987	2036	170	1.6	1438	75	0.2	546	-55.8	-84.8	-62.0
1988	798	201	1.8	1432	75	0.3	525	-62.7	-86.3	-63.3
1989	1793	172	1.7	1450	72	0.3	555	-58.2	-85.0	-61.7
1990	919	152	1.5	1623	71	0.3	609	-53.1	-81.7	-62.5
1991	2633	125	1.0	1476	58	0.2	501	-53.3	-80.2	-66.1
1992	1058	132	1.3	1288	57	0.2	482	-57.1	-84.9	-62.6
1993	2103	143	1.2	1249	59	0.2	470	-59.0	-84.0	-62.4
1994	597	130	1.1	1202	60	0.2	439	-53.9	-81.4	-63.5
1995	980	134	1.0	1061	51	0.2	373	-61.7	-83.4	-64.8
1996	352	116	1.2	826	44	0.2	283	-61.8	-87.5	-65.8
1997	492	97	0.8	757	45	0.1	256	-53.6	-82.8	-66.2
1998	120	106	1.5	543		0.1	165	-61.4	-91.7	-69.6
1999	135	75	0.8	849	30	0.1	231	-59.5	-86.1	-72.7
2000	39	57	0.4	849	39	0.1	155	-31.9	-67.2	-81.8
2001	29	91	0.9	670	33	0.1	210	-63.6	-87.0	-68.6
2002	3	182	0.8	241	56	0.2	0	-69.3	-80.2	-100.0
2003	3	3	0.0	7	2	0.0		-12.5	0.0	-30.0
Total	18,385	199	1.6	1,238	76			-61.7%	-79.8%	-63.1%

New Jersey Enhanced Inspection and Maintenance Program Decentralized Network Average Change in Vehicle Emission Levels After Repairs - LDGT1 Year 2003

					En	nission	Levels					
Model	Total Tests	Bef	ore Rep	airs	Aft	ter Repa	airs	Aver	Average change (%)			
Year	After Repair	HC(ppm)	CO(%)	NO(ppm)	HC(ppm)	CO(%)	NO(ppm)	HC	CO	NO		
<=1968	17	3282	6.5	0	636	3.2	0	-80.6	-50.7	0.0		
1969	4	841	4.4	0	446	1.3	0	-47.0	-71.3	0.0		
1970	4	1996	0.9	0	161	1.6	0	-92.0	74.3	0.0		
1971	18	1272	4.8	0	227	1.9	0	-82.2	-60.3	0.0		
1972	10	1644	4.2	0	363	2.3	0	-77.9	-44.7	0.0		
1973	14	800	6.8	0	222	2.3	0	-72.2	-66.0	0.0		
1974	4	886	7.5	0	229	1.3	0	-74.2	-83.2	0.0		
1975	11	1285	6.4	0	205	1.0	0	-84.1	-84.6	0.0		
1976	11	690	3.2	0	152	1.3	0	-77.9	-58.6	0.0		
1977	39	687	4.7	0	252	1.2	0	-63.3	-75.1	0.0		
1978	32	900	3.4	0	140	1.1	0	-84.4	-69.0	0.0		
1979	101	616	4.0	0	168	1.1	0	-72.7	-72.9	0.0		
1980	22	1210	4.6	0	146	0.6	0	-87.9	-86.7	0.0		
1981	55	292	3.1	1342	125	0.6	850	-57.0	-82.0	-36.7		
1982	32	302	3.2	879	163	0.6	634	-46.0	-81.0	-27.9		
1983	112	312	3.8	1258	111	0.6	978	-64.5	-83.2	-22.2		
1984	110	351	3.4	923	132	0.5	743	-62.3	-86.3	-19.5		
1985	325	227	3.1	1294	90	0.5	831	-60.5	-85.2	-35.8		
1986	174	240	2.7	1327	82	0.4	878	-66.0	-84.3	-33.8		
1987	427	263	2.8	1200	99	0.5	802	-62.3	-83.3	-33.2		
1988	425	226	2.0	1583	76	0.3	596	-66.1	-84.3	-62.4		
1989	840	201	1.9	1535	80	0.3	600	-60.3	-82.1	-60.9		
1990	321	191	2.1	1432	76	0.4	520	-60.1	-82.1	-63.7		
1991	749	186	1.9	1234	66	0.2	486	-64.4	-88.0	-60.6		
1992	373	168	1.7	1322	68	0.3	511	-59.6	-83.7	-61.4		
1993	850	145	1.3	1108	59	0.2	431	-59.1	-81.4	-61.1		
1994	297	140	1.4	1107	55	0.2	428	-60.9	-84.7	-61.3		
1995	463	101	0.9	1254	54	0.2	426	-46.7	-74.0	-66.0		
1996	146	62	0.6	1183	40	0.1	383	-35.6	-77.6	-67.6		
1997	165	79	0.7	1017	36	0.2	295	-54.5	-73.6	-71.0		
1998	39	68	0.8	1169	33	0.1	333	-51.4	-82.4	-71.5		
1999	61	51	0.7	1102	27	0.1	257	-47.0	-87.4	-76.7		
2000	5	37	2.8	1234	32	0.1	193	-14.6	-96.1	-84.3		
2001	11	72	0.4	553	26	0.2	206	-64.3	-59.7	-62.7		
2002	2	223	0.9	169	23	0.2	114	-89.7	-71.7	-32.8		
2003	0											
Total	6,269	221	2.0	1,223	79	0.3	531	-64.3%	-82.6%	-56.6%		

