STATE OF FLORIDA
BENEFICIARY MITIGATION PLAN

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR RESOURCE MANAGEMENT

DRAFT BENEFICIARY MITIGATION PLAN UPDATES AND AMENDMENTS

AUGUST 20, 2025

Pursuant to the Environmental Mitigation Trust Agreement for
State Beneficiaries, issued in partial fulfillment of diesel emissions
mitigation obligations under the Volkswagen Settlement
https://floridadep.gov/volkswagen

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Executive Summary

In October 2019, in accordance with the Volkswagen Settlement's Environmental Mitigation Trust for State Beneficiaries (Final Trust Agreement),[1] the Florida Department of Environmental Protection (Department) finalized and published the **Beneficiary Mitigation Plan** (Mitigation Plan) for the State of Florida[2] and submitted the plan to the Trustee. Florida's Mitigation Plan contained all of the elements required by the Final Trust Agreement.[3]

As detailed in these **Proposed Mitigation Plan Updates and Amendments**, since adopting its Mitigation Plan, Florida has successfully completed numerous projects in three categories of Eligible Mitigation Actions (EMA): School, Transit, and Shuttle Buses (EMA #2); Light-Duty Zero-Emission Vehicle (ZEV) Supply Equipment (EMA #9); and Diesel Emission Reduction Act (DERA) Projects (EMA #10).

These cost-effective mitigation projects have reduced emissions of NO_X, particulate matter, and hazardous air pollutants in areas where people live, work, and visit, and which are impacted to varying degrees by emissions from diesel-powered vehicles and equipment.

As of the date of these Updates and Amendments, Florida has distributed more than $52 million in Diesel Emission Mitigation Program (DEMP) grant funding to grantees that have completed their projects, and more than $80 million is currently encumbered and allocated to specific grant-funded projects. This represents approximately 80% of the total settlement funds awarded to the State of Florida. The Department of Environmental Protection has not used any settlement funds for administrative costs associated with managing the grants funded through the Volkswagen Settlement.

As stated in the Final Trust Agreement, Florida has the discretion to adjust its planning priorities and objectives as necessary, and Florida reserved the right to amend its spending plan while maintaining the primary goal of the Mitigation Plan.

Due to a range of factors, including ongoing electric vehicle and equipment supply challenges, increased interest in funding for new clean diesel and compressed natural gas replacements and repowering of eligible legacy fleet vehicles and equipment, and the state's interest in completing its obligations under the Final Trust Agreement as expeditiously as possible, Florida has determined that it is in the interest of the state, the public, and the intended beneficiaries of the Volkswagen Settlement to amend its Beneficiary Mitigation Plan. Florida intends to utilize the remaining unallocated settlement funds available to the state for new projects under two additional categories of Eligible Mitigation Actions: Class 8 Local Freight Trucks and Port Drayage Trucks (Eligible Large Trucks) (EMA #1); and Class 4-7 Local Freight Trucks (Medium Trucks) (EMA #6).

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[1] The purpose of the Mitigation Trust is to provide money for mobile source emissions mitigation projects. Cumulatively, these projects are intended to mitigate the excess nitrogen oxides (NOx) emissions caused by Volkswagen vehicles that operated without the legally required emissions controls. The Final Trust Agreement is available at: https://floridadep.gov/sites/default/files/Executed-Trust-Agreements-Oct-02-2017.pdf.

[2] Florida's Beneficiary Mitigation Plan is available at: https://floridadep.gov/air/air/documents/floridas-beneficiary-mitigation-plan.

[3] The Department sought public input to develop the Mitigation Plan through Requests for Information (RFI), a public survey, in-person and virtual public meetings, and a public comment period for written comments to be submitted.

Consistent with the requirements of the Final Trust Agreement, the Department is seeking input on these **DRAFT Updates and Amendments to the State of Florida Beneficiary Mitigation Plan** from the public and Trustee through a 30-day comment period, after which Florida will finalize and submit this document to the Trustee as a formal amendment to Florida's Beneficiary Mitigation Plan. This public comment period will run from August 20, 2025, through September 19, 2025.

