NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NEW YORK STATE ENHANCED MOTOR VEHICLE INSPECTION/MAINTENANCE (I/M) PROGRAM

NYVIP2

2021 Annual I/M Report

July 2022

DIVISION OF AIR RESOURCES

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EXECUTIVE SUMMARY

The New York State Department of Environmental Conservation (DEC) and Department of Motor Vehicles (DMV) (referred to as "the Departments") jointly administer New York State's motor vehicle Inspection and Maintenance (I/M) programs. This report reflects the Departments' coordinated efforts to fulfill federal I/M reporting requirements under 40 CFR Section 51.366.

New York State (62 counties) is covered by two I/M areas. The 9-county New York Metropolitan Area (NYMA) includes New York City (Bronx, Kings, New York, Richmond, and Queens Counties), Long Island (Nassau and Suffolk Counties), and Rockland and Westchester Counties. The remaining 53 counties comprise the "Upstate" I/M area.

During Calendar Year (CY) 2021, New York State emissions inspections were completed through the current New York Vehicle Inspection Program (NYVIP2) contract. NYVIP2 utilized a statewide network of 9,735 decentralized inspection stations licensed by DMV. Mandatory onboard diagnostic (OBDII) inspections have been completed statewide since 2005. During calendar year 2021, OBDII inspections are required for most model year (MY) 1997 and newer non-diesel light-duty vehicles (LDVs) and light-duty trucks (LDTs). Since July 2012, most 1997 and newer diesel-powered LDVs and LDTs have been subject to OBDII inspections[1]. In addition to OBDII requirements, low-enhanced emissions inspections (visual inspection of emission control devices and gas cap) are required statewide for applicable vehicles.

Following a Request for Proposal (RFP) procurement (2012), Opus Inspection (Opus) was awarded the NYVIP2 program manager contract in February 2013. Official inspections using new NYVIP2 equipment and its associated computerized network commenced in October 2013. Due to the planned phase-out of NYVIP, there were two I/M programs in operation during the last quarter of CY 2013 into January 2014, with the transition to the NYVIP2 program completed on January 15, 2014. In June 2020, the program manager contract with Opus was extended one year to November 30, 2022.

The NYVIP3 RFP procurement process was released November 14, 2019, and Opus was awarded the NYVIP3 contract on June 28th, 2021. All inspection facilities were notified of NYVIP3 system changes on December 21st, 2021 (see Appendix K, page K-8). Stations were notified of potential NYVIP3 equipment delays due to supply chain shortages on May 26th, 2022 (see Appendix K, page K-13).

A new appendix was added (Appendix E) in 2021 for reporting on re-inspections, as requested by EPA Region 2. This appendix will be included in all forthcoming reports.

During CY 2021, over 5.31 million motor vehicles were registered within NYMA[2]. 4,013,220 NYMA vehicles[3] received a NYVIP2 emissions inspection. The majority of the emissions-tested vehicles (3,861,584 or 96.22%) received OBDII inspections. In addition, over 5.32 million motor vehicles were registered in the Upstate I/M area[2]. 4,103,104 Upstate vehicles[3] received a NYVIP2 emissions inspection. The majority of the emissions-tested vehicles (3,901,265 or 95.08%) received OBDII inspections.

Pursuant to a Consent Order filed on September 6, 1977, all yellow medallion taxi cabs under the jurisdiction of the New York City Taxi and Limousine Commission (T&LC) are required to receive three emissions inspections per year. Beginning in December 2003, the T&LC commenced mandatory OBDII

[1] See Appendix C for detailed reporting on light-duty diesel OBD inspections.

[2] The DMV registration file was screened to remove registration classes not subject to emissions inspections (i.e., trailers, motorcycles, ATVs, boats, locomotives, etc.). Additional discussion can be found within Sections 1.A and 1.B, and Appendices A (Table A-1), E, and F.

[3] Based on unique VINs from the NYVIP2 inspection database. Certain vehicle types are exempt by regulation from emissions testing as noted by "Safety-Only" in Table I.A. An emissions tested summary, by model year, can be found at Appendix A, Table A-2.

inspections at their centralized test-only Woodside (Queens) facility for their applicable taxi fleet. Beginning in 2010, additional "For-Hire" vehicles became subject to mandatory OBDII inspections at the Woodside facility. During CY 2021, T&LC completed 87,627 OBDII inspections (initial and re-inspections) for 60,511 distinct vehicles[3] (36,157 LDVs, 24,354 LDTs).

I. INTRODUCTION

New York's I/M programs have been modified over time to reflect state and federal regulatory changes, most notably to implement new emissions test types. New York's enhanced I/M programs have been outlined within the following State Implementation Plan (SIP) revisions:

- *Enhanced Motor Vehicle Inspection/Maintenance Program (March 1996)*
- *New York Vehicle Inspection Program – NYVIP (March 2006) and*
- *New York Metropolitan Area Enhanced I/M Program (June 2009)*

These SIP revisions have been approved by the United States Environmental Protection Agency (EPA). Final approval of the June 2009 revision was published in the Federal Register on February 28, 2012.

The three components of New York's current I/M design are:

- A High-Enhanced I/M program, as defined by Section 51.351(f), in the New York Metropolitan Area (NYMA),
- An Ozone Transport Region (OTR) Low-Enhanced I/M program, as defined by Section 51.351(h), in the Upstate I/M Region ("Upstate"), and
- A New York City Taxi and Limousine Commission (T&LC) inspection program.

All emission inspections are completed through the statewide New York Vehicle Inspection Program (NYVIP2). Pursuant to the Clean Air Act I/M requirements for the ozone transport region (OTR, 42 USC §7511c), New York implemented a low-enhanced I/M program in the 53 "Upstate" counties in January 1998. This program was outlined in the *Enhanced Motor Vehicle Inspection/Maintenance Program (March 1996) SIP revision.*

Mandatory Upstate OBDII inspections through the original NYVIP commenced in September 2004 and were fully implemented in December 2004. When NYVIP expanded into NYMA in May 2005, NYVIP became a mandatory statewide I/M program. NYVIP was succeeded by NYVIP2 in 2013.

The federal annual reporting requirements for required I/M programs are found in 40 CFR Part 51 (Section 51.366). Unless otherwise noted, the applicable reporting period for the CY 2021 Annual Report is January 1, 2021 to December 31, 2021.

A. New York Vehicle Inspection Program (NYVIP2)

The Clean Air Act (CAA) requires EPA to set National Ambient Air Quality Standards (NAAQS) for six principal pollutants, called "criteria pollutants." Areas where air pollution levels exceed the applicable NAAQS for a given criteria pollutant are designated as being in "nonattainment."

On March 12, 2008, EPA lowered the primary and secondary 8-hour ozone NAAQS to 0.075 parts per million (ppm) from the 0.08 ppm level previously set in 1997. Two areas within New York State were officially designated nonattainment for the 2008 ozone NAAQS: (i) the New York-Northern New Jersey-Long Island, NY-NJ-CT Metropolitan Statistical Area (NYMA MSA), which includes the counties of

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk, and Westchester; and (ii) the Jamestown Metropolitan Statistical Area (Jamestown MSA) which includes only Chautauqua County[4].

The NYMA is currently designated nonattainment with a "serious" classification. However, it did not attain the NAAQS by the July 20, 2021 deadline. Consequently, on April 13, 2022, EPA proposed to reclassify the NYMA to "severe" nonattainment. DEC is expected to have 18 months from the effective date of the reclassification, once final, to develop and submit an attainment demonstration to satisfy the CAA requirements for that reclassification. The Jamestown MSA was determined to have attained the 2008 NAAQS by the applicable deadline.

On October 1, 2015, EPA again lowered the primary and secondary 8-hour ozone NAAQS for ozone by strengthening the primary and secondary 8-hour standards to 0.070 parts per million (ppm). On June 4, 2018, EPA designated the nine county NYMA MSA as nonattainment for the 2015 ozone NAAQS with a "moderate" classification. DEC is currently developing the attainment demonstration for the NYMA for the 2015 ozone NAAQS. The remainder of the state has been designated attainment/unclassifiable for the 2015 ozone NAAQS.

Since both the 2008 and 2015 ozone NAAQS are applicable at this time, DEC continues to take aggressive actions to reduce emissions of the primary ozone precursors, nitrogen oxides (NOx) and volatile organic compounds (VOCs), both in the NYMA and statewide. Aside from the established stationary, area, and mobile source measures that go beyond federal requirements, New York is accelerating the transformation of its vehicle fleet to a zero-tailpipe emission transportation system.

The NYVIP2 program has effectively reduced hydrocarbon, carbon monoxide, and nitrogen oxide emissions from applicable motor vehicles through required emissions inspections and proper vehicle maintenance and repair. During Calendar Year (CY) 2021, all NYVIP2 emissions inspections included the following components:

1) Comprehensive anti-tampering visual inspection of emissions control devices ("ECD checks");
2) Gas cap presence check; and
3) An emissions test as determined by registration class, weight, fuel type, and model year (MY):

   OBDII inspection: for MYs 1997-2019 non-diesel/non-electric LDVs and LDTs; and for MYs 1997-2019, diesel-powered, LDVs and LDTs.

   Low-Enhanced: for MYs 1997-2019 non-diesel/non-electric vehicles 8,501-18,000 lbs. gross vehicle weight rating (GVWR).

As noted in Table I.A below, NYVIP2 requires the same emissions test types statewide.

[4] See: https://www3.epa.gov/airquality/greenbook/hnmapa.html

Table I.A: Calendar Year 2021, Statewide Test Types

Model Year	Non-diesel (gasoline) <8,501 lbs. GVWR	Non-diesel (gasoline) 8,501-18,000 lbs. GVWR	Diesel <8,501 lbs. GVWR
2021	Safety-Only	Safety-Only	Safety-Only
2020	Safety-Only	Safety-Only	Safety-Only
2019	OBDII	Low-Enhanced	OBDII
2018	OBDII	Low-Enhanced	OBDII
2017	OBDII	Low-Enhanced	OBDII
2016	OBDII	Low-Enhanced	OBDII
2015	OBDII	Low-Enhanced	OBDII
2014	OBDII	Low-Enhanced	OBDII
2013	OBDII	Low-Enhanced	OBDII
2012	OBDII	Low-Enhanced	OBDII
2011	OBDII	Low-Enhanced	OBDII
2010	OBDII	Low-Enhanced	OBDII
2009	OBDII	Low-Enhanced	OBDII
2008	OBDII	Low-Enhanced	OBDII
2007	OBDII	Low-Enhanced	OBDII
2006	OBDII	Low-Enhanced	OBDII
2005	OBDII	Low-Enhanced	OBDII
2004	OBDII	Low-Enhanced	OBDII
2003	OBDII	Low-Enhanced	OBDII
2002	OBDII	Low-Enhanced	OBDII
2001	OBDII	Low-Enhanced	OBDII
2000	OBDII	Low-Enhanced	OBDII
1999	OBDII	Low-Enhanced	OBDII
1998	OBDII	Low-Enhanced	OBDII
1997	OBDII	Low-Enhanced	OBDII
≤1996	Safety-Only	Safety-Only	Safety-Only

Note that New York State also requires annual I/M inspections for heavy-duty diesel-powered vehicles (HDDVs) registered within the 9-county NYMA. This annual report does not include statistics for the HDDV I/M program. The HDDV I/M program fact sheet can be found at: http://www.dec.ny.gov/chemical/28892.html

B. New York City T&LC OBDII Inspection Program

The New York City Taxi and Limousine Commission, under the terms of a September 6, 1977 Consent Order between the City and other parties, requires emissions testing of the yellow medallion taxicab fleet on a three-times-per-year basis. In December 2003, the T&LC commenced safety/OBDII inspections using two lanes of an upgraded T&LC inspection facility. The facility was later expanded to six lanes in August 2004.

In 2010, the New York City Code was revised to require "For Hire Vehicles" regulated by the T&LC to receive OBDII inspections at the centralized test-only facility. These vehicles were previously required to receive three inspections per year at NYTEST or NYVIP stations. During a given two-year period, these livery vehicles are now required to receive one of their six required inspections at the T&LC

centralized Woodside (Queens) facility. The remaining five inspections are completed at decentralized NYVIP2 stations. As a result, more OBDII inspections are completed at the T&LC.

In response to the increasing number of personal "For Hire Vehicles" operating for ride-share services, starting in January 2019 the New York City Code permitted the yellow medallion taxicab fleet to have their first safety and emissions inspection of the year conducted at other certified OBDII inspection facilities. This reduced the number of OBDII inspections conducted at the centralized test-only facility.

The Departments have certified the T&LC OBDII inspection procedure. The T&LC OBDII inspection includes:

1) Comprehensive safety check on various components of the vehicle including headlights, suspension, side slip, and brake system;
2) Comprehensive anti-tampering visual inspection of emissions control devices ("ECD checks");
3) Gas cap presence check; and
4) OBDII inspection.

Unlike the NYVIP2 program, the T&LC does not authorize repair expenditure-based emissions waivers, MY-based "new vehicle" exemptions, or readiness evaluation related time extensions ("10-day extensions") from the OBDII inspection requirements.

II. DATA ANALYSIS AND REPORTING

The collection of accurate and timely data is essential to the management, evaluation, and enforcement of an efficient I/M program. The NYMA high-enhanced I/M program has been collecting electronic emissions testing data since the onset of the former NYTEST program in January 1998. The Upstate OTR low-enhanced I/M program has been collecting computerized vehicle and emissions test data since September 2004.

Beginning in December 2003, the T&LC provided DEC with all OBDII inspection data through monthly updates. With the implementation of NYVIP2, the T&LC data is sent to and maintained by the NYVIP2 contractor, Opus Inspection. DEC no longer maintains a stand-alone T&LC database.

A. Computerized Network

The NYVIP2 computerized network provides a means of communication between inspection stations, DMV, and Opus Inspection. The current network of licensed decentralized test-and-repair stations transmits real time emissions inspection data to Opus Inspection and DMV's mainframe computer. Opus maintains all current and past inspection data from the combined NYVIP and NYVIP2 programs.

During CY 2021, a total of 3,729 inspection stations were located within NYMA and 6,006 stations were located within the Upstate I/M area. The current counts of New York State public inspection stations by county can be found online at https://dmv.ny.gov/inspection/public-emissions-inspection-station-cap.

DMV and DEC jointly and independently monitor emissions inspection data for program evaluation and enforcement purposes. The computerized network has resulted in more effective enforcement which is further discussed within the Quality Assurance Report and Quality Control Report sections.

Opus Inspection provides monthly program statistics including transaction volume, system availability, and the number/type of help desk calls. A summary of the NYVIP2 data management statistics during CY 2021 is contained in Table II.A. The current NYVIP2 program differs from the former NYVIP program in that the vast majority of inspection transactions are now completed by broadband (>99%). As such, Table II.A differs from previous reports as dial-up communication statistics have been omitted. Note that System Availability reporting does not include periods of no internet service associated with internet provider downtime.

Table II.A: Data Management System Statistics (Calendar Year 2021)

Category	System Statistics				
	January to March	April to June	July to September	October to December	Total
(NYMA, UPSTATE, and T&LC)					
Transaction Volumes	2,791,214	2,923,612	3,242,604	2,801,906	11,759,336
Total Help Desk Calls	10,075	9,290	10,669	8,716	38,750
System Availability	100.00%	100.00%	100.00%	100.00%	100.00%

B. Test Data Report

DMV registration information provided for this annual report was derived from a query completed on March 8, 2022. An overview of the New York State fleet, by vehicle fuel type and I/M area, based solely on registration data is provided below in Table II.B.1. The registration-based summaries are based on distinct VINs. Table II.B.1 includes T&LC vehicle registrations within the "NYMA" column.

As noted in Table II.B.1, 96.20% of the NYMA and 94.68% of the Upstate vehicles were gasoline-powered. Similarly, diesel-fueled vehicles represented 3.25% of the NYMA and 4.82% of the Upstate vehicle fleet, respectively. Only 0.86% of the NYMA and 0.49% of the Upstate vehicles, respectively, were powered with "Other" fuels. The "Other" fuels category includes compressed natural gas (CNG), propane, and electricity.

Based on a March 8, 2022 query of the DMV database, there were a total of 5,617,728 registrations within the nine-county NYMA. However, certain registration types (i.e., boats, motorcycles, ATVs, trailers, locomotives, etc.) are not subject to emissions inspections. These registration types were removed from further consideration with 5,317,195 NYMA motor vehicle registrations being retained.

During CY 2021, 4,013,220 vehicles received an emissions inspection in NYMA. Of these, 3,861,584 distinct vehicles (2,063,656 LDVs, 1,797,928 LDTs) received at least one OBDII inspection. An additional 151,636 distinct vehicles (105 LDVs, 237 LDTs, and 151,258 HDVs) received at least one low-enhanced inspection. These vehicle counts are based on "distinct" or "unique" vehicle identification numbers (VINs). Some of these vehicles received more than one emissions inspection during CY 2021. A total of 3,729 public inspection stations operated in NYMA during CY 2021. See Tables II.B.1 below for additional statistical summaries.

Based on a March 8, 2022 query, there were a total of 6,181,407 registrations within the 53-county Upstate I/M area. However, certain registration types (i.e., boats, motorcycles, ATVs, trailers, locomotives, etc.) are not subject to emissions inspections. These registration types were removed from further consideration with 5,321,760 Upstate motor vehicle registrations being retained.

During CY 2021, 4,103,104 vehicles received an emissions inspection in the Upstate I/M area. Of these, 3,901,265 vehicles (1,940,516 LDVs, 1,960,749 LDTs) received at least one OBDII inspection. An

additional 201,839 vehicles (142 LDVs, 158 LDTs, and 201,539 HDVs) received at least one low-enhanced emissions inspection. These vehicle counts are based on "distinct" or "unique" vehicle identification numbers (VINs). Some of these vehicles received more than one emissions inspection during CY 2021. A total of 6,006 inspection stations operated in the Upstate I/M area during CY 2021. See Table II.B.1 below for additional statistical summaries.

During CY 2021, 60,511 TLC-regulated vehicles (36,157 LDVs and 24,354 LDTs) received 69,012 initial OBDII inspections. Detailed statistics related to the T&LC inspection can be found in Table II.B.1, Appendix B (Table B-3-a-i to Table B-3-b-ii) and Appendix C (Table C-3-a-i to Table C-3-b-ii). Over the course of any CY, new T&LC regulated vehicles are placed in service while existing vehicles are retired from service. Therefore, not every yellow medallion taxi (based on distinct VIN) receives three initial OBDII inspections.

Table II.B.1: General Statistics on New York State I/M Areas (March 2022 Registrations)

Category	NYMA		UPSTATE	
	Count	% of Total	Count	% of Total
Number of Counties	9	-	53	-
Number of Inspection Stations	3,729	-	6,006	-
Number of Certified Inspectors	12,330	-	19,348	-
Number of Registered Vehicles[5]	5,317,195	-	5,321,760	-
Gasoline-Fueled (all MYs)	5,115,038	96.20%	5,038,572	94.68%
- LDVs & LDTs -	5,027,054	94.54%	4,884,094	91.78%
a. Pre-1997 MYs[6]	99,945	1.88%	140,203	2.63%
c. 1997-2019 MYs	3,890,872	73.18%	3,975,609	74.70%
d. 2020+ MYs[6]	1,036,277	19.49%	768,282	14.44%
- HDVs -	87,944	1.65%	154,478	2.90%
a. Pre-1997 MYs[6]	2,451	0.05%	8,034	0.15%
b. 1997-2019 MYs	72,486	1.36%	114,552	2.14%
c. 2020+ MYs[6]	13,007	0.24%	27,519	0.52%
Diesel-Fueled (all MYs)	172,986	3.25%	256,731	4.82%
- LDVs & LDTs -	36,367	0.68%	52,837	0.99%
- HDVs -	136,619	2.57%	203,894	3.83%
Other Fuels (all MYs)	46,062	0.86%	26,457	0.49%
- LDVs & LDTs -	42,121	0.79%	24,067	0.45%
- HDVs -	3,941	0.07%	2,390	0.04%

The Departments developed the "NYVIP2 Summary Report" to provide general program information related to vehicle type, test type, inspection counts, waiver counts, 10-day time extension counts, etc. Table II.B.2 below considers all NYVIP2 inspections completed during CY 2021. Note that Table II.B.2 is based on inspection counts with the exception of Unknown Final Outcome reporting (items 14 and 15) which are based on unique VINs (See Appendix H).

[5] Excluding vehicle types exempted from DMV/DEC I/M Program (trailers, ATVs, motorboats, motorcycles, and locomotives).

[6] Model years exempt from emission testing in CY2021

Table II.B.2: NYVIP2 Summary Report (Calendar Year 2021)

NYVIP2 Summary	NYMA	Upstate	TLC
1. Total Inspections (Initial and Re-Inspection, All Test Types)	5,705,398	6,068,627	87,627
a. Light-duty Vehicles[7]	3,303,113	3,293,984	50,469
b. Light-duty Trucks[7]	2,235,814	2,443,628	37,158
c. Heavy-duty Vehicles	166,471	331,015	n/a
2. Number of Initial Inspections (All Test Types)	5,457,729	5,813,206	69,012
a. Light-duty Vehicles[7]	3,171,542	3,164,748	40,260
b. Light-duty Trucks[7]	2,120,867	2,319,846	28,752
c. Heavy-duty Vehicles	165,320	328,612	n/a
3. Number of Re-Inspections (All Test Types)	247,669	255,419	18,615
a. Light-duty Vehicles	131,571	129,235	10,209
b. Light-duty Trucks	114,947	123,781	8,406
c. Heavy-duty Vehicles	1,151	2,403	n/a
4. Number of Inspections (Initial and Re-Inspection) by Test Type			
a. Safety-Only	1,159,417	1,467,557	n/a
b. Low-Enhanced	159,462	210,132	n/a
c. OBD	4,386,519	4,390,938	87,627
5. Safety Component Initial Failure Rates (All Test Types)			
a. Number of Initial Safety Inspections	5,457,729	5,813,206	69,012
b. Initial Safety Failure Rate	0.95%	1.63%	25.17%
c. Light-duty Vehicles - Safety Failure Rate	0.88%	1.60%	23.72%
d. Light-duty Trucks - Safety Failure Rate	1.06%	1.79%	27.20%
e. Heavy-duty Vehicles - Safety Failure Rate	0.72%	0.89%	n/a
6. Gas Cap Component Initial Failure Rates (Low-Enhanced, OBD)			
a. Number of Initial Gas Cap Inspections	4,296,251	4,325,785	68,622
b. Initial Gas Cap Failure Rate	0.01%	0.01%	0.00%
c. Light-duty Vehicles - Gas Cap Failure Rate	0.01%	0.01%	0.00%
d. Light-duty Trucks - Gas Cap Failure Rate	0.01%	0.01%	0.00%
e. Heavy-duty Vehicles - Gas Cap Failure Rate	0.01%	0.01%	n/a

[7] The decrease in LDVs and increase in LDTs since the 2020 reporting period is likely a reflection of overall market trends of decreasing passenger cars sales and increasing SUV, crossover, and truck sales.

NYVIP2 Summary	NYMA	Upstate	TLC
7. ECD Component Initial Failure Rates (Low-Enhanced, OBD)			
a. Number of Initial ECD Check Inspections	4,299,702	4,349,279	69,012
b. Initial ECD Check Failure Rate	0.02%	0.03%	0.25%
c. Light-duty Vehicles - ECD Check Failure Rate	0.03%	0.03%	0.33%
d. Light-duty Trucks - ECD Check Failure Rate	0.022%	0.02%	0.15%
e. Heavy-duty Vehicles - ECD Check Failure Rate	0.02%	0.03%	n/a
8. Low-Enhanced Emissions Initial Failure Rates			
a. Number of Initial Low-Enhanced Inspections	158,309	208,372	n/a
b. Initial Low-Enhanced Failure Rate	0.03%	0.03%	n/a
c. Light-duty Vehicles - Low-Enhanced Failure Rate	0.04%	0.03%	n/a
d. Light-duty Trucks - Low-Enhanced Failure Rate	0.00%	0.00%	n/a
e. Heavy-duty Vehicles - Low-Enhanced Failure Rate	0.02%	0.03%	n/a
9. OBD Initial Emissions Failure Rates (All Fuel Types)[8]			
a. Number of Initial OBD Inspections	4,141,393	4,140,907	69,012
b. Initial OBD Failure Rate	5.12%	4.79%	6.58%
c. Light-duty Vehicles - OBD Failure Rate	5.04%	4.75%	6.34%
d. Light-duty Trucks - OBD Failure Rate	5.21%	4.82%	6.92%
10. OBD Re-Inspection Emissions Failure Rates (All Fuel Types)[8]			
a. Number of OBD Re-Inspections	245,126	250,029	17,603
b. OBD Re-Inspection Failure Rate	15.92%	12.54%	8.24%
c. Light-duty Vehicles - OBD Re-Inspection Failure Rate	15.59%	12.51%	7.96%
d. Light-duty Trucks - OBD Re-Inspection Failure Rate	16.29%	12.57%	8.57%
11. Number of OBD Waivers[9]	1,035	1,004	n/a
a. Light-duty Vehicles	457	439	n/a
b. Light-duty Trucks	578	565	n/a
c. Area Waiver Rate (# waivers / # initial failures)	0.49%	0.51%	n/a
12. Number of OBD 10-Day Extensions	87,113	89,332	n/a
a. Light-duty Vehicles	44,519	42,953	n/a
b. Light-duty Trucks	42,577	46,366	n/a

[8] Inspections requiring only a safety inspection were excluded, so the reported values represent a "true" OBD inspection failure rate. Counts include first and subsequent re-inspections, and re-inspections performed in the reporting year due to failed initial inspections in the previous calendar year. See narrative section II.B.2 and Appendix E for a more refined analysis on re-inspections.

[9] Vehicles initially classified as heavy-duty vehicles (HDVs) by the Appendix J procedure were included within the light-duty truck (LDT) counts.

NYVIP2 Summary	NYMA	Upstate	TLC
13. OBD Initial Emissions Failure Rates, Light-duty Diesel Vehicles			
a. Number of Initial OBD LDDV Inspections	1,543	22,124	12
b. Initial OBD LDDV Failure Rate	16.46%	10.35%	0.00%
c. Light-duty Diesel Vehicle - OBD Initial Failure Rate	16.41%	9.04%	0.00%
d. Light-duty Diesel Truck - OBD Initial Failure Rate	17.53%	12.02%	0.00%
14. OBD Unknown Final Outcome (**Based on Unique VINs**)[10]			
a. Number of Vehicles	26,157	22,275	188
b. % of Unknown Final Outcome	0.63%	0.54%	0.27%
15. Low-Enhanced Unknown Final Outcome (**Based on Unique VINs**)[10]			
a. Number of Vehicles	2	3	n/a
b. % of Unknown Final Outcome	0.001%	0.001%	n/a

1. Vehicle Type for Reporting Purposes

The *Test Data Report* requirements of §51.366(a) includes basic statistics according to vehicle MY and vehicle type. Previously submitted annual and program evaluation reports have classified the inspected New York State fleet into three possible vehicle types: light-duty vehicle (LDV), light-duty truck (LDT), or heavy-duty vehicle (HDV). For the 1998 to 2013 annual reports, DEC developed an in-house VIN decoding program to make the required vehicle type classifications. Note that these vehicle type determinations are used exclusively for reporting purposes, as they are not used to determine emissions test type during the actual I/M inspection.

Unlike the previous NYTEST and NYVIP I/M programs, the NYVIP2 inspection software includes an integrated VIN decoding component. To maintain consistency with our past reports, an alternative method was developed to determine vehicle type for NYVIP2 reporting purposes. This method is based predominately on VIN decoded information used by the NYVIP2 software, but there are scenarios where VIN decoded information is not available (i.e., invalid VINs) or where DMV registration and/or inspector changes are allowed by the approved NYVIP2 test sequence.

As part of continuing NYVIP2 software enhancements, the vehicle type classification is being integrated into the inspection record. The procedure used by DEC to validate the reporting of vehicle type, *Procedure for Validating Vehicle Type for Annual Reporting*, is described in detail in Appendix J.

[10] The procedure to determine vehicles with Unknown Final Outcome (Unique VINs) is described in detail in Appendix H. This procedure was updated in 2021 to utilize a more robust querying methodology. See Appendix H for details.

2. Statewide, Onboard Diagnostic Inspections (NYVIP2 and T&LC)

Detailed CY 2021 statistics for NYVIP2, and New York City T&LC OBDII inspections are provided in Appendices A (Table A-2), B (Tables B-1-a-i to B-3-b-ii) and C (Tables C-1-a-i to C-3-b-ii)[11]. These Appendices were used for the summary discussion below.

For NYMA, 2,063,656 LDVs and 1,797,928 LDTs (all fuel types, representing 96.22% of the total emissions tested fleet) received 4,141,393 initial NYVIP2 OBDII inspections. The initial OBDII failure rates for NYMA non-diesel LDVs and LDTs are 5.04% and 5.20% (5.12% combined) with waiver rates of 0.41% and 0.58% (0.49% combined), respectively. The corresponding initial OBDII failure rates for NYMA diesel-powered LDVs and LDTs are 16.41% and 17.53% (17.18% combined), each with waiver rates of 0.00%[12].

For the Upstate I/M Area, 1,940,516 LDVs and 1,960,749 LDTs (all fuel types, representing 95.08% of the total emissions tested fleet) received 4,140,907 initial OBDII inspections. The corresponding initial OBDII failure rates for Upstate non-diesel LDVs and LDTs are 4.72% and 4.78% (4.75% combined) with waiver rates of 0.45% and 0.57% (0.51% combined), respectively. The corresponding initial OBDII failure rates for Upstate diesel LDVs and LDTs are 9.04% and 12.02% (10.42% combined) with waiver rates of 1.04% and 1.08% (1.06% combined)[12], respectively.

An analysis on OBD vehicle re-inspections is presented in Appendix E and provides a breakdown of re-inspection counts for first and subsequent re-inspections and their pass/fail rates[13],[14] by region, vehicle type, and fuel type. Re-inspections performed in the reporting year as follow-ups to failed initial inspections in the previous CY were excluded from this analysis, as this report focuses on CY 2021 inspections, and these would mostly be captured by the previous report's Unknown Final Outcome analysis (as detailed in Appendix H). For the NYMA region, 209,509 first re-inspections and 31,809 subsequent re-inspections were performed (all LD vehicles and fuel types), with overall inspection failure rates of 13.68% and 30.39%, respectively. For the Upstate region, 220,880 first re-inspections and 25,044 subsequent re-inspections were performed (all LD vehicles and fuel types), with overall inspection failure rates of 11.25% and 25.81%, respectively. See Appendix E for more details.

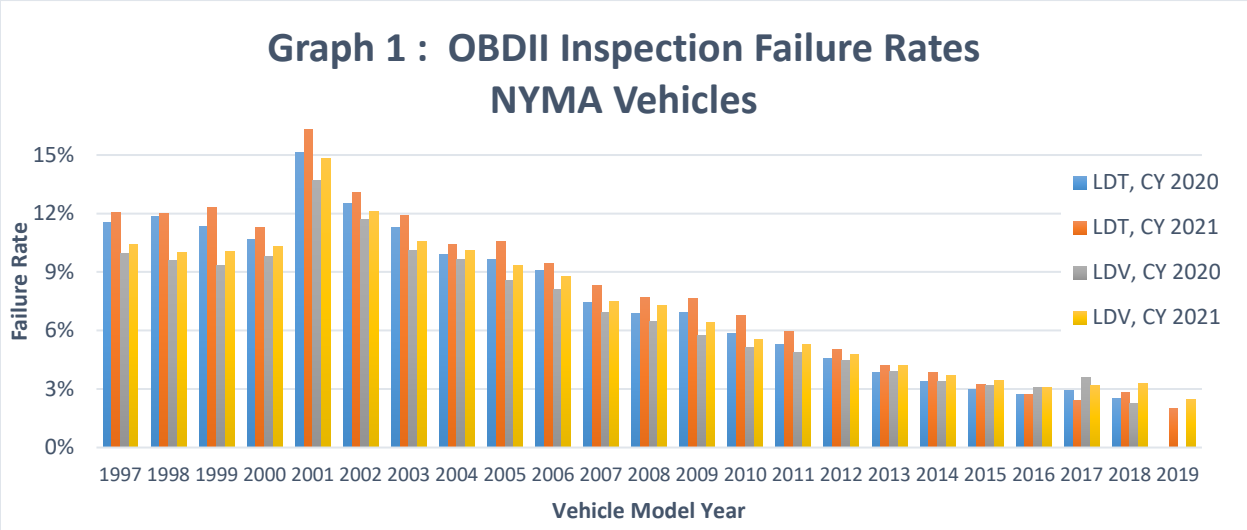
Statewide comparisons of initial OBDII failure rates by vehicle MY and vehicle type for CYs 2020 and 2021 are shown in Graphs 1 and 2 below. Consistent with observations made in previous reports, there is a pronounced trend of increasing initial OBDII inspection failure rate as vehicles age (i.e., older MYs) as well as a more noticeable "spike" associated with the 2001 MY. The elevated MY 2001 failure rate is due to a change in the stringency of the NYVIP2 OBDII readiness evaluation failure criteria. Beginning with the 2001 MY, applicable vehicles will fail the OBDII inspection if 2 or more non-continuous monitors are reported as "Not Ready." For MYs 1997-2000, the NYVIP2 readiness evaluation is less stringent, as three or more non-continuous monitors must be reported as "Not Ready" for an OBDII inspection failure. In addition, "older" vehicles are removed from the on-road fleet more frequently than the newer vehicles which contributes to a less uniform increase of failure rate with vehicle age.

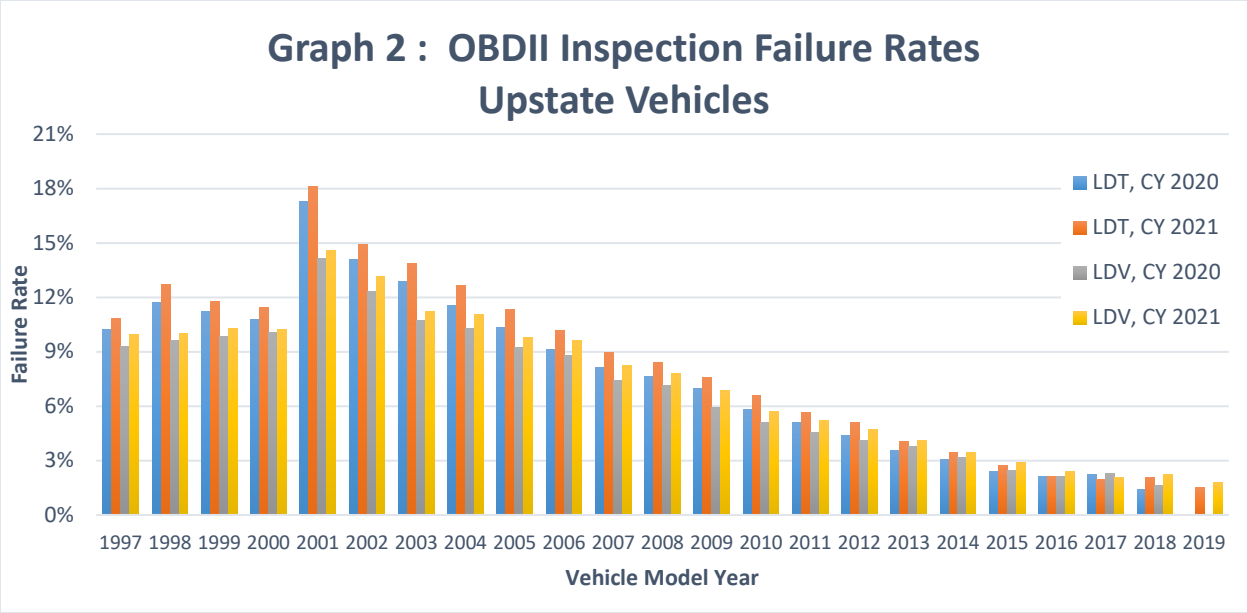
[11] Appendices B and C do not include OBD inspections classified as a heavy-duty vehicle (see Appendix J).

[12] Note only twenty-seven waivers were authorized for diesel-powered vehicles statewide.

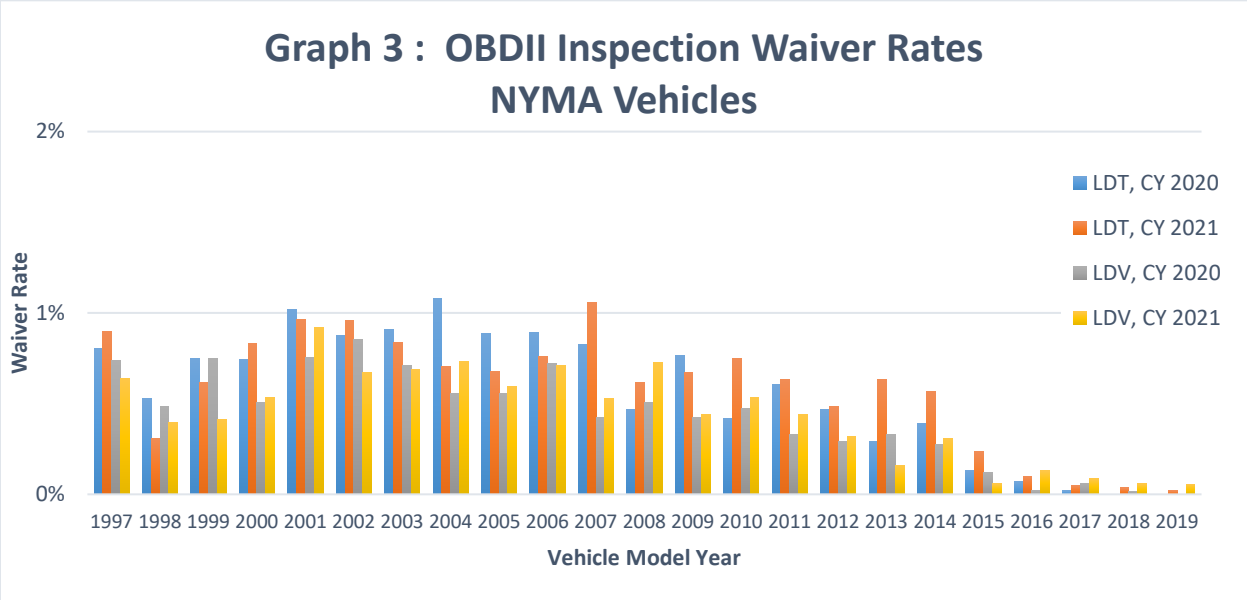
[13] Pass/fail rates for Appendix E are calculated using overall inspection results (and not just OBD emissions test results).