New Jersey Enhanced Inspection and Maintenance Program Decentralized Network Average Change in Vehicle Emission Levels After Repairs - LDGT2 Year 2003

					En	nission	Levels			
Model	Total Tests	Bef	ore Rep	airs	Aft	ter Repa	airs	Aver	age chai	nge (%)
Year	After Repair	HC(ppm)	CO(%)	NO(ppm)	HC(ppm)	CO(%)	NO(ppm)	HC	CO	NO
<=1968	3	1,311	4.6	0	330	2.5	0	-74.8	-45.6	0.0
1969	2	5,796	1.8	0	144	1.5	0	-97.5	-17.6	0.0
1970	1	2,014	4.1	0	174	2.7	0	-91.4	-32.6	0.0
1971	6	1,179	6.2	0	223	2.2	0	-81.1	-63.6	0.0
1972	4	952	4.7	0	438	2.3	0	-54.0	-52.2	0.0
1973	5	1,125	3.6	0	147	1.6	0	-86.9	-55.8	0.0
1974	2	1,757	4.0	0	126	0.3	0	-92.9	-92.5	0.0
1975	8	1,045	4.7	0	123	1.3	0	-88.2	-72.6	0.0
1976	9	373	4.3	0	135	1.4	0	-63.9	-68.4	0.0
1977	34	550	4.5	0	154	0.8	0	-72.0	-81.2	0.0
1978	46	511	4.8	0	169	1.3	0	-66.9	-73.4	0.0
1979	68	684	4.7	0	186	1.3	0	-72.7	-72.5	0.0
1980	18	946	3.6	0	138	1.0	0	-85.4	-72.2	0.0
1981	15	176	3.0	1,308	115	0.4	997	-34.6	-87.3	-23.8
1982	8	556	1.7	794	29	0.0	429	-94.7	-97.3	-46.0
1983	58	313	2.9	1,110	97	0.6	630	-69.2	-80.6	-43.3
1984	52	199	3.3	662	81	0.7	560	-59.5	-80.0	-15.4
1985	151	299	3.1	795	79	0.4	645	-73.7	-87.1	-18.9
1986	88	241	3.1	931	88	0.5	807	-63.7	-83.1	-13.3
1987	180	268	2.1	1,159	88	0.4	705	-67.3	-78.7	-39.2
1988	127	188	1.5	1,349	88	0.4	567	-53.2	-74.2	-58.0
1989	274	204	1.3	1,379	81	0.3	542	-60.1	-77.4	-60.7
1990	87	177	1.2	1,402	81	0.3	530	-54.0	-70.9	-62.2
1991	188	172	1.1	1,100	72	0.3	488	-58.0	-76.7	-55.6
1992	93	149	0.7	1,235	73	0.3	553	-50.8	-62.4	-55.2
1993	241	150	1.2	1,009	74	0.3	463	-50.7	-77.4	-54.1
1994	111	154	0.9	1,220	83	0.4	444	-46.1	-53.0	-63.6
1995	204	127	0.7	1,284	62	0.2	450	-51.1	-69.6	-64.9
1996	57	104	1.0	1,107	37	0.1	338	-64.1	-85.9	-69.5
1997	80	108	0.8	1,275	32	0.1	377	-70.2	-85.8	-70.4
1998	15	155	0.7	611	41	0.2	415	-73.4	-73.5	-32.1
1999	23	70	0.3	864	39	0.1	390	-44.0	-63.4	-54.8
2000	2	81	0.2	678	5	0.0	257	-93.8	-85.7	-62.2
2001	3	58	0.1	657	17	0.0	471	-71.3	-77.4	-28.3
2002	1	68	0.2	774	87	0.5	1228	27.9	108.7	58.7
2003	0									
Total	2,264	241	1.8	1,045	84	0.4	490	-65.1%	-76.9%	-53.1%