Volkswagen Settlement and State Beneficiary Mitigation Plan Summary

1. Introduction

On September 18, 2015, the United States (U.S.) Environmental Protection Agency (EPA) served the Volkswagen Group of America, Inc. (Volkswagen) with a Notice of Violation of the Clean Air Act (CAA). EPA determined that Volkswagen had violated section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(b), which prohibits the use of defeat devices to bypass, defeat, or render inoperative elements of vehicles' emission control systems that exist to comply with CAA emissions standards.[4] Additionally, by using defeat devices and then selling noncompliant vehicles, Volkswagen violated section 203(a)(1) of the CAA, 42 U.S.C. § 7522(a)(1), which prohibits the sale of any vehicles that do not conform to the emissions standards of the CAA.

Volkswagen's defeat devices allowed the 2.0-liter and 3.0-liter diesel vehicles to meet applicable federal nitrogen oxides (NO_x) emissions limits during controlled emissions tests while not meeting these limits during normal vehicle operation. NO_x is produced when fuel is burned in motor vehicles, power plants, industrial boilers, and other sources, and can be harmful to human health. NO_x is also a precursor pollutant for ground-level ozone (O_3), also known as smog. Ozone forms when NO_x and volatile organic compounds (VOC) mix in the air and react to heat and sunlight.[5]

To resolve the 2.0-liter and 3.0-liter diesel engine CAA violations, Volkswagen agreed to provide funding to mitigate the excess NO_x emissions emitted by the approximately 500,000 2.0-liter vehicles and 80,000 3.0-liter vehicles equipped with defeat devices.

2. Final Trust Agreement

On October 2, 2017, the Environmental Mitigation Trust Agreement for State Beneficiaries (Final Trust Agreement) was filed with the federal district court in Northern District of California, establishing the terms and conditions of the Mitigation Trust.[6] This action established October 2, 2017, as the Trust Effective Date. Since the date of the Final Trust Agreement, the Trustee, Wilmington Trust, N.A., has manage the funds held in trust for the beneficiaries according to the responsibilities listed in Attachment A, Section III of the Final Trust Agreement.[7]

Under the terms of the Mitigation Trust, all 50 states, the District of Columbia, and Puerto Rico, were eligible to become beneficiaries and receive a pre-determined share of $2.865 billion in total Mitigation Trust funding. This sum was based upon the number of 2.0-liter and 3.0-liter diesel vehicles sold within all jurisdictions covered by the Mitigation Trust.[8] On November 28, 2017, the

[4] U.S. Clean Air Act, 42 U.S.C. § 7522(a)(3)(b): https://www.gpo.gov/fdsys/pkg/USCODE-2009-title42/pdf/USCODE-2009-title42-chap85-subchapII-partA-sec7522.pdf.

[5] EPA's webpage with information on nitrogen dioxide (NO_2) is available at: https://www.epa.gov/no2-pollution.

[6] The Final Trust Agreement is available at: https://floridadep.gov/sites/default/files/Executed-Trust-Agreements-Oct-02-2017.pdf

[7] The Environmental Mitigation Trust Agreement for State Beneficiaries is available at: https://floridadep.gov/sites/default/files/Attachment-A-State-Environmental-Mitigation-Trust.pdf

[8] The purpose of the Mitigation Trust is to provide money for mobile source emissions mitigation projects. Cumulatively, these projects are intended to mitigate the excess NO_x emissions caused by the subject 2.0-liter and 3.0-liter vehicles

State of Florida elected to become a beneficiary under the Final Trust Agreement by submitting the completed Certification Form to the Trustee. The Certification, signed by the Governor of Florida, designated the Florida Department of Environmental Protection as Lead Agency for purposes of participation in the Environmental Mitigation Trust.[9] On January 30, 2018, the Trustee issued notification designating Florida as a beneficiary under the Trust.[10]

At the time of the Final Trust Agreement, Florida's share was more than $166 million, or 5.68 percent of the funds held in the Mitigation Trust. Florida's initial $166 million share was the combined amount from both the 2.0-liter settlement ($152.4 million) and the 3.0-liter settlement ($13.9 million), as specified in Appendix D-1B to the Mitigation Trust.[11] Over the past eight years, through the accrual of investment income and interest, the total value of Florida's Mitigation Trust share grew to over $173 million.