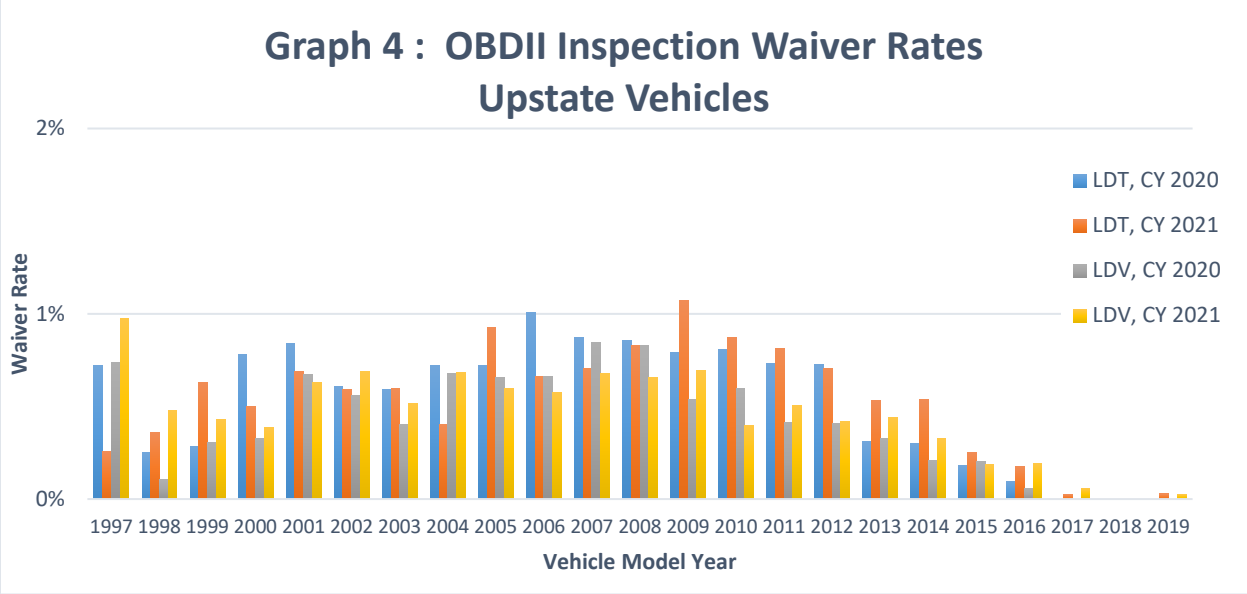
[14] Vehicles that received inspection waivers are categorized as "passing" for the sake of reporting re-inspections since no follow-up inspections are expected for the remainder of the reporting year.





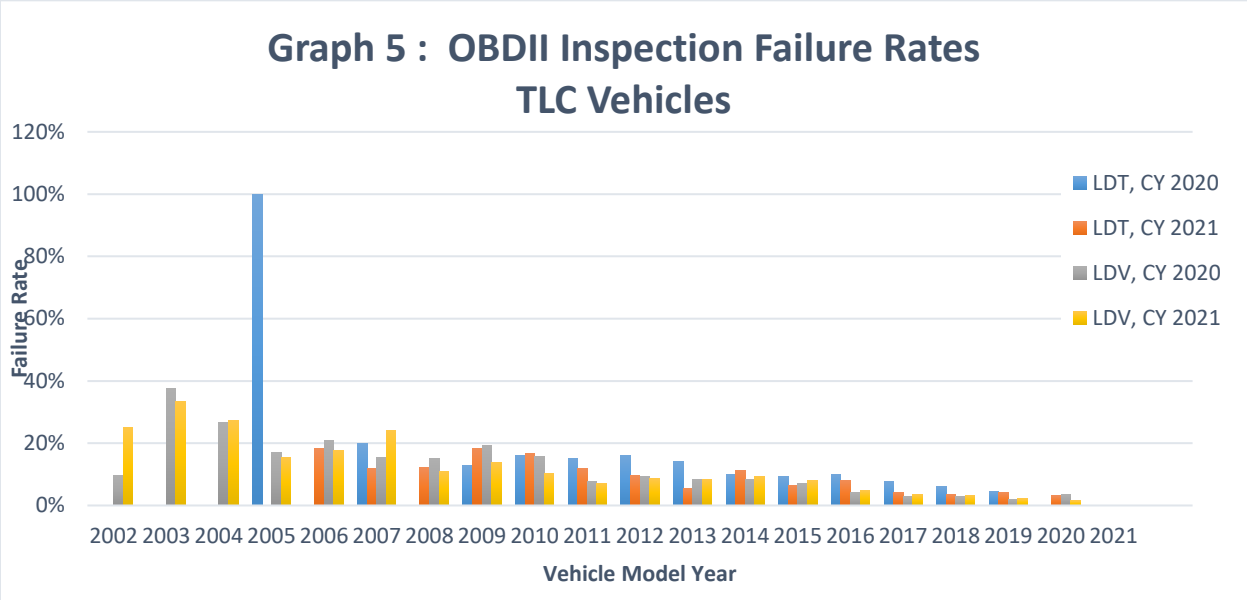
Statewide comparisons of NYVIP2 OBDII waiver rates by vehicle MY and vehicle type for CYs 2020 and 2021 are shown below in Graphs 3 and 4. The overall waiver rates for NYMA and Upstate are comparable for both CYs 2020 and 2021. MY 2001 vehicles (LDVs, LDTs) displayed the highest waiver rate for both I/M areas in both CYs 2020 and 2021.





During CY 2021, the T&LC fleet completed 69,012 initial OBDII inspections on 36,157 distinct LDVs and 24,354 distinct LDTs. The corresponding initial OBDII failure rates for non-diesel LDVs and LDTs are 6.34% and 6.92%, respectively (6.58% combined). The corresponding values for diesel LDVs and LDTs are 10.00% and 33.33%, respectively (18.75% combined).

The T&LC OBDII inspection records are reported directly to Opus Inspection. Comparisons of T&LC OBDII inspection failure rates, by vehicle MY and vehicle type, for CYs 2020 and 2021 are shown in Graph 5. Note that the T&LC does not authorize emissions related waivers.



3. Testing Facilities

Based on unique DMV station identification numbers, 9,735 public inspection stations completed NYVIP2 inspections statewide during CY 2021. It is impractical to generate station specific statistics related to test volume or failure rate. Consistent with previously submitted annual reports, New York has provided initial OBDII test volumes and failure rates by county (see Appendix D).

Within NYMA, Suffolk and Nassau Counties had the largest number of testing facilities (876 and 759, respectively). The two counties with the highest LDV initial OBDII test volumes were Suffolk County (481,486 inspections) and Nassau County (369,734 inspections). The two counties with the highest LDT initial OBDII test volumes were again Suffolk County (449,339 inspections) and Nassau County (316,869 inspections). Bronx and Kings Counties had the highest OBDII failure rates for LDVs (6.98% and 6.38%, respectively) and LDTs (7.49% and 6.67%, respectively).

Within the Upstate I/M Area, Erie County had the largest number of testing facilities (756 facilities), as well as the highest LDV (261,961 inspections) and LDT (275,085 inspections) initial test volumes. The three highest LDV OBDII inspection failure rates were noted in Sullivan (7.40%), Orleans (7.11%), and Franklin (7.00%) counties. The three highest LDT failure rates were Allegany (8.11%), Orleans (7.16%) and Sullivan (6.85%) counties.

C. Quality Assurance Report

DMV continues to improve its quality assurance program. Case development and hearing testimony training for DMV enforcement personnel continues to be refined. DMV has increased the number of authorized users having access to inspection records and certificate information. Procedural improvements have led to a shorter time frame in imposing administrative stops on inspection stations for failure to comply with New York State regulations. The electronic case-tracking management tool named CAPTAIN has been fully functional since 2002.

1. NYMA

DMV enforcement efforts within NYMA program are summarized below in Table II.C.1. From a total of 3,729 NYMA inspection stations and 12,330 licensed inspectors, DMV conducted 3,654 overt audits and 512 covert audits during CY 2021.

These audits combined with consumer complaints led to DMV administrative hearings resulting in 12 inspection station license revocations and 13 station license suspensions (total of 667 days) during CY 2021. Within Table II.C.1, the Mainframe Case row represents those totals by audit type that led to a hearing.

Additional penalties, revocations, and suspensions were also assessed against certified motor vehicle inspectors as the result of administrative hearings. For purposes of this report, inspector revocations and suspensions are not "counted" within Table II.C.1.

Table II.C.1: Statistics on NYSDMV Quality Assurance Program – NYMA (Calendar Year 2021)

Category	Overt Audits	Covert Audits	Surveillance	Complaints	TOTAL
Total Cases:	3,654	512	0	41	4,207
No Action	2,721	259	0	19	2,999
Warnings Issued	768	98	0	18	884
Hearings Held	165	155	0	4	324
Hearing Results:					
Adjourned	0	0		0	0
No Action	2	0		0	2
Warning Issued	0	0		0	0
Revocation	12	1		0	13
Suspension	13	2		1	16
Civil Penalty (# of)	114	119		2	235
Mainframe Case	121	119		2	242
Civil Penalty Levied	$429,747	$89,303		$2,500	$521,550
Days Suspended	512	140		15	667

During CY 2021, DMV staff used 7 vehicles and 12 auditors for undercover covert audits in NYMA. Of the total of 512 covert audits, 171 audits involved setting vehicles to fail for a single component of the OBDII inspection. 168 of these inspections were for the presence of the gas cap and 3 of them were for readiness monitors. Of the total covert audits (512), 338 inspection stations completed an appropriate inspection, and 174 inspection stations completed an inappropriate inspection (covert vehicle set to fail, but inspection passed). All stations honored the reservation (appointment) for the inspection.

As previously reported, a more refined "Investigative Audit" (IA) began in 2008. An IA provides additional time for a detailed investigation of an inspection facility, and these are often triggered by NYVIP2 data analysis of completed inspections by DMV's Central Office (Albany) or one of the six DMV Regional Offices.

Data elements triggering potential audits may include:

- High waiver rate;
- Certified inspector date/time overlaps at different facilities;
- Mismatch of OBDII VIN and DMV registration VIN;
- Suspect electronic signature (E-signature) for the vehicle of record;
- Variations in OBDII monitor support status;
- Inconsistent vehicle E-signature inspection history; and
- Inspection sticker misuse/accountability.

During CY 2021, 474 IAs were conducted within NYMA. The IA results are included within the Table II.C.1, Overt Audit data.

Consumer complaints can also initiate enforcement action. There were a total of 41 NYMA consumer complaints resulting in 1 inspection station suspension (15 days) and 2 civil penalties during CY 2021.

DMV's quality assurance program also applies "administrative stops" to prevent inspection stations from performing additional inspections until the station conforms to the requirements of the license or registration they hold. Typically, administrative stops are placed on the inspection station facility license following requests by DMV field staff. Administrative stops have been proven to be very effective in the NYVIP2 real-time data transmission environment. A total of 362 administrative stops were issued in NYMA during CY 2021. Table II.C.2 summarizes the statistics on administrative stops.

Table II.C.2: Statistics on NYSDMV Administrative Stops (Calendar Year 2021)

Reason for Issuing an Administrative Stop	NYMA	Upstate
Missing or Inoperative Equipment	125	122
Transferred right to apply for a public emission inspection station	90	79
Clean Air Inspection Audit	16	9
Management Review	93	17
Failure to Pay Civil Penalties	30	22
Bad Checks	5	7
Shortage for facility renewal	0	0
Suspended Pending Hearing	0	0
Failure to Have CVIS (Computerized Vehicle Inspection System)	0	0
Undeliverable returned mail	0	0
Out of Business	2	2
Revenue Accounting	0	0
Shortage for facility original licenses	0	0
Shortage for Sticker Order	0	1
No Communication from Facility	0	0
Failed NYSDEC NYTEST Equipment Audit	0	0
No Connection to VID	1	0
TOTAL	**362**	**259**

2. Upstate Area

The results of various DMV compliance efforts for the Upstate I/M Area are summarized below in Table II.C.3. From a total of 6,006 Upstate Area inspection stations and 19,348 licensed inspectors, DMV conducted 5,032 overt audits and 274 covert audits during CY 2021. These audits and consumer complaints led to DMV administrative hearings resulting in three inspection station license revocations and four station license suspensions (total of 460 days) during CY 2021. Additional penalties, revocations, and suspensions applied to certified motor vehicle inspectors as the result of administrative hearings. Revocations and suspensions are not double counted for the station when the inspector is sanctioned.

Table II.C.3: Statistics on NYSDMV Quality Assurance Program – Upstate (Calendar Year 2021)

Category	Overt Audit	Covert Audits	Surveillance	Complaints	TOTAL
Total Cases:	5,032	274	0	90	5,396
No Action	4,095	86	0	18	4,199
Warnings Issued	866	78	0	41	985
Hearings Held	71	110	0	31	212
Hearing Results:					
Adjourned	0		0	0	0
No Action	0		0	1	1
Warning Issued	0		0	0	0
Revocation	3		1	0	4
Suspension	4		5	3	12
Civil Penalty (# of)	73		78	37	188
Mainframe Case	76		78	38	192
Civil Penalty Levied	$65,000		$69,800	$22,575	$157,375
Days Suspended	306		23	131	460

During CY 2021, DMV used 7 vehicles and 22 auditors for undercover (covert) audits in the Upstate I/M Area. Of a total of 274 covert audits, 181 audits involved setting a vehicle to fail for a single component of an OBDII emissions test. The components set to fail included: 1 for gas cap, 33 for failing the OBDII readiness evaluation, 147 for PCV, and numerous safety inspection related failures. Of the total (274), 133 inspection stations completed an appropriate inspection, and 140 inspection stations completed an inappropriate inspection (i.e., covert vehicle set to fail, but inspection passed). One inspection station did not honor the reservation to conduct an official inspection.

During CY 2021, DMV staff completed 338 IAs in the Upstate I/M Area. The results are included within the Table II.C.3, Overt Audit data. As stated above, an IA provides additional time for the detailed investigation of an inspection facility and is often triggered by NYVIP2 data analysis completed by DMV's Central Office (Albany) or one of the six DMV Regional Offices.

Data elements triggering potential audits may include:

- High waiver rate;
- Certified inspector date/time overlaps at different facilities;
- Mismatch of OBDII VIN and DMV registration VIN;
- Suspect electronic signature (E-signature) for the vehicle of record;
- Variations in OBDII monitor support status;
- Inconsistent vehicle E-signature history; and
- Inspection sticker misuse/accountability.

Consumer complaints can also initiate enforcement action. Based on a total of 90 consumer complaints from the Upstate I/M Area, three stations were suspended and 37 had civil penalties levied against them.

Administrative stops were also applied Upstate to prevent inspection stations from performing any more inspections until the station conformed to the requirements of its license or registration. Typically, administrative stops are placed on the inspection station's facility license following requests by DMV field staff. As noted in Table II.C.2 above, 259 administrative stops were issued in the Upstate I/M Area during CY 2021.

D. Enforcement Program Report

New York utilizes both sticker-based and computer matching registration-based enforcement mechanisms. Inspection certificates or "stickers" are authorized by NYVIP2 when a vehicle passes the annual safety/emissions inspection. Sticker inventory is accounted for electronically by NYVIP2. With these computerized systems, the number of stickers missing, stolen, or sold has decreased. During CY 2021, NYVIP2 issued 5,529,341 and 5,313,469 inspection stickers in NYMA and the Upstate I/M Areas respectively. These stickers represent emissions/safety (OBDII, Low-Enhanced) and safety-only inspections.

To ensure that vehicles receive the appropriate inspection, vehicle information including VIN, registration expiration date, I/M area, vehicle weight, and fuel type are encoded into a DMV registration 2D bar code. The NYVIP2 inspection software uses this information to minimize inspector input when determining the appropriate inspection type. For example, when the DMV 2D barcode is scanned, the NYVIP2 software will decode the applicable MY and evaluate GVWR using the encoded vehicle identification number (VIN). The NYVIP2 inspection software determines whether the inspector is allowed to make changes.

DMV also monitors the issuance of traffic tickets by various law enforcement sources through state, county, and local courts. There were 150,689 traffic tickets issued to motorists in 2021 for operating an uninspected vehicle pursuant to Vehicle and Traffic Law, Section 306(b). Of these tickets, 41,797 were issued in NYMA and 108,892 in the Upstate I/M Area.

1. Registration-Based Enforcement (RBE)

The NYS RBE program validates that a motorist has a valid inspection record on file within the previous 12 months when attempting to renew vehicle registrations. If a valid inspection record is not found, a warning is printed on the DMV registration renewal invitation. In the event that a motorist subsequently provides sufficient proof of inspection (i.e., valid sticker number, vehicle inspection receipt), the denial would be superseded and the registration would be renewed. DMV initially implemented RBE in NYMA during the NYTEST program in 2001. Statewide RBE enforcement commenced with the September 2007 registration renewals.

A summary of month-by-month RBE statistics is provided in Table II.D.1 below. Note that the number of April invitations is typically larger than the average monthly volume as all motorcycle and ATV renewals are mailed in April. Similarly, the number of December invitations is also large as all the trailer, ambulance, and livery invitations are mailed in December. In CY 2021, 6,082,423 registration renewal invitations were generated by DMV. Motorists were notified of the need for a completed emissions inspection in order to renew their registration. Of this total, 297,973 vehicle owners still attempted to renew their registration without proof of an emission test, and DMV denied these renewals.

Table II.D.1
Statistics on NYSDMV Registration Denial Enforcement Program
(Calendar Year 2021)

Month	NYMA			Upstate		
	Renewals	Denials	% Denied	Renewals	Denials	% Denied
January	234,492	18,992	8.1%	245,789	12,255	5.0%
February	221,444	12,323	5.6%	210,613	8,422	4.0%
March	347,860	20,889	6.0%	396,170	14,339	3.6%
April	267,149	16,600	6.2%	320,536	11,974	3.7%
May	257,286	15,316	6.0%	282,422	10,346	3.7%
June	258,239	19,179	7.4%	264,437	12,775	4.8%
July	240,740	13,592	5.6%	239,633	9,509	4.0%
August	239,184	12,686	5.3%	239,537	8,756	3.7%
September	223,877	14,575	6.5%	214,988	10,058	4.7%
October	207,093	10,371	5.0%	232,442	7,049	3.0%
November	198,872	9,740	4.9%	253,855	6,870	2.7%
December	218,833	12,632	5.8%	266,932	8,725	3.3%
TOTAL	2,915,069	176,895	6.1%	3,167,354	121,078	3.8%

2. Sticker Compliance Survey

DMV continued the longstanding quarterly sticker compliance survey and 10,144 sticker surveys were completed statewide during CY 2021. The survey data resulted in a statewide compliance rate of 95.03%, which is slightly lower than previous years. This is likely due to lingering hesitancy from the ongoing COVID-19 pandemic. An especially high rate of non-compliance was observed in 2021 Q4, which coincides with the confirmation of the Omicron variant in NYS. A summary of Sticker Compliance Surveys for CYs 2010 - 2021 is included as Appendix I.

E. Program Changes & Issues Discovered During the Reporting Period

1. Software Update

Software update version 20.12.03 was implemented beginning on February 2, 2021. Details of the enhancements provided by the updates are included under Appendix K.

2. DMV Regulatory Changes, 15 NYCRR Part 79

15 NYCRR Part 79 was not revised during CY 2021.

Section 79.7 was revised (effective July 13, 2011) to allow the Commissioner of Motor Vehicles to limit the number of new official emission inspection stations licensed with in New York State. If the maximum number of such inspection stations is reached in any county, DMV places new applications for an inspection station license on a waiting list. If the number of stations falls below the designated maximum for a given county, the applicant who has been on the list the longest will be considered for an inspection station license. DMV's fact sheet related to these changes can be found at: http://www.dmv.ny.gov/vs-ispcap.htm.

On March 28, 2012, DMV adopted changes to Section 79 to allow for statewide light-duty diesel (LDDV) OBDII inspections for MY 1997 and newer vehicles. The NYVIP inspection software was subsequently modified to require LDDV OBDII inspections beginning on July 1, 2012.

3. Contractor Selection

DMV formally released the NYVIP2 Request for Proposals (RFP) on March 30, 2012. Following the review of five submitted proposals and subsequent approval by the NYS Office of the State Comptroller (OSC), the NYVIP2 contract was awarded to Opus Inspection. The transition from the original NYVIP contract (SGS TESTCOM) to NYVIP2 was completed on January 15, 2014. In June 2020, the program manager contract with Opus was extended one year to November 30, 2022. During CY 2021, all emission inspections (except for HDDV I/M) were completed through NYVIP2 or the NYC T&LC.

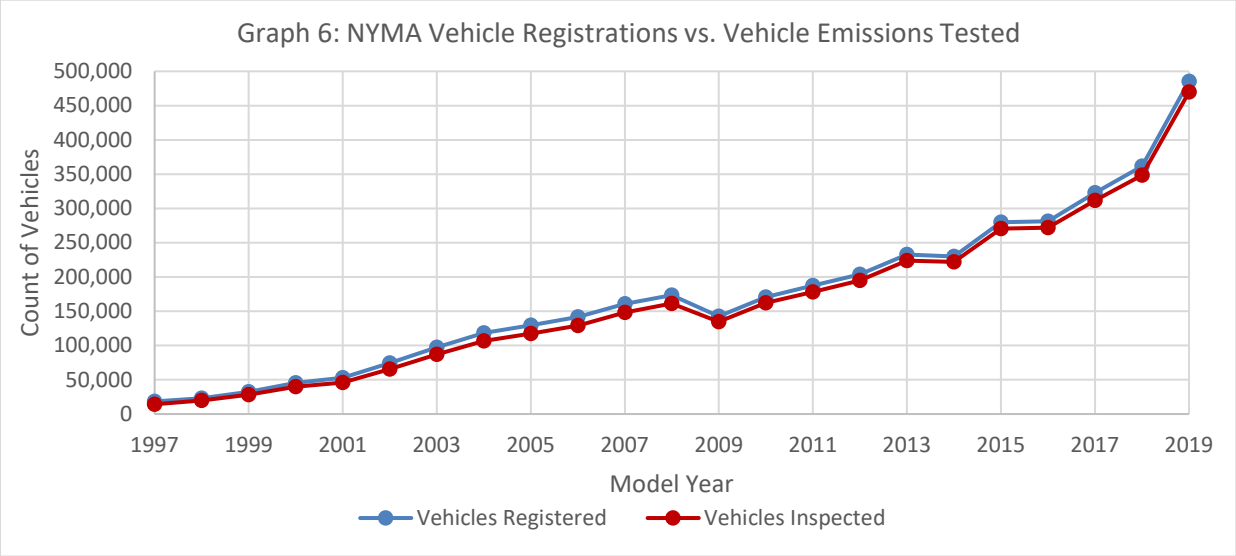
The NYVIP3 RFP was released November 14, 2019. Opus Inspection was awarded the NYVIP3 contract on June 28, 2021. All inspection facilities were notified of NYVIP3 system changes on December 21, 2021 (see Appendix K, page K-8). Stations were notified of NYVIP3 equipment delays due to supply chain shortages on May 26, 2022 (see Appendix K, page K-13).

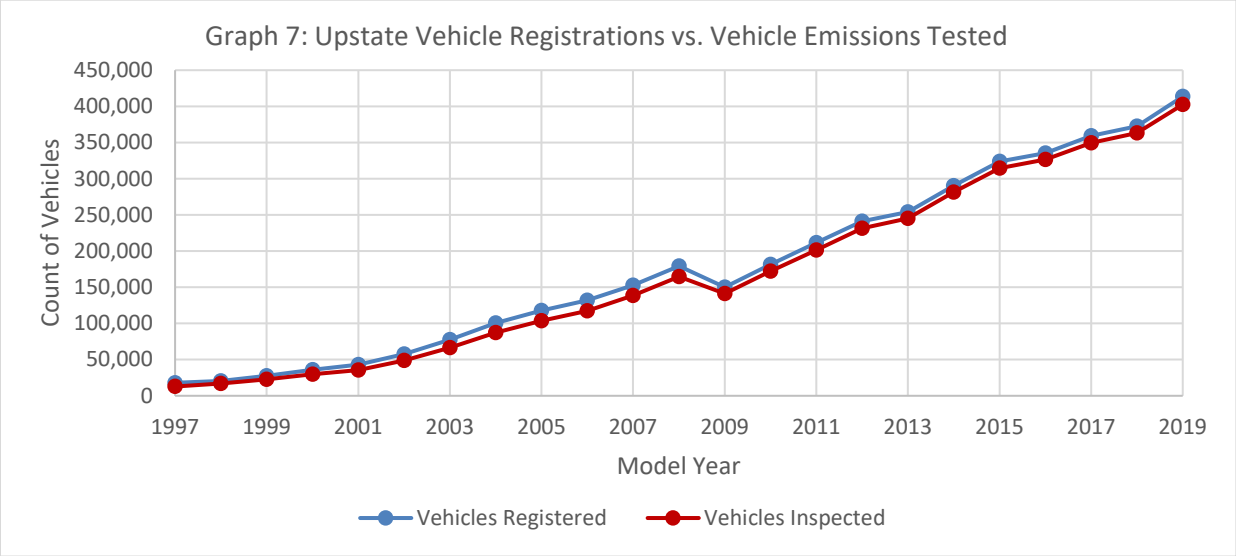
4. COVID-19 Impacts

The CY 2020 report included an analysis demonstrating COVID-19 impacts NYS motor vehicle inspection volumes. NYS Executive Order 202.11, which previously allowed for the lawful operation of vehicles in the event of an expired sticker due to the pandemic, expired in December 2020. Based on a review of 2021 data, inspection volumes have returned to normal levels when compared to vehicle registration data.

F. Vehicle Registrations vs. Emissions Tests, CY 2021

The Departments and Opus Inspection compared vehicle registration data (i.e., vehicles potentially subject to emissions testing) to vehicles that actually received a passing (or waivered) emission test for both NYMA and the Upstate areas for CY 2021. The procedure used for this comparison is described further within Appendix F, *Procedure to Sort DMV Registration File and Matching of Emissions Inspections – I/M Program Evaluation.* Appendix G contains the referenced *Registration Type Codes*. In summary, the NYMA and Upstate I/M areas were found to have a combined 94.59% compliance rate. Graphs 7 and 8 provide by MY comparisons for NYMA and the Upstate I/M areas.





III. CONCLUSIONS

New York State maintained viable motor vehicle inspection and maintenance programs (NYVIP2 and the NYC T&LC) without significant disruption or inconvenience to inspection stations and motorists. As outlined within this report, the most significant reporting metrics, including OBD failure rates (Graphs 1, 2, and 5), OBD waiver rates (Graphs 3 and 4), vehicles with no known final outcome (Table II.B.2), and percentage of emissions tested versus registered (Graphs 6 and 7), remain consistent with CY 2020 reporting.

DMV's sticker compliance survey yielded a slightly higher rate of non-compliance in comparison to previous years. This is likely explained by lingering hesitancy from the ongoing COVID-19 pandemic. However, a review of 2021 data showed that inspection volumes have returned to normal levels when compared to vehicle registration data.

The procedure to determine vehicles with Unknown Final Outcome (Appendix H) was updated for the CY 2021 report to utilize a more robust querying methodology. The update yielded higher overall UFO totals in comparison to previous reports.

DEC and DMV staff completed the necessary regulatory and programmatic changes to implement the NYVIP2 I/M program to maximize its effectiveness through enhanced enforcement (data analysis, undercover operations) and focused quality assurance and quality control (waiver monitoring, station auditing) measures. Significant effort was devoted to the development of direct EPA reporting using the Opus Inspection database. These efforts will continue throughout the term of the contract.

The New York City T&LC OBDII inspection program continues to inspect its yellow medallion taxicab fleet and applicable For-Hire vehicles at the Woodside (Queens) centralized test-only station. DEC completes EPA reporting for T&LC inspections using the Opus Inspection database.

These continuing efforts on the part of DEC, DMV, and the T&LC enable New York State to achieve our enhanced I/M SIP obligations, including its intended goal of healthier, cleaner air for New York State.

APPENDICES

Appendix A

Table A-1: Registered Vehicles* in New York State (Based on Distinct VINs)

Based on Data Collected from DMV Registration File Dated 3/8/22

New York Metropolitan Area (9 Counties)									Upstate New York (53 Counties)							
			*Gasoline Powered***		*Diesel Powered*		*Other Fuels****				*Gasoline Powered **		*Diesel Powered*		*Other Fuels****	
Vehicle Model Year	Total Vehicles	Model Year Distribution	Light Duty	Heavy Duty	Light Duty	Heavy Duty	Light Duty	Heavy Duty	Total Vehicles	Model Year Distribution	Light Duty	Heavy Duty	Light Duty	Heavy Duty	Light Duty	Heavy Duty
Pre-1997	111,869	2.10%	99,945	2,451	2,785	6,651	31	6	168,628	3.17%	140,203	8,388	4,598	15,383	39	17
1997	20,114	0.38%	17,594	499	560	1,460	1	0	20,789	0.39%	15,925	1,187	1,095	2,576	0	6
1998	24,662	0.46%	22,400	387	340	1,530	3	2	23,003	0.43%	19,262	955	478	2,302	3	3
1999	35,770	0.67%	31,452	783	757	2,773	5	0	32,212	0.61%	25,106	1,519	1,445	4,118	11	13
2000	49,388	0.93%	44,098	1,113	793	3,362	11	11	41,196	0.77%	33,199	1,812	1,395	4,759	23	8
2001	56,787	1.07%	51,891	1,070	816	2,991	17	2	48,392	0.91%	40,166	2,113	1,593	4,489	27	4
2002	78,159	1.47%	72,877	1,317	961	2,955	48	1	63,011	1.18%	54,296	2,275	1,860	4,341	224	15
2003	100,972	1.90%	94,902	1,759	1,117	3,155	21	18	83,108	1.56%	73,201	2,794	2,234	4,833	21	25
2004	123,409	2.32%	115,824	2,113	1,166	4,237	55	14	107,419	2.02%	96,035	3,475	2,184	5,671	40	14
2005	135,577	2.55%	126,846	2,086	1,442	5,075	41	87	126,239	2.37%	113,082	3,580	2,406	7,120	39	12
2006	149,465	2.81%	138,245	2,995	1,659	6,395	16	155	141,770	2.66%	126,528	3,913	2,859	8,333	105	32
2007	169,246	3.18%	158,910	2,241	1,022	6,770	85	218	163,317	3.07%	149,127	3,194	1,704	8,978	306	8
2008	180,377	3.39%	171,022	3,028	1,296	4,767	79	185	188,866	3.55%	175,619	4,613	1,757	6,641	234	2
2009	147,958	2.78%	141,570	1,766	545	3,344	74	659	156,139	2.93%	147,924	3,090	691	4,267	161	6
2010	175,232	3.30%	169,418	1,825	736	3,012	117	124	187,260	3.52%	179,304	2,897	747	4,013	262	37
2011	194,019	3.65%	184,559	3,091	1,318	4,494	137	420	220,907	4.15%	206,188	5,657	1,891	6,741	374	56
2012	211,088	3.97%	199,883	4,065	1,743	4,935	290	172	251,462	4.73%	235,045	6,193	2,294	7,125	616	189
2013	240,341	4.52%	228,928	3,813	1,704	5,203	496	197	263,396	4.95%	248,178	5,862	2,199	6,414	627	116
2014	239,349	4.50%	226,100	3,928	2,669	5,969	571	112	300,924	5.65%	283,637	6,059	3,292	7,142	631	163
2015	291,983	5.49%	274,172	5,688	2,983	8,165	713	262	338,940	6.37%	312,750	10,726	3,945	10,665	674	180
2016	294,494	5.54%	274,745	6,890	2,447	9,087	1,144	181	352,704	6.63%	325,450	12,013	2,279	11,964	818	180
2017	335,170	6.30%	316,621	7,277	1,666	7,840	1,569	197	376,979	7.08%	349,590	12,269	1,715	11,700	1,379	326
2018	372,565	7.01%	352,958	6,172	1,530	7,361	4,355	189	389,862	7.33%	363,538	10,649	1,945	11,528	1,957	245
2019	499,917	9.40%	475,857	8,580	1,407	9,797	4,116	160	434,712	8.17%	402,459	13,519	1,373	14,482	2,589	290
2020+	1,096,175	20.62%	1,036,277	13,007	2,905	15,291	28,126	569	840,525	15.79%	768,282	25,726	4,858	28,309	12,907	443
Total	5,317,195		5,027,094	87,944	36,367	136,619	42,121	3,941	5,321,760		4,884,094	154,478	52,837	203,894	24,067	2,390
% of Total		100.00%	94.54%	1.65%	0.68%	2.57%	0.79%	0.07%		100.00%	91.78%	2.90%	0.99%	3.83%	0.45%	0.04%

* Excluding vehicle types exempt from NYS I/M Program (trailers, ATVs, motor boats, motorcycles, and locomotives), and vehicles model year 1965 and older

** Including Hybrid vehicles

*** Including CNG, Propane, Flex-Fueled, and Electric vehicles

Appendix A

Table A-2: Emissions Tested Vehicles in New York State (Based on Distinct VINs)

(Based on Data Collected from 1/1/2021 to 12/31/2021)

	New York Metropolitan Area (9 Counties)							Upstate New York (53 Counties)							NYC Taxi & Limousine			
			OBD II Inspected		Low-Enhanced Inspected Only					OBD II Inspected		Low-Enhanced Inspected Only					OBD II Inspected	
Vehicle Model Year	Total Vehicles	Model Year Distribution	Light Duty Vehicle	Light Duty Truck	Light Duty Vehicle	Light Duty Truck	Heavy Duty Vehicle	Total Vehicles	Model Year Distribution	Light Duty Vehicle	Light Duty Truck	Light Duty Vehicle	Light Duty Truck	Heavy Duty Vehicle	Total Vehicles	Model Year Distribution	Light Duty Vehicle	Light Duty Truck
1996	1,099	0.027%	686	390	3		1	933	0.023%	392	517			1				
1997	16,623	0.414%	8,901	6,332			1,360	15,293	0.373%	6,028	7,058			2,164				
1998	21,563	0.537%	12,403	7,901			1,242	18,360	0.447%	8,142	8,567			1,641				
1999	30,665	0.764%	16,577	11,629			2,451	24,569	0.599%	11,041	10,555			2,929				
2000	43,199	1.076%	23,242	16,640			3,309	32,404	0.790%	14,861	13,631			3,905				
2001	50,180	1.250%	25,785	20,393			3,989	38,958	0.949%	17,949	16,199			4,801				
2002	71,147	1.773%	34,728	31,908			4,359	53,241	1.298%	23,474	24,173			5,558	3	0	3	
2003	92,949	2.316%	45,639	41,354			5,941	72,094	1.757%	31,768	32,974			7,339	12	0.020%	12	
2004	113,669	2.832%	50,122	57,251			6,277	94,148	2.295%	38,479	47,098			8,552	9	0.015%	8	1
2005	124,537	3.103%	58,223	59,796			6,492	111,764	2.724%	51,275	52,719			7,749	20	0.033%	17	3
2006	136,540	3.402%	64,508	62,776			9,234	126,223	3.076%	59,751	57,699			8,750	44	0.073%	33	11
2007	156,974	3.911%	79,225	71,186			6,519	148,017	3.607%	74,847	66,277			6,869	141	0.235%	120	21
2008	170,370	4.245%	82,997	78,510			8,521	175,666	4.281%	85,037	81,256			9,269	204	0.340%	117	87
2009	140,722	3.506%	83,113	52,874			4,722	148,536	3.620%	87,932	54,251			6,334	349	0.583%	219	130
2010	169,519	4.224%	95,712	69,292			4,498	180,202	4.392%	98,630	75,698			5,859	607	1.013%	356	251
2011	186,079	4.637%	90,957	87,859			7,242	210,696	5.135%	99,716	101,203			9,757	1,438	2.400%	863	575
2012	202,465	5.045%	106,694	87,983			7,770	241,802	5.893%	123,549	107,834			10,400	1,795	2.996%	999	796
2013	232,863	5.802%	126,789	98,609			7,444	255,237	6.221%	132,605	113,445			9,168	2,767	4.618%	1,756	1,011
2014	231,441	5.767%	114,703	109,807			6,918	293,925	7.163%	136,406	148,470			9,036	4,725	7.887%	2,978	1,747
2015	282,296	7.034%	137,787	134,945			9,540	327,622	7.985%	144,275	167,118			16,198	9,384	15.663%	5,939	3,445
2016	285,380	7.111%	136,009	138,601			10,744	340,106	8.289%	142,261	181,068			16,741	7,752	12.939%	4,608	3,144
2017	331,488	8.260%	162,683	157,230			11,552	363,679	8.864%	152,299	194,301			17,031	10,525	17.567%	5,819	4,706
2018	406,599	10.131%	231,065	166,101			9,420	390,919	9.527%	197,704	178,991			14,196	6,445	10.757%	3,187	3,258
2019	514,853	12.829%	275,108	228,006			11,713	438,710	10.692%	202,095	219,286			17,292	5,563	9.285%	2,464	3,099
2020															4,282	7.147%	2,457	1,825
2021															3,569	5.957%	3,569	
2022															278	0.464%	278	
Other*				555	102	273					361	142	158					
Total:	4,013,220	100.00%	2,063,656	1,797,928	105	273	151,258	4,103,104	100.00%	1,940,516	1,960,749	142	158	201,539	59,912	100.00%	35,802	24,110
% of Total:			51.42%	44.80%	0.00%	0.01%	3.77%			47.29%	47.79%	0.00%	0.00%	4.91%			59.76%	40.24%

* The post-inspection vehicle type classifications as discussed in Appendix I, inconsistent with emissions testing applicability (MY or HDV)

Appendix B

Table B-1-a-i: Summary of NYMA OBD II Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non Diesel Vehicles