New Jersey Enhanced Inspection and Maintenance Program Decentralized Network Average Change in Vehicle Emission Levels After Repairs - HDGV Year 2003

					Emi	ission L	evels				
Model	Total Tests	Bef	ore Rep	airs	Af	ter Repa	airs	Avera	ge chanç	ge (%)	
Year	After Repair	HC(ppm)	CO(%)	NO(ppm)	HC(ppm)	CO(%)	NO(ppm)	HC	CO	NO	
<=1968	0										
1969	2	1,079	11.8		399	6.3		-63.1	-47.1		
1970	1	5,337	1.0		187	0.8		-96.5	-22.2		
1971	3	1,512	6.7		110	1.8		-92.7	-73.8		
1972	6	2,241	2.3		223	4.1		-90.0	79.0		
1973	8	2,882	3.4		344	2.8		-88.1	-15.7		
1974	1	4,127	1.0		153	0.0		-96.3	-97.0		
1975	11	709	6.6		392	2.0		-44.7	-70.2		
1976	10	889	5.9		228	2.4		-74.3	-58.5		
1977	21	1,173	5.7		242	1.7		-79.4	-70.6		
1978	17	1,281	4.3		219	1.3		-82.9	-69.4		
1979	43	807	5.0		149	1.6		-81.6	-69.2		
1980	15	698	3.1		133	1.0		-80.9	-67.0		
1981	42	702	4.2		173	1.2		-75.4	-71.2		
1982	25	1,190	4.0		179	1.1		-84.9	-71.9		
1983	54	1,023	4.0		125	1.2		-87.8	-71.0		
1984	47	914	3.7		113	1.1		-87.6	-70.9		
1985	155	789	3.8		215	1.2		-72.8	-67.8		
1986	122	732	4.1		148	1.1		-79.8	-73.6		
1987	178	740	3.5		184	1.0		-75.2	-71.4		
1988	92	780	3.9		204	1.3		-73.9	-66.7		
1989	191	927	2.9		190	0.9		-79.5	-70.2		
1990	50	763	3.3		130	0.7		-83.0	-79.5		
1991	52	725	3.9		177	0.9		-75.5	-77.5		
1992	27	858	4.3		279	0.6		-67.4	-85.5		
1993	53	707	3.4		147	0.7		-79.2	-78.6		
1994	37	568	3.5		168	0.6		-70.5	-83.4		
1995	81	629	3.5		145	0.7		-77.0	-80.3		
1996	21	543	4.1		183	0.9		-66.4	-78.1		
1997	42	994	3.3		184	0.9		-81.5	-73.8		
1998	10	814	2.3		146	0.3		-82.1	-86.7		
1999	46	505	1.1		133	0.3		-73.6	-72.5		
2000	2	1,771	5.6		247	0.5		-86.1	-90.9		
2001	1	165	3.2		8	0.0		-95.2	-99.7		
2002	1	1,158	0.2		0	0.0		-100.0	-100.0		
2003	0										
Total	1,467	824	3.6		178	1.0		-78.4%	-71.5%		