3. Florida's State Beneficiary Mitigation Plan

The Mitigation Trust specified that once the Trustee designates the state a beneficiary, the state must, among other requirements, submit to the Trustee, a **State Beneficiary Mitigation Plan (Mitigation Plan)** prior to requesting funding for mobile source emissions mitigation projects. In October 2019, in accordance with the Final Trust Agreement, the Department finalized and published the State of Florida Beneficiary Mitigation Plan and submitted the plan to the Trustee.[12]

Florida's Mitigation Plan contained all of the elements required by the Final Trust Agreement, including: a comprehensive description of the public input process that lead to the development of Florida's Mitigatiion Plan;[13] the overall goals of Florida's Mitigation Plan; a comprehensive description of the areas within the State of Florida that bore a disproportionate share of the diesel emissions burden; related air quality monitoring data, emissions inventory data, and population data, and identification of the Eligible Mitigation Actions that the state had selected for funding through state-grant based distribution of settlement funds.

Appendix D-2 of the Final Trust Agreement lists ten (10) Eligible Mitigation Actions for states to consider in the development of the Mitigation Plan. A complete copy of Appendix D-2 can be found as Appendix D-2 to the Mitigation Plan and can also be found on the Department's webpage.[14] Florida considered which eligible mitigation actions would achieve the state's primary goal of improving air quality around the state and identifying projects projected to yield real and measurable

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operating without the legally required emissions controls to mitigate the excess NO_x emissions attributable to these vehicles. The Department estimates that from 2009 through the mandated buyback period, the 33,160 vehicles sold in Florida had an annual average of 261 tons of excess NO_x emissions.

[9] Notice of Filing of Certification for Beneficiary Status: https://floridadep.gov/air/air-director/documents/notice-filing-certification-beneficiary-status-vw

[10] Notice of Beneficiary Designation: https://floridadep.gov/air/air-director/documents/notice-beneficiary-designation

[11] Department Link to Appendix D-1B: https://floridadep.gov/air/air-director/documents/appendix-d-1b-vw

[12] Florida's Beneficiary Mitigation Plan is available at: https://floridadep.gov/air/air/documents/floridas-beneficiary-mitigation-plan.

[13] The Department sought public input to develop the Mitigation Plan through Requests for Information (RFI), a public survey, in-person and virtual public meetings, and a public comment period for written comments to be submitted.

[14] Appendix D-2 of the Final Trust Agreement is available at: https://floridadep.gov/air/air-director/documents/appendix-d-2-vw

environmental benefits and identified the following categories of Eligible Mitigation Actions for project-specific funding:

Eligible Mitigation Action	Percentage Allocation
School, Transit, and Shuttle Buses	70%
Light-Duty ZEV Supply Equipment	15% (Maximum Allowable)
Diesel Emissions Reduction Act (DERA) [15]	15%

Although the Final Settlement Agreement allowed for up to 15% of the total cost of each eligible mitigation action to be used for actual administrative expenditures, the Department has not utilized any settlement funds for administrative costs associated with managing the grants funded through the Volkswagen Settlement.

For ease of reference, the Department hereby incorporates Florida's October 2019 Beneficiary Mitigation Plan into these Beneficiary Mitigation Plan Updates and Amendments as **Appendix A**. These Beneficiary Mitigation Plan Updates and Amendments expand upon, but do not replicate in their entirety, the the elements that states were required to include in their initial Mitigation Plans. Elements of Florida's Mitigation Plan that are not directly addressed in these Beneficiary Mitigation Plan Updates and Amendments remain unchanged.

4. Florida's Semiannual Reports Under the Mitigation Trust

Consistent with the terms of the Mitigation Trust, since the date of the Trustee's receipt and acknowledgement of Florida's Mitigation Plan, the State of Florida has prepared and submitted to the Trustee a total of eleven (11) **Semiannual Reports**. Each Semiannual Report has included an accounting of the total Settlement funds received from the Trustee, the total funds expended by the state, the remaining balance of Settlement funds under management by the Trustee, a budget summary for each category of Eligible Mitigation Action, a listing of current projects under each Eligible Mitigation Action, and a summary for each project.

