



# GEORGIA

DEPARTMENT OF NATURAL RESOURCES

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ENVIRONMENTAL PROTECTION DIVISION

## **2021 and 2022 Biennial Report**

Submitted July 2023

## Introduction

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The biennial report submitted to EPA by July 1 satisfies the reporting requirements of 40 CFR 51.353 by addressing the emissions reductions of NO<sub>x</sub>, providing evaluation methodology and showing program effectiveness through after repair test pass/fail rates.

## Program Evaluation

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Georgia's Inspection & Maintenance (I/M) Program covers 13 counties within the metro Atlanta area and include Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale counties. For the reporting years of 2021 and 2022, Georgia's I/M Program used the same method for evaluating program effectiveness as in years past based on 40 CFR 51.353(c).

For 2021 and 2022, the I/M program reduced NO<sub>x</sub> emissions by about 9% per year from light duty gasoline powered vehicles in the 13-county metro Atlanta area based on MOVES3.1 modeling analysis.

	2021	2022
<b>NO<sub>x</sub> emissions reduction<sup>1</sup></b>	1,199 tons	1,036 tons
<b>Vehicles Tested (Initial)<sup>2</sup></b>	2,990,249	3,146,224
<b>Overall Pass Rate<sup>2</sup></b>	92.2%	91.9%
<b>Vehicles Tested After Initial Fail<sup>2</sup></b>	216,082	240,683
<b>Percent Pass After Repair Rate<sup>2</sup></b>	82.5%	81.2%
<b>Failing Vehicles Repaired and now Clean</b>	178,291	195,470

<sup>1</sup>Total reduction of NO<sub>x</sub> due to Georgia's I/M program based on the MOVES3.1 model. Numbers were calculated by multiplying the daily NO<sub>x</sub> reductions for 2021 (3.5 tons/day) and 2022 (3.0 tons/day) by the number of workdays in each year.

<sup>2</sup>Includes On-Board Diagnostic (OBD) and Two Speed Idle (TSI) testing methods.

The I/M program achieved a total NO<sub>x</sub> emissions reduction of 2,235 tons over the two-year reporting period. Although significant, the program impact on NO<sub>x</sub> reduction decreased from 2021 to 2022. This decrease combined with a high measured pass rate (91%) may be attributed to motor vehicles being manufactured with better emissions control technology with each new model year. However, the inspection portion of the I/M program remained effective because it detected over 178,000 polluting vehicles each year that were repaired and ultimately passed their emissions test. The stringent maintenance portion of the I/M program also ensures that vehicle owners keep their vehicles well maintained and repair them prior to emissions testing.

## Testing Volume for the 2021 – 2022

Data taken from Appendix A in the annual report of the year indicated

Initial					After Repair			
2021	Test Type	<u>All</u>	<u>Pass</u>	<u>Fail</u>	Test Type	<u>All</u>	<u>Pass</u>	<u>Fail</u>
	OBD	2,990,136	2,758,062	232,074	OBD	216,055	178,269	37,786
	TSI	113	95	18	TSI	27	22	5
	Total	2,990,249	2,758,157	232,092	Total	216,082	178,291	37,791
	Rate:		92.2%	7.8%	Rate:		82.5%	17.5%
2022	Test Type	<u>All</u>	<u>Pass</u>	<u>Fail</u>	Test Type	<u>All</u>	<u>Pass</u>	<u>Fail</u>
	OBD	3,146,117	2,892,341	253,776	OBD	240,673	195,460	45,213
	TSI	107	102	5	TSI	10	10	0
	Total	3,146,224	2,892,443	253,781	Total	240,683	195,470	45,213
	Rate:		91.9%	8.1%	Rate:		81.2%	18.8%
Biennial	Test Type	<u>All</u>	<u>Pass</u>	<u>Fail</u>	Test Type	<u>All</u>	<u>Pass</u>	<u>Fail</u>
	OBD	6,136,253	5,650,403	485,850	OBD	456,728	373,729	82,999
	TSI	220	197	23	TSI	37	32	5
	Total	6,136,473	5,650,600	485,873	Total	456,765	373,761	83,004
	Rate:		92.1%	7.9%	Rate:		81.8%	18.2%