APPENDIX II CREATE DATE

REPORT

Create Date vs Test Date Statistics* for the Year 2003

Report Period:	Station Type	# of Inspections	# of Inspections with a Create Date/Time >= 24 hours of	% of Inspections with a Create Date/Time >= 24 hours of Test Date/Time	# of Inspections with a Create Date/Time >= 120 hours of	% of Inspections with a Create Date/Time >= 120 hours of Test Date/Time
January 2003	CIF/SIF	179,675	49	0.03%	0	0.00%
January 2005	PIF/PFF	52,242	987	1.89%	422	0.81%
	TOTAL	231,917	1,036	0.45%	422	0.18%
February 2003	CIF/SIF	150,637	139	0.09%	0	0.00%
1 001441 2000	PIF/PFF	43,507	819	1.88%	367	0.84%
	TOTAL	194,144	958	0.49%	367	0.19%
March 2003	CIF/SIF	219,504			1	0.00%
	PIF/PFF	65,952	1,634	2.48%	575	
	TOTAL	285,456	2,034	0.71%	576	0.20%
April 2003	CIF/SIF	213,843	66	0.03%	1	0.00%
	PIF/PFF	66,353	1,163	1.75%	580	0.87%
	TOTAL	280,196		0.44%	581	0.21%
May 2003	CIF/SIF	228,622	78	0.03%	0	0.00%
ĺ	PIF/PFF	70,544	1,370	1.94%	640	0.91%
	TOTAL	299,166		0.48%	640	0.21%
June 2003	CIF/SIF	223,117	301	0.13%	1	0.00%
	PIF/PFF	66,046		2.00%	440	0.67%
	TOTAL	289,163	1,622	0.56%	441	0.15%
July 2003	CIF/SIF	245,693	120	0.05%	1	0.00%
	PIF/PFF	72,272	1,137	1.57%	471	0.65%
	TOTAL	317,965	1,257	0.40%	472	0.15%
August 2003	CIF/SIF	233,996	64	0.03%	1	0.00%
	PIF/PFF	65,569	1,478	2.25%	485	0.74%
	TOTAL	299,565	1,542	0.51%	486	0.16%
September 2003	CIF/SIF	212,532	115	0.05%	10	0.00%
	PIF/PFF	65,167	1,196	1.84%	580	0.89%
	TOTAL	277,699	1,311	0.47%	590	0.21%
October 2003	CIF/SIF	213,249				
	PIF/PFF	65,273		1.67%	376	0.58%
	TOTAL	278,522	1,206		376	
November 2003	CIF/SIF	164,490			0	
	PIF/PFF	50,727	1,136	2.24%	373	0.74%
	TOTAL	215,217		0.61%	373	0.17%
December 2003	CIF/SIF	164,024			0	
	PIF/PFF	48,101	1,114	2.32%	414	0.86%
	TOTAL	212,125	1,172	0.55%	414	0.20%
Year 2003	CIF/SIF	2,449,382			15	
	PIF/PFF	731,753			5,723	
	TOTAL	3,181,135	16,126	0.51%	5,738	0.18%

^{*} These statistics include data for both emissions inspections and safety inspections.

APPENDIX III

CENTRALIZED
INSPECTION
FACILITY
EQUIPMENT AUDIT
REPORT

New Jersey Enhanced Inspection and Maintenance Program CIF Equipment Audit Pass/Fail Rates by Station Year 2003