For ease of reference, the Department hereby incorporates Florida's Semiannial Report for the Reporting Period of January 1, 2025, through June 30, 2025, into this document as **Appendix B**. As detailed in Florida's most recent Semiannual Report, to date, Florida has allocated the following funding amounts to specific projects under each of the three Eligible Mitigation Actions identified in Florida's initial Mitigation Plan:

Eligible Mitigation Action	Funds Allocated	Funds Encumbered[16]	Funds Expended[17]
School Bus & Transit Bus Replacements	$116,395,121.18	$74,483,535.80	$40,347,294.38
Electric Vehicle Charging Infrastructure (EVCI)	$24,941,811.68	$5,402,205.00	$9,815,023.09
Diesel Emission Reduction Act (DERA)	$24,941,811.68	$1,250,000.00	$2,200,000
TOTAL	**$166,278,745.00**	**$81,135,740.80**	**$52,362,317.47**

[15] Information about EPA's DERA State Grants Program is available at: https://www.epa.gov/dera/state
[16] "Funds Encumbered" refers to amounts assigned to projects, but which the Department has not yet paid out to grantees.
[17] "Funds Expended" refers to amounts that the Department has paid out to grantees.

Mitigation Plan Updates and Amendments

The primary goal of Florida's Mitigation Plan is to reduce emissions of NO_X, particulate matter, and hazardous air pollutants in areas where people live, work, and visit. To achieve this goal, Florida's Mitigation Plan balanced the following factors:

1. Prioritizing projects that replace eligible units with electric-powered and/or alternative fueled units;
2. Identifying the areas in Florida where the largest number of people are impacted by higher levels of emissions from diesel-powered vehicles and equipment; and
3. Identifying cost-effective mitigation projects, factoring in the prioritized fuel types.

Since 2020, the Department has implemented **Florida's Diesel Emissions Mitigation Program (DEMP)** using VW Settlement funds (complemented, at times, by smaller amounts of federal funding distributed to the states through EPA's **DERA State Grants** program). To date, over $52.3 million has been paid out to grantees that have completed their projects, and more than $81 million is encumbered for active projects.

As stated in the Final Trust Agreement, Florida has the discretion to adjust its planning priorities and objectives as necessary, and Florida reserved the right to amend its spending plan while maintaining the primary goal of the Mitigation Plan.

Florida has determined that it is in the interest of the state, the public, and the intended beneficiaries of the Volkswagen Settlement to utilize the remaining unallocated settlement funds available to the state for projects under two additional categories of Eligible Mitigation Action (EMA): Class 8 Local Freight Trucks and Port Drayage Trucks (Eligible Large Trucks) (EMA #1); and Class 4-7 Local Freight Trucks (Medium Trucks) (EMA #6). .

Consistent with the requirements of the Final Trust Agreement, the Department is seeking input on these **DRAFT Updates and Amendments to the State of Florida Beneficiary Mitigation Plan** from the public and Trustee through a **30-day comment period**, after which Florida will finalize and submit this document to the Trustee as a formal amendment to Florida's Beneficiary Mitigation Plan. **This public comment period will run from August 20, 2025, through September 19, 2025.**

5. Mitigation Plan Updates

Since adopting its Mitigation Plan, Florida has successfully completed numerous projects in three categories of Eligible Mitigation Actions (EMA): School, Transit, and Shuttle Buses (EMA #2); Light-Duty Zero-Emission Vehicle (ZEV) Supply Equipment (EMA #9); and Diesel Emission Reduction Act (DERA) Projects (EMA #10). The Department has prepared a summary of these completed projects, together with an accounting of settlement fund expenditures under each category and projected unallocated fund balances that are available for utilization on future projects under two additional EMA categories: Class 4-7 Local Freight Trucks (Medium Trucks (EMA #1); and

Class 4-7 Local Freight Trucks (Medium Trucks) (EMA #6), as discussed at further length under the Mitigation Plan Amendments section below.[18]

A. Eligible Mitigation Action #2 – School and Transit Buses

Electric School Buses

In November 2020, the Department announced a Notice of Funding Availability (NOFA) inviting applications from Florida school districts for the purchase of electric school buses to replace eligible diesel school buses. Diesel school buses eligible for this program were required to be of an engine model year 2009 or older Only school districts within an air quality priority area designated in Florida's Mitigation Plan were eligible to participate.