Model Year	Total Initial Tests	Passed OBD II	Failed OBD II	% Failed	--- Passed OBD II --- Passed Gas Cap	--- Passed OBD II --- Failed Gas Cap	--- Failed OBD II --- Passed Gas Cap	--- Failed OBD II --- Failed Gas Cap	MIL Command ----- On ----- No DTC	MIL Command ----- On ----- With DTC	MIL Command ----- Not On ----- No DTC	MIL Command ----- Not On ----- With DTC	Rec'd Waiver	Waiver Rate
1997	9,045	8,103	942	10.41%	8,102	1	942	0	0	230	8,777	0	6	0.64%
1998	12,645	11,379	1,264	10.00%	11,379	0	1,264	0	0	324	12,272	0	5	0.40%
1999	16,873	15,179	1,694	10.04%	15,179	0	1,694	0	0	444	16,347	0	7	0.41%
2000	23,725	21,276	2,445	10.31%	21,275	1	2,445	0	0	640	23,000	0	13	0.53%
2001	26,443	22,524	3,918	14.82%	22,524	0	3,918	0	0	684	25,670	0	36	0.92%
2002	35,570	31,254	4,313	12.13%	31,254	0	4,313	0	0	715	34,707	3	29	0.67%
2003	46,649	41,704	4,941	10.59%	41,701	3	4,938	2	1	795	45,543	4	34	0.69%
2004	51,275	46,094	5,173	10.09%	46,090	4	5,172	1	0	842	50,261	2	38	0.73%
2005	59,513	53,950	5,558	9.34%	53,946	4	5,556	2	1	900	58,417	0	33	0.59%
2006	65,928	60,126	5,792	8.79%	60,123	3	5,790	1	0	1,033	64,696	0	41	0.71%
2007	81,234	75,143	6,064	7.46%	75,140	3	6,063	1	0	1,047	79,936	0	32	0.53%
2008	85,175	78,980	6,183	7.26%	78,979	1	6,183	0	0	960	83,988	0	45	0.73%
2009	85,540	80,058	5,474	6.40%	80,052	6	5,471	3	0	761	84,630	0	24	0.44%
2010	98,429	92,996	5,429	5.52%	92,993	3	5,428	0	0	738	97,516	0	29	0.53%
2011	94,365	89,388	4,965	5.26%	89,381	7	4,964	0	1	666	93,505	0	22	0.44%
2012	110,905	105,588	5,314	4.79%	105,579	9	5,313	1	0	645	110,057	1	17	0.32%
2013	132,726	127,154	5,556	4.19%	127,144	10	5,556	0	1	566	131,961	6	9	0.16%
2014	122,840	118,291	4,541	3.70%	118,271	20	4,538	0	1	546	122,143	0	14	0.31%
2015	151,069	145,890	5,164	3.42%	145,871	19	5,160	1	0	555	150,293	1	3	0.06%
2016	151,380	146,714	4,656	3.08%	146,571	143	4,652	4	0	468	150,710	2	6	0.13%
2017	182,251	176,480	5,762	3.16%	176,465	15	5,761	1	1	382	181,605	13	5	0.09%
2018	261,883	253,309	8,564	3.27%	253,292	17	8,564	0	3	393	261,141	3	5	0.06%
2019	292,467	285,322	7,131	2.44%	285,307	15	7,130	1	5	393	291,618	9	4	0.06%
Total:	2,197,930	2,086,902	110,843	5.04%	2,086,618	284	110,815	18	14	14,727	2,178,793	44	457	0.41%

Appendix B

Table B-1-a-ii: Summary of NYMA OBD II Readiness Status Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non Diesel Vehicles

Model Year	Total Initial Tests	Comprehensive Comp. Not Ready	%	Misfire Not Ready	%	Fuel Control Not Ready	%	Catalyst Not Ready	%	O2 Sensor Not Ready	%	EGR Not Ready	%
1997	9,045	0	0.00%	0	0.00%	0	0.00%	3,196	35.41%	1,447	16.02%	872	12.90%
1998	12,645	0	0.00%	0	0.00%	1	0.01%	3,245	25.70%	1,613	12.77%	937	11.43%
1999	16,873	35	0.21%	1	0.01%	5	0.03%	3,888	23.07%	1,921	11.40%	1,105	10.39%
2000	23,725	129	0.56%	13	0.06%	14	0.06%	5,489	23.18%	2,881	12.15%	1,327	9.30%
2001	26,443	433	1.64%	17	0.06%	61	0.23%	4,391	16.64%	2,506	9.48%	1,104	7.80%
2002	35,570	846	2.38%	17	0.05%	77	0.22%	4,700	13.24%	2,929	8.25%	1,054	7.00%
2003	46,649	397	0.85%	29	0.06%	284	0.61%	5,723	12.30%	3,469	7.45%	1,085	5.92%
2004	51,275	412	0.80%	25	0.05%	67	0.13%	6,314	12.34%	3,720	7.26%	1,153	5.33%
2005	59,513	280	0.47%	10	0.02%	28	0.05%	5,487	9.23%	4,559	7.67%	1,315	5.22%
2006	65,928	56	0.08%	1	0.00%	3	0.00%	5,640	8.58%	4,636	7.05%	1,199	4.91%
2007	81,234	17	0.02%	0	0.00%	2	0.00%	5,961	7.35%	5,092	6.28%	1,090	4.02%
2008	85,175	0	0.00%	1	0.00%	3	0.00%	6,824	8.02%	5,000	5.88%	1,067	3.56%
2009	85,540	0	0.00%	0	0.00%	1	0.00%	6,295	7.37%	4,442	5.20%	1,629	2.93%
2010	98,429	0	0.00%	0	0.00%	38	0.04%	5,901	6.00%	4,814	4.89%	2,012	2.16%
2011	94,365	1	0.00%	0	0.00%	278	0.29%	5,093	5.41%	4,712	5.00%	1,923	2.08%
2012	110,905	2	0.00%	2	0.00%	1,958	1.77%	4,965	4.48%	5,442	4.91%	2,237	2.05%
2013	132,726	1	0.00%	0	0.00%	3,150	2.37%	4,764	3.60%	5,741	4.33%	2,403	1.82%
2014	122,840	3	0.00%	1	0.00%	2,623	2.14%	3,521	2.87%	4,400	3.58%	2,083	1.71%
2015	151,069	2	0.00%	1	0.00%	3,442	2.28%	4,331	2.87%	4,827	3.20%	2,422	1.61%
2016	151,380	4	0.00%	2	0.00%	3,317	2.19%	3,869	2.56%	4,029	2.66%	2,081	1.38%
2017	182,251	3	0.00%	1	0.00%	4,414	2.42%	4,932	2.71%	5,190	2.85%	2,487	1.37%
2018	261,883	4	0.00%	4	0.00%	7,395	2.82%	5,940	2.27%	7,969	3.04%	4,986	1.90%
2019	292,467	21	0.01%	18	0.01%	5,216	1.78%	4,333	1.48%	6,395	2.19%	10,193	[1]3.49%
Total:	2,197,930	2,646	0.12%	143	0.01%	32,377	1.47%	114,802	5.23%	97,734	4.45%	47,764	2.57%

Model Year	Total Initial Tests	Evaporative Systems Not Ready	%	Heated Catalyst Not Ready	%	O2 Sensor Heater Not Ready	%	Secondary Air Injection Not Ready	%	Air Conditioning Not Ready	%
1996	9,045	2,123	34.69%	0	0.00%	608	6.75%	394	22.66%	0	0.00%
1997	12,645	4,175	34.04%	0	0.00%	733	5.82%	530	22.02%	0	0.00%
1998	16,873	5,194	30.88%	0	0.00%	619	3.68%	418	12.43%	0	0.00%
1999	23,725	7,967	33.71%	2	2.08%	937	3.96%	642	10.78%	0	0.00%
2000	26,443	7,511	28.50%	0	0.00%	949	3.60%	756	11.75%	0	0.00%
2001	35,570	9,455	26.65%	0	0.00%	999	2.84%	845	11.21%	0	0.00%
2002	46,649	10,978	23.61%	0	0.00%	1,043	2.28%	849	10.54%	0	0.00%
2003	51,275	11,205	21.89%	0	0.00%	960	1.91%	816	10.00%	0	0.00%
2004	59,513	11,977	20.15%	3	1.41%	950	2.06%	874	11.95%	3	0.87%
2005	65,928	12,509	19.02%	0	0.00%	953	1.83%	828	10.96%	0	0.00%
2006	81,234	12,888	15.88%	0	0.00%	1,027	1.41%	712	7.78%	0	0.00%
2007	85,175	12,068	14.18%	0	0.00%	1,092	1.29%	752	6.67%	0	0.00%
2008	85,540	10,430	12.20%	0	0.00%	934	1.09%	418	4.15%	0	0.00%
2009	98,429	10,109	10.28%	1	0.55%	1,030	1.05%	418	4.33%	0	0.00%
2010	94,365	9,364	9.93%	1	0.47%	998	1.06%	367	3.07%	0	0.00%
2011	110,905	9,077	8.19%	0	0.00%	1,056	0.95%	276	2.87%	0	0.00%
2012	132,726	10,146	7.65%	0	0.00%	1,173	0.88%	249	2.48%	0	0.00%
2013	122,840	8,721	7.11%	1	0.48%	969	0.79%	164	2.15%	0	0.00%
2014	151,069	9,312	6.17%	1	0.35%	833	0.55%	104	1.44%	0	0.00%
2015	151,380	8,956	5.92%	0	0.00%	742	0.49%	101	1.41%	0	0.00%
2016	182,251	11,349	6.23%	0	0.00%	744	0.41%	66	0.90%	0	0.00%
2017	261,883	14,725	5.63%	0	0.00%	1,034	0.42%	54	0.73%	0	0.00%
2018	292,467	10,990	3.76%	1	0.21%	1,130	0.41%	74	0.63%	0	0.00%
Total:	2,197,930	221,229	10.09%	10	0.21%	21,513	1.01%	10,707	1.20%	3	0.00%

Note: %(Not Ready) = Not Ready/(Total Vehicles-Unsupported)*100.

[1] High rates of "Not Ready" EGR sensors in MY2019 vehicles have been noted and are currently under investigation.

Appendix B

Table B-1-b-i: Summary of NYMA OBD II Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non Diesel Trucks

Model Year	Total Initial Tests	Passed OBD II	Failed OBD II	% Failed	--- Passed OBD II --- Passed Gas Cap	--- Passed OBD II --- Failed Gas Cap	--- Failed OBD II --- Passed Gas Cap	--- Failed OBD II --- Failed Gas Cap	MIL Command ----- On ----- No DTC	MIL Command ----- On ----- With DTC	MIL Command ----- Not On ----- No DTC	MIL Command ----- Not On ----- With DTC	Rec'd Waiver	Waiver Rate
1997	6,465	5,685	780	12.06%	5,684	1	780	0	0	315	6,130	0	7	0.90%
1998	8,064	7,095	968	12.00%	7,094	1	968	0	0	333	7,700	0	3	0.31%
1999	11,893	10,426	1,465	12.32%	10,425	0	1,464	1	0	486	11,338	0	9	0.61%
2000	17,004	15,080	1,922	11.30%	15,079	0	1,922	0	1	605	16,311	0	16	0.83%
2001	20,991	17,560	3,428	16.33%	17,557	1	3,427	1	0	678	20,226	0	33	0.96%
2002	32,607	28,339	4,266	13.08%	28,334	2	4,264	2	1	872	31,596	0	41	0.96%
2003	42,133	37,105	5,023	11.92%	37,103	2	5,022	1	0	1,007	40,883	0	42	0.84%
2004	58,545	52,443	6,099	10.42%	52,441	0	6,099	0	0	1,170	57,178	0	43	0.71%
2005	61,223	54,737	6,479	10.58%	54,736	1	6,477	2	0	1,062	59,989	0	44	0.68%
2006	64,216	58,150	6,063	9.44%	58,149	1	6,062	1	0	1,067	62,992	0	46	0.76%
2007	72,727	66,686	6,035	8.30%	66,681	5	6,033	2	1	991	71,558	1	64	1.06%
2008	80,473	74,283	6,185	7.69%	74,278	3	6,184	1	0	1,014	79,305	0	38	0.61%
2009	54,239	50,083	4,154	7.66%	50,080	2	4,152	1	0	663	53,483	1	28	0.67%
2010	70,937	66,140	4,793	6.76%	66,132	2	4,789	1	1	725	70,111	0	36	0.75%
2011	90,306	84,935	5,365	5.94%	84,931	2	5,365	0	0	754	89,439	0	34	0.63%
2012	90,616	86,065	4,546	5.02%	86,054	3	4,545	0	1	623	89,900	0	22	0.48%
2013	102,281	98,003	4,272	4.18%	97,994	4	4,272	0	0	512	101,654	0	27	0.63%
2014	114,663	110,274	4,384	3.82%	110,246	5	4,382	0	2	587	113,949	0	25	0.57%
2015	144,329	139,660	4,660	3.23%	139,620	5	4,655	0	0	568	143,614	0	11	0.24%
2016	149,062	145,039	4,016	2.69%	145,011	6	4,014	1	1	456	148,440	4	4	0.10%
2017	172,208	168,064	4,133	2.40%	168,033	9	4,131	0	1	412	171,581	2	2	0.05%
2018	199,766	194,141	5,619	2.81%	194,119	7	5,612	1	1	397	199,110	0	2	0.04%
2019	249,487	244,510	4,964	1.99%	244,503	6	4,960	3	2	404	248,738	21	1	0.02%
Total:	1,914,235	1,814,503	99,619	5.20%	1,814,284	62	94,619	15	10	15,701	1,895,225	29	578	0.58%

Appendix B

Table B-1-b-ii: Summary of NYMA OBD II Readiness Status Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non Diesel Trucks

Model Year	Total Initial Tests	Comprehensive Comp. Not Ready	%	Misfire Not Ready	%	Fuel Control Not Ready	%	Catalyst Not Ready	%	O2 Sensor Not Ready	%	ERG Not Ready	%
1997	6,465	0	0.00%	0	0.00%	0	0.00%	2861	44.38%	910	14.10%	527	14.00%
1998	8,064	0	0.00%	0	0.00%	1	0.01%	2891	35.87%	757	9.39%	551	12.17%
1999	11,893	0	0.00%	1	0.01%	0	0.00%	3534	29.74%	1261	10.61%	777	11.62%
2000	17,004	0	0.00%	0	0.00%	1	0.01%	4003	23.56%	1876	11.04%	932	10.65%
2001	20,991	79	0.38%	7	0.03%	6	0.03%	3499	16.68%	2075	9.89%	781	8.19%
2002	32,607	301	0.92%	2	0.01%	5	0.02%	4313	13.24%	2805	8.61%	664	5.92%
2003	42,133	300	0.71%	9	0.02%	61	0.14%	4719	11.28%	3265	7.79%	835	5.73%
2004	58,545	56	0.10%	10	0.02%	22	0.04%	6253	10.69%	4350	7.43%	923	4.93%
2005	61,223	15	0.02%	1	0.00%	2	0.00%	7043	11.51%	5003	8.18%	1186	5.24%
2006	64,216	7	0.01%	2	0.00%	1	0.00%	6054	9.43%	4919	7.66%	1214	5.14%
2007	72,727	0	0.00%	0	0.00%	3	0.00%	5425	7.46%	4926	6.78%	1334	3.99%
2008	80,473	3	0.00%	0	0.00%	3	0.00%	5557	6.91%	4902	6.09%	1555	4.16%
2009	54,239	0	0.00%	3	0.01%	4	0.01%	3738	6.89%	3348	6.17%	1274	3.56%
2010	70,937	0	0.00%	2	0.00%	189	0.27%	4013	5.66%	4815	6.79%	1650	2.76%
2011	90,306	0	0.00%	1	0.00%	720	0.80%	4239	4.70%	6319	7.00%	2096	2.37%
2012	90,616	1	0.00%	1	0.00%	2091	2.31%	3014	3.33%	5174	5.71%	2145	2.38%
2013	102,281	1	0.00%	2	0.00%	2312	2.26%	2965	2.90%	4710	4.61%	1819	1.79%
2014	114,663	8	0.01%	4	0.00%	3567	3.11%	2945	2.57%	4857	4.24%	1700	1.49%
2015	144,329	4	0.00%	2	0.00%	2737	1.90%	3143	2.18%	4566	3.16%	2129	1.48%
2016	149,062	5	0.00%	5	0.00%	2375	1.59%	2572	1.73%	3679	2.47%	1828	1.23%
2017	172,208	3	0.00%	0	0.00%	2644	1.54%	2647	1.54%	3960	2.30%	1832	1.06%
2018	199,766	7	0.00%	4	0.00%	4238	2.12%	3736	1.87%	5224	2.62%	3394	1.70%
2019	249,487	12	0.00%	11	0.00%	3302	1.32%	2892	1.16%	4035	1.62%	15743	[1]6.31%
Total:	1,914,235	802	0.04%	67	0.00%	24,284	1.27%	92,056	4.81%	87,736	4.59%	46,889	2.93%

Model Year	Total Initial Tests	Evaporative Systems Not Ready	%	Heated Catalyst Not Ready	%	O2 Sensor Heater Not Ready	%	Secondary Air Injection Not Ready	%	Air Conditioning Not Ready	%
1997	6,465	1428	41.36%	0	0.00%	660	10.65%	2	6.90%	0	0.00%
1998	8,064	3063	43.20%	1	3.13%	691	8.57%	38	19.39%	0	0.00%
1999	11,893	4732	42.94%	0	0.00%	1002	8.43%	147	21.65%	0	0.00%
2000	17,004	6119	37.67%	0	0.00%	1396	8.21%	258	19.62%	0	0.00%
2001	20,991	7330	34.97%	0	0.00%	1294	6.17%	291	18.03%	0	0.00%
2002	32,607	10709	32.87%	0	0.00%	1666	5.14%	174	11.53%	0	0.00%
2003	42,133	14958	35.70%	0	0.00%	1430	3.54%	180	9.81%	0	0.00%
2004	58,545	17217	29.44%	0	0.00%	1507	2.62%	370	10.62%	0	0.00%
2005	61,223	16137	26.37%	0	0.00%	2055	3.58%	442	8.97%	2	0.85%
2006	64,216	15602	24.31%	0	0.00%	1678	3.22%	399	7.28%	0	0.00%
2007	72,727	15787	21.71%	0	0.00%	1345	1.89%	290	6.07%	2	0.77%
2008	80,473	14838	18.44%	1	0.62%	1466	1.82%	248	4.76%	0	0.00%
2009	54,239	9266	17.09%	1	1.01%	972	1.79%	141	5.18%	1	1.02%
2010	70,937	10255	14.47%	4	3.39%	1230	1.73%	217	4.61%	0	0.00%
2011	90,306	11616	12.87%	0	0.00%	1214	1.34%	176	3.76%	0	0.00%
2012	90,616	10436	11.52%	1	0.93%	1109	1.22%	153	2.53%	0	0.00%
2013	102,281	9369	9.16%	0	0.00%	1241	1.21%	88	1.61%	0	0.00%
2014	114,663	9329	8.14%	2	1.26%	1132	0.99%	67	1.15%	0	0.00%
2015	144,329	9758	6.76%	1	0.51%	1195	0.83%	71	0.88%	0	0.00%
2016	149,062	7819	5.25%	0	0.00%	899	0.60%	36	0.75%	0	0.00%
2017	172,208	7839	4.56%	3	1.23%	834	0.48%	42	0.71%	0	0.00%
2018	199,766	9010	4.52%	3	0.87%	973	0.49%	69	0.82%	0	0.00%
2019	249,487	7254	2.91%	1	0.29%	867	0.37%	47	0.46%	0	0.00%
Total:	1,914,235	229,871	12.05%	18	0.48%	27,856	1.48%	3,946	4.03%	5	0.13%

Note: %(Not Ready) = Not Ready/(Total Vehicles-Unsupported)*100.

[1] High rates of "Not Ready" EGR sensors in MY2019 vehicles have been noted and are currently under investigation.

Appendix B

Table B-2-a-i: Summary of Upstate OBD II Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non Diesel Vehicles

Model Year	Total Initial Tests	Passed OBD II	Failed OBD II	% Failed	--- Passed OBD II --- Passed Gas Cap	Failed Gas Cap	--- Failed OBD II --- Passed Gas Cap	Failed Gas Cap	MIL Command ----- On ----- No DTC	With DTC	MIL Command ----- Not On ----- No DTC	With DTC	Rec'd Waiver	Waiver Rate
1997	6,139	5,535	604	9.84%	5,535	0	604	0	1	158	5,943	0	5	0.83%
1998	8,276	7,443	830	10.03%	7,441	1	829	0	0	211	8,030	0	3	0.36%
1999	11,189	10,029	1,159	10.36%	10,028	0	1,159	0	0	274	10,862	0	5	0.43%
2000	15,116	13,562	1,546	10.23%	13,558	0	1,546	0	0	393	14,655	0	6	0.39%
2001	18,412	15,712	2,694	14.63%	15,710	1	2,693	1	0	451	17,883	0	17	0.63%
2002	23,981	20,812	3,169	13.21%	20,808	0	3,168	0	0	592	23,293	0	22	0.69%
2003	32,319	28,668	3,644	11.28%	28,660	3	3,641	1	0	623	31,457	0	19	0.52%
2004	39,568	35,187	4,369	11.04%	35,181	3	4,366	3	1	689	38,708	2	29	0.66%
2005	52,545	47,377	5,151	9.80%	47,372	4	5,150	0	0	838	51,500	0	31	0.60%
2006	61,153	55,254	5,890	9.63%	55,251	3	5,890	0	0	1,005	59,930	0	34	0.58%
2007	77,046	70,684	6,342	8.23%	70,676	5	6,341	1	1	1,140	75,600	1	43	0.68%
2008	87,879	81,037	6,837	7.78%	81,034	3	6,836	1	1	1,144	86,440	1	45	0.66%
2009	90,607	84,409	6,192	6.83%	84,407	1	6,187	5	0	1,005	89,373	0	43	0.69%
2010	101,376	95,642	5,732	5.65%	95,640	2	5,731	1	1	950	100,208	1	22	0.38%
2011	101,722	96,464	5,252	5.16%	96,456	4	5,252	0	1	755	100,740	0	26	0.50%
2012	126,179	120,344	5,830	4.62%	120,342	1	5,829	1	0	827	125,016	2	24	0.41%
2013	135,770	130,256	5,509	4.06%	130,250	1	5,506	2	0	769	134,815	4	23	0.42%
2014	138,522	133,842	4,678	3.38%	133,815	7	4,676	0	0	695	137,688	0	14	0.30%
2015	148,408	144,177	4,225	2.85%	144,157	3	4,223	1	0	568	147,643	0	8	0.19%
2016	149,066	145,458	3,601	2.42%	145,452	4	3,600	1	0	412	148,489	0	6	0.17%
2017	160,441	157,107	3,328	2.07%	157,092	6	3,328	0	0	256	159,975	6	2	0.06%
2018	216,763	211,915	4,832	2.23%	211,904	6	4,832	0	1	220	216,277	3	0	0.00%
2019	214,766	210,910	3,844	1.79%	210,893	16	3,844	0	1	170	214,271	9	1	0.03%
Total:	2,017,243	1,921,824	95,258	4.72%	1,921,662	74	95,231	18	8	14,145	1,998,796	29	428	0.45%

Appendix B

Table B-2-a-ii: Summary of Upstate OBD II Readiness Status Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non Diesel Vehicles

Model Year	Total Initial Tests	Comprehensive Comp. Not Ready	%	Misfire Not Ready	%	Fuel Control Not Ready	%	Catalyst Not Ready	%	O2 Sensor Not Ready	%	EGR Not Ready	%
1997	6,139	0	0.00%	0	0.00%	0	0.00%	1,508	24.68%	867	14.17%	548	11.88%
1998	8,276	0	0.00%	0	0.00%	0	0.00%	1,840	22.30%	982	11.90%	617	11.70%
1999	11,189	30	0.27%	1	0.01%	15	0.13%	2,245	20.14%	1,076	9.64%	742	10.63%
2000	15,116	56	0.39%	8	0.06%	12	0.08%	3,038	20.16%	1,425	9.44%	774	8.94%
2001	18,412	112	0.61%	11	0.06%	21	0.11%	2,844	15.51%	1,422	7.75%	774	7.71%
2002	23,981	284	1.18%	11	0.05%	39	0.16%	3,304	13.81%	1,736	7.26%	783	6.91%
2003	32,319	245	0.76%	29	0.09%	122	0.38%	3,786	11.77%	2,045	6.35%	888	5.93%
2004	39,568	267	0.67%	16	0.04%	40	0.10%	4,644	11.77%	2,532	6.42%	1,109	5.93%
2005	52,545	178	0.34%	4	0.01%	7	0.01%	4,985	9.51%	3,305	6.30%	1,485	5.62%
2006	61,153	20	0.03%	1	0.00%	2	0.00%	5,347	8.76%	3,707	6.07%	1,429	5.47%
2007	77,046	7	0.01%	0	0.00%	2	0.00%	5,429	7.06%	4,302	5.59%	1,246	4.22%
2008	87,879	0	0.00%	1	0.00%	0	0.00%	6,136	6.99%	4,902	5.58%	1,304	4.02%
2009	90,607	0	0.00%	0	0.00%	1	0.00%	5,184	5.73%	4,752	5.25%	1,918	2.92%
2010	101,376	0	0.00%	0	0.00%	59	0.06%	4,393	4.34%	4,753	4.69%	2,233	2.32%
2011	101,722	0	0.00%	0	0.00%	272	0.27%	3,672	3.61%	4,720	4.64%	2,116	2.15%
2012	126,179	1	0.00%	0	0.00%	1,502	1.19%	3,826	3.03%	5,384	4.27%	2,308	1.87%
2013	135,770	4	0.00%	3	0.00%	2,479	1.83%	3,477	2.56%	5,158	3.80%	2,176	1.62%
2014	138,522	4	0.00%	0	0.00%	2,418	1.75%	2,875	2.08%	4,093	2.96%	1,976	1.44%
2015	148,408	0	0.00%	3	0.00%	2,410	1.62%	2,601	1.75%	3,553	2.39%	2,032	1.38%
2016	149,066	0	0.00%	0	0.00%	2,069	1.39%	2,264	1.52%	2,951	1.98%	1,497	1.00%
2017	160,441	0	0.00%	0	0.00%	1,970	1.23%	2,040	1.27%	2,954	1.84%	1,470	0.92%
2018	216,763	5	0.00%	8	0.00%	3,461	1.60%	2,805	1.29%	4,235	1.95%	2,513	1.16%
2019	214,766	3	0.00%	1	0.00%	2,532	1.18%	2,192	1.02%	3,378	1.57%	3,940	[1]1.83%
Total:	2,017,243	1,216	0.06%	97	0.00%	19,433	0.96%	80,435	3.99%	74,232	3.68%	35,878	2.06%

Model Year	Total Initial Tests	Evaporative Systems Not Ready	%	Heated Catalyst Not Ready	%	O2 Sensor Heater Not Ready	%	Secondary Air Injection Not Ready	%	Air Conditioning Not Ready	%
1997	6,139	1,230	35.40%	0	0.00%	441	7.23%	198	15.34%	0	0.00%
1998	8,276	2,913	39.14%	0	0.00%	652	7.92%	448	20.58%	0	0.00%
1999	11,189	3,914	35.29%	1	1.67%	476	4.27%	316	11.63%	0	0.00%
2000	15,116	5,456	36.42%	0	0.00%	718	4.77%	502	10.08%	0	0.00%
2001	18,412	5,778	31.59%	1	1.16%	721	3.94%	549	10.23%	0	0.00%
2002	23,981	7,103	29.71%	0	0.00%	776	3.29%	592	9.64%	0	0.00%
2003	32,319	9,240	28.74%	2	0.74%	954	3.05%	593	10.89%	2	0.74%
2004	39,568	10,069	25.53%	0	0.00%	1,095	2.84%	640	10.85%	0	0.00%
2005	52,545	12,104	23.09%	0	0.00%	1,256	2.90%	649	9.89%	0	0.00%
2006	61,153	14,649	24.00%	0	0.00%	1,318	2.60%	660	8.31%	0	0.00%
2007	77,046	16,087	20.90%	0	0.00%	1,727	2.46%	808	6.50%	0	0.00%
2008	87,879	16,343	18.62%	0	0.00%	1,789	2.04%	844	5.65%	0	0.00%
2009	90,607	14,651	16.18%	0	0.00%	1,553	1.71%	660	3.88%	0	0.00%
2010	101,376	13,413	13.24%	0	0.00%	1,633	1.61%	445	3.80%	0	0.00%
2011	101,722	12,415	12.21%	0	0.00%	1,567	1.54%	340	3.02%	0	0.00%
2012	126,179	12,399	9.83%	0	0.00%	1,684	1.34%	403	2.68%	0	0.00%
2013	135,770	11,894	8.77%	2	0.96%	1,646	1.21%	447	2.61%	2	1.00%
2014	138,522	10,507	7.59%	3	1.66%	1,407	1.02%	255	2.01%	1	0.63%
2015	148,408	8,946	6.03%	0	0.00%	1,069	0.72%	94	1.40%	0	0.00%
2016	149,066	8,216	5.51%	0	0.00%	872	0.59%	85	1.35%	0	0.00%
2017	160,441	7,306	4.55%	0	0.00%	582	0.36%	36	0.54%	0	0.00%
2018	216,763	9,579	4.42%	1	0.31%	782	0.37%	27	0.50%	1	0.32%
2019	214,766	6,994	3.26%	0	0.00%	706	0.34%	44	0.48%	0	0.00%
Total:	2,017,243	221,206	10.99%	10	0.21%	25,424	1.29%	9,635	4.94%	6	0.12%

Note: %(Not Ready) = Not Ready/(Total Vehicles-Unsupported)*100.

[1] High rates of "Not Ready" EGR sensors in MY2019 vehicles have been noted and are currently under investigation.

Appendix B

Table B-2-b-i: Summary of Upstate OBD II Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non Diesel Trucks

Model Year	Total Initial Tests	Passed OBD II	Failed OBD II	% Failed	--- Passed OBD II --- Passed Gas Cap	Failed Gas Cap	--- Failed OBD II --- Passed Gas Cap	Failed Gas Cap	MIL Command ----- On ----- No DTC	With DTC	MIL Command ----- Not On ----- No DTC	With DTC	Rec'd Waiver	Waiver Rate
1997	7,221	6,439	781	10.82%	6,439	0	781	0	0	302	6,893	0	2	0.26%
1998	8,819	7,702	1,116	12.65%	7,701	0	1,116	0	0	327	8,453	0	4	0.36%
1999	10,802	9,526	1,274	11.79%	9,526	0	1,274	0	0	373	10,372	0	8	0.63%
2000	13,978	12,377	1,598	11.43%	12,374	0	1,596	0	2	363	13,544	0	8	0.50%
2001	16,878	13,826	3,051	18.08%	13,820	2	3,046	3	0	520	16,296	0	21	0.69%
2002	24,891	21,181	3,706	14.89%	21,173	2	3,705	1	0	671	24,106	0	22	0.59%
2003	33,982	29,269	4,708	13.85%	29,265	2	4,703	4	0	847	32,929	0	28	0.59%
2004	48,701	42,527	6,170	12.67%	42,524	1	6,168	1	1	1,058	47,474	0	25	0.41%
2005	54,267	48,126	6,140	11.31%	48,122	4	6,139	1	0	991	53,114	0	57	0.93%
2006	59,479	53,417	6,057	10.18%	53,413	4	6,056	1	0	984	58,358	0	40	0.66%
2007	67,887	61,808	6,074	8.95%	61,802	5	6,072	2	0	1,115	66,644	1	43	0.71%
2008	83,413	76,413	6,997	8.39%	76,412	1	6,994	2	0	1,179	82,106	0	58	0.83%
2009	55,402	51,233	4,166	7.52%	51,231	2	4,165	1	1	699	54,628	0	45	1.08%
2010	76,556	71,567	4,985	6.51%	71,557	5	4,984	1	0	794	75,644	0	43	0.86%
2011	101,579	95,887	5,686	5.60%	95,880	3	5,684	0	0	914	100,536	1	43	0.76%
2012	107,612	102,182	5,417	5.03%	102,177	4	5,417	0	0	800	106,701	0	36	0.66%
2013	114,345	109,728	4,614	4.04%	109,724	3	4,613	1	0	645	113,608	0	25	0.54%
2014	149,207	144,184	5,018	3.36%	144,170	6	5,017	0	1	817	148,285	0	25	0.50%
2015	171,301	166,796	4,499	2.63%	166,775	10	4,495	0	0	598	170,555	1	12	0.27%
2016	187,144	183,302	3,833	2.05%	183,287	7	3,832	1	1	463	186,490	0	6	0.16%
2017	204,380	200,379	3,985	1.95%	200,363	12	3,984	1	1	426	203,737	0	1	0.03%
2018	204,763	200,621	4,133	2.02%	200,601	6	4,132	0	0	229	204,282	0	0	0.00%
2019	241,334	237,714	3,610	1.50%	237,702	10	3,609	1	0	247	240,721	83	0	0.00%
Total:	2,043,941	1,946,204	97,618	4.78%	1,946,038	89	97,582	21	7	15,362	2,025,476	86	552	0.57%

Appendix B

Table B-2-b-ii: Summary of Upstate OBD II Readiness Status Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non Diesel Trucks

Model Year	Total Initial Tests	Comprehensive Comp. Not Ready	%	Misfire Not Ready	%	Fuel Control Not Ready	%	Catalyst Not Ready	%	O2 Sensor Not Ready	%	EGR Not Ready	%
1997	7,221	0	0.00%	0	0.00%	0	0.00%	2,387	33.13%	903	12.58%	498	10.94%
1998	8,819	0	0.00%	0	0.00%	0	0.00%	2,725	30.94%	858	9.73%	580	10.38%
1999	10,802	0	0.00%	0	0.00%	0	0.00%	2,926	27.16%	973	9.01%	573	8.66%
2000	13,978	0	0.00%	1	0.01%	1	0.01%	3,555	25.47%	1,337	9.57%	692	8.76%
2001	16,878	33	0.20%	0	0.00%	0	0.00%	3,036	18.00%	1,437	8.52%	659	6.95%
2002	24,891	119	0.48%	4	0.02%	3	0.01%	3,766	15.14%	1,919	7.71%	393	5.64%
2003	33,982	103	0.30%	6	0.02%	21	0.06%	4,517	13.39%	2,582	7.62%	485	5.79%
2004	48,701	19	0.04%	3	0.01%	13	0.03%	6,085	12.51%	3,538	7.27%	756	5.47%
2005	54,267	0	0.00%	1	0.00%	0	0.00%	6,467	11.94%	3,849	7.11%	907	4.75%
2006	59,479	0	0.00%	0	0.00%	0	0.00%	5,597	9.43%	3,840	6.47%	1,099	5.32%
2007	67,887	1	0.00%	0	0.00%	2	0.00%	5,255	7.76%	4,177	6.16%	1,296	4.42%
2008	83,413	0	0.00%	1	0.00%	2	0.00%	6,014	7.22%	5,079	6.10%	1,605	4.43%
2009	55,402	0	0.00%	0	0.00%	0	0.00%	3,238	5.85%	3,322	6.00%	1,281	3.74%
2010	76,556	0	0.00%	1	0.00%	327	0.43%	3,577	4.68%	4,841	6.33%	1,815	2.82%
2011	101,579	0	0.00%	0	0.00%	973	0.96%	3,948	3.89%	6,199	6.11%	2,307	2.32%
2012	107,612	0	0.00%	1	0.00%	2,394	2.22%	3,490	3.25%	5,647	5.25%	2,409	2.26%
2013	114,345	5	0.00%	2	0.00%	2,828	2.47%	3,083	2.70%	4,558	3.99%	2,020	1.78%
2014	149,207	3	0.00%	1	0.00%	5,403	3.62%	3,141	2.11%	4,866	3.26%	2,106	1.41%
2015	171,301	1	0.00%	2	0.00%	2,690	1.57%	2,640	1.54%	4,161	2.43%	1,942	1.13%
2016	187,144	4	0.00%	3	0.00%	2,213	1.18%	2,207	1.18%	3,257	1.74%	1,616	0.86%
2017	204,380	4	0.00%	3	0.00%	2,313	1.13%	2,260	1.11%	3,444	1.69%	1,655	0.81%
2018	204,763	8	0.00%	3	0.00%	2,606	1.27%	2,348	1.15%	3,428	1.67%	1,922	0.94%
2019	241,334	5	0.00%	2	0.00%	2,409	1.00%	1,997	0.83%	2,876	1.19%	7,699	[1]3.19%
Total:	2,043,941	305	0.01%	34	0.00%	24,198	1.18%	84,259	4.13%	77,091	3.77%	36,315	2.08%

Model Year	Total Initial Tests	Evaporative Systems Not Ready	%	Heated Catalyst Not Ready	%	O2 Sensor Heater Not Ready	%	Secondary Air Injection Not Ready	%	Air Conditioning Not Ready	%
1997	7,221	1,210	44.78%	0	0.00%	938	13.17%	6	12.77%	0	0.00%
1998	8,819	3,591	50.51%	0	0.00%	954	10.82%	10	10.00%	0	0.00%
1999	10,802	4,580	49.17%	0	0.00%	977	9.05%	139	23.13%	0	0.00%
2000	13,978	5,391	42.23%	0	0.00%	1,238	8.86%	304	20.11%	0	0.00%
2001	16,878	6,759	40.09%	0	0.00%	1,216	7.21%	426	24.72%	0	0.00%
2002	24,891	9,125	36.67%	0	0.00%	1,614	6.53%	110	13.16%	0	0.00%
2003	33,982	14,294	42.20%	0	0.00%	1,213	3.85%	60	7.47%	0	0.00%
2004	48,701	17,246	35.45%	0	0.00%	1,643	3.40%	242	8.97%	0	0.00%
2005	54,267	15,484	28.59%	0	0.00%	2,652	5.17%	379	8.11%	6	2.65%
2006	59,479	17,180	28.93%	0	0.00%	2,498	4.75%	336	5.94%	6	2.74%
2007	67,887	17,934	26.46%	0	0.00%	1,994	2.98%	302	4.66%	5	2.25%
2008	83,413	19,372	23.27%	0	0.00%	2,254	2.71%	307	3.75%	0	0.00%
2009	55,402	10,986	19.85%	0	0.00%	1,469	2.65%	107	3.20%	0	0.00%
2010	76,556	12,698	16.60%	0	0.00%	1,735	2.27%	139	3.11%	0	0.00%
2011	101,579	13,822	13.62%	2	1.44%	1,828	1.80%	110	2.63%	0	0.00%
2012	107,612	12,166	11.31%	0	0.00%	1,717	1.60%	202	1.92%	0	0.00%
2013	114,345	10,736	9.39%	0	0.00%	1,756	1.54%	174	1.55%	0	0.00%
2014	149,207	11,807	7.92%	0	0.00%	1,747	1.17%	159	1.19%	0	0.00%
2015	171,301	10,827	6.32%	3	1.70%	1,430	0.83%	211	1.29%	1	0.61%
2016	187,144	8,600	4.60%	0	0.00%	1,104	0.59%	42	0.65%	0	0.00%
2017	204,380	7,802	3.82%	1	0.39%	1,047	0.51%	25	0.42%	3	1.19%
2018	204,763	7,107	3.47%	1	0.24%	831	0.41%	35	0.42%	0	0.00%
2019	241,334	6,232	2.58%	0	0.00%	903	0.39%	27	0.30%	0	0.00%
Total:	2,043,941	244,949	12.04%	7	0.00%	34,758	1.71%	3,852	3.05%	21	0.58%

Note: %(Not Ready) = Not Ready/(Total Vehicles-Unsupported)*100.