Station	Total Audits	Number Fail	Fail Rate	Number Pass	Pass Rate
Asbury Park Specialty	1	1	100%	0	0%
Bakers Basin	46	21	46%	25	54%
Bridgeton	12	0	0%	12	100%
Cape May	11	5	45%	6	55%
Cherry Hill	59	2	3%	57	97%
Delanco	35	11	31%	24	69%
Deptford	41	8	20%	33	80%
Eatontown	66	21	32%	45	68%
Flemington	30	14	47%	16	53%
Freehold	64	10	16%	54	84%
Jersey City	27	2	7%	25	93%
Kilmer	53	14	26%	39	74%
Lakewood	72	24	33%	48	67%
Lodi	50	12	24%	38	76%
Manahawkin	35	11	31%	24	69%
Mays Landing	44	17	39%	27	61%
Millville	23	1	4%	22	96%
Montclair	22	3	14%	19	86%
Morristown Specialty	2	1	50%	1	50%
Newark	47	5	11%	42	89%
Newton	21	0	0%	21	100%
Paramus	45	10	22%	35	78%
Plainfield	32	14	44%	18	56%
Rahway	60	25	42%	35	58%
Randolph	42	15	36%	27	64%
Ridgewood	24	0	0%	24	100%
Salem	11	0	0%	11	100%
Secaucus	63	10	16%	53	84%
South Brunswick	44	15	34%	29	66%
Southampton	47	10	21%	37	79%
Washington	11	0	0%	11	100%
Wayne	70	7	10%	63	90%
Westfield	17	7	41%	10	59%
Winslow	35	4	11%	31	89%
Winslow Specialty	2	1	50%	1	50%
Totals	1264	301	24%	963	76%

New Jersey Enhanced Inspection and Maintenance Program CIF Equipment Audit Pass/Fail Rates by Lane Year 2003

Station	Total Audits Per Station	Lane	Total Audits Per Lane	Number Fail	Fail Rate	Number Pass	Pass Rate
Asbury Park Specialty	1	1	1	1	100%	0	0%
Bakers Basin	46	1	10	5	50%	5	50%
		2	9	2	22%	7	78%
		3	7	3	43%	4	57%
		4	8	7	88%	1	13%
		5	9	3	33%	6	67%
		6 (METT)	3	1	33%	2	67%
Bridgeton	12	1	12	0	0%	12	100%
Cape May	11	1	11	5	45%	6	55%
Cherry Hill	59	1	11	1	9%	10	91%
		2	11	0	0%	11	100%
		3	10	0	0%	10	100%
		4	11	0	0%	11	100%
		5	12	1	8%	11	92%
		6 (METT)	4	0	0%	4	100%
Delanco	35	1	11	3	27%	8	73%
		2	12	4	33%	8	67%
		3	12	4	33%	8	67%
Deptford	41	1	10	3	30%	7	70%
		2	10	2	20%	8	80%
		3	10	2	20%	8	80%
		4	11	1	9%	10	91%
Eatontown	66	1	11	3	27%	8	73%
		2	11	5	45%	6	55%
		3	11	5	45%	6	55%
		4	12	4	33%	8	67%
		5	11	3	27%	8	73%
		6	10	1	10%	9	90%
Flemington	30	1	9	4	44%	5	56%
		2	11	6	55%	5	45%
		3	10	4	40%	6	60%
Freehold	64	1	10	1	10%	9	90%
		2	10	3	30%	7	70%
		3	9	1	11%		89%
		4	11	1	9%	10	91%
		5	12	2	17%	10	83%
		6	12	2	17%	10	83%
Jersey City	27	1	9	0	0%	9	100%
		2	9	1	11%	8	89%
		3	9	1	11%	8	89%
Kilmer	53	1	7	0	0%	7	100%
		2	9	1	11%	8	89%
		3	9	3	33%	6	67%
		4	10	4	40%	6	60%
		5	8	3	38%	5	63%
		6	10	3	30%	7	70%

New Jersey Enhanced Inspection and Maintenance Program CIF Equipment Audit Pass/Fail Rates by Lane Year 2003