The Department allocated approximately **$56.3 million** in VW settlement funds towards the **electric school bus grant program**. School districts were required to provide at least a 25% cost share towards the total project budget.[19] To maximize the cost-share and increase the competitiveness of their applications, the Department encouraged school districts to partner with electric utilities to offset the expense of charging infrastructure.

The Department has entered into grant agreements with seven (7) Florida school districts: Broward County, Manatee County, Miami-Dade County, Orange County, Palm Beach County, Pinellas County, and Sarasota County. The total number of electric school buses funded under these seven grant agreements is 183.[20]

To date, three of these school districts have completed their projects, and four school districts are continuing to order and receive delivery of new electric school buses to replace eligible diesel school buses within their existing fleets. To date, the total number of buses delivered and in operation is 133.

Those grantees that have not yet completed their purchases will continue to receive delivery of buses through June 2027.[21] Due to a range of factors, including ongoing electric vehicle and equipment supply challenges, shifts in federal incentive structures, and the state's interest in completing its obligations under the Final Trust Agreement as expeditiously as possible, Florida has determined that it is in the interest of the state, the public, and the intended beneficiaries of the Volkswagen Settlement not to proceed with any additional electric school bus projects using VW

[18] See Section 6. Mitigation Plan Amendments for additional information on Florida's intention to expand the state's Beneficiary Mitigation Plan to include projects under these two Eligible Mitigation Actions.
[19] At the time that the initial Grant Agreements were developed (state FY22), the average price per new electric school bus was approximately $360,000. The average price of a comparable diesel bus in state FY22 was $120,000. To incentivize participation and maximize the number of new electric buses funded under the program, the Department sought to cover the difference in unit cost between a new diesel bus and a new electric bus.
[20] Due to significant increases in the price of electric school buses, in 2024, DARM amended six electric school bus grants to increase the allowable reimbursement amount per bus and reduce the number of buses covered under each agreement proportionately. The total dollar value of each grant agreement was not increased.
[21] Electric bus manufacturer lead times and unit availability has been a significant factor in the schedules under which grantees are working to meet their obligations under their grant agreements.

settlement funding. Florida does not anticipate that there will be any unused balance of funds from the electric school bus allocation.

Projected Unused VW Funding Balance (Electric School Buses): $0

Electric Transit Buses

In February 2022, the Department announced a NOFA for the purchase of electric transit buses to replace eligible diesel transit buses. This funding opportunity was made available to all Florida public transit agencies that own and operate diesel transit buses in the state of Florida. Diesel transit buses eligible for this program were required to be of an engine model year 2009 or older.

The Department allocated approximately **$68.1 million** in VW settlement funds towards the **electric transit bus grant program**. DARM determined that reimbursements of $300,000 per new electric bus would enable the Department to meet the needs of these transit agencies within the budget allocated to bus replacement under the State Mitigation Plan.

The Department has entered into grant agreements[22] with ten (10) transit agencies:[23]

- Broward County Transportation Department (22 buses)
- Central Florida Regional Transportation Authority (LYNX) (30 buses)
- City of Gainesville Regional Transit System (4 buses)
- City of Key West (1 bus)
- City of Ocala (SunTran) (1 bus)
- City of Tallahassee (StarMetro) (17 buses)
- Escambia County Area Transit (9 buses)
- Miami-Dade County (63 buses)
- Palm Beach County (PalmTran) (6 buses)
- Pinellas Suncoast Transit Authority (60 buses)

The total number of electric transit buses funded under these ten grant agreements is 213.

To date, the total number of buses ordered is 88, and the total number of buses delivered and in operation is 38.