[1] High rates of "Not Ready" EGR sensors in MY2019 vehicles have been noted and are currently under investigation.

Appendix B

Table B-3-a-i: Summary of TLC OBD II Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non Diesel Vehicles

Model Year	Total Initial Tests	Passed OBD II	Failed OBD II	% Failed	--- Passed OBD II --- Passed Gas Cap	Failed Gas Cap	--- Failed OBD II --- Passed Gas Cap	Failed Gas Cap	MIL Command ----- On ----- No DTC	With DTC	MIL Command ----- Not On ----- No DTC	With DTC	Rec'd Waiver	Waiver Rate
1997	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
1998	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
1999	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
2000	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
2001	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
2002	5	3	2	40.00%	3	0	2	0	0	0	5	2	0	0.00%
2003	16	12	4	25.00%	12	0	4	0	0	1	26	1	0	0.00%
2004	12	8	4	33.33%	8	0	4	0	0	0	17	2	0	0.00%
2005	22	16	6	27.27%	16	0	6	0	1	0	33	0	0	0.00%
2006	26	22	4	15.38%	22	0	4	0	0	0	48	8	0	0.00%
2007	152	125	27	17.76%	125	0	27	0	0	8	203	19	0	0.00%
2008	116	88	28	24.14%	88	0	28	0	0	4	183	22	0	0.00%
2009	184	164	20	10.87%	164	0	20	0	0	3	334	29	0	0.00%
2010	310	267	43	13.87%	267	0	43	0	0	3	545	61	0	0.00%
2011	647	580	67	10.36%	580	0	67	0	0	16	1321	147	0	0.00%
2012	1,135	1,053	82	7.22%	1,053	0	82	0	0	9	1455	113	0	0.00%
2013	1,996	1,825	171	8.57%	1,825	0	171	0	0	17	2468	258	0	0.00%
2014	3,481	3,187	294	8.45%	3,187	0	294	0	0	23	4297	373	0	0.00%
2015	6,872	6,227	645	9.39%	6,227	0	645	0	0	78	8414	652	0	0.00%
2016	5,012	4,614	398	7.94%	4,614	0	398	0	0	40	6207	392	0	0.00%
2017	6,047	5,752	295	4.88%	5,752	0	295	0	0	17	7223	475	0	0.00%
2018	3,340	3,222	118	3.53%	3,222	0	118	0	0	10	3735	163	0	0.00%
2019	2,643	2,558	85	3.22%	2,558	0	85	0	0	6	2989	72	0	0.00%
2020	2,945	2,880	65	2.21%	2,880	0	65	0	0	3	3095	56	0	0.00%
2021	3,925	3,864	61	1.55%	3,864	0	61	0	0	1	3986	93	0	0.00%
2022	291	273	10	3.44%	273	0	10	0	0	0	297	1	0	0.00%
Total:	39,177	36,740	2,429	6.20%	36,740	0	2,429	0	1	239	46,881	2,939	0	0.00%

Appendix B

Table B-3-a-ii: Summary of TLC OBD II Readiness Status Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non Diesel Vehicles

Model Year	Total Initial Tests	Comprehensive Comp. Not Ready	Supported	%	Misfire Not Ready	Supported	%	Fuel Control Not Ready	Supported	%	Catalyst Not Ready	Supported	%	O2 Sensor Not Ready	Supported	%	ERG Not Ready	Supported	%
1997	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
1998	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
1999	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
2000	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
2001	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
2002	5	0	0	0.00%	0	0	0.00%	0	0	0.00%	1	0	20.00%	1	0	20.00%	0	3	0.00%
2003	16	0	0	0.00%	0	0	0.00%	0	0	0.00%	2	0	12.50%	1	0	6.25%	0	0	0.00%
2004	12	0	0	0.00%	0	0	0.00%	0	0	0.00%	2	0	16.67%	1	0	8.33%	2	0	16.67%
2005	22	0	0	0.00%	0	0	0.00%	0	0	0.00%	5	0	22.73%	3	0	13.64%	1	3	5.26%
2006	26	0	0	0.00%	0	0	0.00%	0	0	0.00%	2	0	7.69%	2	0	7.69%	2	5	9.52%
2007	152	0	0	0.00%	0	0	0.00%	0	0	0.00%	23	0	15.13%	9	0	5.92%	0	97	0.00%
2008	116	0	0	0.00%	0	0	0.00%	0	0	0.00%	22	0	18.97%	15	0	12.93%	3	81	8.57%
2009	184	0	0	0.00%	0	0	0.00%	0	0	0.00%	19	0	10.33%	12	0	6.52%	0	152	0.00%
2010	310	0	0	0.00%	0	0	0.00%	0	0	0.00%	26	0	8.39%	24	0	7.74%	12	14	4.05%
2011	647	0	0	0.00%	0	0	0.00%	1	0	0.15%	48	0	7.42%	51	0	7.88%	14	17	2.22%
2012	1,135	0	0	0.00%	0	0	0.00%	10	0	0.88%	51	0	4.49%	68	0	5.99%	12	12	1.07%
2013	1,996	0	0	0.00%	0	1	0.00%	51	1	2.56%	131	0	6.56%	119	0	5.96%	44	3	2.21%
2014	3,481	0	0	0.00%	0	0	0.00%	48	1	1.38%	199	1	5.72%	199	1	5.72%	102	3	2.93%
2015	6,872	0	0	0.00%	0	0	0.00%	128	2	1.86%	451	1	6.56%	437	1	6.36%	243	0	3.54%
2016	5,012	0	0	0.00%	0	0	0.00%	115	2	2.30%	306	0	6.11%	249	0	4.97%	112	0	2.23%
2017	6,047	0	0	0.00%	0	0	0.00%	130	0	2.15%	268	0	4.43%	190	0	3.14%	84	0	1.39%
2018	3,340	0	0	0.00%	0	0	0.00%	61	2	1.83%	53	0	1.59%	87	0	2.60%	45	0	1.35%
2019	2,643	0	0	0.00%	0	0	0.00%	49	0	1.85%	42	0	1.59%	64	0	2.42%	48	0	1.82%
2020	2,945	0	0	0.00%	0	0	0.00%	29	0	0.98%	23	0	0.78%	51	0	1.73%	45	0	1.53%
2021	3,925	0	0	0.00%	0	0	0.00%	18	0	0.46%	24	0	0.61%	58	0	1.48%	91	0	2.32%
2022	291	0		0.00%	0	0	0.00%	4	0	1.37%	5	0	1.72%	11	0	3.78%	53	0	18.21%
Total:	39,177	0	0	0.00%	0	1	0.00%	644	8	1.64%	1,703	2	4.35%	1,652	2	4.22%	913	390	2.35%

Model Year	Total Initial Tests	Evaporative Systems Not Ready	Supported	%	Heated Catalyst Not Ready	Supported	%	O2 Sensor Heater Not Ready	Supported	%	Secondary Air Injection Not Ready	Supported	%	Air Conditioning Not Ready	Supported	%
1997	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
1998	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
1999	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
2000	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
2001	0	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%	0	0	0.00%
2002	5	4	0	80.00%	0	5	0.00%	1	0	20.00%	0	5	0.00%	0	5	0.00%
2003	16	12	0	75.00%	0	15	0.00%	1	0	6.25%	0	15	0.00%	0	#	0.00%
2004	12	7	0	58.33%	0	12	0.00%	1	0	8.33%	0	12	0.00%	0	#	0.00%
2005	22	16	0	72.73%	0	20	0.00%	2	3	10.53%	0	20	0.00%	0	#	0.00%
2006	26	13	0	50.00%	0	25	0.00%	2	3	8.70%	1	23	33.33%	0	#	0.00%
2007	152	46	0	30.26%	0	##	0.00%	0	62	0.00%	0	##	0.00%	0	#	0.00%
2008	116	41	0	35.34%	0	##	0.00%	4	0	3.45%	2	##	66.67%	0	#	0.00%
2009	184	42	0	22.83%	0	##	0.00%	1	0	0.54%	0	##	0.00%	0	#	0.00%
2010	310	64	0	20.65%	0	##	0.00%	4	0	1.29%	0	##	0.00%	0	#	0.00%
2011	647	106	0	16.38%	0	##	0.00%	10	1	1.55%	3	##	50.00%	0	#	0.00%
2012	1,135	170	0	14.98%	0	##	0.00%	3	0	0.26%	0	##	0.00%	0	#	0.00%
2013	1,996	333	1	16.69%	0	##	0.00%	30	0	1.50%	2	##	8.70%	0	#	0.00%
2014	3,481	556	1	15.98%	0	##	0.00%	58	1	1.67%	2	##	6.25%	0	#	0.00%
2015	6,872	1007	4	14.66%	0	##	0.00%	92	3	1.34%	1	##	3.23%	0	#	0.00%
2016	5,012	641	3	12.80%	0	##	0.00%	46	0	0.92%	1	##	4.76%	0	#	0.00%
2017	6,047	642	0	10.62%	0	##	0.00%	33	0	0.55%	0	##	0.00%	0	#	0.00%
2018	3,340	293	2	8.78%	0	##	0.00%	21	##	1.11%	0	##	0.00%	0	#	0.00%
2019	2,643	182	0	6.89%	0	##	0.00%	19	##	1.23%	0	##	0.00%	0	#	0.00%
2020	2,945	95	0	3.23%	0	##	0.00%	4	##	0.15%	0	##	0.00%	0	#	0.00%
2021	3,925	146	0	3.72%	0	##	0.00%	4	0	0.10%	0	##	0.00%	0	#	0.00%
2022	291	20	0	6.87%	0	##	0.00%	0	0	0.00%	0	##	0.00%	0	#	0.00%
Total	39,177	4,436	#	11.33%	0	##	0.00%	336	##	0.89%	12	##	3.97%	0	#	0.00%

Note: % (Not Ready) = Not Ready/(Total Vehicles-Unsupported)*100.

Appendix B

Table B-3-b-i: Summary of TLC OBD II Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non Diesel Trucks

Model Year	Total Initial Tests	Passed OBD II	Failed OBD II	% Failed	--- Passed OBD II --- Passed Gas Cap	--- Passed OBD II --- Failed Gas Cap	--- Failed OBD II --- Passed Gas Cap	--- Failed OBD II --- Failed Gas Cap	MIL Command ----- On ----- No DTC	MIL Command ----- On ----- With DTC	MIL Command ----- Not On ----- No DTC	MIL Command ----- Not On ----- With DTC	Rec'd Waiver	Waiver Rate
1997	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
1998	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
1999	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
2000	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
2001	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
2002	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
2003	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
2004	1	1	0	0.00%	1	0	0	0	0	0	0	1	0	0.00%
2005	5	5	0	0.00%	5	0	0	0	0	0	4	3	0	0.00%
2006	11	9	2	18.18%	9	0	2	0	0	0	14	4	0	0.00%
2007	25	22	3	12.00%	22	0	3	0	0	1	30	7	0	0.00%
2008	99	87	12	12.12%	87	0	12	0	0	1	137	27	0	0.00%
2009	163	133	30	18.40%	133	0	30	0	0	5	220	25	0	0.00%
2010	283	236	47	16.61%	236	0	47	0	0	2	431	38	0	0.00%
2011	633	557	76	12.01%	557	0	76	0	0	9	916	93	0	0.00%
2012	846	765	81	9.57%	765	0	81	0	0	11	1,208	101	0	0.00%
2013	864	816	48	5.56%	816	0	48	0	0	5	1,386	131	0	0.00%
2014	1,884	1,672	212	11.25%	1,672	0	212	0	0	35	2,721	249	0	0.00%
2015	3,265	3,053	212	6.49%	3,053	0	212	0	0	31	4,744	357	0	0.00%
2016	3,486	3,205	281	8.06%	3,205	0	281	0	0	31	4,731	404	0	0.00%
2017	4,851	4,643	208	4.29%	4,643	0	208	0	0	19	6,069	450	0	0.00%
2018	4,099	3,954	145	3.54%	3,954	0	145	0	0	19	4,659	337	0	0.00%
2019	4,115	3,943	172	4.18%	3,943	0	172	0	1	19	4,628	212	0	0.00%
2020	2,285	2,214	71	3.11%	2,214	0	71	0	1	1	2,531	69	0	0.00%
2021	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
2022	0	0	0	0.00%	0	0	0	0	0	0	0	0	0	0.00%
Total:	26,915	25,315	1,600	5.94%	25,315	0	1,600	0	2	189	34,429	2,508	0	0.00%

Appendix B

Table B-3-b-ii: Summary of TLC OBD II Readiness Status Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non Diesel Trucks

Model Year	Total Initial Tests	Comprehensive Comp. Not Ready	%	Misfire Not Ready	%	Fuel Control Not Ready	%	Catalyst Not Ready	%	O2 Sensor Not Ready	%	ERG Not Ready	%
1997	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1998	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1999	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2002	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2003	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2004	1	0	0.00%	0	0.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%
2005	5	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2006	11	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	9.09%	1	50.00%
2007	25	0	0.00%	0	0.00%	0	0.00%	2	8.00%	2	8.00%	0	0.00%
2008	99	0	0.00%	0	0.00%	0	0.00%	11	11.11%	6	6.06%	4	6.45%
2009	163	0	0.00%	0	0.00%	0	0.00%	20	12.27%	17	10.43%	2	1.53%
2010	283	0	0.00%	0	0.00%	0	0.00%	37	13.07%	39	13.78%	13	5.31%
2011	633	0	0.00%	0	0.00%	1	0.16%	58	9.16%	63	9.95%	31	4.91%
2012	846	0	0.00%	0	0.00%	8	0.95%	54	6.38%	61	7.21%	36	4.26%
2013	864	0	0.00%	0	0.00%	9	1.04%	34	3.94%	46	5.32%	9	1.04%
2014	1,884	0	0.00%	0	0.00%	66	3.50%	143	7.59%	190	10.08%	23	1.22%
2015	3,265	0	0.00%	0	0.00%	69	2.11%	145	4.44%	158	4.84%	52	1.59%
2016	3,486	0	0.00%	0	0.00%	128	3.67%	191	5.48%	236	6.77%	61	1.75%
2017	4,851	0	0.00%	0	0.00%	76	1.57%	121	2.49%	154	3.17%	41	0.85%
2018	4,099	0	0.00%	0	0.00%	62	1.51%	51	1.24%	85	2.07%	39	0.95%
2019	4,115	0	0.00%	0	0.00%	48	1.17%	58	1.41%	108	2.62%	147	3.57%
2020	2,285	0	0.00%	0	0.00%	16	0.70%	20	0.88%	55	2.41%	86	3.76%
2021	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2022	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	26,915	0	0.00%	0	0.00%	483	1.79%	946	3.51%	1,221	4.54%	545	2.04%

Model Year	Total Initial Tests	Evaporative Systems Not Ready	%	Heated Catalyst Not Ready	%	O2 Sensor Heater Not Ready	%	Secondary Air Injection Not Ready	%	Air Conditioning Not Ready	%
1997	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1998	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1999	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2002	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2003	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2004	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2005	5	2	40.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2006	11	3	27.27%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2007	25	4	16.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2008	99	36	36.36%	0	0.00%	2	2.02%	0	0.00%	0	0.00%
2009	163	57	34.97%	0	0.00%	13	7.98%	0	0.00%	0	0.00%
2010	283	87	30.74%	0	0.00%	27	9.54%	0	0.00%	0	0.00%
2011	633	144	22.75%	0	0.00%	34	5.37%	0	0.00%	0	0.00%
2012	846	156	18.44%	0	0.00%	30	3.55%	1	8.33%	0	0.00%
2013	864	123	14.24%	0	0.00%	7	0.81%	1	10.00%	0	0.00%
2014	1,884	421	22.35%	0	0.00%	18	0.96%	0	0.00%	0	0.00%
2015	3,265	466	14.27%	0	0.00%	12	0.37%	0	0.00%	0	0.00%
2016	3,486	530	15.22%	0	0.00%	19	0.55%	0	0.00%	0	0.00%
2017	4,851	422	8.70%	0	0.00%	15	0.31%	0	0.00%	0	0.00%
2018	4,099	301	7.35%	0	0.00%	17	0.41%	0	0.00%	0	0.00%
2019	4,115	389	9.45%	0	0.00%	18	0.59%	0	0.00%	0	0.00%
2020	2,285	229	10.02%	0	0.00%	4	0.00%	0	0.00%	0	0.00%
2021	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2022	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	26,915	3,370	12.52%	0	0.00%	216	0.84%	2	0.85%	0	0.00%

Note: % (Not Ready) = Not Ready/(Total Vehicles-Unsupported)*100.

Appendix C

Table C-1-a-i: Summary of NYMA OBD II Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Vehicles

Model Year	Total Initial Tests	Passed OBD II	Failed OBD II	% Failed	MIL Command ----- On ----- No DTC	MIL Command ----- On ----- With DTC	MIL Command ----- Not On ----- No DTC	MIL Command ----- Not On ----- With DTC	Rec'd Waiver	Waiver Rate
1997	1	1	0	0.00%	0	0	1	0	0	0.00%
1998	1	1	0	0.00%	0	0	1	0	0	0.00%
1999	1	1	0	0.00%	0	0	1	0	0	0.00%
2000	0	0	0	0.00%	0	0	0	0	0	0.00%
2001	1	1	0	0.00%	0	0	1	0	0	0.00%
2002	6	5	1	16.67%	0	1	5	0	0	0.00%
2003	4	4	0	0.00%	0	0	4	0	0	0.00%
2004	4	4	0	0.00%	0	0	4	0	0	0.00%
2005	5	4	1	20.00%	0	1	4	0	0	0.00%
2006	12	11	1	8.33%	0	0	11	0	0	0.00%
2007	4	4	0	0.00%	0	0	4	0	0	0.00%
2008	3	2	1	33.33%	0	0	3	0	0	0.00%
2009	5	4	1	20.00%	0	0	5	0	0	0.00%
2010	7	7	0	0.00%	0	0	7	0	0	0.00%
2011	15	12	3	20.00%	0	0	15	0	0	0.00%
2012	28	22	6	21.43%	0	2	26	0	0	0.00%
2013	45	36	9	20.00%	0	1	43	0	0	0.00%
2014	44	37	7	15.91%	0	0	44	0	0	0.00%
2015	34	28	6	17.65%	0	0	34	0	0	0.00%
2016	4	3	1	25.00%	0	0	4	0	0	0.00%
2017	73	63	10	13.70%	0	0	72	0	0	0.00%
2018	54	44	10	18.52%	0	1	52	0	0	0.00%
2019	39	32	7	17.95%	0	0	39	0	0	0.00%
Total:	390	326	64	16.41%	0	6	380	0	0	0.00%

Appendix C

Table C-1-a-ii: Summary of NYMA OBD II Readiness Status Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Vehicles

Model Year	Total Initial Tests	Comprehensive Comp. Not Ready	%	Misfire Not Ready	%	Fuel Control Not Ready	%	NMHC Catalyst Not Ready	%	Exhaust Gas Sensor Not Ready	%	VVT Not Ready	%
1997	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1998	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1999	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2002	6	1	20.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2003	4	1	25.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2004	4	1	25.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2005	5	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2006	12	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2007	4	0	0.00%	0	0.00%	0	0.00%	1	25.00%	0	0.00%	0	0.00%
2008	3	0	0.00%	0	0.00%	0	0.00%	1	33.33%	1	50.00%	0	0.00%
2009	5	0	0.00%	0	0.00%	0	0.00%	2	40.00%	1	20.00%	1	20.00%
2010	7	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	16.67%	0	0.00%
2011	15	0	0.00%	0	0.00%	1	6.67%	1	6.67%	3	20.00%	1	6.67%
2012	28	0	0.00%	0	0.00%	1	3.57%	4	14.29%	8	28.57%	4	14.29%
2013	45	0	0.00%	0	0.00%	3	6.98%	8	17.78%	7	15.56%	2	4.65%
2014	44	0	0.00%	0	0.00%	4	9.09%	5	20.00%	5	11.36%	4	9.09%
2015	34	0	0.00%	0	0.00%	2	5.88%	6	21.43%	6	17.65%	2	5.88%
2016	4	0	0.00%	0	0.00%	0	0.00%	1	50.00%	1	25.00%	0	0.00%
2017	73	0	0.00%	0	0.00%	4	5.48%	8	13.33%	8	10.96%	4	5.48%
2018	54	0	0.00%	0	0.00%	2	3.77%	4	12.12%	7	13.21%	7	13.21%
2019	39	0	0.00%	0	0.00%	3	7.69%	4	10.53%	6	15.38%	5	12.82%
Total:	390	3	0.79%	0	0.00%	20	5.22%	45	15.20%	54	14.75%	30	7.83%

Model Year	Total Initial Tests	Evaporative Systems Not Ready	%	NOx After Treatment Not Ready	%	PM Filter Not Ready	%	Boost Pressure Not Ready	%	Air Conditioning Not Ready	%
1997	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1998	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1999	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2002	6	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2003	4	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2004	4	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2005	5	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2006	12	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2007	4	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2008	3	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2009	5	0	0.00%	1	25.00%	1	25.00%	0	0.00%	0	0.00%
2010	7	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2011	15	0	0.00%	2	13.33%	6	40.00%	0	0.00%	0	0.00%
2012	28	0	0.00%	4	14.29%	9	32.14%	1	3.57%	0	0.00%
2013	45	0	0.00%	3	6.98%	7	15.56%	2	4.44%	0	0.00%
2014	44	0	0.00%	2	4.76%	10	22.73%	2	4.55%	0	0.00%
2015	34	0	0.00%	4	11.76%	7	20.59%	3	8.82%	0	0.00%
2016	4	0	0.00%	0	0.00%	1	25.00%	0	0.00%	0	0.00%
2017	73	0	0.00%	6	9.09%	12	16.44%	4	5.48%	0	0.00%
2018	54	0	0.00%	4	8.16%	10	18.87%	4	7.55%	0	0.00%
2019	39	0	0.00%	4	10.26%	6	15.38%	4	10.26%	0	0.00%
Total:	390	0	0.00%	30	9.06%	69	19.17%	20	5.80%	0	0.00%

Note: %(Not Ready) = Not Ready/(Total Vehicles-Unsupported)*100.

Appendix C

Table C-1-b-i: Summary of NYMA OBD II Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Trucks

Model Year	Total Initial Tests	Passed OBD II	Failed OBD II	% Failed	MIL Command ----- On ----- No DTC	MIL Command ----- On ----- With DTC	MIL Command ----- Not On ----- No DTC	MIL Command ----- Not On ----- With DTC	Rec'd Waiver	Waiver Rate
1997	1	1	0	0.00%	0	0	1	0	0	0.00%
1998	0	0	0	0.00%	0	0	0	0	0	0.00%
1999	0	0	0	0.00%	0	0	0	0	0	0.00%
2000	0	0	0	0.00%	0	0	0	0	0	0.00%
2001	1	1	0	0.00%	0	0	1	0	0	0.00%
2002	0	0	0	0.00%	0	0	0	0	0	0.00%
2003	0	0	0	0.00%	0	0	0	0	0	0.00%
2004	1	1	0	0.00%	0	0	1	0	0	0.00%
2005	4	3	1	25.00%	0	0	0	0	0	0.00%
2006	2	2	0	0.00%	0	0	2	0	0	0.00%
2007	3	2	1	33.33%	0	1	2	0	0	0.00%
2008	13	11	2	15.38%	0	0	12	0	0	0.00%
2009	12	9	3	25.00%	0	2	10	0	0	0.00%
2010	18	13	5	27.78%	0	0	18	0	0	0.00%
2011	29	27	2	6.90%	0	0	29	0	0	0.00%
2012	34	33	1	2.94%	0	0	34	0	0	0.00%
2013	37	30	7	18.92%	0	0	37	0	0	0.00%
2014	88	69	19	21.59%	0	3	85	0	0	0.00%
2015	99	81	18	18.18%	0	1	97	0	0	0.00%
2016	125	105	20	16.00%	0	2	123	0	0	0.00%
2017	149	126	23	15.44%	0	4	144	0	0	0.00%
2018	218	174	44	20.18%	0	0	218	0	0	0.00%
2019	39	32	7	17.95%	0	0	39	0	0	0.00%
Total:	873	720	153	17.53%	0	13	852	0	0	0.00%

Appendix C

Table C-1-b-ii: Summary of NYMA OBD II Readiness Status Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Trucks

Model Year	Total Initial Tests	Comprehensive Comp. Not Ready	%	Misfire Not Ready	%	Fuel Control Not Ready	%	NMHC Catalyst Not Ready	%	Exhaust Gas Sensor Not Ready	%	VVT Not Ready	%
1997	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1998	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1999	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	1	1	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2002	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2003	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2004	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2005	4	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2006	2	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	50.00%
2007	3	0	0.00%	1	33.33%	0	0.00%	0	0.00%	0	0.00%	1	33.33%
2008	13	0	0.00%	0	0.00%	0	0.00%	1	50.00%	0	0.00%	1	7.69%
2009	12	0	0.00%	0	0.00%	0	0.00%	4	33.33%	2	16.67%	2	16.67%
2010	18	0	0.00%	0	0.00%	5	27.78%	8	44.44%	8	44.44%	5	27.78%
2011	29	0	0.00%	0	0.00%	5	17.24%	4	13.79%	7	24.14%	1	3.45%
2012	34	0	0.00%	0	0.00%	2	5.88%	3	8.82%	3	8.82%	1	2.94%
2013	37	0	0.00%	0	0.00%	7	18.92%	8	21.62%	7	18.92%	8	21.62%
2014	88	0	0.00%	0	0.00%	13	14.77%	19	23.75%	15	17.24%	11	12.64%
2015	99	0	0.00%	1	1.01%	5	5.05%	12	15.00%	13	13.13%	14	14.14%
2016	125	0	0.00%	0	0.00%	7	5.60%	18	15.38%	15	12.00%	10	8.06%
2017	149	0	0.00%	0	0.00%	8	5.37%	19	13.10%	20	13.42%	7	4.70%
2018	218	0	0.00%	0	0.00%	15	6.88%	33	16.75%	49	22.48%	33	15.14%
2019	39	1	2.56%	0	0.00%	3	7.69%	5	13.89%	7	18.42%	6	15.79%
Total:	873	2	0.23%	2	0.23%	70	8.04%	134	16.94%	146	17.14%	101	11.64%

Model Year	Total Initial Tests	Evaporative Systems Not Ready	%	Nox After Treatment Not Ready	%	PM Filter Not Ready	%	Boost Pressure Not Ready	%	Air Conditioning Not Ready	%
1997	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1998	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1999	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2002	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2003	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2004	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2005	4	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2006	2	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2007	3	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2008	13	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2009	12	0	0.00%	4	33.33%	1	8.33%	1	50.00%	0	0.00%
2010	18	0	0.00%	5	27.78%	11	61.11%	3	16.67%	0	0.00%
2011	29	0	0.00%	2	6.90%	6	20.69%	1	3.57%	0	0.00%
2012	34	0	0.00%	1	3.03%	15	44.12%	1	2.94%	0	0.00%
2013	37	1	100.00%	7	19.44%	13	35.14%	7	19.44%	0	0.00%
2014	88	0	0.00%	15	17.24%	27	31.40%	11	12.64%	0	0.00%
2015	99	1	50.00%	11	11.34%	21	21.43%	5	5.10%	0	0.00%
2016	125	0	0.00%	11	8.87%	32	25.81%	6	4.80%	0	0.00%
2017	149	0	0.00%	15	10.87%	22	14.77%	6	4.03%	0	0.00%
2018	218	0	0.00%	25	12.95%	52	23.85%	23	10.55%	0	0.00%
2019	39	0	0.00%	3	8.11%	11	28.95%	2	5.41%	0	0.00%
Total:	873	2	18.18%	99	12.24%	211	24.85%	66	7.89%	0	0.00%

Note: %(Not Ready) = Not Ready/(Total Vehicles-Unsupported)*100.

Appendix C

Table C-2-a-i: Summary of Upstate OBD II Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Vehicles

Model Year	Total Initial Tests	Passed OBD II	Failed OBD II	% Failed	MIL Command ----- On ----- No DTC	MIL Command ----- On ----- With DTC	MIL Command ----- Not On ----- No DTC	MIL Command ----- Not On ----- With DTC	Rec'd Waiver	Waiver Rate
1997	30	20	10	33.33%	0	8	21	0	1	0.00%
1998	85	79	6	7.06%	0	4	80	0	1	16.67%
1999	150	141	9	6.00%	0	9	141	0	0	0.00%
2000	109	99	10	9.17%	0	7	99	0	0	0.00%
2001	139	128	11	7.91%	1	9	128	0	0	0.00%
2002	303	279	24	7.92%	0	23	279	0	0	0.00%
2003	432	392	39	9.03%	0	36	393	0	0	0.00%
2004	208	190	18	8.65%	0	10	197	0	1	0.00%
2005	314	290	24	7.64%	0	13	300	0	0	0.00%
2006	425	399	26	6.12%	0	9	416	0	0	0.00%
2007	46	43	3	6.52%	0	2	44	0	0	0.00%
2008	60	50	10	16.67%	0	4	54	0	0	0.00%
2009	156	142	14	8.97%	0	2	153	0	0	0.00%
2010	223	182	41	18.39%	0	10	212	0	1	2.44%
2011	738	634	104	14.09%	0	19	719	0	1	0.96%
2012	1226	1073	153	12.48%	0	35	1188	0	1	0.65%
2013	1484	1337	147	9.91%	0	20	1462	0	2	1.36%
2014	2378	2167	208	8.75%	0	41	2332	0	2	0.96%
2015	2105	2010	95	4.51%	0	11	2090	0	0	0.00%
2016	185	175	10	5.41%	0	0	185	0	1	10.00%
2017	310	274	36	11.61%	0	4	305	0	0	0.00%
2018	476	427	49	10.29%	0	7	469	0	0	0.00%
2019	115	97	18	15.65%	0	2	111	0	0	0.00%
Total:	11,667	10,608	1,055	9.04%	1	277	11,378	0	11	1.04%

Appendix C

Table C-2-a-ii: Summary of Upstate OBD II Readiness Status Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Vehicles

Model Year	Total Initial Tests	Comprehensive Comp. Not Ready	%	Misfire Not Ready	%	Fuel Control Not Ready	%	NMHC Catalyst Not Ready	%	Exhaust Gas Sensor Not Ready	%	VVT Not Ready	%
1997	30	0	0.00%	0	0.00%	0	0.00%	1	50.00%	1	50.00%	10	33.33%
1998	85	2	2.35%	3	3.57%	2	9.52%	0	0.00%	0	0.00%	29	34.12%
1999	150	5	3.36%	5	3.45%	4	6.78%	1	25.00%	0	0.00%	46	31.29%
2000	109	17	15.60%	16	14.68%	12	11.11%	0	0.00%	0	0.00%	15	13.89%
2001	139	9	6.47%	14	10.07%	7	5.04%	0	0.00%	0	0.00%	9	6.47%
2002	303	27	8.97%	25	8.31%	15	5.02%	0	0.00%	0	0.00%	31	10.40%
2003	432	50	11.63%	46	10.67%	44	10.26%	1	4.17%	0	0.00%	56	13.05%
2004	208	17	8.17%	4	1.95%	8	3.88%	0	0.00%	9	4.52%	17	8.63%
2005	314	27	12.74%	10	3.22%	11	3.54%	0	0.00%	13	6.19%	36	11.61%
2006	425	3	0.95%	21	4.95%	2	0.47%	0	0.00%	19	6.03%	40	9.93%
2007	46	0	0.00%	1	2.17%	0	0.00%	6	21.43%	2	7.14%	1	2.17%
2008	60	0	0.00%	1	1.67%	0	0.00%	13	26.00%	3	7.89%	2	3.39%
2009	156	0	0.00%	3	1.96%	1	0.66%	18	11.76%	12	8.89%	11	7.24%
2010	223	0	0.00%	5	2.27%	8	3.70%	30	13.89%	46	20.91%	29	13.36%
2011	738	0	0.00%	14	1.91%	26	3.60%	64	8.86%	87	11.89%	70	9.68%
2012	1,226	0	0.00%	26	2.12%	11	0.91%	102	8.37%	125	10.20%	75	6.17%
2013	1,484	0	0.00%	25	1.69%	17	1.16%	119	8.07%	115	7.75%	69	4.70%
2014	2,378	0	0.00%	19	0.80%	53	2.25%	119	6.16%	179	7.54%	86	3.64%
2015	2,105	0	0.00%	13	0.62%	57	2.71%	73	3.72%	88	4.19%	46	2.19%
2016	185	0	0.00%	0	0.00%	7	3.78%	7	6.86%	9	4.89%	4	2.17%
2017	310	0	0.00%	0	0.00%	7	2.26%	30	13.33%	42	13.55%	13	4.19%
2018	476	0	0.00%	3	0.63%	16	3.36%	38	11.14%	51	10.71%	27	5.67%
2019	115	0	0.00%	1	0.87%	8	6.96%	13	12.15%	14	12.17%	12	10.43%
Total:	11,697	157	1.37%	255	2.19%	316	2.77%	635	7.39%	815	8.02%	734	6.34%

Model Year	Total Initial Tests	Evaporative Systems Not Ready	%	Nox After Treatment Not Ready	%	PM Filter Not Ready	%	Boost Pressure Not Ready	%	Air Conditioning Not Ready	%
1997	30	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1998	85	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1999	150	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	109	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	139	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2002	303	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2003	432	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2004	208	0	0.00%	0	0.00%	11	5.53%	0	0.00%	0	0.00%
2005	314	0	0.00%	0	0.00%	9	4.31%	0	0.00%	0	0.00%
2006	425	0	0.00%	0	0.00%	16	5.08%	0	0.00%	0	0.00%
2007	46	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2008	60	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2009	156	0	0.00%	16	11.51%	21	17.21%	4	3.51%	0	0.00%
2010	223	0	0.00%	20	9.26%	44	20.09%	11	5.05%	0	0.00%
2011	738	1	100.00%	52	7.19%	110	15.15%	32	4.39%	0	0.00%
2012	1,226	1	20.00%	73	6.01%	134	10.97%	62	5.07%	0	0.00%
2013	1,484	1	20.00%	74	5.05%	134	9.07%	50	3.38%	0	0.00%
2014	2,378	0	0.00%	106	4.48%	236	9.96%	88	3.71%	0	0.00%
2015	2,105	0	0.00%	58	2.77%	100	4.78%	63	3.00%	0	0.00%
2016	185	0	0.00%	4	2.17%	22	11.96%	5	2.70%	0	0.00%
2017	310	0	0.00%	18	7.76%	35	11.29%	9	2.91%	0	0.00%
2018	476	0	0.00%	26	5.92%	58	12.18%	18	3.80%	0	0.00%
2019	115	0	0.00%	8	7.55%	15	13.04%	9	8.26%	0	0.00%
Total:	11,697	3	4.76%	455	4.95%	945	9.39%	351	3.76%	0	0.00%

Note: %(Not Ready) = Not Ready/(Total Vehicles-Unsupported)*100.