Station	Total Audits Per Station	Lane	Total Audits Per Lane	Number Fail	Fail Rate	Number Pass	Pass Rate
Lakewood	72	1	12	4	33%	8	67%
		2	12	4	33%	8	67%
		3	12	4	33%	8	67%
	Γ	4	12	3	25%	9	75%
		5	12	5	42%	7	58%
		6	12	4	33%	***********************************	67%
Lodi	50	1	10	2	20%		80%
		2	9	4	44%		56%
		3	12	2	17%		83%
		4	10	1	10%		90%
		5	9	3	33%		67%
Manahawkin	35	1	12	4	33%		67%
	_	2	12	5	42%		58%
		3	11	2	18%		82%
Mays Landing	44	1	11	3	27%		73%
	<u> </u>	2	11	5	45%		55%
	<u> </u>	3	11	4	36%		64%
• • • • • • • • • • • • • • • • • • • •		4	11	5	45%		55%
Millville	23	1	11	1	9%		91%
8.6 . 1 .		2	12	0	0%		100%
Montclair	22	1	11	1	9%		91%
**		2	11	2	18%		82%
Morristown Specialty	2 47	1	2	1	50%		50%
Newark	47	1	9	1	11%		89%
		2	11	0	0%		100%
		3	9	3	33%		67%
		<u>4</u> 5	10 8	0	10% 0%		90% 100%
Newton	21	<u>ე</u>	10	0	0% 0%		100%
INEWION	21 -	2	10	0	0% 0%		100%
Paramus	45	<u>_</u> 1	6	2	33%		67%
r aramus	45	2	7	0	0%		100%
		3	9	4	44%		56%
		4	11	2	18%		82%
		5	12	2	17%		83%
Plainfield	32	1	10	5	50%		50%
i idiiiioid	1 2	2	11	5	45%	6	55%
		3	11	4	36%	7	64%
Rahway	60	1	10	6	60%	4	40%
	"	2	10	3	30%	7	70%
		3	10	3	30%	7	70%
		4	10	6	60%	4	40%
		5	10	3	30%	7	70%
		6			40%	6	60%

New Jersey Enhanced Inspection and Maintenance Program CIF Equipment Audit Pass/Fail Rates by Lane Year 2003

Station	Total Audits Per Station	Lane	Total Audits Per Lane	Number Fail	Fail Rate	Number Pass	Pass Rate
Randolph	42	1	5	1	20%	4	80%
		2	8	2	25%	6	75%
		3	6	1	17%		83%
		4		4			20%
	<u> </u>			4			50%
							70%
Ridgewood	24	-					100%
_		Name	100%				
Salem							100%
Secaucus	63			-			89%
							73%
							73%
							88%
							92%
_				-			92%
South Brunswick	44						57%
							86%
							83%
							43%
							67%
-							63%
South Hampton	47						92%
							64%
							92%
							67%
Washington		-					100%
Wayne	70						100%
							73%
							100%
							100%
							91%
							82%
		= -		1	10%	9	90%
WestField	17]						33%
							88%
Winslow	35						100%
	<u> </u>						64%
							100%
Winslow Specialty							50%
Totals	1264	130	1264	301	24%	963	76%