Grantees will continue to order and receive delivery of buses through June 2027. Due to a range of factors, including ongoing electric vehicle and equipment supply challenges, shifts in federal incentive structures, and the state's interest in completing its obligations under the Final Trust Agreement as expeditiously as possible, Florida has determined that it is in the interest of the state, the public, and the intended beneficiaries of the Volkswagen Settlement not to proceed with any additional electric school bus projects using VW settlement funding. At present, Florida anticipates

[22] Under the terms of each grant agreement, the grantee is required to scrap at least one eligible existing diesel bus for each three new electric buses purchased, and the grantee will be reimbursed $300,000 for each new electric bus purchased.

[23] Six of these transit agencies are located within an air quality priority area designated in Florida's Mitigation Plan. Four of these transit agencies operate within the city centers of smaller metropolitan areas.

that there will be an unused balance of approximately $4.2 million from the electric transit bus allocation.

Projected Unused VW Funding Balance (Electric Transit Buses): approx. $4,200,000

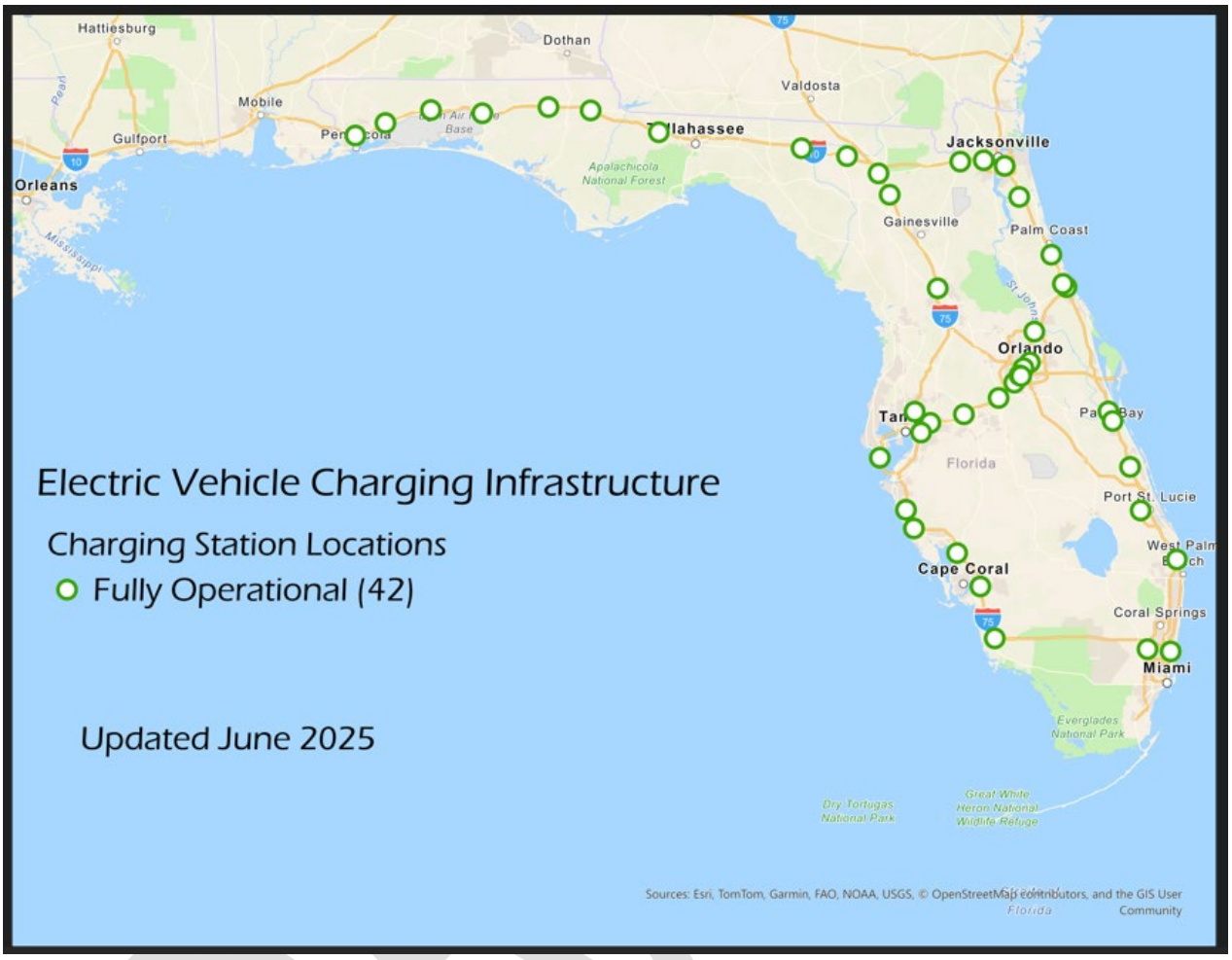
B. Eligible Mitigation Action #9 – Electric Vehicle Charging Infrastructure (EVCI)