Appendix C

Table C-2-b-i: Summary of Upstate OBD II Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Trucks

Model Year	Total Initial Tests	Passed OBD II	Failed OBD II	% Failed	MIL Command ----- On ----- No DTC	MIL Command ----- On ----- With DTC	MIL Command ----- Not On ----- No DTC	MIL Command ----- Not On ----- With DTC	Rec'd Waiver	Waiver Rate
1997	13	11	2	15.38%	0	2	11	0	0	0.00%
1998	11	7	4	36.36%	0	3	8	0	0	0.00%
1999	14	13	1	7.14%	0	1	13	0	0	0.00%
2000	3	2	1	33.33%	0	1	2	0	0	0.00%
2001	2	0	2	100.00%	0	0	1	1	0	0.00%
2002	5	2	3	60.00%	0	0	2	3	0	0.00%
2003	1	0	1	100.00%	0	1	0	0	0	0.00%
2004	6	5	1	16.67%	0	1	5	0	0	0.00%
2005	62	60	2	3.23%	0	2	4	6	0	0.00%
2006	73	66	7	9.59%	0	5	67	1	0	0.00%
2007	76	71	5	6.58%	0	5	71	0	0	0.00%
2008	128	122	6	4.69%	0	5	123	0	0	0.00%
2009	159	117	42	26.42%	0	14	144	1	0	0.00%
2010	268	213	55	20.52%	0	16	252	0	1	1.82%
2011	463	380	83	17.93%	0	19	442	2	4	4.82%
2012	787	673	114	14.49%	0	31	755	1	3	2.63%
2013	599	527	71	11.85%	0	8	590	1	0	0.00%
2014	1650	1461	189	11.45%	0	26	1618	6	3	1.59%
2015	1985	1748	237	11.94%	0	51	1927	7	0	0.00%
2016	1528	1352	175	11.45%	0	28	1498	2	1	0.57%
2017	707	645	62	8.77%	0	11	695	1	0	0.00%
2018	1138	1030	108	9.49%	1	15	1120	2	0	0.00%
2019	376	338	38	10.11%	0	5	371	0	1	2.63%
Total:	10,041	8,832	1,207	12.02%	1	248	9,719	34	13	1.08%

Appendix C

Table C-2-b-ii: Summary of Upstate OBD II Readiness Status Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Trucks

Model Year	Total Initial Tests	Comprehensive Comp. Not Ready	%	Misfire Not Ready	%	Fuel Control Not Ready	%	NMHC Catalyst Not Ready	%	Exhaust Gas Sensor Not Ready	%	VVT Not Ready	%
1997	13	0	0.00%	0	0.00%	0	0.00%	1	100.00%	0	0.00%	5	55.56%
1998	11	0	0.00%	0	0.00%	0	0.00%	2	50.00%	1	25.00%	2	33.33%
1999	14	0	0.00%	1	7.14%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	3	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	2	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	50.00%	0	0.00%
2002	5	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2003	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2004	6	1	16.67%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2005	62	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	3	4.92%
2006	73	0	0.00%	0	0.00%	0	0.00%	1	8.33%	1	3.70%	6	12.24%
2007	76	0	0.00%	1	1.32%	0	0.00%	0	0.00%	0	0.00%	5	6.67%
2008	128	0	0.00%	1	0.78%	0	0.00%	1	50.00%	0	0.00%	9	7.14%
2009	159	0	0.00%	2	1.26%	0	0.00%	41	26.28%	28	18.06%	32	20.38%
2010	268	0	0.00%	1	0.37%	33	12.31%	58	21.97%	56	20.90%	44	16.54%
2011	463	0	0.00%	2	0.43%	63	13.67%	92	20.40%	84	18.22%	68	14.91%
2012	787	0	0.00%	3	0.38%	89	11.37%	151	19.46%	126	16.11%	95	12.20%
2013	599	0	0.00%	3	0.50%	38	6.35%	107	18.14%	67	11.22%	42	7.11%
2014	1,650	0	0.00%	12	0.73%	72	4.37%	179	11.92%	171	10.40%	98	6.04%
2015	1,985	0	0.00%	18	0.91%	93	4.69%	180	10.93%	185	9.35%	128	6.52%
2016	1,528	0	0.00%	13	0.85%	50	3.27%	139	9.83%	148	9.70%	90	5.94%
2017	707	0	0.00%	1	0.14%	19	2.69%	42	6.71%	64	9.05%	25	3.55%
2018	1,138	0	0.00%	5	0.44%	43	3.78%	85	8.44%	104	9.15%	54	4.76%
2019	376	0	0.00%	1	0.27%	15	3.99%	27	7.52%	34	9.04%	24	6.38%
Total:	10,054	1	0.01%	64	0.64%	515	5.16%	1,106	12.45%	1,070	10.98%	730	7.37%

Model Year	Total Initial Tests	Evaporative Systems Not Ready	%	Nox After Treatment Not Ready	%	PM Filter Not Ready	%	Boost Pressure Not Ready	%	Air Conditioning Not Ready	%
1997	13	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1998	11	2	66.67%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1999	14	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	3	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	2	0	0.00%	0	0.00%	1	50.00%	0	0.00%	0	0.00%
2002	5	1	20.00%	0	0.00%	0	0.00%	0	0.00%		0.00%
2003	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2004	6	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2005	62	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2006	73	6	50.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2007	76	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2008	128	0	0.00%	0	0.00%	0	0.00%	0	0.00%		0.00%
2009	159	0	0.00%	41	26.45%	37	23.87%	6	8.33%	0	0.00%
2010	268	1	100.00%	45	17.18%	94	35.88%	15	5.66%	0	0.00%
2011	463	0	0.00%	65	14.44%	152	33.48%	28	6.10%	0	0.00%
2012	787	0	0.00%	87	11.24%	236	30.41%	49	6.30%	0	0.00%
2013	599	0	0.00%	55	9.42%	145	24.70%	33	5.56%	0	0.00%
2014	1,650	0	0.00%	89	5.51%	274	16.86%	58	3.53%		0.00%
2015	1,985	0	0.00%	116	5.92%	268	13.62%	62	3.13%	0	0.00%
2016	1,528	2	7.41%	83	5.56%	204	13.44%	53	3.53%	0	0.00%
2017	707	0	0.00%	55	8.86%	60	8.51%	16	2.26%	0	0.00%
2018	1,138	0	0.00%	68	6.47%	120	10.55%	42	3.71%	0	0.00%
2019	376	2	13.33%	23	6.44%	43	11.44%	15	4.16%	0	0.00%
Total:	10,054	16	9.82%	727	7.75%	1,634	16.89%	377	3.95%	0	0.00%

Note: %(Not Ready) = Not Ready/(Total Vehicles-Unsupported)*100.

Appendix C

Table C-3-a-i: Summary of TLC OBD II Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Vehicles

Model Year	Total Initial Tests	Passed OBD II	Failed OBD II	% Failed	MIL Command ----- On ----- No DTC	MIL Command ----- On ----- With DTC	MIL Command ----- Not On ----- No DTC	MIL Command ----- Not On ----- With DTC	Rec'd Waiver	Waiver Rate
1997	0	0	0	0.00%	0	0	0	0	0	0.00%
1998	0	0	0	0.00%	0	0	0	0	0	0.00%
1999	0	0	0	0.00%	0	0	0	0	0	0.00%
2000	0	0	0	0.00%	0	0	0	0	0	0.00%
2001	0	0	0	0.00%	0	0	0	0	0	0.00%
2002	0	0	0	0.00%	0	0	0	0	0	0.00%
2003	0	0	0	0.00%	0	0	0	0	0	0.00%
2004	0	0	0	0.00%	0	0	0	0	0	0.00%
2005	0	0	0	0.00%	0	0	0	0	0	0.00%
2006	0	0	0	0.00%	0	0	0	0	0	0.00%
2007	0	0	0	0.00%	0	0	0	0	0	0.00%
2008	0	0	0	0.00%	0	0	0	0	0	0.00%
2009	0	0	0	0.00%	0	0	0	0	0	0.00%
2010	0	0	0	0.00%	0	0	0	0	0	0.00%
2011	0	0	0	0.00%	0	0	0	0	0	0.00%
2012	1	1	0	0.00%	0	0	1	0	0	0.00%
2013	3	3	0	0.00%	0	0	3	0	0	0.00%
2014	1	1	0	0.00%	0	0	1	0	0	0.00%
2015	1	1	0	0.00%	0	0	1	0	0	0.00%
2016	0	0	0	0.00%	0	0	0	0	0	0.00%
2017	0	0	0	0.00%	0	0	0	0	0	0.00%
2018	0	0	0	0.00%	0	0	0	0	0	0.00%
2019	0	0	0	0.00%	0	0	0	0	0	0.00%
2020	0	0	0	0.00%	0	0	0	0	0	0.00%
2021	0	0	0	0.00%	0	0	0	0	0	0.00%
2022	0	0	0	0.00%	0	0	0	0	0	0.00%
Total:	6	6	0	0.00%	0	0	6	0	0	0.00%

Appendix C

Table C-3-a-ii: Summary of TLC OBD II Readiness Status Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Vehicles

Model Year	Total Initial Tests	Comprehensive Comp. Not Ready	%	Misfire Not Ready	%	Fuel Control Not Ready	%	NMHC Catalyst Not Ready	%	Exhaust Gas Sensor Not Ready	%	VVT Not Ready	%
1997	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1998	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1999	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2002	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2003	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2004	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2005	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2006	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2007	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2008	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2009	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2010	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2011	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2012	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2013	3	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2014	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2015	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2016	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2017	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2018	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2019	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	6	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Model Year	Total Initial Tests	Evaporative Systems Not Ready	%	Nox After Treatment Not Ready	%	PM Filter Not Ready	%	Boost Pressure Not Ready	%	Air Conditioning Not Ready	%
1997	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1998	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1999	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2002	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2003	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2004	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2005	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2006	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2007	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2008	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2009	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2010	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2011	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2012	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2013	3	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2014	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2015	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2016	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2017	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2018	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2019	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	6	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Note: % (Not Ready) = Not Ready/(Total Vehicles-Unsupported)*100.

Appendix C

Table C-3-b-i: Summary of TLC OBD II Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Trucks

Model Year	Total Initial Tests	Passed OBD II	Failed OBD II	% Failed	MIL Command ----- On ----- No DTC	MIL Command ----- On ----- With DTC	MIL Command ----- Not On ----- No DTC	MIL Command ----- Not On ----- With DTC	Rec'd Waiver	Waiver Rate
1997	0	0	0	0.00%	0	0	0	0	0	0.00%
1998	0	0	0	0.00%	0	0	0	0	0	0.00%
1999	0	0	0	0.00%	0	0	0	0	0	0.00%
2000	0	0	0	0.00%	0	0	0	0	0	0.00%
2001	0	0	0	0.00%	0	0	0	0	0	0.00%
2002	0	0	0	0.00%	0	0	0	0	0	0.00%
2003	0	0	0	0.00%	0	0	0	0	0	0.00%
2004	0	0	0	0.00%	0	0	0	0	0	0.00%
2005	0	0	0	0.00%	0	0	0	0	0	0.00%
2006	0	0	0	0.00%	0	0	0	0	0	0.00%
2007	0	0	0	0.00%	0	0	0	0	0	0.00%
2008	0	0	0	0.00%	0	0	0	0	0	0.00%
2009	0	0	0	0.00%	0	0	0	0	0	0.00%
2010	0	0	0	0.00%	0	0	0	0	0	0.00%
2011	0	0	0	0.00%	0	0	0	0	0	0.00%
2012	1	1	0	0.00%	0	0	1	0	0	0.00%
2013	0	0	0	0.00%	0	0	0	0	0	0.00%
2014	0	0	0	0.00%	0	0	0	0	0	0.00%
2015	2	2	0	0.00%	0	0	2	0	0	0.00%
2016	1	1	0	0.00%	0	0	1	0	0	0.00%
2017	1	1	0	0.00%	0	0	1	0	0	0.00%
2018	1	1	0	0.00%	0	0	1	0	0	0.00%
2019	0	0	0	0.00%	0	0	0	0	0	0.00%
Total:	6	6	0	0.00%	0	0	6	0	0	0.00%

Appendix C

Table C-3-b-ii: Summary of TLC OBD II Readiness Status Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Trucks

Model Year	Total Initial Tests	Comprehensive Comp. Not Ready	%	Misfire Not Ready	%	Fuel Control Not Ready	%	NMHC Catalyst Not Ready	%	Exhaust Gas Sensor Not Ready	%	VVT Not Ready	%
1997	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1998	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1999	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2002	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2003	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2004	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2005	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2006	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2007	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2008	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2009	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2010	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2011	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2012	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2013	3	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2014	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2015	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2016	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2017	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2018	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2019	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total:	6	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Model Year	Total Initial Tests	Evaporative Systems Not Ready	%	Nox After Treatment Not Ready	%	PM Filter Not Ready	%	Boost Pressure Not Ready	%	Air Conditioning Not Ready	%
1997	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1998	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
1999	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2000	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2001	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2002	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2003	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2004	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2005	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2006	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2007	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2008	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2009	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2010	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2011	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2012	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2013	3	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2014	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2015	1	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2016	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2017	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2018	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
2019	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total:	6	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Note: % (Not Ready) = Not Ready/(Total Vehicles-Unsupported)*100.

Appendix D

Table D-1: Summary of OBD II Initial Test Volumes and Failure Rates by County in NYMA

(Based on Data Collected from 1/1/2021 to 12/31/2021)

County #3 : Bronx

OBD II Stations in County: 257

Model Year	Light Duty Vehicles Volume	Light Duty Vehicles % Fail	Light Duty Trucks Volume	Light Duty Trucks % Fail
1997	628	10.99%	413	9.93%
1998	789	11.66%	571	16.29%
1999	1055	13.08%	825	15.27%
2000	1539	12.80%	1248	12.66%
2001	1628	18.61%	1562	18.82%
2002	2206	14.78%	2659	14.29%
2003	3034	13.78%	3600	14.47%
2004	3358	12.78%	4819	12.24%
2005	4043	11.20%	5700	12.70%
2006	4647	9.92%	6298	11.07%
2007	5995	9.99%	7181	10.17%
2008	6285	9.45%	7561	9.93%
2009	6398	8.41%	4868	9.59%
2010	7094	7.71%	6054	8.74%
2011	7042	7.41%	7830	8.10%
2012	8347	6.86%	7315	7.04%
2013	10167	5.67%	7729	5.82%
2014	10240	5.45%	8455	5.58%
2015	12869	4.86%	11119	4.37%
2016	13237	4.40%	11427	3.46%
2017	16234	4.19%	12625	3.19%
2018	16189	4.29%	11855	3.46%
2019	13832	3.51%	11306	2.82%
Total	156,856	6.67%	143,020	7.12%

County #24 : Kings

OBD II Stations in County: 428

Model Year	Light Duty Vehicles Volume	Light Duty Vehicles % Fail	Light Duty Trucks Volume	Light Duty Trucks % Fail
1997	1025	11.51%	692	11.85%
1998	1509	11.53%	912	15.13%
1999	1890	10.90%	1384	12.07%
2000	2726	11.78%	2137	10.95%
2001	2830	17.03%	2589	16.99%
2002	3864	12.73%	4052	14.96%
2003	5131	12.41%	5192	12.96%
2004	5722	11.24%	7654	10.83%
2005	6622	10.53%	8257	11.02%
2006	7579	10.29%	9062	10.62%
2007	9840	8.55%	10160	9.52%
2008	9782	8.62%	10936	8.69%
2009	9937	7.18%	7372	8.87%
2010	11222	7.17%	9059	7.98%
2011	11059	6.53%	11730	6.93%
2012	13088	6.04%	11498	6.10%
2013	15944	5.53%	13754	5.05%
2014	15121	4.44%	13684	4.75%
2015	19140	4.01%	17680	3.94%
2016	18345	3.71%	17414	3.24%
2017	21499	3.73%	20557	2.73%
2018	27866	3.89%	20720	3.61%
2019	31492	3.13%	27246	2.91%
Total	253,233	5.98%	233,741	6.23%

County #30 : Nassau

OBD II Stations in County: 759

Model Year	Light Duty Vehicles Volume	Light Duty Vehicles % Fail	Light Duty Trucks Volume	Light Duty Trucks % Fail
1997	1750	10.23%	1103	12.15%
1998	2552	10.27%	1401	11.28%
1999	3367	10.22%	2068	12.38%
2000	4706	10.39%	2820	10.99%
2001	5205	14.74%	3511	15.95%
2002	6979	11.72%	5364	12.53%
2003	9473	10.24%	7010	11.48%
2004	9954	10.11%	9688	10.41%
2005	11698	8.93%	9809	10.12%
2006	12826	8.65%	10190	8.86%
2007	15266	7.00%	11633	7.92%
2008	16224	7.14%	13533	6.93%
2009	16374	5.97%	9361	6.95%
2010	18870	5.02%	12933	6.04%
2011	17769	5.03%	16063	5.43%
2012	20924	4.44%	16903	4.74%
2013	26462	3.82%	19323	4.02%
2014	22589	3.48%	21362	3.60%
2015	27025	3.21%	26466	3.09%
2016	27241	3.01%	27672	2.67%
2017	34042	3.28%	33261	2.45%
2018	58438	3.25%	44525	2.80%
2019	68058	2.36%	59938	1.89%
Total	437,792	4.81%	365,937	4.66%

County #31 : New York

OBD II Stations in County: 82

Model Year	Light Duty Vehicles Volume	Light Duty Vehicles % Fail	Light Duty Trucks Volume	Light Duty Trucks % Fail
1997	182	9.34%	90	15.56%
1998	238	9.66%	117	11.97%
1999	334	11.38%	175	11.43%
2000	431	10.90%	259	12.74%
2001	499	12.83%	265	16.23%
2002	668	10.93%	494	15.59%
2003	825	8.73%	626	11.50%
2004	926	10.37%	889	10.69%
2005	1104	10.69%	982	10.79%
2006	1300	8.00%	1202	9.98%
2007	1692	7.15%	1525	9.05%
2008	1861	8.33%	1762	8.12%
2009	1739	6.84%	1159	8.89%
2010	2158	5.19%	1594	7.03%
2011	2365	4.95%	2076	6.60%
2012	2734	5.19%	2288	5.11%
2013	3341	4.43%	2885	5.41%
2014	3480	4.48%	2981	4.56%
2015	4333	4.45%	4169	4.37%
2016	4370	3.91%	4610	3.58%
2017	5507	3.56%	5787	2.89%
2018	7198	3.43%	6300	3.29%
2019	7785	2.75%	7178	2.97%
Total	55,070	4.98%	49,413	5.20%

County #41 : Queens

OBD II Stations in County: 607

Model Year	Light Duty Vehicles Volume	Light Duty Vehicles % Fail	Light Duty Trucks Volume	Light Duty Trucks % Fail
1997	1633	9.80%	1008	12.20%
1998	2284	10.95%	1317	11.01%
1999	3057	9.19%	2033	11.51%
2000	4299	9.79%	2964	10.16%
2001	4675	13.99%	3734	13.95%
2002	6390	12.13%	5924	12.34%
2003	7940	10.08%	7498	10.54%
2004	8570	10.07%	10342	9.77%
2005	9961	9.57%	11320	10.20%
2006	10854	8.68%	11851	9.10%
2007	13800	7.72%	13388	8.28%
2008	14332	7.35%	14177	7.69%
2009	14726	7.12%	9619	8.10%
2010	16847	6.05%	12838	6.93%
2011	17221	6.14%	16720	6.44%
2012	19571	5.47%	16762	5.16%
2013	24621	5.46%	19553	4.38%
2014	26001	4.84%	22471	4.88%
2015	36565	4.90%	30461	4.07%
2016	34588	3.99%	30899	3.63%
2017	41402	3.60%	36215	2.98%
2018	44444	3.55%	35775	3.02%
2019	43820	3.02%	38604	2.57%
Total	407,601	5.54%	355,473	5.45%

County #43 : Richmond

OBD II Stations in County: 165

Model Year	Light Duty Vehicles Volume	Light Duty Vehicles % Fail	Light Duty Trucks Volume	Light Duty Trucks % Fail
1997	334	10.48%	228	11.84%
1998	431	8.82%	275	11.64%
1999	658	10.33%	380	12.11%
2000	951	10.94%	563	10.30%
2001	1035	16.23%	722	16.76%
2002	1438	12.03%	1257	11.85%
2003	2002	9.84%	1646	11.66%
2004	2231	8.74%	2184	9.84%
2005	2640	8.64%	2393	9.86%
2006	2781	9.53%	2469	9.56%
2007	3505	7.10%	2794	8.23%
2008	3549	6.17%	3269	7.62%
2009	3827	7.16%	2157	7.74%
2010	4219	5.55%	2902	7.06%
2011	3811	5.27%	3599	5.33%
2012	4502	5.13%	3543	4.85%
2013	5522	3.89%	4051	4.17%
2014	4543	3.43%	4246	3.98%
2015	5441	3.68%	5200	2.87%
2016	5642	3.10%	5490	2.51%
2017	6457	2.63%	6127	2.28%
2018	11198	2.38%	7727	1.84%
2019	17944	1.55%	14501	1.57%
Total	94,661	4.58%	77,723	4.71%

Appendix D

Table D-1: Summary of OBD II Initial Test Volumes and Failure Rates by County in NYMA

(Based on Data Collected from 1/1/2021 to 12/31/2021)

County #44 : Rockland

OBD II Stations in County: 155

Model Year	Light Duty Vehicles Volume	Light Duty Vehicles % Fail	Light Duty Trucks Volume	Light Duty Trucks % Fail
1997	328	11.59%	178	7.30%
1998	425	9.65%	265	13.58%
1999	609	9.85%	356	12.64%
2000	820	10.73%	559	11.99%
2001	1018	15.52%	679	18.85%
2002	1385	13.07%	1052	13.69%
2003	1870	10.05%	1425	12.84%
2004	2135	10.73%	2107	10.73%
2005	2547	7.81%	2154	10.77%
2006	2643	9.35%	2455	9.65%
2007	3655	6.98%	2850	6.95%
2008	3850	6.62%	3203	7.06%
2009	3790	5.62%	2108	6.40%
2010	4549	5.41%	2773	6.38%
2011	4174	5.15%	3621	5.27%
2012	5023	4.46%	3413	3.78%
2013	5439	3.71%	3831	3.45%
2014	5116	2.99%	4490	2.81%
2015	5990	2.45%	5531	2.51%
2016	6019	2.59%	5792	2.05%
2017	7233	2.46%	6389	2.11%
2018	11807	2.85%	8174	2.47%
2019	12660	2.09%	10399	1.90%
Total	93,085	4.59%	73,804	4.63%

County #52 : Suffolk

OBD II Stations in County: 876

Model Year	Light Duty Vehicles Volume	Light Duty Vehicles % Fail	Light Duty Trucks Volume	Light Duty Trucks % Fail
1997	2163	9.99%	2153	12.96%
1998	3034	8.40%	2534	11.37%
1999	4075	9.33%	3692	11.65%
2000	5645	9.32%	5032	11.35%
2001	6449	13.46%	6047	15.86%
2002	8686	11.29%	8917	12.48%
2003	11205	10.25%	11499	11.65%
2004	12339	9.61%	15459	9.92%
2005	13930	9.09%	14867	10.05%
2006	15657	8.11%	14479	9.03%
2007	18581	7.17%	16368	7.50%
2008	19866	6.96%	18607	6.99%
2009	19547	5.72%	12374	6.86%
2010	22751	4.74%	16407	6.14%
2011	21288	4.46%	20682	5.39%
2012	25162	3.89%	21444	4.62%
2013	29238	3.26%	22780	3.75%
2014	26314	2.90%	27604	3.35%
2015	30482	2.61%	33371	2.90%
2016	30461	2.39%	34567	2.35%
2017	35989	2.46%	39427	2.11%
2018	55541	2.75%	45388	2.43%
2019	63083	2.03%	55641	1.60%
Total	481,486	4.54%	449,339	4.94%

County #60 : Westchester

OBD II Stations in County: 479

Model Year	Light Duty Vehicles Volume	Light Duty Vehicles % Fail	Light Duty Trucks Volume	Light Duty Trucks % Fail
1997	1145	10.83%	682	12.32%
1998	1568	9.25%	755	10.60%
1999	2037	10.11%	1150	13.57%
2000	2815	9.88%	1649	12.86%
2001	3362	14.78%	2135	18.36%
2002	4323	12.26%	3328	13.94%
2003	5740	10.33%	4372	12.79%
2004	6603	9.16%	6117	11.43%
2005	7651	8.65%	6485	10.79%
2006	8480	8.24%	6979	8.78%
2007	10179	6.56%	8009	7.64%
2008	10651	6.29%	8915	7.91%
2009	10569	5.75%	6242	7.40%
2010	12449	4.84%	8064	6.71%
2011	12171	4.49%	10754	5.47%
2012	14384	3.90%	10791	4.58%
2013	16424	3.48%	12003	3.72%
2014	15973	2.99%	14661	3.34%
2015	19305	2.97%	17952	2.66%
2016	19146	2.57%	19013	2.42%
2017	22577	2.95%	21012	2.18%
2018	35849	3.25%	26686	2.72%
2019	41044	2.38%	33872	1.63%
Total	284,445	4.54%	231,626	4.74%

New York City Taxi and Limousine

Stations: 1

Model Year	Light Duty Vehicles Volume	Light Duty Vehicles % Fail	Light Duty Trucks Volume	Light Duty Trucks % Fail
1997	0	n/a	0	n/a
1998	0	n/a	0	n/a
1999	0	n/a	0	n/a
2000	0	n/a	0	n/a
2001	0	n/a	0	n/a
2002	5	40.00%	0	n/a
2003	16	25.00%	0	n/a
2004	12	33.33%	1	0.00%
2005	22	27.27%	5	0.00%
2006	37	16.22%	11	18.18%
2007	152	17.76%	26	15.38%
2008	135	21.48%	106	13.21%
2009	248	14.11%	168	17.86%
2010	408	14.95%	315	20.32%
2011	989	13.35%	703	13.09%
2012	1142	7.18%	925	10.70%
2013	2016	8.68%	1062	8.85%
2014	3499	8.49%	2080	12.88%
2015	6887	9.41%	3790	8.97%
2016	5023	7.92%	3835	8.66%
2017	6080	4.93%	5171	4.99%
2018	3359	3.54%	4110	3.53%
2019	2654	3.35%	4143	4.25%
2020	2951	2.20%	2287	3.19%
Total	35,635	8.70%	28,738	5.68%

Out of State

Stations: 7

Model Year	Light Duty Vehicles Volume	Light Duty Vehicles % Fail	Light Duty Trucks Volume	Light Duty Trucks % Fail
1997	0	n/a	0	n/a
1998	0	n/a	0	n/a
1999	0	n/a	0	n/a
2000	0	n/a	0	n/a
2001	0	n/a	0	n/a
2002	0	n/a	0	n/a
2003	0	n/a	0	n/a
2004	0	n/a	0	n/a
2005	0	n/a	0	n/a
2006	0	n/a	0	n/a
2007	0	n/a	0	n/a
2008	0	n/a	0	n/a
2009	0	0.00%	3	n/a
2010	0	n/a	3	0.00%
2011	0	n/a	1	0.00%
2012	1	n/a	3	33.33%
2013	0	0.00%	2	0.00%
2014	3	0.00%	17	5.88%
2015	0	0.00%	8	0.00%
2016	0	n/a	6	0.00%
2017	2	n/a	15	6.67%
2018	20	15.00%	31	25.81%
2019	114	20.18%	130	20.00%
Total	140	18.57%	219	16.89%

Appendix D

Table D-2: Summary of OBD II Initial Test Volumes and Failure Rates by County in Upstate

(Based on Data Collected from 1/1/2021 to 12/31/2021)

County #1 : Albany

OBD II Stations in County: 253

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	263	27	10.27%	156	19.87%
1998	327	29	8.87%	212	10.85%
1999	460	51	11.09%	267	11.24%
2000	630	63	10.00%	399	9.52%
2001	801	107	13.36%	491	13.65%
2002	1105	114	10.32%	810	13.70%
2003	1499	162	10.81%	1109	13.07%
2004	1880	190	10.11%	1699	12.48%
2005	2406	223	9.27%	1884	9.50%
2006	2714	253	9.32%	2041	7.74%
2007	3543	251	7.08%	2506	7.82%
2008	4191	296	7.06%	3076	7.74%
2009	4544	283	6.23%	2164	6.93%
2010	5140	236	4.59%	2998	5.17%
2011	5109	242	4.74%	4201	4.45%
2012	6770	280	4.14%	4629	4.73%
2013	7827	297	3.79%	5040	3.51%
2014	8149	263	3.23%	6887	3.47%
2015	9291	261	2.81%	8651	2.81%
2016	9346	248	2.65%	9559	2.37%
2017	10705	247	2.31%	10550	2.67%
2018	14200	383	2.70%	11594	2.84%
2019	13972	310	2.22%	12876	1.89%
Total	114,872	4,816	4.19%	93,799	4.14%

County #2 : Allegany

OBD II Stations in County: 51

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	21	4.76%	94	14.89%
1998	45	8.89%	109	11.93%
1999	59	6.78%	134	11.94%
2000	85	18.82%	134	12.69%
2001	90	10.00%	178	23.60%
2002	115	15.65%	246	18.29%
2003	159	11.32%	312	18.27%
2004	199	14.07%	494	14.37%
2005	278	11.15%	496	16.33%
2006	339	12.09%	549	12.39%
2007	373	10.46%	577	11.96%
2008	469	7.68%	672	12.35%
2009	453	8.83%	412	11.17%
2010	408	8.58%	576	7.47%
2011	501	6.39%	657	7.15%
2012	480	5.83%	683	7.91%
2013	471	5.73%	690	3.91%
2014	553	5.24%	874	3.55%
2015	472	3.18%	865	3.24%
2016	432	3.01%	755	2.91%
2017	391	1.28%	849	1.41%
2018	435	0.46%	725	1.79%
2019	434	0.46%	800	1.13%
Total	7,262	6.51%	11,881	7.64%

County #4 : Broome

OBD II Stations in County: 162

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	208	10.10%	252	8.73%
1998	326	9.20%	222	12.61%
1999	410	10.49%	385	11.95%
2000	565	10.09%	456	10.09%
2001	601	16.64%	551	18.51%
2002	813	12.55%	773	14.49%
2003	1081	10.55%	1034	16.44%
2004	1284	10.90%	1533	11.48%
2005	1754	9.81%	1844	11.82%
2006	2089	10.00%	1894	9.98%
2007	2582	7.40%	2265	8.74%
2008	2832	6.85%	2528	6.65%
2009	2821	6.63%	1612	6.27%
2010	3293	5.16%	2188	5.99%
2011	3293	5.22%	3041	4.87%
2012	4107	4.31%	3249	4.83%
2013	4012	3.89%	3375	3.50%
2014	4041	2.62%	3963	3.18%
2015	4048	2.40%	4650	2.56%
2016	4164	1.99%	4759	2.14%
2017	4525	1.57%	5170	1.43%
2018	5344	1.55%	4801	1.40%
2019	4863	1.44%	5161	1.20%
Total	59,056	4.65%	55,706	4.81%

County #5 : Cattaraugus

OBD II Stations in County: 83

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	55	4	7.27%	138	18.12%
1998	64	6	9.38%	148	15.54%
1999	88	8	9.09%	189	13.76%
2000	124	15	12.10%	215	14.88%
2001	135	23	17.04%	276	20.65%
2002	202	21	10.40%	337	16.91%
2003	272	31	11.40%	450	17.11%
2004	321	47	14.64%	629	14.94%
2005	431	52	12.06%	653	15.16%
2006	524	67	12.79%	778	13.24%
2007	641	67	10.45%	864	11.46%
2008	734	84	11.44%	1109	11.45%
2009	834	75	8.99%	772	7.64%
2010	787	37	4.70%	998	8.02%
2011	800	59	7.38%	1324	7.02%
2012	932	60	6.44%	1353	6.06%
2013	933	50	5.36%	1401	5.85%
2014	991	46	4.64%	1829	4.16%
2015	1008	38	3.77%	2015	2.98%
2016	1007	37	3.67%	2059	2.67%
2017	1072	22	2.05%	2380	1.85%
2018	1518	36	2.37%	2020	2.03%
2019	1236	23	1.86%	2224	1.84%
Total	14,709	908	6.17%	24,161	6.34%

County #6 : Chautauqua

OBD II Stations in County: 126

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	127	11.81%	178	7.87%
1998	167	12.57%	232	11.21%
1999	222	10.36%	247	13.36%
2000	284	13.73%	352	14.49%
2001	335	19.70%	381	19.95%
2002	387	12.66%	572	16.96%
2003	548	14.60%	784	15.05%
2004	679	13.70%	1071	14.85%
2005	941	10.52%	1231	11.62%
2006	1047	10.98%	1398	10.30%
2007	1343	8.94%	1634	9.42%
2008	1612	8.19%	1969	8.53%
2009	1630	7.24%	1394	8.25%
2010	1797	5.68%	1875	7.47%
2011	1809	5.36%	2521	5.71%
2012	2031	5.17%	2570	4.90%
2013	2039	5.25%	2664	4.73%
2014	2127	3.62%	3439	4.48%
2015	2072	3.19%	3488	2.95%
2016	2043	2.59%	3753	2.29%
2017	2079	2.55%	4073	2.01%
2018	2831	1.59%	3607	1.52%
2019	2615	1.72%	4156	1.47%
Total	30,765	5.59%	43,589	5.45%

County #7 : Cayuga

OBD II Stations in County: 82

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	58	10.34%	86	10.47%
1998	45	2.22%	121	15.70%
1999	92	16.30%	121	5.79%
2000	127	15.75%	136	12.50%
2001	157	12.74%	184	19.02%
2002	179	11.73%	241	12.86%
2003	248	13.31%	353	15.86%
2004	293	11.95%	525	14.10%
2005	429	10.02%	551	13.61%
2006	531	10.17%	635	13.07%
2007	704	11.08%	769	10.66%
2008	810	8.27%	905	10.72%
2009	816	7.72%	659	7.89%
2010	920	6.63%	938	6.40%
2011	886	7.79%	1284	6.46%
2012	1278	6.03%	1300	5.54%
2013	1330	4.96%	1384	4.26%
2014	1353	4.73%	1837	4.14%
2015	1447	2.90%	1929	3.32%
2016	1326	3.17%	2111	2.56%
2017	1464	2.05%	2253	1.69%
2018	1964	2.65%	2281	2.10%
2019	1883	1.59%	2763	1.56%
Total	18,340	5.39%	23,366	5.28%

Appendix D

Table D-2: Summary of OBD II Initial Test Volumes and Failure Rates by County in Upstate

(Based on Data Collected from 1/1/2021 to 12/31/2021)

County #8 : Chemung

OBD II Stations in County: 66

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	101	5	4.95%	139	12.95%
1998	117	13	11.11%	141	17.02%
1999	144	18	12.50%	162	15.43%
2000	197	28	14.21%	220	10.00%
2001	241	35	14.52%	225	15.56%
2002	273	34	12.45%	369	15.18%
2003	387	42	10.85%	470	13.19%
2004	470	53	11.28%	712	11.80%
2005	700	80	11.43%	830	11.20%
2006	756	73	9.66%	857	9.33%
2007	929	75	8.07%	922	9.00%
2008	1090	97	8.90%	1009	9.61%
2009	966	53	5.49%	642	8.88%
2010	1112	60	5.40%	943	6.15%
2011	1345	61	4.54%	1203	6.15%
2012	1537	70	4.55%	1380	4.86%
2013	1564	67	4.28%	1464	3.76%
2014	1763	54	3.06%	1805	3.82%
2015	1849	58	3.14%	2145	2.00%
2016	1819	42	2.31%	2230	1.70%
2017	2150	47	2.19%	2645	2.38%
2018	3628	109	3.00%	3348	2.54%
2019	3261	89	2.73%	3554	2.59%
Total	26,399	1,263	4.78%	27,415	5.03%

County #9 : Chenango

OBD II Stations in County: 54

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	59	13.56%	99	7.07%
1998	68	13.24%	140	18.57%
1999	86	16.28%	159	14.47%
2000	103	11.65%	189	14.29%
2001	124	14.52%	254	21.26%
2002	181	12.71%	301	17.28%
2003	233	12.88%	385	16.62%
2004	286	11.54%	521	13.44%
2005	383	13.58%	559	13.77%
2006	417	10.31%	599	11.02%
2007	524	8.21%	625	10.08%
2008	554	9.03%	704	9.23%
2009	601	9.98%	447	8.05%
2010	700	6.00%	674	7.72%
2011	704	7.24%	865	5.20%
2012	835	5.99%	945	4.55%
2013	877	3.76%	893	4.70%
2014	959	3.86%	1182	2.71%
2015	904	2.43%	1268	2.52%
2016	987	1.82%	1429	1.68%
2017	916	2.29%	1402	1.71%
2018	1011	1.58%	1136	1.23%
2019	941	1.06%	1179	1.10%
Total	12,453	5.58%	15,955	5.96%

County #10 : Clinton

OBD II Stations in County: 75

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	78	10.26%	102	11.76%
1998	104	13.46%	113	11.50%
1999	133	8.27%	142	11.97%
2000	165	10.30%	170	14.12%
2001	201	14.93%	263	18.63%
2002	263	14.45%	307	18.57%
2003	332	10.84%	430	14.88%
2004	403	13.90%	625	12.32%
2005	596	10.74%	575	11.13%
2006	681	8.96%	706	8.92%
2007	847	8.26%	730	7.53%
2008	951	7.68%	838	8.00%
2009	1006	7.85%	579	9.15%
2010	1046	5.93%	775	6.71%
2011	1057	4.82%	1059	5.67%
2012	1433	4.12%	1151	4.26%
2013	1626	3.94%	1302	4.22%
2014	1674	3.70%	1775	2.76%
2015	1726	3.24%	2088	2.01%
2016	1719	1.57%	2347	2.22%
2017	1912	2.14%	2633	1.90%
2018	2628	2.02%	2582	1.05%
2019	2790	1.15%	3425	1.11%
Total	23,371	4.55%	24,717	4.41%

County #11 : Columbia

OBD II Stations in County: 58

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	86	10	11.63%	89	10.11%
1998	120	10	8.33%	110	10.00%
1999	153	18	11.76%	141	5.67%
2000	182	17	9.34%	196	12.76%
2001	260	26	10.00%	265	15.09%
2002	319	46	14.42%	351	11.97%
2003	429	34	7.93%	472	13.14%
2004	507	44	8.68%	593	11.64%
2005	638	42	6.58%	699	11.02%
2006	695	55	7.91%	681	8.96%
2007	796	43	5.40%	733	6.41%
2008	898	50	5.57%	828	5.92%
2009	824	37	4.49%	610	3.93%
2010	995	40	4.02%	778	4.63%
2011	965	38	3.94%	952	3.89%
2012	1085	29	2.67%	907	2.98%
2013	1173	40	3.41%	953	2.20%
2014	1091	23	2.11%	1156	2.60%
2015	1192	14	1.17%	1219	1.48%
2016	1150	9	0.78%	1350	1.04%
2017	1136	14	1.23%	1262	1.19%
2018	1158	12	1.04%	1124	0.89%
2019	1218	12	0.99%	1266	0.71%
Total	17,070	663	3.88%	16,735	4.43%

County #12 : Cortland

OBD II Stations in County: 48

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	33	9.09%	54	12.96%
1998	46	17.39%	63	15.87%
1999	45	6.67%	70	15.71%
2000	74	17.57%	110	11.82%
2001	101	11.88%	107	20.56%
2002	123	11.38%	149	20.81%
2003	157	11.46%	215	16.28%
2004	222	13.96%	343	16.62%
2005	294	10.20%	398	13.82%
2006	342	11.70%	438	12.56%
2007	447	11.19%	489	10.63%
2008	549	9.84%	675	9.63%
2009	543	7.37%	421	10.21%
2010	662	7.40%	609	5.75%
2011	722	6.93%	813	6.89%
2012	946	5.29%	906	6.18%
2013	1047	3.53%	962	4.78%
2014	1084	4.61%	1239	4.20%
2015	1087	2.67%	1240	2.34%
2016	1078	2.50%	1327	1.73%
2017	1062	1.41%	1389	1.94%
2018	1470	1.63%	1401	1.43%
2019	1310	1.37%	1455	2.27%
Total	13,444	4.95%	14,873	5.60%