## **Program Changes**

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This section of the biennial report reflects the reporting requirements of 40 CFR 51.366(e) by addressing:

- (1) Any changes made in program design, funding, personnel levels, procedures, regulations, and legal authority, with detailed discussion and evaluation of the impact on the program of all such changes; and
- (2) Any weaknesses or problems identified in the program within the two-year reporting period, what steps have already been taken to correct those problems, the results of those steps, and any future efforts planned.

The Georgia Enhanced I/M Program is part of the Environmental Protection Division's Mobile and Area Sources (MAS) Program. The Georgia Enhanced I/M Program was in maintenance mode<sup>1</sup> under the state contractor during the reporting period of calendar year 2021 and 2022. Multiple enhancements and program upgrades occurred and are outlined below.

### **Task 1 – Data System Requirements**

The following enhancements were implemented to improve the data system deliverables of Task 1:

- Operating on the new Azure platform.

### **Task 2 – Audit Requirements**

The following enhancements were implemented to improve audit requirement deliverables of Task 2:

- Specifications for stations' state signs were updated.
  - Inverted colors for "Emissions Testing" text (blue background, white text) are acceptable.
  - "Emissions Testing" must be at the bottom of the sign.
  - Laminated printout instead of decals, provided they are professional and will not fall off.
- Electronic version of Stant manuals is acceptable for audits.

### **Task 3 – Public Information and Consumer Protection**

The following enhancements were implemented to improve the public information and consumer protection deliverables of Task 3:

- Digital marketing assets received a brand overhaul with new branding designs and guidelines created to refresh the look of the program.
- A new website was launched via the existing URL, [www.cleanairforce.com](http://www.cleanairforce.com), showcasing a new design and improved user-friendly features. The website added a new translation option of program information throughout the website into Spanish, Korean, Vietnamese, and Mandarin Chinese, along with an online comment card in Spanish.

<sup>1</sup> Maintenance mode refers to no program changes to the state's testing parameters such as rolling model years tested, newer model year exemptions, Gross Vehicle Weight Rating (GVWR) parameters.

- A new Instagram account was added to enhance social media marketing efforts.

#### **Task 4 – Training and Certification**

The following enhancements were implemented to improve the training and certification deliverables of Task 4:

- The Emissions Inspector Certification Training Program manual and the Inspection Equipment Hands-On Training manual both were updated to reflect changes in the program that occurred during the period.

#### **Task 5 – Customer Service, and Waivers, Exemptions and Extensions**

The following enhancements were implemented to improve the customer service deliverables of Task 5:

- The waiver requirements were updated. The following are no longer mandatory: Proof of Vehicle or Permission to Drive documents, Georgia Driver's License for military personnel, and military IDs to be sent in with waiver application.

#### **Task 6 - Administration and Reporting**

The following enhancements were implemented to improve the deliverables of Task 6:

- Improved the station closeout process by processing the refunds to those stations through Applus Technologies, Inc. This provides a more efficient refund to the station.

### **Program Weaknesses or Problems**

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During the two-year reporting period of 2021 and 2022, the program, as required, was monitored for any weaknesses or problems. No significant weaknesses or problems in the program that would warrant program changes were identified.

## **Conclusion**

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Georgia's I/M Program continues to provide measurable impact in reducing air pollutants in the Atlanta metropolitan area. During the two-year reporting period of 2021 and 2022, the Atlanta metropolitan area had a decrease in emissions from light duty gasoline powered vehicles. The program continued to identify and ultimately repair vehicles that pollute the air, while helping the 13 metro Atlanta counties attain federal clean air standards.