In February and November 2020, the Department announced NOFAs for grant funding for Electric Vehicle Charging Infrastructure (EVCI) projects at specified locations near Florida's interstate highways (I-10, I-85, I-75, and I-4) along evacuation corridors. Each project site was eligible for up to $500,000 in grant funding, with mandatory cost-share requirements for both public and private project partners.

The Department initially allocated approximately **$24.9 million** in VW settlement funds towards the **EVCI program**. Not all proposed project locations yielded viable proposals, and over the past five years, the Department has determined that certain project locations were infeasible.

The Department ultimately proceeded with a total of 42 projects with 8 separate grantees. Grant award amounts ranged from approximately $243,000 up to the full $500,000, depending upon the number of charging units at the site and other location-specific factors. All 42 sites are now operational, and the Department anticipates that reimbursement of installation costs will be completed by the end of the calendar year. **Figure 1** below shows the EVCI project locations and their operational status as of June 2025.

Figure 1. EVCI Project Sites and Operational Status



Due to a range of factors, including ongoing electric vehicle and equipment supply challenges, shifts in federal incentive structures, and the state's interest in completing its obligations under the Final Trust Agreement as expeditiously as possible, Florida has determined that it is in the interest of the state, the public, and the intended beneficiaries of the Volkswagen Settlement not to proceed with any additional EVCI projects using VW settlement funding. At present, Florida anticipates that there will be an unused balance of approximately $11.9 million from the EVCI allocation.

Projected Unused VW Funding Balance (EVCI): approx. $11,900,000

C. Eligible Mitigation Action #10 – DERA Projects

The Department allocated approximately **$24.9 million** in VW settlement funds towards **DERA projects**. Project partners are required to meet all of the eligibility and mandatory match requirements under DERA State Grant program guidelines.

To date, Florida has utilized VW settlement funds to complete two marine diesel repower projects for commercial ferry vessels under the DERA State Grant program:

- Key West Express Marine Diesel Repower Project ($1,000,000 in VW funds);
- Big Cat Express Marine Diesel Repower Project ($1,200,000 in VW funds).

At present, Florida has two active grant agreements for freight switcher locomotive repower projects under the DERA State Grant program at locations in air quality priority areas designated in Florida's Mitigation Plan:

- CEMEX Baymeadows Switcher Locomotive Repower ($664,751 in VW funds);
- CEMEX Miami-Krome Switcher Locomotive Repower ($585,249 in VW funds).

Florida anticipates that these two freight switcher locomotive projects will be completed by September 2025. Due to a range of factors, including shifts in federal incentive structures, increased interest in funding for new clean diesel and compressed natural gas replacements and repowering of eligible legacy fleet vehicles and equipment, and the state's interest in completing its obligations under the Final Trust Agreement as expeditiously as possible, Florida has determined that it is in the interest of the state, the public, and the intended beneficiaries of the Volkswagen Settlement not to proceed with any additional DERA projects using VW settlement funding. At present, Florida anticipates that there will be an unused balance of approximately $21.6 million from the DERA projects allocation.

Projected Unused VW Funding Balance (DERA): approx. $21,600,000

In sum, Florida anticipates a projected unused balance of VW settlement funds of approximately **$40.6 million** from unallocated or reverted resources from projects under the three Eligible Mitigation Actions provided for under Florida's 2019 Mitigation Plan.