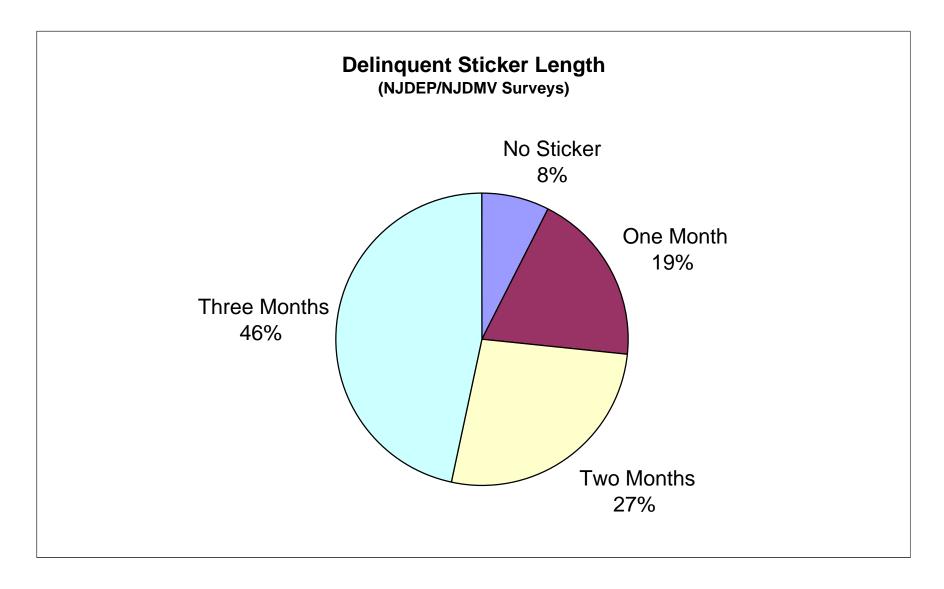
APPENDIX IV

COMPLIANCE STICKER SURVEY REPORT

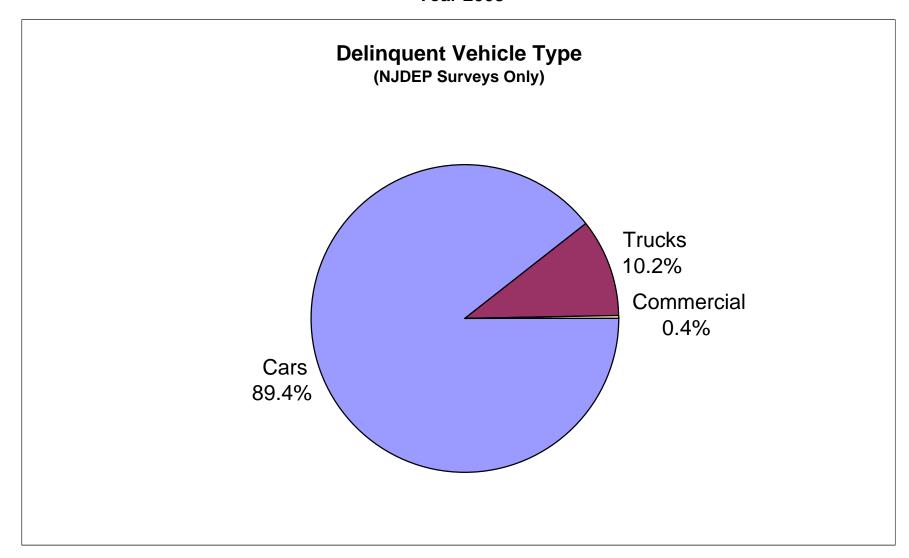
New Jersey Enhanced Inspection and Maintenance Program Compliance Sticker Survey Summary Year 2003

2002		Number	Number		Delinquent Length Delinquent Vo						Compliance
2003	Agency	Surveyed	Delinquent	No Sticker	1-30 Days	31-89 Days	90+ Days	Cars	Trucks	Commercial	Rate
January	NJDEP	1,780	58	6	9	22	21	53	5	0	96.7%
Febuary	NJDEP	1,750	61	7	6	18	30	57	4	0	96.5%
March	NJDEP	1,373	31	8	2	7	14	27	4	0	97.7%
March/April	NJDMV	5,000	240	0	58	55	127		Not Reported		95.2%
April	NJDEP	1,310	40	3	2	7	28	35	5	0	96.9%
May	NJDEP	1,771	50	13	7	10	20	46	4	0	97.2%
June	NJDEP	1,314	55	5	9	15	26	48	5	2	95.8%
July	NJDEP	1,348	34	5	2	11	16	32	2	0	97.5%
August	NJDEP	1,231	22	4	3	7	8	21	1	0	98.2%
September	NJDEP	1,408	24	8	3	4	9	15	9	0	98.3%
September	NJDMV	5,000	282	0	66	83	133		Not Re	ported	94.4%
October	NJDEP	2,342	57	10	11	14	22	54	3	0	97.6%
November	NJDEP	1,877	42	3	13	10	16	35	7	0	97.8%
December	NJDEP	1,451	16	4	2	8	2	15	1	0	98.9%
Totals		28,955	1,012	76	193	271	472	438	50	2	96.5%

New Jersey Enhanced Inspection and Maintenance Program Compliance Sticker Survey Results Year 2003



New Jersey Enhanced Inspection and Maintenance Program Compliance Sticker Survey Results Year 2003



APPENDIX V

USEPA's
"Performing Onboard
Diagnostic System
Checks as Part of a
Vehicle Inspection and
Maintenance Program"
June 2001

Available Electronically Upon Request