County #13 : Delaware

OBD II Stations in County: 52

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	56	7.14%	95	12
1998	60	15.00%	113	20
1999	90	6.67%	149	18
2000	123	15.45%	186	29
2001	147	14.29%	213	55
2002	166	16.27%	268	49
2003	210	10.00%	347	55
2004	273	14.65%	481	67
2005	338	9.76%	446	55
2006	357	12.32%	480	56
2007	442	7.24%	487	56
2008	430	8.60%	530	65
2009	433	7.39%	341	24
2010	518	7.72%	461	30
2011	550	5.45%	641	47
2012	647	6.03%	690	47
2013	659	4.25%	712	35
2014	661	3.93%	935	20
2015	700	1.86%	975	18
2016	698	2.29%	1063	28
2017	673	1.93%	1231	13
2018	774	1.81%	1024	10
2019	768	1.04%	1072	13
Total	9,773	5.65%	12,940	6.35%

Appendix D

Table D-2: Summary of OBD II Initial Test Volumes and Failure Rates by County in Upstate

(Based on Data Collected from 1/1/2021 to 12/31/2021)

County #14 : Dutchess

OBD II Stations in County: 229

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	339	24	7.08%	327	11.93%
1998	511	36	7.05%	402	10.70%
1999	650	63	9.69%	455	10.77%
2000	954	83	8.70%	696	8.19%
2001	1126	151	13.41%	863	15.87%
2002	1492	181	12.13%	1170	12.31%
2003	1948	207	10.63%	1643	11.44%
2004	2317	226	9.75%	2223	10.89%
2005	2800	232	8.29%	2395	9.94%
2006	3159	249	7.88%	2546	8.21%
2007	3781	255	6.74%	2742	7.62%
2008	4029	268	6.65%	3157	6.15%
2009	4098	226	5.51%	2155	6.08%
2010	5057	244	4.82%	3015	5.57%
2011	4799	200	4.17%	3904	4.28%
2012	6320	261	4.13%	4214	4.86%
2013	6848	217	3.17%	4428	3.14%
2014	6543	188	2.87%	5711	2.71%
2015	7669	197	2.57%	6678	2.44%
2016	7622	158	2.07%	7500	2.07%
2017	8386	152	1.81%	7764	1.83%
2018	10179	189	1.86%	7585	2.18%
2019	10405	173	1.66%	8791	1.59%
Total	101,032	4,180	4.14%	80,364	4.33%

County #15 : Erie

OBD II Stations in County: 756

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	641	9.83%	573	9.95%
1998	839	9.89%	708	13.70%
1999	1180	11.02%	901	11.65%
2000	1542	11.87%	1119	11.71%
2001	1901	15.78%	1444	17.17%
2002	2522	13.08%	2329	14.86%
2003	3565	11.05%	3202	13.18%
2004	4255	11.26%	4718	12.19%
2005	5965	10.18%	5570	10.72%
2006	7126	9.77%	6329	10.14%
2007	9517	8.33%	7842	9.33%
2008	11302	8.36%	10590	8.29%
2009	12370	6.90%	7118	8.27%
2010	13166	6.04%	10079	7.20%
2011	13311	5.48%	13332	5.91%
2012	15890	5.17%	14466	5.38%
2013	16622	4.15%	15250	4.07%
2014	17802	3.70%	20390	3.82%
2015	18340	2.84%	22541	2.72%
2016	18523	2.58%	24916	2.18%
2017	19876	2.21%	28481	1.99%
2018	32273	2.35%	31676	2.02%
2019	33433	1.69%	41511	1.40%
Total	261,961	4.70%	275,085	4.38%

County #16 : Essex

OBD II Stations in County: 35

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	30	6.67%	60	18.33%
1998	39	10.26%	67	7.46%
1999	61	13.11%	76	15.79%
2000	76	15.79%	99	17.17%
2001	102	16.67%	123	22.76%
2002	101	15.84%	141	19.15%
2003	143	14.69%	251	15.14%
2004	182	13.19%	320	12.81%
2005	235	12.77%	308	15.91%
2006	273	11.72%	340	13.82%
2007	335	11.04%	337	8.01%
2008	340	12.65%	457	10.72%
2009	382	10.47%	331	12.08%
2010	364	4.67%	453	5.74%
2011	398	8.04%	620	7.90%
2012	555	5.59%	619	6.95%
2013	595	4.71%	622	5.31%
2014	692	4.48%	913	3.72%
2015	660	3.33%	943	2.86%
2016	611	2.45%	1122	1.60%
2017	636	1.26%	1247	1.60%
2018	881	1.14%	1141	0.79%
2019	830	1.57%	1401	1.07%
Total	8,521	5.79%	11,991	5.55%

County #17 : Franklin

OBD II Stations in County: 47

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	41	5	12.20%	57	17.54%
1998	48	5	10.42%	63	22.22%
1999	49	2	4.08%	84	13.10%
2000	69	7	10.14%	102	10.78%
2001	92	20	21.74%	138	23.91%
2002	106	26	24.53%	163	20.86%
2003	149	24	16.11%	269	17.84%
2004	184	28	15.22%	335	21.19%
2005	274	32	11.68%	371	14.56%
2006	322	60	18.63%	392	13.78%
2007	379	43	11.35%	472	12.92%
2008	437	58	13.27%	555	11.35%
2009	463	55	11.88%	378	11.11%
2010	508	40	7.87%	549	8.74%
2011	506	44	8.70%	729	7.96%
2012	632	43	6.80%	756	7.94%
2013	692	39	5.64%	784	4.46%
2014	681	29	4.26%	1070	5.14%
2015	672	20	2.98%	1063	3.20%
2016	550	14	2.55%	1281	2.73%
2017	617	15	2.43%	1485	2.90%
2018	844	15	1.78%	1335	1.72%
2019	752	11	1.46%	1657	1.69%
Total	9,067	635	7.00%	14,088	6.57%

County #18 : Fulton

OBD II Stations in County: 64

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	44	6.82%	75	16.00%
1998	59	5.08%	109	11.93%
1999	89	4.49%	128	14.06%
2000	122	9.84%	158	8.86%
2001	180	12.22%	187	17.65%
2002	205	16.59%	303	12.54%
2003	275	11.27%	405	11.11%
2004	320	13.75%	540	13.33%
2005	500	9.80%	618	11.33%
2006	548	10.77%	620	9.52%
2007	675	8.59%	671	8.20%
2008	745	6.85%	809	8.90%
2009	726	8.54%	543	7.73%
2010	769	4.42%	748	6.42%
2011	795	4.91%	899	4.45%
2012	1038	5.59%	1044	5.17%
2013	1093	3.93%	1107	4.07%
2014	1123	2.76%	1504	2.66%
2015	1244	2.65%	1673	1.43%
2016	1262	2.30%	1722	1.57%
2017	1231	1.87%	1891	1.85%
2018	1589	1.51%	1845	1.19%
2019	1441	0.90%	2073	1.30%
Total	16,073	4.72%	19,672	4.60%

County #19 : Genesee

OBD II Stations in County: 70

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	43	4.65%	76	6.58%
1998	75	5.33%	120	15.83%
1999	92	10.87%	120	5.83%
2000	92	8.70%	161	8.70%
2001	151	14.57%	170	21.18%
2002	199	14.07%	240	13.33%
2003	248	12.10%	296	13.51%
2004	246	10.57%	470	12.34%
2005	389	8.48%	529	8.51%
2006	485	8.66%	608	9.54%
2007	656	9.15%	683	7.17%
2008	783	9.45%	853	6.92%
2009	801	7.24%	610	7.87%
2010	787	4.96%	899	5.56%
2011	798	4.89%	1149	5.57%
2012	1014	4.73%	1304	5.06%
2013	1007	4.57%	1353	4.21%
2014	1149	4.26%	1780	3.82%
2015	1110	3.06%	1870	3.48%
2016	1135	2.47%	2041	2.94%
2017	1053	1.80%	2201	2.04%
2018	1508	2.12%	1970	2.18%
2019	1337	1.35%	2209	1.13%
Total	15,158	4.94%	21,712	4.67%

Appendix D

Table D-2: Summary of OBD II Initial Test Volumes and Failure Rates by County in Upstate

(Based on Data Collected from 1/1/2021 to 12/31/2021)

County #20 : Greene

OBD II Stations in County: 45

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	64	7	10.94%	100	8.00%
1998	82	9	10.98%	106	18.87%
1999	97	13	13.40%	140	7.14%
2000	117	17	14.53%	164	12.20%
2001	206	30	14.56%	189	17.46%
2002	262	34	12.98%	282	16.67%
2003	306	39	12.75%	384	12.50%
2004	364	44	12.09%	444	11.49%
2005	480	58	12.08%	468	11.97%
2006	502	48	9.56%	489	9.82%
2007	550	40	7.27%	479	10.02%
2008	557	38	6.82%	571	9.11%
2009	573	39	6.81%	379	6.33%
2010	645	38	5.89%	493	3.85%
2011	617	16	2.59%	624	5.13%
2012	739	30	4.06%	593	4.22%
2013	778	28	3.60%	613	3.43%
2014	816	20	2.45%	708	3.25%
2015	861	17	1.97%	925	1.84%
2016	855	14	1.64%	919	1.63%
2017	936	8	0.85%	954	1.15%
2018	1119	9	0.80%	886	1.69%
2019	1079	11	1.02%	990	1.11%
Total	12,605	607	4.82%	11,900	5.50%

County #21 : Hamilton

OBD II Stations in County: 5

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	2	0.00%	7	0.00%
1998	3	0.00%	4	0.00%
1999	3	0.00%	4	25.00%
2000	3	0.00%	13	23.08%
2001	8	12.50%	10	10.00%
2002	8	37.50%	12	25.00%
2003	10	10.00%	29	17.24%
2004	9	0.00%	27	7.41%
2005	12	8.33%	25	16.00%
2006	18	22.22%	23	8.70%
2007	21	0.00%	23	4.35%
2008	24	8.33%	49	6.12%
2009	10	10.00%	24	8.33%
2010	22	0.00%	31	9.68%
2011	19	5.26%	51	9.80%
2012	38	5.26%	57	7.02%
2013	37	2.70%	44	6.82%
2014	38	2.63%	63	3.17%
2015	50	2.00%	71	0.00%
2016	42	2.38%	72	1.39%
2017	49	0.00%	83	1.20%
2018	39	2.56%	75	0.00%
2019	55	0.00%	87	1.15%
Total	520	4.04%	884	5.32%

County #22 : Herkimer

OBD II Stations in County: 54

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	42	4.76%	51	13.73%
1998	50	12.00%	81	8.64%
1999	56	7.14%	89	12.36%
2000	99	7.07%	104	7.69%
2001	115	17.39%	113	21.24%
2002	154	11.04%	182	15.38%
2003	225	11.56%	267	13.11%
2004	265	10.57%	373	15.01%
2005	348	13.22%	440	11.36%
2006	407	10.57%	465	13.98%
2007	539	9.09%	516	10.66%
2008	608	9.70%	657	8.68%
2009	661	7.87%	391	8.18%
2010	726	8.68%	571	8.76%
2011	744	6.72%	744	6.05%
2012	895	5.36%	805	6.09%
2013	995	4.52%	837	5.50%
2014	962	3.01%	1077	3.53%
2015	987	2.84%	1107	2.62%
2016	913	1.64%	1284	1.71%
2017	858	1.86%	1231	1.87%
2018	887	1.80%	1090	1.28%
2019	896	1.12%	1217	1.73%
Total	12,432	5.46%	13,692	5.64%

County #23 : Jefferson

OBD II Stations in County: 98

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	73	14	19.18%	130	11.54%
1998	88	12	13.64%	152	13.16%
1999	130	17	13.08%	181	10.50%
2000	144	14	9.72%	201	11.94%
2001	237	41	17.30%	266	25.19%
2002	232	35	15.09%	366	20.22%
2003	334	52	15.57%	510	17.84%
2004	403	49	12.16%	728	17.86%
2005	600	78	13.00%	866	14.55%
2006	700	92	13.14%	921	13.57%
2007	898	104	11.58%	1063	11.01%
2008	1017	90	8.85%	1238	10.50%
2009	1014	88	8.68%	779	6.42%
2010	1093	88	8.05%	1158	8.20%
2011	1262	76	6.02%	1618	7.23%
2012	1520	79	5.20%	1669	5.45%
2013	1771	90	5.08%	1843	4.94%
2014	1882	95	5.05%	2644	4.39%
2015	2024	87	4.30%	3067	3.39%
2016	2083	65	3.12%	3506	2.37%
2017	2234	50	2.24%	4287	1.82%
2018	3524	82	2.33%	4464	2.04%
2019	3252	69	2.12%	4669	1.80%
Total	26,515	1,467	5.53%	36,326	5.34%

County #25 : Lewis

OBD II Stations in County: 30

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	12	0.00%	56	5.36%
1998	38	7.89%	78	14.10%
1999	36	16.67%	69	10.14%
2000	58	13.79%	92	10.87%
2001	67	16.42%	102	21.57%
2002	63	6.35%	111	13.51%
2003	94	8.51%	173	12.72%
2004	127	8.66%	239	14.64%
2005	159	11.32%	250	10.40%
2006	191	12.57%	291	6.87%
2007	260	7.69%	339	9.44%
2008	270	6.67%	427	12.18%
2009	244	4.51%	281	8.90%
2010	287	6.97%	326	5.52%
2011	279	3.94%	433	6.93%
2012	382	4.45%	447	4.25%
2013	358	3.91%	471	3.40%
2014	368	3.26%	631	2.06%
2015	297	3.70%	628	1.91%
2016	297	1.68%	696	1.58%
2017	273	2.56%	726	0.83%
2018	360	0.56%	654	0.31%
2019	314	0.64%	740	0.68%
Total	4,834	5.03%	8,260	4.99%

County #26 : Livingston

OBD II Stations in County: 63

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	49	14.29%	82	8.54%
1998	90	5.56%	109	9.17%
1999	108	11.11%	129	15.50%
2000	109	7.34%	160	9.38%
2001	145	13.79%	178	17.42%
2002	198	13.64%	253	13.44%
2003	260	13.08%	338	13.61%
2004	366	9.84%	470	14.04%
2005	495	10.91%	613	11.75%
2006	541	9.43%	643	9.64%
2007	680	9.85%	660	8.79%
2008	783	7.79%	798	9.02%
2009	780	6.67%	567	6.53%
2010	811	5.06%	777	7.34%
2011	801	5.99%	1032	5.72%
2012	896	4.80%	1115	5.20%
2013	948	4.22%	1134	4.76%
2014	967	4.45%	1572	3.63%
2015	929	3.23%	1789	3.02%
2016	937	1.71%	1871	1.76%
2017	944	1.59%	2005	2.00%
2018	1291	1.55%	1737	1.50%
2019	1228	1.79%	2017	1.44%
Total	14,356	5.24%	20,049	4.97%

Appendix D

Table D-2: Summary of OBD II Initial Test Volumes and Failure Rates by County in Upstate

(Based on Data Collected from 1/1/2021 to 12/31/2021)

County #27 : Madison

OBD II Stations in County: 68

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	51	8	15.69%	56	9.80%
1998	56	3	5.36%	97	19.64%
1999	78	6	7.69%	116	15.38%
2000	100	8	8.00%	137	13.00%
2001	131	20	15.27%	136	16.03%
2002	186	22	11.83%	202	12.37%
2003	201	20	9.95%	266	14.43%
2004	289	22	7.61%	418	19.03%
2005	384	31	8.07%	442	12.50%
2006	458	53	11.57%	549	12.45%
2007	606	46	7.59%	588	10.07%
2008	616	32	5.19%	759	12.50%
2009	701	51	7.28%	536	5.85%
2010	796	42	5.28%	674	5.15%
2011	826	32	3.87%	1040	8.11%
2012	1029	52	5.05%	1090	4.47%
2013	1150	46	4.00%	1287	4.09%
2014	1317	37	2.81%	1660	4.40%
2015	1331	29	2.18%	2028	4.06%
2016	1439	38	2.64%	2202	2.92%
2017	1396	32	2.29%	2554	3.94%
2018	2088	64	3.07%	2692	2.54%
2019	1739	38	2.19%	2749	2.42%
Total	16,968	732	4.31%	22,278	4.30%

County #28 : Monroe

OBD II Stations in County: 528

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	567	8.47%	409	6.53%
1998	742	9.84%	503	7.82%
1999	1056	9.85%	639	8.14%
2000	1506	9.56%	818	6.51%
2001	1716	13.34%	1031	10.02%
2002	2403	12.23%	1740	9.70%
2003	3495	10.70%	2595	9.21%
2004	4387	9.53%	3717	9.55%
2005	5840	9.42%	4527	7.93%
2006	7224	8.50%	5266	6.66%
2007	9391	7.52%	6510	5.62%
2008	10894	7.24%	8476	5.91%
2009	11749	6.30%	5750	3.42%
2010	12901	5.39%	8091	3.94%
2011	13243	4.67%	11141	4.38%
2012	15618	4.23%	11914	3.60%
2013	16798	3.79%	12186	2.81%
2014	17197	3.24%	16116	2.91%
2015	18061	2.89%	18087	2.52%
2016	18007	2.52%	19188	2.09%
2017	19631	2.09%	21111	1.83%
2018	27064	2.14%	21404	1.49%
2019	27984	1.60%	26921	1.35%
Total	247,474	4.31%	208,140	4.10%

County #29 : Montgomery

OBD II Stations in County: 43

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	40	20.00%	57	7.50%
1998	55	7.27%	49	25.45%
1999	81	13.58%	86	13.58%
2000	110	9.09%	107	16.36%
2001	122	18.03%	132	21.31%
2002	144	16.67%	223	39.58%
2003	202	12.38%	256	18.81%
2004	270	13.70%	374	22.22%
2005	285	12.98%	430	16.84%
2006	356	10.67%	423	10.96%
2007	460	11.52%	475	9.13%
2008	508	11.81%	534	10.63%
2009	485	9.69%	324	6.39%
2010	544	10.11%	460	5.15%
2011	501	6.19%	561	4.19%
2012	603	3.65%	564	4.31%
2013	691	4.63%	562	3.47%
2014	698	3.30%	820	4.15%
2015	643	2.95%	833	4.04%
2016	612	2.78%	947	2.12%
2017	608	2.47%	1070	3.45%
2018	770	3.38%	949	2.21%
2019	647	0.46%	1016	2.63%
Total	9,435	6.56%	11,252	5.89%

County #32 : Niagara

OBD II Stations in County: 188

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	158	13	8.23%	228	10.53%
1998	270	21	7.78%	264	12.12%
1999	336	25	7.44%	346	10.40%
2000	446	33	7.40%	441	9.52%
2001	513	61	11.89%	505	17.43%
2002	785	87	11.08%	810	12.59%
2003	1020	93	9.12%	1183	10.57%
2004	1187	128	10.78%	1497	10.82%
2005	1641	145	8.84%	1695	9.79%
2006	1883	155	8.23%	1847	9.20%
2007	2419	187	7.73%	2260	8.14%
2008	2822	217	7.69%	2913	7.31%
2009	3010	198	6.58%	1959	6.74%
2010	3051	173	5.67%	2619	6.91%
2011	2980	159	5.34%	3325	5.71%
2012	3523	162	4.60%	3676	4.62%
2013	3457	153	4.43%	3717	3.79%
2014	3699	126	3.41%	4906	3.34%
2015	3376	112	3.32%	5160	3.28%
2016	3404	91	2.67%	5613	2.21%
2017	3450	65	1.88%	6226	1.90%
2018	5225	104	1.99%	6342	1.97%
2019	5129	72	1.40%	8544	1.42%
Total	53,784	2,580	4.80%	66,076	4.51%

County #33 : Oneida

OBD II Stations in County: 226

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	172	9.88%	240	8.33%
1998	230	11.74%	248	13.71%
1999	298	10.40%	307	12.38%
2000	395	10.89%	379	11.61%
2001	506	14.23%	404	19.80%
2002	671	14.46%	635	14.96%
2003	854	12.18%	874	13.84%
2004	1105	11.04%	1470	13.47%
2005	1480	10.95%	1632	11.03%
2006	1860	9.84%	1892	11.15%
2007	2425	8.58%	2311	8.39%
2008	2828	8.13%	2734	8.12%
2009	2794	7.30%	1856	7.81%
2010	3308	6.38%	2692	7.10%
2011	3411	5.48%	3493	6.01%
2012	4343	4.72%	3518	5.60%
2013	4742	4.51%	3901	4.33%
2014	4722	3.60%	5031	3.66%
2015	5133	3.37%	6005	3.05%
2016	5082	3.03%	6272	2.38%
2017	5504	2.33%	6560	2.21%
2018	6810	2.50%	6757	2.49%
2019	6580	1.93%	7425	1.64%
Total	65,253	4.96%	66,636	4.95%

County #34 : Onondaga

OBD II Stations in County: 386

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	325	10.46%	253	11.46%
1998	365	6.85%	326	9.82%
1999	475	12.21%	394	14.21%
2000	670	10.60%	465	8.39%
2001	807	14.75%	535	17.38%
2002	1061	12.25%	826	11.02%
2003	1418	9.80%	1185	14.26%
2004	1807	10.18%	1800	12.11%
2005	2417	8.32%	2184	11.68%
2006	3049	8.99%	2500	9.72%
2007	4057	7.76%	3167	9.47%
2008	4767	7.49%	4308	8.19%
2009	4965	6.69%	2890	8.03%
2010	6117	5.64%	4188	6.09%
2011	6334	4.94%	6002	5.41%
2012	8314	4.67%	6742	5.28%
2013	9586	4.04%	7391	4.10%
2014	10200	3.62%	10121	3.29%
2015	11031	3.08%	11900	2.51%
2016	11105	2.28%	13645	2.00%
2017	12276	2.14%	14829	2.34%
2018	18017	2.69%	16636	2.57%
2019	17004	2.08%	19151	1.71%
Total	136,167	4.21%	131,438	4.07%

Appendix D

Table D-2: Summary of OBD II Initial Test Volumes and Failure Rates by County in Upstate

(Based on Data Collected from 1/1/2021 to 12/31/2021)

County #35 : Ontario

OBD II Stations in County: 120

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	98	9	9.18%	132	5.30%
1998	134	18	13.43%	161	10.56%
1999	188	18	9.57%	166	10.84%
2000	262	20	7.63%	227	12.33%
2001	278	41	14.75%	262	16.79%
2002	408	49	12.01%	408	16.91%
2003	501	47	9.38%	518	13.13%
2004	604	64	10.60%	841	13.44%
2005	818	79	9.66%	912	10.31%
2006	1073	93	8.67%	1049	9.15%
2007	1290	92	7.13%	1184	7.09%
2008	1520	99	6.51%	1557	7.84%
2009	1546	89	5.76%	1050	8.48%
2010	1882	104	5.53%	1502	5.99%
2011	1986	97	4.88%	2182	5.96%
2012	2452	117	4.77%	2337	5.52%
2013	2875	138	4.80%	2638	4.59%
2014	3106	113	3.64%	3512	3.36%
2015	3299	106	3.21%	3822	2.77%
2016	3240	97	2.99%	4240	1.91%
2017	3513	87	2.48%	4625	2.42%
2018	4576	89	1.94%	4230	2.43%
2019	4433	70	1.58%	4703	1.45%
Total	40,082	1,736	4.33%	42,258	4.51%

County #36 : Orange

OBD II Stations in County: 267

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	367	9.54%	369	8.13%
1998	571	9.98%	509	10.61%
1999	786	8.91%	687	12.08%
2000	1124	8.99%	929	12.06%
2001	1340	13.58%	1125	17.60%
2002	1735	12.74%	1752	13.47%
2003	2373	11.97%	2294	12.86%
2004	2756	10.60%	3309	12.18%
2005	3479	9.40%	3371	11.42%
2006	3764	8.45%	3452	10.37%
2007	4401	8.04%	3908	8.21%
2008	4700	8.06%	4345	8.10%
2009	4944	7.04%	2842	7.21%
2010	5875	5.82%	3952	6.22%
2011	5761	4.70%	5199	4.69%
2012	7235	4.41%	5388	4.55%
2013	8140	3.38%	5614	3.71%
2014	7830	2.76%	7090	3.39%
2015	8961	2.41%	8721	2.26%
2016	8953	2.46%	9763	2.03%
2017	9484	2.22%	10393	1.63%
2018	12406	2.43%	9968	1.95%
2019	12217	1.80%	11447	1.38%
Total	119,202	4.66%	106,427	4.82%

County #37 : Orleans

OBD II Stations in County: 42

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	40	10.00%	65	10.77%
1998	44	9.09%	109	15.60%
1999	75	9.33%	110	14.55%
2000	87	9.20%	151	14.57%
2001	111	22.52%	171	19.88%
2002	147	14.29%	252	15.08%
2003	178	8.43%	332	16.57%
2004	250	16.00%	472	17.16%
2005	344	13.66%	526	14.45%
2006	383	16.19%	518	14.86%
2007	430	13.49%	589	12.39%
2008	629	11.76%	729	10.56%
2009	497	7.44%	412	11.41%
2010	451	7.32%	510	7.25%
2011	501	8.78%	665	7.22%
2012	577	5.03%	685	6.42%
2013	516	3.49%	656	5.18%
2014	541	4.81%	834	5.04%
2015	527	4.93%	865	2.77%
2016	502	2.19%	987	1.62%
2017	579	1.21%	1230	1.87%
2018	903	2.10%	1264	2.45%
2019	633	3.32%	1211	3.06%
Total	8,945	7.11%	13,343	7.16%

County #38 : Oswego

OBD II Stations in County: 111

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	91	5	5.49%	132	14.39%
1998	102	15	14.71%	180	15.00%
1999	158	16	10.13%	204	11.27%
2000	235	18	7.66%	237	10.55%
2001	284	38	13.38%	309	16.18%
2002	339	40	11.80%	441	12.02%
2003	412	36	8.74%	538	16.54%
2004	498	49	9.84%	896	14.29%
2005	677	64	9.45%	1007	11.32%
2006	876	79	9.02%	1078	10.95%
2007	1014	82	8.09%	1232	10.15%
2008	1261	106	8.41%	1590	8.81%
2009	1093	83	7.59%	976	8.91%
2010	1248	86	6.89%	1410	6.45%
2011	1376	88	6.40%	1914	7.58%
2012	1588	90	5.67%	2034	6.44%
2013	1780	100	5.62%	2133	5.30%
2014	1790	75	4.19%	2840	3.24%
2015	1840	58	3.15%	3080	2.95%
2016	1773	61	3.44%	3344	2.54%
2017	1683	36	2.14%	3520	2.50%
2018	2259	67	2.97%	3196	2.41%
2019	2006	44	2.19%	3415	1.96%
Total	24,383	1,336	5.48%	35,706	5.54%

County #39 : Otsego

OBD II Stations in County: 64

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	44	11.36%	98	10.20%
1998	74	6.76%	112	12.50%
1999	123	12.20%	137	13.14%
2000	129	10.08%	200	11.50%
2001	190	14.21%	237	26.16%
2002	231	15.58%	318	20.13%
2003	262	12.60%	385	13.77%
2004	339	12.98%	545	11.93%
2005	449	11.14%	564	13.48%
2006	519	10.40%	577	11.44%
2007	641	9.83%	654	9.94%
2008	692	7.80%	772	9.97%
2009	721	7.77%	498	6.43%
2010	805	6.83%	741	7.83%
2011	851	3.64%	870	6.78%
2012	1093	5.49%	930	6.02%
2013	1151	4.95%	1046	3.44%
2014	1310	2.98%	1424	2.74%
2015	1438	3.41%	1683	2.08%
2016	1480	1.62%	1860	1.67%
2017	1612	1.92%	1990	2.06%
2018	1970	1.93%	1882	2.39%
2019	1949	1.69%	2056	1.65%
Total	18,073	4.82%	19,579	5.41%

County #40 : Putnam

OBD II Stations in County: 79

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	107	12.15%	89	14.61%
1998	148	6.08%	111	10.81%
1999	197	5.58%	132	15.15%
2000	291	7.56%	199	11.06%
2001	350	16.86%	269	12.64%
2002	521	13.63%	395	15.95%
2003	639	10.95%	509	14.54%
2004	769	11.70%	738	11.65%
2005	903	9.41%	822	10.83%
2006	1012	9.19%	857	10.27%
2007	1208	7.28%	983	8.95%
2008	1324	6.57%	1031	8.44%
2009	1375	5.38%	772	6.09%
2010	1597	6.01%	989	6.07%
2011	1597	3.82%	1394	5.67%
2012	1915	4.28%	1456	4.81%
2013	2114	2.98%	1532	3.98%
2014	2132	2.72%	1914	4.44%
2015	2488	2.77%	2407	2.66%
2016	2359	1.48%	2548	2.04%
2017	2623	1.37%	2461	1.95%
2018	3150	2.54%	2357	1.99%
2019	3623	1.63%	2977	1.41%
Total	32,442	4.35%	26,942	4.94%

Appendix D

Table D-2: Summary of OBD II Initial Test Volumes and Failure Rates by County in Upstate

(Based on Data Collected from 1/1/2021 to 12/31/2021)

County #42 : Rensselaer

OBD II Stations in County: 118

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	132	15	11.36%	156	5.77%
1998	172	21	12.21%	180	9.44%
1999	221	18	8.14%	217	10.60%
2000	341	34	9.97%	285	10.18%
2001	402	63	15.67%	398	15.58%
2002	501	66	13.17%	552	14.31%
2003	702	54	7.69%	750	11.73%
2004	872	109	12.50%	1085	9.40%
2005	1204	113	9.39%	1162	11.02%
2006	1286	125	9.72%	1219	8.70%
2007	1615	97	6.01%	1303	6.45%
2008	1915	124	6.48%	1598	6.45%
2009	1921	122	6.35%	1100	6.27%
2010	2170	98	4.52%	1512	4.30%
2011	2130	90	4.23%	2012	4.77%
2012	2635	99	3.76%	2090	4.02%
2013	2717	89	3.28%	2110	3.13%
2014	2745	72	2.62%	2650	3.55%
2015	3044	66	2.17%	3016	1.92%
2016	2867	62	2.16%	3148	1.59%
2017	3131	53	1.69%	2901	1.41%
2018	3410	65	1.91%	2539	1.22%
2019	3709	60	1.62%	2941	0.99%
Total	39,842	1,715	4.30%	34,924	4.33%

County #45 : St Lawrence

OBD II Stations in County: 107

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	77	10.39%	160	13.75%
1998	78	11.54%	189	15.87%
1999	124	11.29%	216	16.67%
2000	205	14.15%	275	13.45%
2001	220	12.73%	330	20.61%
2002	303	15.18%	496	15.32%
2003	410	11.95%	626	18.21%
2004	497	11.67%	861	15.33%
2005	728	10.44%	1027	14.90%
2006	886	13.54%	1114	12.48%
2007	1114	10.32%	1289	11.87%
2008	1281	10.15%	1526	8.91%
2009	1121	9.46%	997	10.53%
2010	1310	7.63%	1404	7.62%
2011	1284	6.39%	1789	6.37%
2012	1572	7.25%	1918	6.10%
2013	1626	6.03%	2010	5.92%
2014	1547	4.20%	2678	3.85%
2015	1682	3.39%	2828	2.48%
2016	1472	3.33%	3010	1.99%
2017	1526	1.77%	3438	1.95%
2018	1974	1.47%	3043	1.22%
2019	1783	1.85%	3477	1.52%
Total	22,820	6.32%	34,701	5.90%

County #46 : Saratoga

OBD II Stations in County: 157

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	169	8.28%	191	10.99%
1998	228	10.96%	222	12.16%
1999	356	8.15%	235	9.36%
2000	453	8.61%	344	10.17%
2001	576	10.59%	403	14.64%
2002	732	12.57%	665	14.29%
2003	1008	10.42%	887	13.19%
2004	1222	9.66%	1332	9.76%
2005	1630	8.47%	1505	9.30%
2006	1813	7.50%	1657	8.51%
2007	2311	8.09%	1938	7.64%
2008	2564	6.67%	2365	7.19%
2009	2769	6.57%	1613	5.39%
2010	3138	4.62%	2406	5.40%
2011	3282	4.02%	3341	4.46%
2012	4435	3.68%	3559	3.74%
2013	4814	3.47%	4018	3.81%
2014	5034	3.02%	5289	3.03%
2015	5371	2.27%	6222	2.44%
2016	5241	2.10%	6853	1.49%
2017	5756	1.70%	7150	1.47%
2018	6799	1.75%	6865	1.44%
2019	7022	1.58%	7583	1.24%
Total	66,723	3.92%	66,643	3.70%

County #47 : Schenectady

OBD II Stations in County: 129

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	127	9	7.09%	141	10.64%
1998	184	25	13.59%	160	10.63%
1999	267	32	11.99%	210	11.43%
2000	371	34	9.16%	279	14.34%
2001	481	81	16.84%	355	18.03%
2002	611	94	15.38%	584	14.55%
2003	852	95	11.15%	806	9.93%
2004	1067	118	11.06%	1130	9.82%
2005	1311	115	8.77%	1221	10.48%
2006	1500	135	9.00%	1292	8.44%
2007	1869	150	8.03%	1518	7.64%
2008	2017	142	7.04%	1888	7.73%
2009	2148	142	6.61%	1271	6.29%
2010	2488	145	5.83%	1608	6.16%
2011	2413	119	4.93%	2139	4.68%
2012	3120	124	3.97%	2331	5.11%
2013	3408	125	3.67%	2374	3.88%
2014	3330	110	3.30%	3124	3.20%
2015	3549	90	2.54%	3690	3.01%
2016	3859	83	2.15%	4337	1.96%
2017	4401	94	2.14%	4437	2.41%
2018	5725	141	2.46%	4365	2.47%
2019	6110	151	2.47%	5177	1.35%
Total	51,208	2,354	4.60%	44,437	4.51%

County #48 : Schoharie

OBD II Stations in County: 36

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	40	22.50%	75	10.67%
1998	43	13.95%	96	11.46%
1999	71	8.45%	114	8.77%
2000	96	8.33%	124	12.10%
2001	119	11.76%	152	25.00%
2002	154	11.04%	192	16.67%
2003	169	10.06%	240	14.17%
2004	178	15.73%	341	14.08%
2005	272	9.19%	348	12.07%
2006	327	12.54%	350	8.57%
2007	324	10.49%	321	9.35%
2008	395	9.11%	391	9.46%
2009	386	7.25%	272	9.19%
2010	378	6.35%	339	7.08%
2011	332	3.01%	463	5.62%
2012	449	3.56%	443	4.06%
2013	441	2.27%	404	3.71%
2014	413	2.42%	583	2.92%
2015	481	2.29%	622	2.57%
2016	467	1.50%	671	2.24%
2017	464	2.37%	596	1.51%
2018	431	0.70%	496	0.20%
2019	429	0.93%	538	1.49%
Total	6,859	5.47%	8,171	6.23%

County #49 : Schuyler

OBD II Stations in County: 20

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	19	5.26%	31	3.23%
1998	33	6.06%	34	5.88%
1999	37	5.41%	50	6.00%
2000	55	3.64%	64	12.50%
2001	70	8.57%	69	10.14%
2002	68	13.24%	120	17.50%
2003	98	8.16%	138	14.49%
2004	97	7.22%	189	12.17%
2005	166	4.82%	234	6.41%
2006	189	5.29%	266	8.65%
2007	207	6.28%	248	6.05%
2008	238	7.56%	264	9.09%
2009	237	4.64%	128	5.47%
2010	225	6.67%	232	7.76%
2011	228	3.51%	248	6.45%
2012	286	3.50%	271	3.32%
2013	247	4.45%	259	5.41%
2014	252	2.78%	359	1.95%
2015	261	1.92%	383	2.35%
2016	245	0.82%	359	1.11%
2017	235	0.00%	470	1.28%
2018	277	1.44%	361	1.11%
2019	250	0.00%	389	0.51%
Total	4,020	3.96%	5,166	4.99%

Appendix D

Table D-2: Summary of OBD II Initial Test Volumes and Failure Rates by County in Upstate

(Based on Data Collected from 1/1/2021 to 12/31/2021)

County #50 : Seneca

OBD II Stations in County: 38

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	37	8	21.62%	60	13.33%
1998	54	5	9.26%	66	12.12%
1999	83	5	6.02%	89	7.87%
2000	80	8	10.00%	115	9.57%
2001	123	16	13.01%	119	18.49%
2002	158	30	18.99%	194	13.92%
2003	214	13	6.07%	256	13.28%
2004	218	26	11.93%	335	13.43%
2005	281	11	3.91%	413	9.69%
2006	375	28	7.47%	449	8.46%
2007	401	37	9.23%	543	9.21%
2008	488	31	6.35%	603	7.96%
2009	461	29	6.29%	357	7.84%
2010	525	30	5.71%	486	6.17%
2011	584	35	5.99%	668	5.54%
2012	690	34	4.93%	634	5.05%
2013	706	27	3.82%	692	6.50%
2014	674	23	3.41%	897	2.45%
2015	609	16	2.63%	935	3.21%
2016	596	12	2.01%	931	1.83%
2017	638	14	2.19%	943	1.80%
2018	761	11	1.45%	957	2.61%
2019	671	14	2.09%	927	1.51%
Total	9,427	463	4.91%	11,669	5.44%

County #51 : Steuben

OBD II Stations in County: 96

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	117	5.98%	186	4.84%
1998	151	15.89%	223	9.87%
1999	191	12.57%	292	9.93%
2000	246	10.98%	347	5.48%
2001	286	20.98%	397	10.08%
2002	331	16.92%	527	10.82%
2003	460	13.48%	733	8.19%
2004	553	14.29%	1009	5.65%
2005	834	11.99%	1137	7.04%
2006	934	12.85%	1217	6.90%
2007	1091	11.46%	1247	7.06%
2008	1387	9.37%	1422	4.92%
2009	1156	7.18%	875	9.14%
2010	1239	7.02%	1239	5.00%
2011	1410	8.01%	1584	3.54%
2012	1676	5.55%	1786	3.30%
2013	1674	5.20%	1746	3.55%
2014	1845	4.23%	2390	1.13%
2015	1669	2.46%	2501	1.20%
2016	1634	2.14%	2578	1.12%
2017	1672	1.44%	3038	0.53%
2018	2255	1.64%	2853	0.63%
2019	2163	2.31%	3097	0.61%
Total	24,974	6.17%	32,424	3.31%

