



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

2019 and 2020 Biennial Report

Submitted July 2021

Introduction

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_x, providing evaluation methodology and showing program effectiveness through after repair test pass/fail rates.

Program Evaluation

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 2019 and 2020, Georgia's I/M Program used an updated method for evaluating program effectiveness as in years past based on 40 CFR 51.353(c).

For 2019, the I/M program reduced NO_x emissions by about 11% per year from light duty gasoline powered vehicles in the 13-county metro Atlanta area based on MOVES3 modeling analysis. For 2020, the NO_x emissions reduction was around 9% per year.

| | 2019 | 2020 |
|---|------------|------------|
| NO_x emissions reduction¹ | 1,605 tons | 1,032 tons |
| Vehicles Tested (Initial)² | 2,985,680 | 3,055,644 |
| Overall Pass Rate² | 91.5% | 91.9% |
| Vehicles Tested After Initial Fail² | 244,055 | 234,895 |
| Percent Pass After Repair Rate² | 82.4% | 83.2% |
| Failing Vehicles Repaired and now Clean | 200,994 | 195,512 |

¹Total reduction of NO_x due to Georgia's I/M program based on the MOVES3 model. Numbers were calculated by multiplying the daily NO_x reductions for 2019 (4.7 tons/day) and 2020 (3.0 tons/day) by the number of workdays in each year.

²Includes On-Board Diagnostic (OBD)/Accelerated Simulation Mode (ASM) /Two Speed Idle (TSI) testing methods.

The I/M Program achieved a total NO_x emissions reduction of 2,637 tons over the two-year reporting period. Although significant, the program impact on NO_x reduction decreased from 2019 to 2020. 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. The inspection portion of the I/M program remained effective because it detected nearly 400,000 polluting vehicles during this reporting period 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 2019 – 2020

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

| Initial | | | | | After Repair | | | |
|----------|-----------|------------|-------------|-------------|--------------|------------|-------------|-------------|
| 2019 | Test Type | <u>All</u> | <u>Pass</u> | <u>Fail</u> | Test Type | <u>All</u> | <u>Pass</u> | <u>Fail</u> |
| | OBD | 2,970,610 | 2,718,821 | 251,789 | OBD | 241,050 | 199,218 | 41,832 |
| | ASM | 13,853 | 11,324 | 2,529 | ASM | 2,881 | 1,683 | 1,198 |
| | TSI | 1,217 | 1,118 | 99 | TSI | 124 | 93 | 31 |
| | Total | 2,985,680 | 2,731,263 | 254,417 | Total | 244,055 | 200,994 | 43,061 |
| | Rate: | | 91.5% | 8.5% | Rate: | | 82.4% | 17.6% |
| | | | | | | | | |
| 2020 | Test Type | <u>All</u> | <u>Pass</u> | <u>Fail</u> | Test Type | <u>All</u> | <u>Pass</u> | <u>Fail</u> |
| | OBD | 3,055,434 | 2,807,579 | 247,855 | OBD | 234,836 | 195,464 | 39,372 |
| | TSI | 210 | 186 | 24 | TSI | 59 | 48 | 11 |
| | Total | 3,055,644 | 2,807,765 | 247,879 | Total | 234,895 | 195,512 | 39,383 |
| | Rate: | | 91.9% | 8.1% | Rate: | | 83.2% | 16.8% |
| | | | | | | | | |
| Biennial | Test Type | <u>All</u> | <u>Pass</u> | <u>Fail</u> | Test Type | <u>All</u> | <u>Pass</u> | <u>Fail</u> |
| | OBD | 6,026,044 | 5,526,400 | 499,644 | OBD | 475,886 | 394,682 | 81,204 |
| | ASM | 13,853 | 11,324 | 2,529 | ASM | 2,881 | 1,683 | 1,198 |
| | TSI | 1,427 | 1,304 | 123 | TSI | 183 | 141 | 42 |
| | Total | 6,041,324 | 5,539,028 | 502,296 | Total | 478,950 | 396,506 | 82,444 |
| | Rate: | | 91.7% | 8.3% | Rate: | | 82.8% | 17.2% |

Program Changes

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 mode¹ under the state contractor during the reporting period of calendar year 2019 and 2020. 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:

- During the reporting period, eight Dashboard software releases were executed with 87 items that aided all tasks.
- VID monthly database maintenance and compact jobs that reclaimed storage space occurred.