County #53 : Sullivan

OBD II Stations in County: 82

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	83	16.87%	128	10.94%
1998	132	11.36%	122	12.30%
1999	185	14.05%	162	16.05%
2000	179	17.88%	221	14.48%
2001	246	20.73%	254	20.08%
2002	324	20.99%	362	18.78%
2003	401	21.70%	525	16.57%
2004	472	23.73%	677	16.54%
2005	557	19.93%	687	16.16%
2006	659	12.14%	719	11.13%
2007	786	12.47%	727	13.48%
2008	846	10.28%	871	9.99%
2009	836	6.10%	584	8.73%
2010	878	6.72%	745	7.92%
2011	830	9.64%	930	8.60%
2012	1020	5.88%	900	6.67%
2013	1160	3.71%	989	4.35%
2014	997	2.91%	1130	2.57%
2015	1151	3.74%	1393	3.09%
2016	1146	2.53%	1496	1.94%
2017	1119	1.61%	1426	1.26%
2018	1309	1.22%	1277	1.25%
2019	1292	1.55%	1605	1.25%
Total	16,608	7.40%	17,930	6.85%

County #54 : Tioga

OBD II Stations in County: 52

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	71	6	8.45%	95	7.37%
1998	54	5	9.26%	103	7.77%
1999	96	10	10.42%	134	14.18%
2000	138	18	13.04%	180	13.33%
2001	157	22	14.01%	190	18.42%
2002	179	19	10.61%	298	12.42%
2003	267	40	14.98%	357	14.01%
2004	316	32	10.13%	520	16.35%
2005	423	43	10.17%	549	10.56%
2006	479	54	11.27%	586	11.77%
2007	555	47	8.47%	644	11.02%
2008	635	47	7.40%	680	10.44%
2009	585	42	7.18%	432	7.18%
2010	646	47	7.28%	613	6.53%
2011	668	46	6.89%	840	5.83%
2012	836	35	4.19%	803	5.73%
2013	789	31	3.93%	869	4.95%
2014	872	32	3.67%	1048	3.15%
2015	779	28	3.59%	1133	2.91%
2016	703	18	2.56%	1122	1.87%
2017	743	15	2.02%	1145	2.36%
2018	807	9	1.12%	988	1.72%
2019	676	5	0.74%	953	0.52%
Total	11,474	651	5.67%	14,282	6.15%

County #55 : Tompkins

OBD II Stations in County: 75

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	92	13.04%	85	8.24%
1998	122	10.66%	113	12.39%
1999	170	13.53%	125	13.60%
2000	203	8.37%	156	11.54%
2001	242	14.88%	204	17.16%
2002	293	15.36%	284	20.07%
2003	377	13.53%	374	14.97%
2004	540	10.19%	485	15.46%
2005	743	11.31%	638	13.01%
2006	827	11.61%	723	9.54%
2007	1017	9.54%	803	9.96%
2008	1113	8.27%	951	7.68%
2009	1099	6.64%	590	6.95%
2010	1358	5.96%	879	7.96%
2011	1343	5.44%	1124	5.60%
2012	1867	4.45%	1240	5.24%
2013	1981	3.69%	1268	3.55%
2014	1948	3.08%	1623	2.90%
2015	2144	2.66%	1879	3.14%
2016	2053	2.87%	2068	2.13%
2017	2404	2.91%	2152	2.14%
2018	2952	2.85%	2318	2.55%
2019	2528	2.14%	2212	2.08%
Total	27,416	5.06%	22,294	5.24%

County #56 : Ulster

OBD II Stations in County: 146

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	243	11.11%	290	8.28%
1998	378	9.52%	386	12.44%
1999	489	9.00%	443	10.84%
2000	731	9.58%	613	9.30%
2001	819	14.16%	690	18.41%
2002	1083	13.39%	1019	12.66%
2003	1360	10.74%	1233	14.36%
2004	1645	10.09%	1740	10.29%
2005	2009	8.61%	1706	10.20%
2006	2203	8.26%	1773	10.60%
2007	2451	7.26%	1820	6.87%
2008	2674	6.13%	2113	7.10%
2009	2768	5.49%	1398	6.15%
2010	3057	4.06%	1902	5.47%
2011	2901	3.86%	2347	4.64%
2012	3536	3.54%	2540	4.25%
2013	3959	3.49%	2510	3.67%
2014	3795	2.37%	3242	3.05%
2015	4260	2.42%	3794	2.50%
2016	4094	1.88%	3896	1.85%
2017	4568	1.88%	4335	1.91%
2018	5068	2.33%	4064	2.29%
2019	4937	1.50%	4615	1.13%
Total	59,028	4.48%	48,469	4.99%

Appendix D

Table D-2: Summary of OBD II Initial Test Volumes and Failure Rates by County in Upstate

(Based on Data Collected from 1/1/2021 to 12/31/2021)

County #57 : Warren

OBD II Stations in County: 66

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	64	6	9.38%	79	15.19%
1998	95	9	9.47%	91	10.99%
1999	121	10	8.26%	118	7.63%
2000	148	19	12.84%	132	11.36%
2001	172	24	13.95%	186	14.52%
2002	246	39	15.85%	262	13.74%
2003	330	41	12.42%	372	13.98%
2004	408	56	13.73%	512	13.67%
2005	536	55	10.26%	585	10.26%
2006	641	47	7.33%	680	10.00%
2007	730	62	8.49%	775	8.26%
2008	837	68	8.12%	947	8.13%
2009	879	61	6.94%	688	5.09%
2010	1052	49	4.66%	910	6.37%
2011	1097	49	4.47%	1371	5.62%
2012	1559	60	3.85%	1521	4.34%
2013	1929	82	4.25%	1889	3.60%
2014	1917	69	3.60%	2453	2.98%
2015	2216	52	2.35%	2787	2.01%
2016	2303	58	2.52%	2966	1.92%
2017	2567	58	2.26%	3247	1.94%
2018	3657	83	2.27%	3470	1.64%
2019	3481	58	1.67%	3851	1.27%
Total	26,985	1,115	4.13%	29,892	3.88%

County #58 : Washington

OBD II Stations in County: 46

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	58	13.79%	64	15.63%
1998	66	9.09%	110	11.82%
1999	105	9.52%	115	10.43%
2000	104	8.65%	162	11.73%
2001	159	13.84%	213	19.25%
2002	212	12.74%	269	16.73%
2003	269	9.67%	412	12.14%
2004	286	9.79%	544	11.58%
2005	412	7.52%	563	10.48%
2006	465	11.18%	626	9.11%
2007	534	7.87%	661	6.96%
2008	619	8.89%	830	8.07%
2009	599	5.68%	477	6.50%
2010	624	3.85%	658	8.51%
2011	642	4.67%	912	5.48%
2012	777	5.41%	872	7.11%
2013	813	3.69%	932	3.86%
2014	799	2.50%	1071	4.11%
2015	770	2.08%	1216	2.71%
2016	771	2.20%	1235	2.11%
2017	639	1.10%	1197	1.42%
2018	847	1.65%	1185	1.35%
2019	794	0.63%	1244	1.69%
Total	11,364	4.88%	15,568	5.61%

County #59 : Wayne

OBD II Stations in County: 89

Model Year	Light Duty Vehicles Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	61	16.39%	113	9.73%
1998	115	11.30%	139	12.23%
1999	154	7.79%	178	8.43%
2000	199	9.55%	222	11.26%
2001	237	17.30%	281	17.44%
2002	284	15.85%	386	15.03%
2003	403	12.41%	528	15.15%
2004	506	12.45%	758	13.72%
2005	635	9.29%	849	10.13%
2006	792	7.20%	959	12.41%
2007	973	4.73%	1088	9.83%
2008	1171	5.72%	1279	9.46%
2009	1105	2.81%	829	7.84%
2010	1185	4.73%	1197	6.52%
2011	1218	4.11%	1588	6.17%
2012	1430	4.34%	1608	5.10%
2013	1421	2.53%	1733	4.56%
2014	1528	2.88%	2405	2.70%
2015	1483	2.23%	2369	3.21%
2016	1504	1.73%	2499	2.08%
2017	1555	1.09%	2462	2.03%
2018	1719	0.93%	2178	1.74%
2019	1552	1.35%	2320	1.77%
Total	21,230	4.12%	27,968	5.42%

County #61 : Wyoming

OBD II Stations in County: 42

Model Year	Light Duty Vehicles Volume		% Fail	Light Duty Trucks Volume	% Fail
1997	29	0	0.00%	46	6.52%
1998	38	1	2.63%	68	19.12%
1999	41	1	2.44%	61	8.20%
2000	41	7	17.07%	98	7.14%
2001	85	12	14.12%	66	21.21%
2002	94	10	10.64%	125	13.60%
2003	123	12	9.76%	192	14.58%
2004	131	9	6.87%	256	13.67%
2005	197	16	8.12%	291	13.06%
2006	225	27	12.00%	343	12.54%
2007	304	33	10.86%	387	10.59%
2008	406	30	7.39%	484	11.16%
2009	373	30	8.04%	312	5.77%
2010	366	29	7.92%	458	8.08%
2011	363	23	6.34%	622	5.14%
2012	439	19	4.33%	651	4.76%
2013	403	19	4.71%	715	4.20%
2014	440	16	3.64%	975	3.38%
2015	403	14	3.47%	993	3.22%
2016	435	9	2.07%	1002	2.00%
2017	408	4	0.98%	1145	1.40%
2018	581	7	1.20%	1032	1.07%
2019	505	6	1.19%	1151	0.87%
Total	6,430	334	5.19%	11,473	4.95%

County #62 : Yates

OBD II Stations in County: 24

Model Year	Light Duty Volume	% Fail	Light Duty Trucks Volume	% Fail
1997	24	8.33%	49	12.24%
1998	32	9.38%	61	9.84%
1999	41	9.76%	65	16.92%
2000	53	9.43%	94	10.64%
2001	77	10.39%	94	9.57%
2002	82	17.07%	149	17.45%
2003	129	6.20%	185	9.19%
2004	152	13.82%	280	14.29%
2005	195	7.18%	276	11.96%
2006	215	7.91%	352	10.23%
2007	258	9.30%	308	10.06%
2008	290	4.48%	333	7.21%
2009	226	3.98%	252	7.14%
2010	323	5.26%	268	7.09%
2011	316	5.70%	432	5.56%
2012	358	3.35%	400	3.00%
2013	353	2.55%	464	4.96%
2014	331	3.63%	542	2.95%
2015	291	1.72%	626	3.04%
2016	277	2.89%	670	2.24%
2017	280	1.07%	715	1.54%
2018	359	1.39%	509	0.98%
2019	315	0.95%	619	1.45%
Total	4,977	4.70%	7,743	5.42%

Appendix E

Table E-1-a-i: Summary of NYMA OBD II Re-Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non-Diesel Vehicles

Model Year	Initial Inspection Failures	Total First Re-Insp.	First Re-Insp. Fails	%	First Re-Insp. Passes	%	Total 2nd or Subsequent Re-Insp.	2nd or Subsequent Re-Insp. Fails	%	2nd or Subsequent Re-Insp. Passes	%
1997	1,075	779	129	16.56%	650	83.44%	130	44	33.85%	86	66.15%
1998	1,477	1,079	136	12.60%	943	87.40%	141	50	35.46%	91	64.54%
1999	1,959	1,478	218	14.75%	1,260	85.25%	210	73	34.76%	137	65.24%
2000	2,812	2,105	273	12.97%	1,832	87.03%	251	64	25.50%	187	74.50%
2001	4,319	3,169	609	19.22%	2,560	80.78%	634	224	35.33%	410	64.67%
2002	4,878	3,662	594	16.22%	3,068	83.78%	584	198	33.90%	386	66.10%
2003	5,662	4,327	621	14.35%	3,706	85.65%	632	196	31.01%	436	68.99%
2004	6,022	4,606	650	14.11%	3,956	85.89%	661	227	34.34%	434	65.66%
2005	6,530	5,064	686	13.55%	4,378	86.45%	651	190	29.19%	461	70.81%
2006	6,877	5,325	718	13.48%	4,607	86.52%	755	240	31.79%	515	68.21%
2007	7,368	5,727	733	12.80%	4,994	87.20%	719	200	27.82%	519	72.18%
2008	7,637	5,967	733	12.28%	5,234	87.72%	763	223	29.23%	540	70.77%
2009	6,946	5,582	736	13.19%	4,846	86.81%	789	234	29.66%	555	70.34%
2010	7,068	5,693	713	12.52%	4,980	87.48%	747	212	28.38%	535	71.62%
2011	6,460	5,218	622	11.92%	4,596	88.08%	660	180	27.27%	480	72.73%
2012	7,083	5,829	739	12.68%	5,090	87.32%	844	257	30.45%	587	69.55%
2013	7,606	6,299	760	12.07%	5,539	87.93%	832	233	28.00%	599	72.00%
2014	6,321	5,139	641	12.47%	4,498	87.53%	728	181	24.86%	547	75.14%
2015	7,224	5,962	754	12.65%	5,208	87.35%	887	238	26.83%	649	73.17%
2016	6,690	5,397	609	11.28%	4,788	88.72%	744	217	29.17%	527	70.83%
2017	7,787	6,482	810	12.50%	5,672	87.50%	1,032	298	28.88%	734	71.12%
2018	10,692	9,123	1,247	13.67%	7,876	86.33%	1,615	457	28.30%	1,158	71.70%
2019	9,127	7,684	1,286	16.74%	6,398	83.26%	1,778	633	35.60%	1,145	64.40%
Total:	139,620	111,696	15,017	13.44%	96,679	86.56%	16,787	5,069	30.20%	11,718	69.80%

Appendix E

Table E-1-a-ii: Summary of NYMA OBD II Re-Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non-Diesel Trucks

Model Year	Initial Inspection Failures	Total First Re-Insp.	First Re-Insp. Fails	%	First Re-Insp. Passes	%	Total 2nd or Subsequent Re-Insp.	2nd or Subsequent Re-Insp. Fails	%	2nd or Subsequent Re-Insp. Passes	%
1997	865	626	114	18.21%	512	81.79%	102	31	30.39%	71	69.61%
1998	1,102	779	124	15.92%	655	84.08%	105	23	21.90%	82	78.10%
1999	1,628	1,168	183	15.67%	985	84.33%	192	77	40.10%	115	59.90%
2000	2,183	1,579	240	15.20%	1,339	84.80%	236	77	32.63%	159	67.37%
2001	3,748	2,695	536	19.89%	2,159	80.11%	577	219	37.95%	358	62.05%
2002	4,778	3,466	628	18.12%	2,838	81.88%	609	192	31.53%	417	68.47%
2003	5,660	4,225	655	15.50%	3,570	84.50%	644	202	31.37%	442	68.63%
2004	7,000	5,306	782	14.74%	4,524	85.26%	780	274	35.13%	506	64.87%
2005	7,439	5,579	830	14.88%	4,749	85.12%	814	262	32.19%	552	67.81%
2006	7,018	5,352	789	14.74%	4,563	85.26%	793	255	32.16%	538	67.84%
2007	7,231	5,511	739	13.41%	4,772	86.59%	765	255	33.33%	510	66.67%
2008	7,447	5,771	716	12.41%	5,055	87.59%	687	206	29.99%	481	70.01%
2009	4,950	3,837	569	14.83%	3,268	85.17%	533	137	25.70%	396	74.30%
2010	5,851	4,605	656	14.25%	3,949	85.75%	678	192	28.32%	486	71.68%
2011	6,730	5,399	737	13.65%	4,662	86.35%	801	249	31.09%	552	68.91%
2012	5,862	4,755	625	13.14%	4,130	86.86%	674	192	28.49%	482	71.51%
2013	5,722	4,708	553	11.75%	4,155	88.25%	643	164	25.51%	479	74.49%
2014	5,938	4,953	614	12.40%	4,339	87.60%	724	213	29.42%	511	70.58%
2015	6,441	5,406	676	12.50%	4,730	87.50%	816	215	26.35%	601	73.65%
2016	5,819	4,978	499	10.02%	4,479	89.98%	612	154	25.16%	458	74.84%
2017	5,935	5,097	608	11.93%	4,489	88.07%	802	199	24.81%	603	75.19%
2018	7,279	6,256	898	14.35%	5,358	85.65%	1,260	379	30.08%	881	69.92%
2019	6,577	5,602	813	14.51%	4,789	85.49%	1,093	388	35.50%	705	64.50%
Total:	123,203	97,653	13,584	13.91%	84,069	86.09%	14,940	4,555	30.49%	10,385	69.51%

Appendix E

Table E-1-b-i: Summary of NYMA OBD II Re-Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Vehicles

Model Year	Initial Inspection Failures	Total First Re-Insp.	First Re-Insp. Fails	%	First Re-Insp. Passes	%	Total 2nd or Subsequent Re-Insp.	2nd or Subsequent Re-Insp. Fails	%	2nd or Subsequent Re-Insp. Passes	%
1997	1	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
1998	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
1999	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2000	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2001	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2002	1	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2003	1	1	0	0.00%	1	100.00%	0	0	0.00%	0	0.00%
2004	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2005	1	1	0	0.00%	1	100.00%	0	0	0.00%	0	0.00%
2006	2	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2007	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2008	1	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2009	1	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2010	1	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2011	4	3	0	0.00%	3	100.00%	0	0	0.00%	0	0.00%
2012	8	3	0	0.00%	3	100.00%	0	0	0.00%	0	0.00%
2013	9	5	3	60.00%	2	40.00%	5	4	80.00%	1	20.00%
2014	12	6	2	33.33%	4	66.67%	4	2	50.00%	2	50.00%
2015	9	9	1	11.11%	8	88.89%	1	0	0.00%	1	100.00%
2016	2	1	0	0.00%	1	100.00%	0	0	0.00%	0	0.00%
2017	10	5	2	40.00%	3	60.00%	2	2	100.00%	0	0.00%
2018	10	7	2	28.57%	5	71.43%	4	1	25.00%	3	75.00%
2019	7	3	1	33.33%	2	66.67%	2	1	50.00%	1	50.00%
Total:	80	44	11	25.00%	33	75.00%	18	10	55.56%	8	44.44%

Appendix E

Table E-1-b-ii: Summary of NYMA OBD II Re-Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Trucks

Model Year	Initial Inspection Failures	Total First Re-Insp.	First Re-Insp. Fails	%	First Re-Insp. Passes	%	Total 2nd or Subsequent Re-Insp.	2nd or Subsequent Re-Insp. Fails	%	2nd or Subsequent Re-Insp. Passes	%
1997	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
1998	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
1999	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2000	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2001	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2002	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2003	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2004	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2005	1	1	0	0.00%	1	100.00%	0	0	0.00%	0	0.00%
2006[1]	0	1	1	100.00%	0	0.00%	0	0	0.00%	0	0.00%
2007	1	1	1	100.00%	0	0.00%	2	1	50.00%	1	50.00%
2008	2	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2009	4	3	0	0.00%	3	100.00%	0	0	0.00%	0	0.00%
2010	7	3	0	0.00%	3	100.00%	0	0	0.00%	0	0.00%
2011	2	2	0	0.00%	2	100.00%	0	0	0.00%	0	0.00%
2012	2	1	0	0.00%	1	100.00%	0	0	0.00%	0	0.00%
2013	7	3	1	33.33%	2	66.67%	1	1	100.00%	0	0.00%
2014	24	15	8	53.33%	7	46.67%	14	8	57.14%	6	42.86%
2015	23	15	7	46.67%	8	53.33%	10	5	50.00%	5	50.00%
2016	21	12	3	25.00%	9	75.00%	7	5	71.43%	2	28.57%
2017	24	16	5	31.25%	11	68.75%	7	2	28.57%	5	71.43%
2018	50	38	19	50.00%	19	50.00%	19	10	52.63%	9	47.37%
2019	8	5	3	60.00%	2	40.00%	4	1	25.00%	3	75.00%
Total:	176	116	48	41.38%	68	58.62%	64	33	51.56%	31	48.44%

[1]The single vehicle listed for MY 2006 was entered as HDT for its initial inspection and LDT for its re-inspection (HD vehicles are not included in this analysis).

Appendix E

Table E-2-a-i: Summary of Upstate OBD II Re-Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non-Diesel Vehicles

Model Year	Initial Inspection Failures	Total First Re-Insp.	First Re-Insp. Fails	%	First Re-Insp. Passes	%	Total 2nd or Subsequent Re-Insp.	2nd or Subsequent Re-Insp. Fails	%	2nd or Subsequent Re-Insp. Passes	%
1997	728	490	68	13.88%	422	86.12%	54	18	33.33%	36	66.67%
1998	1,007	701	99	14.12%	602	85.88%	92	24	26.09%	68	73.91%
1999	1,458	1,043	159	15.24%	884	84.76%	137	42	30.66%	95	69.34%
2000	1,932	1,339	171	12.77%	1,168	87.23%	153	41	26.80%	112	73.20%
2001	3,143	2,177	373	17.13%	1,804	82.87%	327	110	33.64%	217	66.36%
2002	3,762	2,621	416	15.87%	2,205	84.13%	346	89	25.72%	257	74.28%
2003	4,550	3,275	468	14.29%	2,807	85.71%	430	132	30.70%	298	69.30%
2004	5,501	4,006	532	13.28%	3,474	86.72%	465	135	29.03%	330	70.97%
2005	6,696	4,829	609	12.61%	4,220	87.39%	563	171	30.37%	392	69.63%
2006	7,767	5,559	716	12.88%	4,843	87.12%	659	199	30.20%	460	69.80%
2007	8,775	6,504	832	12.79%	5,672	87.21%	735	170	23.13%	565	76.87%
2008	9,613	7,253	842	11.61%	6,411	88.39%	762	178	23.36%	584	76.64%
2009	8,988	7,111	858	12.07%	6,253	87.93%	857	227	26.49%	630	73.51%
2010	8,762	7,023	772	10.99%	6,251	89.01%	767	178	23.21%	589	76.79%
2011	8,362	6,712	652	9.71%	6,060	90.29%	642	137	21.34%	505	78.66%
2012	9,409	7,779	803	10.32%	6,976	89.68%	849	213	25.09%	636	74.91%
2013	9,174	7,545	737	9.77%	6,808	90.23%	764	198	25.92%	566	74.08%
2014	7,995	6,709	598	8.91%	6,111	91.09%	636	148	23.27%	488	76.73%
2015	7,296	6,151	547	8.89%	5,604	91.11%	596	141	23.66%	455	76.34%
2016	6,633	5,508	488	8.86%	5,020	91.14%	534	111	20.79%	423	79.21%
2017	6,036	5,236	453	8.65%	4,783	91.35%	535	129	24.11%	406	75.89%
2018	7,612	6,661	653	9.80%	6,008	90.20%	843	234	27.76%	609	72.24%
2019	5,931	5,132	569	11.09%	4,563	88.91%	822	280	34.06%	542	65.94%
Total:	141,130	111,364	12,415	11.15%	98,949	88.85%	12,568	3,305	26.30%	9,263	73.70%

Appendix E

Table E-2-a-ii: Summary of Upstate OBD II Re-Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non-Diesel Trucks

Model Year	Initial Inspection Failures	Total First Re-Insp.	First Re-Insp. Fails	%	First Re-Insp. Passes	%	Total 2nd or Subsequent Re-Insp.	2nd or Subsequent Re-Insp. Fails	%	2nd or Subsequent Re-Insp. Passes	%
1997	948	631	94	14.90%	537	85.10%	71	23	32.39%	48	67.61%
1998	1,327	883	135	15.29%	748	84.71%	131	44	33.59%	87	66.41%
1999	1,523	1,036	154	14.86%	882	85.14%	129	35	27.13%	94	72.87%
2000	1,932	1,321	166	12.57%	1,155	87.43%	157	40	25.48%	117	74.52%
2001	3,451	2,230	413	18.52%	1,817	81.48%	326	83	25.46%	243	74.54%
2002	4,293	2,893	450	15.55%	2,443	84.45%	383	95	24.80%	288	75.20%
2003	5,557	3,853	551	14.30%	3,302	85.70%	472	133	28.18%	339	71.82%
2004	7,386	5,052	681	13.48%	4,371	86.52%	611	169	27.66%	442	72.34%
2005	7,585	5,362	694	12.94%	4,668	87.06%	626	178	28.43%	448	71.57%
2006	7,696	5,579	683	12.24%	4,896	87.76%	593	148	24.96%	445	75.04%
2007	8,056	5,990	721	12.04%	5,269	87.96%	672	171	25.45%	501	74.55%
2008	9,333	7,020	904	12.88%	6,116	87.12%	858	224	26.11%	634	73.89%
2009	5,639	4,344	533	12.27%	3,811	87.73%	495	113	22.83%	382	77.17%
2010	7,134	5,579	610	10.93%	4,969	89.07%	583	133	22.81%	450	77.19%
2011	8,527	6,866	736	10.72%	6,130	89.28%	728	170	23.35%	558	76.65%
2012	8,189	6,709	622	9.27%	6,087	90.73%	615	114	18.54%	501	81.46%
2013	7,377	6,124	566	9.24%	5,558	90.76%	585	110	18.80%	475	81.20%
2014	8,266	7,010	630	8.99%	6,380	91.01%	716	183	25.56%	533	74.44%
2015	7,573	6,510	532	8.17%	5,978	91.83%	602	125	20.76%	477	79.24%
2016	6,872	6,035	467	7.74%	5,568	92.26%	526	116	22.05%	410	77.95%
2017	6,864	6,025	517	8.58%	5,508	91.42%	630	143	22.70%	487	77.30%
2018	6,308	5,637	549	9.74%	5,088	90.26%	701	171	24.39%	530	75.61%
2019	5,805	5,051	513	10.16%	4,538	89.84%	677	187	27.62%	490	72.38%
Total:	137,641	107,740	11,921	11.06%	95,819	88.94%	11,887	2,908	24.46%	8,979	75.54%

Appendix E

Table E-2-b-i: Summary of Upstate OBD II Re-Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Vehicles

Model Year	Initial Inspection Failures	Total First Re-Insp.	First Re-Insp. Fails	%	First Re-Insp. Passes	%	Total 2nd or Subsequent Re-Insp.	2nd or Subsequent Re-Insp. Fails	%	2nd or Subsequent Re-Insp. Passes	%
1997	11	5	1	20.00%	4	80.00%	0	0	0.00%	0	0.00%
1998	10	6	3	50.00%	3	50.00%	2	1	50.00%	1	50.00%
1999	11	7	0	0.00%	7	100.00%	0	0	0.00%	0	0.00%
2000	14	11	1	9.09%	10	90.91%	0	0	0.00%	0	0.00%
2001	14	6	0	0.00%	6	100.00%	0	0	0.00%	0	0.00%
2002	29	19	5	26.32%	14	73.68%	4	0	0.00%	4	100.00%
2003	55	44	2	4.55%	42	95.45%	2	1	50.00%	1	50.00%
2004	23	13	1	7.69%	12	92.31%	0	0	0.00%	0	0.00%
2005	36	30	5	16.67%	25	83.33%	4	1	25.00%	3	75.00%
2006	34	20	3	15.00%	17	85.00%	3	0	0.00%	3	100.00%
2007	4	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2008	11	4	1	25.00%	3	75.00%	0	0	0.00%	0	0.00%
2009	19	13	3	23.08%	10	76.92%	2	1	50.00%	1	50.00%
2010	43	19	6	31.58%	13	68.42%	8	3	37.50%	5	62.50%
2011	122	68	21	30.88%	47	69.12%	22	9	40.91%	13	59.09%
2012	182	118	34	28.81%	84	71.19%	32	9	28.12%	23	71.88%
2013	183	123	24	19.51%	99	80.49%	23	8	34.78%	15	65.22%
2014	250	184	53	28.80%	131	71.20%	65	30	46.15%	35	53.85%
2015	130	94	14	14.89%	80	85.11%	16	7	43.75%	9	56.25%
2016	14	12	5	41.67%	7	58.33%	8	3	37.50%	5	62.50%
2017	38	27	8	29.63%	19	70.37%	17	11	64.71%	6	35.29%
2018	50	41	16	39.02%	25	60.98%	17	7	41.18%	10	58.82%
2019	20	16	7	43.75%	9	56.25%	11	6	54.55%	5	45.45%
Total:	1,303	880	213	24.20%	667	75.80%	236	97	41.10%	139	58.90%

Appendix E

Table E-2-b-ii: Summary of Upstate OBD II Re-Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Trucks

Model Year	Initial Inspection Failures	Total First Re-Insp.	First Re-Insp. Fails	%	First Re-Insp. Passes	%	Total 2nd or Subsequent Re-Insp.	2nd or Subsequent Re-Insp. Fails	%	2nd or Subsequent Re-Insp. Passes	%
1997	2	2	0	0.00%	2	100.00%	0	0	0.00%	0	0.00%
1998	3	3	1	33.33%	2	66.67%	0	0	0.00%	0	0.00%
1999	2	1	0	0.00%	1	100.00%	0	0	0.00%	0	0.00%
2000	1	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2001	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2002	2	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2003	1	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2004	1	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2005	5	3	0	0.00%	3	100.00%	0	0	0.00%	0	0.00%
2006	9	6	1	16.67%	5	83.33%	1	0	0.00%	1	100.00%
2007	5	3	2	66.67%	1	33.33%	1	0	0.00%	1	100.00%
2008	11	8	1	12.50%	7	87.50%	1	0	0.00%	1	100.00%
2009	42	24	7	29.17%	17	70.83%	3	0	0.00%	3	100.00%
2010	56	25	11	44.00%	14	56.00%	9	7	77.78%	2	22.22%
2011	87	43	14	32.56%	29	67.44%	8	4	50.00%	4	50.00%
2012	125	71	13	18.31%	58	81.69%	8	4	50.00%	4	50.00%
2013	81	53	11	20.75%	42	79.25%	13	6	46.15%	7	53.85%
2014	216	152	53	34.87%	99	65.13%	65	24	36.92%	41	63.08%
2015	262	208	68	32.69%	140	67.31%	85	40	47.06%	45	52.94%
2016	193	127	50	39.37%	77	60.63%	71	33	46.48%	38	53.52%
2017	69	52	19	36.54%	33	63.46%	35	16	45.71%	19	54.29%
2018	121	91	30	32.97%	61	67.03%	41	15	36.59%	26	63.41%
2019	39	24	11	45.83%	13	54.17%	12	4	33.33%	8	66.67%
Total:	1,333	896	292	32.59%	604	67.41%	353	153	43.34%	200	56.66%

Appendix E

Table E-3-a-i: Summary of T&LC OBD II Re-Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non-Diesel Vehicles

Model Year	Initial Inspection Failures	Total First Re-Insp.	First Re-Insp. Fails	%	First Re-Insp. Passes	%	Total 2nd or Subsequent Re-Insp.	2nd or Subsequent Re-Insp. Fails	%	2nd or Subsequent Re-Insp. Passes	%
1997	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
1998	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
1999	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2000	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2001	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2002	3	2	0	0.00%	2	100.00%	0	0	0.00%	0	0.00%
2003	7	5	1	20.00%	4	80.00%	7	4	57.14%	3	42.86%
2004	7	5	2	40.00%	3	60.00%	2	0	0.00%	2	100.00%
2005	11	8	0	0.00%	8	100.00%	3	0	0.00%	3	100.00%
2006	15	14	3	21.43%	11	78.57%	5	1	20.00%	4	80.00%
2007	74	60	7	11.67%	53	88.33%	18	1	5.56%	17	94.44%
2008	65	56	10	17.86%	46	82.14%	18	4	22.22%	14	77.78%
2009	106	93	9	9.68%	84	90.32%	21	5	23.81%	16	76.19%
2010	189	159	15	9.43%	144	90.57%	39	4	10.26%	35	89.74%
2011	456	384	41	10.68%	343	89.32%	93	11	11.83%	82	88.17%
2012	402	346	32	9.25%	314	90.75%	76	10	13.16%	66	86.84%
2013	683	587	60	10.22%	527	89.78%	127	14	11.02%	113	88.98%
2014	1108	961	64	6.66%	897	93.34%	203	29	14.29%	174	85.71%
2015	2131	1789	129	7.21%	1660	92.79%	431	34	7.89%	397	92.11%
2016	1524	1345	76	5.65%	1269	94.35%	233	16	6.87%	217	93.13%
2017	1538	1395	97	6.95%	1298	93.05%	219	35	15.98%	184	84.02%
2018	516	452	24	5.31%	428	94.69%	77	5	6.49%	72	93.51%
2019	391	354	18	5.08%	336	94.92%	56	7	12.50%	49	87.50%
Total:	9,226	8,015	588	7.34%	7,427	92.66%	1,628	180	11.06%	1,448	88.94%

Appendix E

Table E-3-a-ii: Summary of T&LC OBD II Re-Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Non-Diesel Trucks

Model Year	Initial Inspection Failures	Total First Re-Insp.	First Re-Insp. Fails	%	First Re-Insp. Passes	%	Total 2nd or Subsequent Re-Insp.	2nd or Subsequent Re-Insp. Fails	%	2nd or Subsequent Re-Insp. Passes	%
1997	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
1998	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
1999	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2000	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2001	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2002	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2003	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2004	1	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2005	2	1	0	0.00%	1	100.00%	1	0	0.00%	1	100.00%
2006	5	5	2	40.00%	3	60.00%	2	0	0.00%	2	100.00%
2007	12	10	0	0.00%	10	100.00%	2	0	0.00%	2	100.00%
2008	52	42	5	11.90%	37	88.10%	15	3	20.00%	12	80.00%
2009	78	61	6	9.84%	55	90.16%	20	4	20.00%	16	80.00%
2010	149	111	12	10.81%	99	89.19%	41	5	12.20%	36	87.80%
2011	281	236	26	11.02%	210	88.98%	72	10	13.89%	62	86.11%
2012	360	309	29	9.39%	280	90.61%	75	11	14.67%	64	85.33%
2013	425	365	31	8.49%	334	91.51%	82	14	17.07%	68	82.93%
2014	851	689	75	10.89%	614	89.11%	217	23	10.60%	194	89.40%
2015	1262	1074	75	6.98%	999	93.02%	245	29	11.84%	216	88.16%
2016	1246	1044	69	6.61%	975	93.39%	270	34	12.59%	236	87.41%
2017	1266	1118	76	6.80%	1042	93.20%	234	25	10.68%	209	89.32%
2018	859	737	41	5.56%	696	94.44%	165	18	10.91%	147	89.09%
2019	664	585	46	7.86%	539	92.14%	129	13	10.08%	116	89.92%
Total:	7,513	6,387	493	7.72%	5,894	92.28%	1,570	189	12.04%	1,381	87.96%

Appendix E

Table E-3-b-i: Summary of T&LC OBD II Re-Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Vehicles

Model Year	Initial Inspection Failures	Total First Re-Insp.	First Re-Insp. Fails	%	First Re-Insp. Passes	%	Total 2nd or Subsequent Re-Insp.	2nd or Subsequent Re-Insp. Fails	%	2nd or Subsequent Re-Insp. Passes	%
1997	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
1998	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
1999	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2000	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2001	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2002	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2003	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2004	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2005	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2006	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2007	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2008	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2009	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2010	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2011	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2012	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2013	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2014	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2015	1	1	0	0.00%	1	100.00%	0	0	0.00%	0	0.00%
2016	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2017	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2018	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2019	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
Total:	1	1	-	0.00%	1	100.00%	-	-	-	-	-

Appendix E

Table E-3-b-ii: Summary of T&LC OBD II Re-Inspection Results

(Based on Data Collected from 1/1/2021 to 12/31/2021)

Light Duty Diesel Trucks

Model Year	Initial Inspection Failures	Total First Re-Insp.	First Re-Insp. Fails	%	First Re-Insp. Passes	%	Total 2nd or Subsequent Re-Insp.	2nd or Subsequent Re-Insp. Fails	%	2nd or Subsequent Re-Insp. Passes	%
1997	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
1998	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
1999	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2000	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2001	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2002	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2003	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2004	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2005	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2006	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2007	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2008	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2009	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2010	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2011	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2012	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2013	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2014	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2015	1	1	0	0.00%	1	100.00%	0	0	0.00%	0	0.00%
2016	1	1	0	0.00%	1	100.00%	0	0	0.00%	0	0.00%
2017	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2018	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
2019	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
Total:	2	2	-	0.00%	2	100.00%	-	-	-	-	-

APPENDIX F
Procedure to Sort the DMV Registration File and Matching of Emissions Inspections - I/M Program Evaluation (March 2021)

[Steps 1-10 below completed by DEC/DMV]

1. Obtain a statewide registration database from the NYS DMV (March 8, 2022).
2. Delete registration records associated with "duplicate" VINs to ensure only unique VINs.
3. Delete registration records for vehicles exempt from emissions testing based on registration type code (see Appendix G).
4. Delete registration records with registration codes 77 and 88 (state or political subdivisions).
5. Delete registration records for those vehicles with a VIN containing less than 17 digits.
6. Delete registration records for those vehicles registered as diesels >8500 lbs (registered weight), electric, "Other," and blank fuel types.
7. Delete registration records for vehicles affected by age-based exemptions. For purposes of this evaluation, remove from consideration the 3 newest model years using the calendar year of the registration query. (Given the March 2022 registration run, ignore all 2020, 2021, and 2022 model year vehicle registrations.) Also remove from consideration those registration records for vehicles older than 26 model years. (Given the March 2022 registration query, ignore vehicles with a model year of 1995 and older.)
8. Delete the registration records for vehicles with a registered weight (actually seating capacity) from '11' to '100,' inclusive. This will remove buses with a seating capacity greater than 11 that are inspected by the NYSDOT.
9. Remove the registration records for exempt vehicles with a registered weight over 18,000 lbs.
10. Sort the remaining registration records into two tables, Upstate (53 counties) and NYMA (9 counties) using the registration "county code." These tables represent vehicles (unique VINs) potentially subject to NYVIP2 OBDII or low enhanced emissions testing based on registration data.

[Steps 11-14 below completed by Opus Inspection]

11. Using the lists of subject VINs, identify any safety-only inspection completed between January 1, 2021 to May 8, 2022 with a vehicle weight code change of '4' recorded in the NYVIP2 database. Revise the provided text files (NYMA, Upstate) to include a new column ("safety WC4"), and where applicable, include a 'Y' in this field. Ignore these unique VINs from the remaining screening and from a final list of registered VINs subject to emission testing.

12. Using the remaining unique VINs from the Upstate and NYMA registration tables, search the statewide NYVIP2 inspection database for the period of January 1, 2021 to May 8, 2022 to initially "find" any passing (OBD, low enhanced) inspections. The search should consider initial and re-inspections with a pass ('P') reported within the "Initial Emission Inspection Results" field. Include a new column ("Passing") in the provided text files (NYMA, Upstate), and where applicable, include a 'Y' in this field.
13. Using the remaining unique VINs from the Upstate and NYMA registration tables, search the statewide NYVIP2 inspection database for the period of January 1, 2021 to May 8, 2022 to "find" any waivered OBD inspections. The search should consider re-inspections with a 'Y' reported in the "Emission_Waiver_Ind" field. Include a new column ("Waivered") in the provided text files (NYMA, Upstate) and, where applicable, include a 'Y' in these field.
14. By model year and I/M area, tabulate and graph the number of identified emissions tested inspections (Passing and Waivered from Steps #12 and #13) vs. registration estimates (Step #10 minus the VINs identified in Step #11). Use the vehicle MY and I/M area from the DMV registration file when completing Graphs 6 and 7.

APPENDIX G
REGISTRATION TYPE CODES

	NYVIP2 Exempt		HDDV Exempt	
01		VPL		VAN POOL
02		WUG		WORLD UNIVERSITY GAMES
03		JWV		JEWISH WAR VETERANS
04		MCL		MARINE CORP LEAGUE
05		CLG		COUNTY LEGISLATORS
06		CBS		COUNTY BOARD OF LEGISLATORS
07		PPH		PURPLE HEART
08		EDU		EDUCATOR
10		LOC	Y	LOCOMOTIVE **Exempt from Diesel Inspection**
11		SRF		SPECIAL PASSENGER
12		SRN		SPECIAL PASSENGER (Judges/Officials)
13		GSC		GOVERNOR'S SECOND CAR
14		NYS		NEW YORK SENATE
15		NYA		NEW YORK ASSEMBLY
16		PAS		PASSENGER OR SUBURBAN (Regular)
17		USC		US CONGRESS
18		USS		US SENATE
19	Y	SCL	Y	SCHOOL CAR **Exempt, inspected by DOT**
20		HIR		HEARSE COACH (Hearse or Hearse Invalid Regular)
21	Y	HIS	Y	HISTORICAL **No emissions inspection**
22		HIF		SPECIAL REG. HEARSE
23	Y	HSM	Y	HISTORICAL MOTORCYCLE **No emissions inspection**
24	Y	LUA	Y	LIMITED USE AUTOMOBILE **Exempt - Includes Low Speed Vehicles**
25		JCA		COURT OF APPEALS
26	Y	SPC	Y	SPECIAL PURPOSE COMMERCIAL **No inspection required**
27		NYC		NEW YORK COUNCIL
28		JSC		SUPREME COURT (ADJ)
29		MED		MEDICAL DOCTOR
30		JCL		COURT OF CLAIMS
31		GAC		GOVERNOR'S ADDITIONAL CAR
32		CMH		CONGRESSIONAL MEDAL-OF-HONOR
33		SUP		SUPREME COURT JUSTICE
34		CCK		COUNTY CLERK
35	Y	ATV	Y	ALL TERRAIN VEHICLE **No inspection required**
36	Y	MOT	Y	MOTORCYCLE A **No emissions inspection**
37	Y	LMA	Y	LIMITED USE MOTORCYCLE-TYPE **No emissions inspection**
38	Y	LMB	Y	LIMITED USE MOTORCYCLE-TYPE B **No emissions inspection**
39	Y	LMC	Y	LIMITED USE MOTORCYCLE-TYPE C **No emissions inspection**
40		ARG		AIR NATIONAL GUARD
41		AYG		ARMY NATIONAL GUARD
42		NLM		NAVAL MILITIA
43		STG		STATE NATIONAL GUARD
44		FPW		FORMER PRISONER OF WAR
45		HAM		HAM OPERATOR

46	Y	FAR	Y	FARM **No inspection required**
47		BOB		BIRTHPLACE OF BASEBALL
48		VAS	Y	VOLUNTEER AMBULANCE SERVICES
49		SOS		SURVIVORS OF THE SHIELD
50				OMNIBUS (Out-of-State) **May be inspected out of state**
51		AMB	Y	AMBULANCE **Exempt from Diesel Emissions Insp.**
52		OMS		(Special) OMNIBUS
53		OMF		(Public Service) OMNIBUS
54		OMT		(Taxi) OMNIBUS
55		OML		(Livery) OMNIBUS
56		OMR		(Regular) OMNIBUS **Exempt - Inspected by DOT**
57		OMV		(Vanity) OMNIBUS **Exempt - Inspected by DOT**
58		PHS		PEARL HARBOR SURVIVORS
59		GSM		GOLD STAR MOTHERS
60		CME		CORONER/MEDICAL EXAMINER
61				INTRANSIT PERMIT
62		DLR		DEALER
64		MCD		MOTORCYCLE DEALER **Plates only, no vehicles, no inspection**
65		ATD		ALL TERRAIN DEALER
66		TRA		TRANSPORTER
67		RGL		REGIONAL
68		SPO		SPORTS
69		ORG		ORGANIZATIONS
70		IRP		INTERNATIONAL REG.PLAN **May be inspected out of state**
71				HAM - COMM
72		AGR	Y	AGRICULTURAL TRUCK **Exempt from Diesel Emissions Insp.**
73		RGC		REGIONAL COMMERCIAL
74		CSP		SPORTS COMMERCIAL
75		ORC		COMMERCIAL ORGANIZATIONS
76		COM		(Regular) COMMERCIAL
77		STA		STATE AGENCIES
78		CHC		(Household Carrier) COMMERCIAL
79				(Agricultural) COMMERCIAL
80		TOW		TOW TRUCK
81		TRC		(Regular) TRACTOR
82		THC		(Household Carrier) TRACTOR
83	Y	ORM		MOTORYCLE HOG **No emissions inspection**
84	Y	LTR		(Light Trailer) **No emissions inspection**
85	Y	SEM		(Commercial Semi-Trailer) **No emissions inspection**
86	Y	TRL		(Regular) TRAILER **No emissions inspection**
87	Y	HOU		HOUSE OR COACH TRAILER **No emissions inspection**
88		PSD		POLITICAL SUBDIVISION (Municipal or Thruway)
90	Y	BOT		MOTORBOATS **No inspection required**
93	Y	-		SNOWMOBILES **No inspection required**

NOTES:
Busses and other vehicles inspected by DOT do not require any inspection under this program, no matter what type of fuel. DOT only performs emissions inspection on Diesel vehicles, no gas emissions inspections.

Reg Classes 77 & 88 both include some Special Purpose Commercial vehicles that are exempt from any inspection.

Appendix H

Procedure for Counting Vehicles with Unknown Final Outcome (Due to Emissions Failures)

1. For the period of January 1, 2021 to December 31, 2021, query the NYVIP2 inspection database for the most recent inspection for each VIN[1]. This is completed by using the MAX() SQL function on KeyDateMMDDYYY (inspection date) while selecting only DMV_VIN_NUM and KeyDateMMDDYYY fields and grouping by DMV_VIN_NUM.

2. Perform an inner join on DMV_VIN_NUM and KeyDateMMDDYYY to return all fields in the dataset.

3. Filter the dataset to only OBDII and low enhanced inspections with failing final outcomes (OverallResultCode = 'F' AND INSP_TEST_TYPE in ('B', 'L')). Results are first filtered by OverallResultCode to exclude inspections that received repair expenditure waivers.

4. Subset this dataset to failed OBDII checks (OBD_CHECK_RESULT = 'F'). Subset this further into the three "regions", excluding T&LC from the NYMA subset as follows:

   NYMA: NYMA_IND = '1' AND DMV_FACILITY_NUM <> '7098060'
   Upstate: NYMA_IND = '2'
   T&LC: DMV_FACILITY_NUM = '7098060'

5. Subset the dataset from step 3 for Low Enhanced emissions failures[1] (EMM_CNTRL_DEV_CHECK = 'F' AND GAS_CAP_RESULT = 'F'). Further subset these results into NYMA and T&LC as in step 4 (Low Enhanced does not apply to T&LC).

6. Perform an additional query on the resulting VINs for each of the five subsets generated above to see if any received a passing emissions test (as queried in steps 4 and 5) or a repair expenditure waiver (OverallResultCode = 'W') between January 1, 2022 and March 31, 2022. Subtract the count of unique VINs in this query from the Unknown Final Outcome total for each respective group. This additional search is to account for failing emission inspections completed during the latter part of Calendar Year 2021[2].

7. The results of this procedure are reported by I/M area and by emissions test type (OBDII, Low Enhanced) within Table II.B.2 (NYVIP2 Summary Report). This procedure utilizes the I/M area reported within the 'last' inspection record (i.e., not the DMV registration file).

[1] This procedure was updated in 2021 to utilize a more robust querying methodology.

[2] Note one or more "passing" emissions inspections prior to the "last" inspection in the reporting year may exist. This procedure does not account for these passing inspections. For example, consider an older vehicle that passes the NYVIP OBDII inspection in March of the reporting year that was privately sold, then later fails the OBDII inspection in December of the reporting year. The "new" owner does not wish to pay for repairs and salvages the vehicle. The procedure described above would report this example vehicle as having no known final outcome – even though the vehicle was salvaged and actually passed a NYVIP2 OBDII inspection during the reporting year. As such, New York believes this procedure is conservative in its approach in the reporting of "no known final outcome" within the Test Data Report requirements under §51.366(vi).

APPENDIX I
STICKER COMPLIANCE SURVEY
Statewide, Calendar Years 2010 - 2021

Year	Vehicles surveyed per quarter				Total	No Sticker				Improper Sticker				Sticker Expired 30 days or Less				Sticker Expired 31 - 60 Days				Sticker Expired Over 60 Days				Total	Percent of Non-Compliance			
	1	2	3	4	Vehicle	1St Qtr	2nd Qtr	3rd Qtr	4th Qtr	1St Qtr	2nd Qtr	3rd Qtr	4th Qtr	1St Qtr	2nd Qtr	3rd Qtr	4th Qtr	1St Qtr	2nd Qtr	3rd Qtr	4th Qtr	1St Qtr	2nd Qtr	3rd Qtr	4th Qtr	Non-Compliant	1St Qtr	2nd Qtr	3rd Qtr	4th Qtr
2010	2536	2536	2536	2536	10144	4	2	5	3	2	6	1	3	23	48	43	49	14	11	16	13	13	24	15	22		2.21%	3.59%	3.15%	3.55%
Totals							14				12				163				54				74			**317**		**3.13%**		
2011	2536	2536	2536	2536	10144	1	8	5	5	1	0	0	2	22	38	42	38	19	9	10	18	21	17	22	36		2.52%	2.84%	3.12%	3.90%
Totals							19				3				140				56				96			**314**		**3.10%**		
2012	2536	2536	2536	2536	10144	1	1	2	2	0	2	0	0	24	40	44	41	13	12	16	19	10	19	37	38		1.89%	2.92%	3.90%	3.94%
Totals							6				2				149				60				104			**321**		**3.16%**		
2013	2536	2536	2536	2536	10144	5	7	4	1	1	2	1	2	40	42	38	51	21	12	8	7	18	21	23	32		3.35%	3.31%	2.92%	3.67%
Totals							17				6				171				48				94			**336**		**3.31%**		
2014	2536	2536	2536	2536	10144	4	5	3	3	5	5	1	2	37	36	40	34	28	13	12	22	13	23	26	33		3.43%	3.23%	3.23%	3.71%
Totals							15				13				147				75				95			**345**		**3.40%**		
2015	2536	2536	2536	2536	10144	3	3	1	3	0	0	1	0	32	39	34	32	21	30	23	20	28	22	21	25		3.31%	3.71%	3.15%	3.15%
Totals							10				1				137				94				96			**338**		**3.33%**		
2016	2536	2536	2536	2536	10144	8	3	7	8	1	3	3	3	33	41	43	42	13	14	15	18	17	19	28	26		2.84%	3.15%	3.79%	3.82%
Totals							26				10				159				60				90			**345**		**3.40%**		
2017	2536	2536	2536	2536	10144	5	4	4	2	0	0	3	2	25	35	33	30	17	18	17	16	25	18	28	19		2.84%	2.96%	3.35%	2.72%
Totals							15				5				123				68				90			**301**		**2.97%**		
2018	2536	2536	2536	2536	10144	5	10	5	7	5	2	1	1	29	48	48	35	14	13	18	21	37	22	34	46		3.55%	3.75%	4.18%	4.34%
Totals							27				9				160				66				139			**401**		**3.95%**		
2019	2536	2536	2536	2536	10144	11	8	14	8	2	4	1	0	40	30	26	34	25	17	13	14	17	29	26	28		3.75%	3.47%	3.15%	3.31%
Totals							41				7				130				69				100			**347**		**3.42%**		
2020	2308	0	0	0	2308	11	0	0	0	0	0	0	0	38	0	0	0	10	0	0	0	30	0	0	0		3.86%	NA	NA	NA
Totals	COVID	COVID	COVID	COVID			11				0				38				10				30			**89**		**3.86%**		
2021	2536	2536	2536	2536	10144	24	19	14	26	0	0	2	6	28	23	35	53	19	9	22	28	44	36	48	68		4.53%	3.43%	4.77%	7.14%
Totals							83				8				139				78				196			**504**		**4.97%**		

Appendix J

Procedure for Validating Vehicle Type for Annual Reporting

1. If the Data One Vehicle Type = Car or P, then Vehicle Type = LDV
2. If the Data One Vehicle Type = Truck, SUV, VAN, Motor Home, Straight Truck, Cab Over Truck, Bus, or Semi-Trailer Truck and Data One GVWR 0< x <8,501, then Vehicle Type = LDT
3. If the Data One Vehicle Type = Truck, SUV, VAN, Motor Home, Straight Truck, Cab Over Truck, Bus, or Semi-Trailer Truck and Data One GVWR >8,500, then Vehicle Type = HDV
4. If the Data One Vehicle Type = Truck, SUV, VAN, Motor Home, Straight Truck, Cab Over Truck, Bus, or Semi-Trailer Truck; Data One GVWR is blank or 0; and DMV Weight Change = 1, or DMV Weight = 1/DMV Weight Change is blank, then Vehicle Type = LDT
5. If the Data One Vehicle Type = Truck, SUV, VAN, Motor Home, Straight Truck, Cab Over Truck, Bus, or Semi-Trailer Truck; Data One GVWR is blank or 0; and DMV Weight Change 2-4, or DMV Weight 2-4/DMV Weight Change is blank, then Vehicle Type = HDV
6. If the Data One Vehicle Type is blank; DMV_REG_CLASS = VPL, SPC, FAR, OMS, OMF, IRP, HAC, AGR, RGC, CSP, ORC, COM, CHC, TRC, TOW, or THC; DMV Weight Change = 1, or DMV Weight = 1/DMV Weight Change is blank, then Vehicle Type = LDT
7. If the Data One Vehicle Type is blank; DMV_REG_CLASS = VPL, SPC, FAR, OMS, OMF, IRP, HAC, AGR, RGC, CSP, ORC, COM, CHC, TRC, TOW, or THC; DMV Weight Change > 1, or DMV Weight > 1/DMV Weight Change is blank, then Vehicle Type = HDV
8. If the Data One Vehicle Type is blank; DMV_REG_CLASS is **not** VPL, SPC, FAR, OMS, OMF, IRP, HAC, AGR, RGC, CSP, ORC, COM, CHC, TRC, TOW, or THC ; and DMV Weight Change < 2, or DMV Weight < 2/DMV Weight Change is blank, then Vehicle Type = LDV
9. If the Data One Vehicle Type is blank; DMV_REG_CLASS is **not** VPL, SPC, FAR, OMS, OMF, IRP, HAC, AGR, RGC, CSP, ORC, COM, CHC, TRC, TOW, or THC ; and DMV Weight Change > 1, or DMV Weight > 1/DMV Weight Change is blank, then Vehicle Type = HDV
10. If the Data One Vehicle Type is blank; DMV_REG_CLASS is blank; and DMV Weight Change = 0, or DMV Weight = 0/DMV Weight Change is blank, then Vehicle Type = LDV
11. If the Data One Vehicle Type is blank; DMV_REG_CLASS is blank; DMV Weight Change = 1, or DMV Weight = 1/DMV Weight Change is blank, then Vehicle Type = LDV
12. If the Data One Vehicle Type is blank; DMV_REG_CLASS is blank; and DMV Weight Change >1, or DMV Weight >1/DMV Weight Change is blank, then Vehicle Type = HDV

Appendix K
NYVIP2 Station Messages, Calendar Year 2021

NYVIP2 MESSAGE No. 264

DATE: 1/13/2021

TO: ALL INSPECTION STATIONS

FROM: NYS DMV

SUBJECT: RETURNING 2021 INSPECTION CERTIFICATES

****PRINT THIS MESSAGE AND DELIVER IT TO THE PERSON WHO MAINTAINS THE**

INSPECTION CERTIFICATE INVENTORY**

Per Commissioner's Regulation Part 79.10 (c), "every inspection station owner must return to the department all unused inspection certificates from the previous year" and that "refunds or credits will be allowed for such unused or defective certificates of inspection upon receipt..."

As such, if you have any inspection stickers with a 2021 expiration date, regulation requires that you **return them by March 1st 2021**. No credit or refunds for 2021 stickers will be given after December 31, 2021.

Please return the unused stickers in a secure and durable shipping container (e.g., a cardboard box or reinforced envelope).

Do not place a new sticker order or requisition in the shipping container with your sticker returns. This will delay your new sticker order.

Include a completed **"Inspection Certificate Return Form"** provided with this message. You may use more than one form if necessary. This form also provides the mailing address options for your returns. Completed Inspection Certificate Return Forms must be included with your sticker returns to DMV.

Once the returns are logged into our system, a Credit Letter will be sent to the Facility. Upon receipt of your credit letter, verify the return sticker numbers indicated and the amount. If any discrepancies are found, please contact us immediately.

Questions regarding this procedure can be directed to DMV at 518-474-2398.

Questions regarding sticker credits should be directed to DMV Accounting at 518-474-5913.

NYVIP2 MESSAGE No. 265

DATE: 1/20/2021

TO: ALL INSPECTION STATIONS

FROM: OPUS INSPECTION INC

SUBJECT: TRANSACTION FEE (TEST AUTHORIZATION)

This message is to inform you that there is no change in the test authorization (TA) fee for 2021. Each inspection/transaction pre-paid to Opus will remain the same at $0.436 (43.6 cents) for the next year. Test Authorizations will continue to be sold in batches of twenty (20) at a cost of $8.72 per batch. The TA fee is for each inspection your NYVIP2 CVIS conducts.

Under contract with the New York State Department of Motor Vehicles (NYSDMV), Opus Inspection Inc. (Opus) is the provider of Computerized Vehicle Inspection System (CVIS) equipment and information management for the New York Vehicle Inspection Program (NYVIP2). Your inspection station has a contract with Opus for those services.

NYSDMV does not have discretion in determining the test authorization fee amount each year. The contract between NYSDMV and Opus requires a recalculation of this fee each year based on the number of inspections/transactions occurring in the prior year by the entire inspection station network.

If you have questions, you may call Opus Inspection at 1-866-623-8378.

NYVIP2 MESSAGE No. 266

DATE: 2/2/2021

TO: ALL INSPECTION STATIONS FROM: OPUS INSPECTION INC

SUBJECT: NYVIP2 SOFTWARE UPDATE – VERSION 20.12.03

PLEASE BRING THIS MESSAGE TO THE ATTENTION OF THE STATION OWNER AND/OR MANAGER

A NYVIP2 software update to version **20.12.03** will be rolled out to all Emissions Inspection Stations. You must accept and load the new software update when you are prompted to by your NYVIP2 Computerized Vehicle Inspection System (CVIS) analyzer.

This software update includes an important inspection station requirement in relation to NY State Transportation legislation which takes effect February 3, 2021 in regard to altered vehicle seating. Vehicle and Traffic Law Section 308-a requires all inspection stations to report to DMV any time an **altered vehicle** (stretched limousine) is presented for inspection, regardless of whether an inspection is conducted.

Along with other important fixes, this software release includes changes per new legislation regarding limo reporting requirements. Reporting is required for stretch limousines that seat 9 or more passengers including the driver.

A vehicle is "altered" if it has been stretched or widened to increase passenger capacity.

Reject Inspection:

I. An altered vehicle that DOES NOT have a Federal Alterer's Safety Certificate affixed to the vehicle (normally found on the door jamb) must be **REJECTED.**

II. An altered vehicle that seats **9** or more persons (including driver) and whose operator does not possess a NYS Department of Transportation (NYSDOT) exemption letter must be **REJECTED**.

Inspection Allowed:

I. An altered vehicle that seats less than **9** persons (including driver) and has a Federal Alterer's Safety Certificate affixed to the vehicle can be inspected.

II. An altered vehicle that seats **9** or more persons (including driver) and has a Federal Alterer's Safety Certificate affixed to the vehicle can be inspected only if a NYSDOT exemption letter is presented.

If you have any questions regarding this new reporting requirement, please call the DMV Office of Clean Air at (518) 473-0597 and select option #4.

Important Note: Inspection Stations not receiving software version 20.12.03 by 2/3/2021 or stations not using a NYVIP2 CVIS will need to use the attached revised 2/21 VS-1074SL for all altered vehicle (stretch limousine) reporting to DMV. The revised VS-1074SL form can also be downloaded from the WWW.NYVIP.ORG website under the "Forms and Downloads" tab. Once you have downloaded the new software (20.12.03), you will not need to fill out and return the attached VS-1074SL form.

NYVIP2 MESSAGE No. 267

DATE: 2/26/2021

TO: ALL INSPECTION STATIONS

FROM: OPUS INSPECTION INC

SUBJECT: NYVIP2 CONTRACT EXTENSION #2

PLEASE BRING THIS MESSAGE TO THE ATTENTION OF THE STATION OWNER AND/OR MANAGER

Under contract with the New York State Department of Motor Vehicles (NYSDMV), Opus Inspection Inc. (Opus) is the provider of NYVIP2 inspection equipment, inspection data transmission, and information management for the New York Vehicle Inspection Program (NYVIP2). Your inspection station has a contract with Opus for those services.

DMV has now extended the Opus contract for an additional year. The amended NYVIP2 contract will now end at midnight on November 30, 2022.

(Note: Previously in early July 2019 DMV extended Opus's contract through 11/30/2021.)

During this additional extension period, services provided by Opus will remain the same as you receive today.

If you have any questions, please contact Clean Air at (518)473-0597 Option #4.

NYVIP2 MESSAGE No. 268

DATE: 3/12/2021

TO: ALL INSPECTION STATIONS

FROM: OPUS INSPECTION

SUBJECT: NYVIP2 SOFTWARE VERSION LOCKOUT WEDNESDAY 3/17/2021

PLEASE BRING THIS MESSAGE TO THE ATTENTION OF THE STATION OWNER AND/OR MANAGER

You need to take immediate action! On February 2, 2021 stations received NYVIP2 Message #266 which announced the rollout of NYVIP2 software version 20.12.03.

Please be sure that your NYVIP2 software is current and updated as required with version 20.12.03. The version number is displayed in the upper right-hand corner of the NYVIP2 screen.

Stations not updated to 20.12.03 software will be locked out on Wednesday 3/17/21.

A lockout will interrupt your ability to inspect vehicles until you successfully update to software version 20.12.03.

This software update includes an important inspection station requirement in relation to NY State Transportation legislation which took effect February 3, 2021 regarding altered vehicle seating. Altered vehicle reporting to DMV is now required for stretch limousines that seat 9 or more passengers including the driver.

When presented with the question “Has this vehicle been altered to increase seating capacity?” Answer: **N (o)** unless the vehicle has been “altered.”

A vehicle is “altered” if it has been stretched or widened to increase passenger capacity.

If you need assistance installing the update, or you haven’t received the update, contact the Opus Inspection Help Desk at 1-866-623-8378 (1-866-OBD-TEST).

NYVIP2 Messages can be viewed at WWW.NYVIP.ORG under “Program News” on the Home Page. Or from your stations NYVIP2 Computerized Vehicle Inspection System (CVIS) by going to the Main Menu – Utilities Menu – Documents and Information – View Bulletins/Messages - Log-in with your inspector’s ID card to scroll through all NYVIP2 messages by clicking the drop-down arrow under “Message Center.”

NYVIP MESSAGE No. 269

DATE: 10/15/2021

TO: NYVIP INSPECTION STATIONS

FROM: NYS DEPT. OF MOTOR VEHICLES

SUBJECT: ADVANCE NOTICE OF REPLACEMENT OF NYVIP2 EQUIPMENT

The DMV contract with Opus Inspection, Inc. for the NYVIP2 program will terminate on November 30, 2022. Opus Inspection, Inc. will continue as DMV's vendor to administer the new NYVIP3 contract which will launch on December 1, 2022.

This message is intended to provide advance notice to inspection stations that NYVIP3 will require that all inspection stations purchase a new Computerized Vehicle Inspection System (CVIS).

The purchase of new equipment is necessary due to the advanced age of NYVIP2's technology. This new equipment will also accommodate the many benefits planned for NYVIP3 including:

·On-demand inspection sticker printing
·Integrated opacity inspection equipment option for NYMA-registered Medium to Heavy Duty diesel vehicles
·Elimination of paper recording for all inspection types

The initial purchase price for a basic NYVIP3 CVIS unit will be $1,695.00. Each unit will be authorized for the entire duration of the NYVIP3 contract (7-9 years) and is covered under warranty against defects and failures due to normal wear and tear. Each inspection will include a $0.436 (43.6 cents) transaction fee payable to the emissions inspection vendor; this fee remains unchanged from the current fee charged in NYVIP2.

Opus Inspection, Inc. will begin conducting outreach to inspection stations early next year to facilitate the purchase of NYVIP3 equipment.

This message is being provided to ensure that you are fully informed when making business decisions and to help in planning your budget for 2022.

Additional information will be distributed to you as it becomes available.

NYVIP MESSAGE No. 270

DATE: OCTOBER 19, 2021

TO: ALL INSPECTION STATIONS

FROM: NYS DEPARTMENT OF MOTOR VEHICLES

SUBJECT: 2023 STICKER ORDERING NOW AVAILABLE

Below are instructions for ordering next year's stickers.

****PLEASE PRINT A COPY OF THIS MESSAGE AND DELIVER IT TO THE PERSON WHO ORDERS YOUR INSPECTION STICKERS.****

Inspection stickers with an expiration year of 2023 are now available to order.

HOW TO ORDER STICKERS:
To order stickers on the NYS DMV website go to
http://dmv.ny.gov/sticker/default.html

It is your responsibility to order next year's stickers promptly so that you have proper supply on hand by January 1, 2022. Sticker orders are processed in the order received. Please allow 3-4 weeks for processing.

Note:
The last day 2022 expiring sticker orders will be processed by DMV is December 22, 2021. Please submit your 2022 expiring sticker orders prior to this date.
If you have questions regarding your sticker order, please contact Sticker Issuance at (518) 474-2398.

NYVIP MESSAGE No. 271

IMPLEMENTATION OF NEW NYVIP3 CONTRACT

DATE: 12/21/2021

TO: ALL EMISSIONS INSPECTION STATIONS

FROM: NYS DEPT. OF MOTOR VEHICLES

SUBJECT: IMPLEMENTATION OF NEW NYVIP3 CONTRACT

****PLEASE BRING THIS MESSAGE TO THE ATTENTION OF THE STATION OWNER AND/OR MANAGER****

This message is to inform you of upcoming changes to the New York Vehicle Inspection Program (NYVIP) and requirements to participate as an emissions station.
As previously advised in NYVIP Message #269 sent October 15, 2021, the new program (NYVIP3) will launch on December 1, 2022. Beginning December 1, 2022, Opus Inspection, Inc. (Opus) will be the program manager for NYVIP3.
The new program will require that all inspection stations purchase a new computerized vehicle inspection system (CVIS). Most components of NYVIP3 station equipment and operations will remain familiar to all existing stations that utilize the current NYVIP2 equipment.

Further, NYVIP3 equipment and software will include upgrades that will allow both inspection stations and DMV to better serve customers. New features include, but are not limited to:
• Print-on-demand inspection sticker printing
• Elimination of paper recording for all inspection types
• Integrated opacity inspection equipment for NYMA-registered Medium to Heavy Duty Diesel vehicles
• Enhanced online Certified Inspector training and certification including online renewals
• Improved OBD scan tool capability and station network communication
• Improved station assistance with problem vehicles during emission inspection
• CVIS web camera for added security

The purchase price of a new initial NYVIP3 CVIS unit is as follows:
Level 2 OBD & Safety CVIS $1,695
Level 3 Integrated Opacity & Safety CVIS $4,695
Level 4 OBD, Integrated Opacity & Safety CVIS $4,995
In addition, Opus will offer a lease option. Under this option, payment is required in equal monthly installments for the life of the contract at the following rates:

Level 2 OBD & Safety CVIS $45.00
Level 3 Integrated Opacity & Safety CVIS $90.00
Level 4 OBD, Integrated Opacity & Safety CVIS $98.00

Below are frequently asked questions (FAQ’s) that will help you better understand any changes. This information is being provided to ensure that you are fully informed when making business decisions and/or renewing your New York State Official Inspection Station license.

1. What is NYVIP3?

NYVIP3 is the vehicle inspection program that will replace the current vehicle emissions inspection program known as NYVIP2 (New York Vehicle Inspection Program 2). Emissions testing is required as part of New York State's agreement with the EPA to comply with the Federal Clean Air Act.
Similar to NYVIP2, the NYVIP3 work station will electronically communicate with the on-board diagnostic (OBD) system of vehicles, record the status of the vehicles emission system, and transmit the data to DMV via the program contractor.

2. Do I have to purchase NYVIP3 equipment?

Yes. in order to continue participating in the voluntary inspection program, inspection stations will be required to purchase the new computerized vehicle inspection system (CVIS). The new equipment will accommodate the changes incorporated into the NYVIP3 program and allow for improvements in the operating platform for future changes to the program.

3. What costs are associated with the NYVIP3 program?

a) Initial CVIS unit: the new program will require that inspection stations purchase a new computerized vehicle inspection system (CVIS). The purchase price of a new initial NYVIP3 CVIS unit is as follows:
Level 2 OBD & Safety CVIS $1,695
Level 3 Integrated Opacity & Safety CVIS $4,695
Level 4 OBD, Integrated Opacity & Safety CVIS $4,995
In addition, Opus will offer an equipment operating lease option. Under this option, payment is required in equal monthly installments for the life of the contract at the following rates:
Level 2 OBD & Safety CVIS $45.00
Level 3 Integrated Opacity & Safety CVIS $90.00
Level 4 OBD, Integrated Opacity & Safety CVIS $98.00

b) Transaction fees: Stations will continue to pay the Contractor for each inspection conducted. Opus will continue to charge one transaction fee, per inspection, of $0.436 cents. This transaction fee remains unchanged from NYVIP2.

c) CVIS communication connection: Inspection stations must provide a NYVIP3 CVIS broadband communications connection and are responsible for any related charges.

4. When will I need to use the new inspection equipment?

You will continue to use the inspection equipment you currently have until notified otherwise. Stations must have the NYVIP3 equipment operational in order to continue to perform inspections after the official start date.

5. What equipment does the base NYVIP3 CVIS include?

- PC – Workstation
- Windows 10 Operating System
- CVIS NYVIP3 Software and Virus Protection
- 19" monitor
- Barcode Scanner
- OBDII interface (data acquisition device)

• Laser Printer (VIR, station reports, etc.)
• Thermal Sticker Printer
• Web Camera

6. What do I do with my old equipment?

The equipment belongs to you and can be disposed of (recycled) or reused elsewhere as you like. However, other than the storage cabinet, NYVIP2 equipment CANNOT be used in connection with the NYVIP3 program.
The current (CVIS) NYVIP2 electronic components contain hazardous elements and compounds, including lead, mercury, and cadmium, which can be toxic if released into the environment. Electronic waste CANNOT be thrown out in your garbage. Electronic waste is often hazardous waste. When it is properly recycled, most electronic waste is exempt from hazardous waste regulation. Regulations for handling of electronic waste are available from your local government and can be found at: http://www.dec.ny.gov/chemical/8788.html.

7. Does the new equipment include a warranty?

Yes. The NYVIP3 equipment is covered under warranty against defects and failures due to normal wear and tear for the duration of the contract. There is no additional cost for the warranty; the warranty cost for an initial unit is included in the "transaction" fee. The warranty does not cover defects caused by customer abuse.

8. How does the new equipment operate?

The NYVIP3 workstation will basically follow the same operational procedures that the current system uses. A certified inspector will enter vehicle information and safety inspection results. The workstation will then guide the inspector to perform the proper emission test and record the results. The NYVIP3 unit will offer Computer Based Training (CBT) to instruct inspectors how to use it.

9. How do I set up the equipment?

The NYVIP3 CVIS will be drop shipped with setup instructions. Operating software will be preinstalled and peripherals will be plug-and-play. A dedicated help desk will be available to assist users by phone. Opus field service representatives will be available for an onsite visit, if necessary.

10. Do I have to sign any contracts with Opus?

Yes, like the NYVIP2 agreement, if you want to participate in this program, you will be required to enter into a station participation agreement with Opus. This agreement will be posted on Opus' NYVIP.org website when it becomes available.

11. What type of vehicles can I inspect in the NYVIP3 Program?

You will be limited to inspect those groups of vehicles that you are currently licensed to inspect.

12. Do I have to obtain a new inspector's card or certification?

No. You will continue to use the inspector's card you have now.

13. What are my communications options for NYVIP3?

The NYVIP3 CVIS will only support broadband (wired and/or wireless) communication connections, including cellular and satellite broadband connections. Dial-up phone line connections will no longer be supported. Inspection stations will be responsible for any related broadband connection charges.

14.What optional equipment or upgrades may be available?

Opus has proposed the following options which, pending DMV testing and approval, will be available to stations.

• Professional Cabinet
• Wi-Fi Communication Card for in-station wireless LAN
• Wireless OBD scan tool
• Wireless Barcode Scanner
• Bluetooth Wireless Headset for hands-free safety inspection
• OBD Verification Tester embedded in OBD scan tool (no charge)
The wireless optional equipment provides greater freedom of equipment location, and faster data entry methods with fewer mistakes.

15.What improvements will be included in NYVIP3?

• Print-on-demand inspection sticker printing
• Elimination of paper recording for all inspection types
• Integrated opacity inspection equipment for NYMA registered Medium to Heavy Duty Diesel vehicles
• Enhanced online Certified Inspector training and certification including online renewals
• Improved OBD scan tool capability and station network communication
• Improved station assistance with problem vehicles during emission inspection
• CVIS web camera for added security

16.How long is the NYVIP3 contract with Opus?

The Contract with Opus Inspection will become effective on 12/1/2022 and will continue for a period of seven (7) years, and includes a renewal option for up to two (2) additional years.

17.Can I purchase or lease more than one NYVIP3 workstation?

Yes. However, additional CVIS units are priced differently than initial units. The total cost of one additional CVIS unit is as follows:

Level 1 Safety Only CVIS $4,695
Level 2 OBD & Safety CVIS $5,495
Level 3 Integrated Opacity & Safety CVIS $8,995
Level 4 OBD, Integrated Opacity & Safety CVIS $9,495
Monthly lease payments are as follows:
Level 1 Safety Only CVIS $125.00
Level 2 OBD & Safety CVIS $145.00
Level 3 Integrated Opacity & Safety CVIS $240.00
Level 4 OBD, Integrated Opacity & Safety CVIS $250.00

18.Will there be a change in inspection fees?

Inspection fees, which are set in regulation, and sticker fees, which are set in law,

are not affected by this contract.

19.What happens next? What if I have questions?

DMV will follow up this communication with further information as it becomes available. Please be on the lookout for future NYVIP3 updates.

NYVIP MESSAGE No. 278

DATE: 05/26/2022

TO: ALL EMISSIONS INSPECTION STATIONS

FROM: NYS DEPT. OF MOTOR VEHICLES

SUBJECT: IMPLEMENTATION OF NYVIP3 CONTRACT + EQUIPMENT ORDERING

PLEASE BRING THIS MESSAGE TO THE ATTENTION OF THE STATION OWNER AND/OR MANAGER

This message is to inform you of upcoming changes to the New York Vehicle Inspection Program (NYVIP) and requirements to participate as an emissions station.

As previously advised, NYVIP3 will require all inspection stations to purchase a new computerized vehicle inspection system (CVIS). As such, you must proceed to WWW.NYVIP3.COM to register and complete your equipment order with Opus Inspection, Inc. (Opus).

To order your NYVIP3 equipment, the following information will be required:

1) Facility license number
2) Facility contact information
3) Owner or manager contact information
4) Payment method information

Due to verified equipment supply chain shortages, Opus has requested a modified implementation timeline for NYVIP3; as such, hardware shipments must be prioritized:

- Opus will prioritize orders from official diesel emissions (opacity) inspection stations and stations not currently conducting inspections on the NYVIP network. Two important deadlines are outlined below, please plan accordingly:
  - July 2022: Opus expects to begin fulfilling these orders.
  - November 1, 2022: Official diesel emissions (opacity) inspection stations and stations not currently conducting electronic inspections are expected to have ordered and secured NYVIP3 equipment.

- All other stations currently conducting inspections with a CVIS – excluding official diesel emissions (opacity) inspection stations as noted above – are expected to begin receiving their orders by Q2 2023.
  - This group of stations have the option of placing an order immediately, or closer to their targeted delivery date.
  - Placing an order and submitting a completed NYVIP3 Station Participation Agreement to Opus will ensure compliance and uninterrupted service with current NYVIP2 equipment.

For further information, email Opus Inspection at NYVIP3Info@Opusinspection.com. Please include your name, phone number, email address, and facility number with your question(s), or call the DMV Office of Clean Air at (518) 473-0597 and select Option #4.

DMV and Opus will follow up this communication with further information as it becomes available. Please be on the lookout for future NYVIP3 updates.