Task 2 – Audit Requirements

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

- Coroplast was approved as an acceptable material for Georgia's Clean Air Force (GCAF) signs.
- Overt auditors no longer carry master Pass/Fail caps or probe tip caps. If the station's caps fail or if they do not have them, they fail the calibration.
- Stations are allowed more days to remove departed inspectors from their analyzers.
- ASM inspections ceased on December 31, 2019. The Audits application in the Dashboard was updated to coincide with the program change.
- Overt team conducted audits on mobile units instead of the Covert team.
- Release of Liability forms were changed to an electronic format and hard copy forms are no longer needed.
- Motorists' Rights Poster forms were changed to an electronic format and hard copy forms are no longer needed.
- I/M Rules Acknowledgment were changed to an electronic format. All station owners were notified about new I/M rules and were able to acknowledge that they read the rules through the Dashboard.

¹ 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.

- Pending Enforcement Action Acknowledgement went electronic. Station owners with pending enforcement action were notified via the Dashboard.

Task 3– Public Information and Consumer Protection

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

- New educational campaigns were launched with the use of press releases, infographics, infographic videos, web banners. The campaigns covered Earth Day, National Clean Air Month, World Environment Day, senior exemptions, vehicle tips for summer heat, and pre-owned and young driver vehicle purchasing tips, back-to-school tips, finding the right car for drivers 65+, and Fall car care awareness month.
 - GCAF created videos of its infographics for increased educational opportunities.
 - The website home page for GCAF was continually refreshed with new home page banners, including information on COVID-19 updates and notifications.
- Social media marketing efforts included the continuation of Facebook, Twitter, and YouTube. Paid Facebook ads were used as part of the annual advertising campaign.
- Media relations were enhanced with the use of infographic videos, proactive pitching, press releases and infographics.
- The annual advertising campaign was enhanced with new creative messaging, along with the addition of programmatic display, which was used along with Pandora ads, Facebook ads, solar-powered kiosks, outdoor digital billboards, gas station pump toppers, :10 and :15 radio traffic spots, Marta taillight displays and rail video.
- The GCAF Ambassadors Program was launched to recruit county tag office liaisons and to provide ongoing training to tag office personnel; two lunch-and-learn meetings were completed. Online training and program resources were distributed, including the annual overview presentation, along with a Google Docs link with accompanying training material.
- The annual training of tag office personnel was provided via online video presentation, along with a Google Docs link that included accompanying training material.
- The impacts of COVID-19 in 2020 in relation to inspections, registrations, and GCAF customer service offerings were addressed through ongoing communications to motorists, stations, and tag offices. A new home page banner was added with timely updates, along with website updates on relevant pages, social media messages, advertising messages, and GAS messages.

Task 4 – Training and Certification

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

- Class sizes were limited to practice social distancing at the end of first quarter 2020 due to COVID-19. Because of this, more recertification classes were offered to accommodate the industry and ensure current inspectors were able to continue testing without interruption.
- Inspector training manuals were revised for training. The Emissions Inspector Certification Training Program manual and the Inspection Equipment Hands-On Training manual were updated to reflect changes in the program that occurred as a result of ceasing the ASM portion of the program.
- Dashboard automation enhancements were made to streamline the station closeout process

- and certification of mobile analyzers.
- Online Recertification Application was enhanced to ease submission for station owners.

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

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

- The Repair Waiver limit was updated in the Dashboard, website, and all correspondence to reflect the CPI.
- Due to 2020 Covid-19 restrictions, clear signage was posted at all service centers to direct motorists to online applications, VIR reprints, email corresponding, and help desk phone assistance.
- The GCAF Dashboard was enhanced to allow new applications created to auto-populate in Submit status instead of Pending to ensure it is identified as a new application needing to be worked.
- Auto email correspondences were activated to direct motorists to waivers@cleanairforce.com to streamline the waivers process.

Task 6 – Administration and Reporting

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

- EPD implemented measures to better reconcile and ensure the accuracy of vehicle emissions test counts for invoicing from the management contractor.

Program Weaknesses or Problems

During the two-year reporting period of 2019 and 2020, 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

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 2019 and 2020, the Atlanta metropolitan area had a decrease of 2,637 tons of NOx 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 work toward attaining federal clean air standards.