Unused Electric Bus Funds (EMA #2):	Approx. $4,200,000
Unused EVCI Funds (EMA #9):	Approx. $11,900,000
Unused DERA Project Funds (EMA #10):	Approx. $21,600,000
TOTAL Projected Unused Balance:	**Approx. $40,600,000**

As detailed under the Mitigation Plan Amendments section below, Florida is proposing to reallocate these resources (together with any interest earned on encumbered or unencumbered settlement funds) towards projects under two additional Eligible Mitigation Actions.

D. National Emissions Inventory

In addition to detailing the progress that Florida hast made across a range of Eligible Mitigation Actions, in the interest of providing Florida citizens and stakeholders with more recent information on statewide emissions, the Department has prepared a suite of updates to key data sets and data visualization tools to reflect currently applicable mobile and stationary source emissions inventories and air quality conditions in Florida as of the date of these Updates and Amendments to Florida's Beneficiary Mitigation Plan.

The National Emissions Inventory (NEI) is a comprehensive and detailed estimate of air emissions for criteria air pollutants, criteria precursors, and 187 hazardous air pollutants (HAPs) from air

emissions sources. The 2014 NEI is the most recent complete version released by EPA. The NEI is based primarily upon data provided by State, Local, and Tribal air agencies for sources in their jurisdictions and supplemented by data developed by EPA.[24] The NEI allows states to review state-level and county-level emissions data, sector-wide emissions data (i.e., point sources, mobile sources, or area sources), or a combination of these.

NEI on-road sources include emissions from on-road vehicles that use gasoline, diesel, and other fuels. These sources include on-road light-duty and heavy-duty vehicle emissions. EPA uses the Motor Vehicle Emission Simulator (MOVES) model to compute on-road emissions based on model inputs.[25] NEI non-road sources include off-road mobile sources that use gasoline, diesel, and other fuels. Source types include construction equipment, lawn and garden equipment, aircraft ground support equipment, and locomotives. For many non-road sources, the EPA uses the MOVES-NONROAD model.[26]

According to the 2014 NEI, Florida's total emissions of NO_X from all sources, both stationary and mobile, was 582,390 tons.[27] The vast majority of these NO_X emissions came from mobile sources. These sources emitted 416,565 tons in 2014, approximately 71% of the total statewide NO_X emissions.

At the time that Florida prepared and submitted its 2019 Beneficiary Mitigation Plan, approximately 33% of all NO_X emissions (194,638 tons) were from diesel-powered mobile sources. Of these 194,638 tons of NO_X emitted from diesel-powered mobile sources, the sources were divided across into these following specific subcategories:[28]

- 100,709 tons from on-road diesel heavy-duty vehicles (e.g., tractor trailers);
- 63,675 tons from non-road diesel equipment (e.g., heavy forklifts);
- 16,786 tons from commercial marine vessels (e.g., cruise and container ships);
- 7,448 tons from on-road diesel light-duty vehicles (i.e., personal vehicles); and
- 6,020 tons from diesel-powered locomotives (e.g., switcher locomotives).

Based upon the most recent NEI (2020), 46% of all NO_X emissions statewide are from diesel powered mobile sources. Updates to several key data visualization figures that Florida included in its 2019 Beneficiary Mitigation Plan are incorporated below.

[24] National Emissions Inventory: https://www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei
[25] EPA MOVES Model: https://www.epa.gov/moves
[26] EPA Nonroad MOVES Model: https://www.epa.gov/moves/nonroad-technical-reports
[27] EPA's 2014 NEI Data: https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data
[28] As detailed above, to date Environmental Mitigation Trust Fund has provided funding to reduce NO_x emissions from four of these categories (on-road diesel heavy-duty vehicles [school and transit bus replacements]; commercial marine vessels [DERA repower projects]; on-road diesel light-duty vehicles [EVCI projects]; and diesel-powered locomotives [DERA repower projects]).

Figure 2. Percentage Distribution by Sector for All NOx Emissions in Florida (2020 NEI)

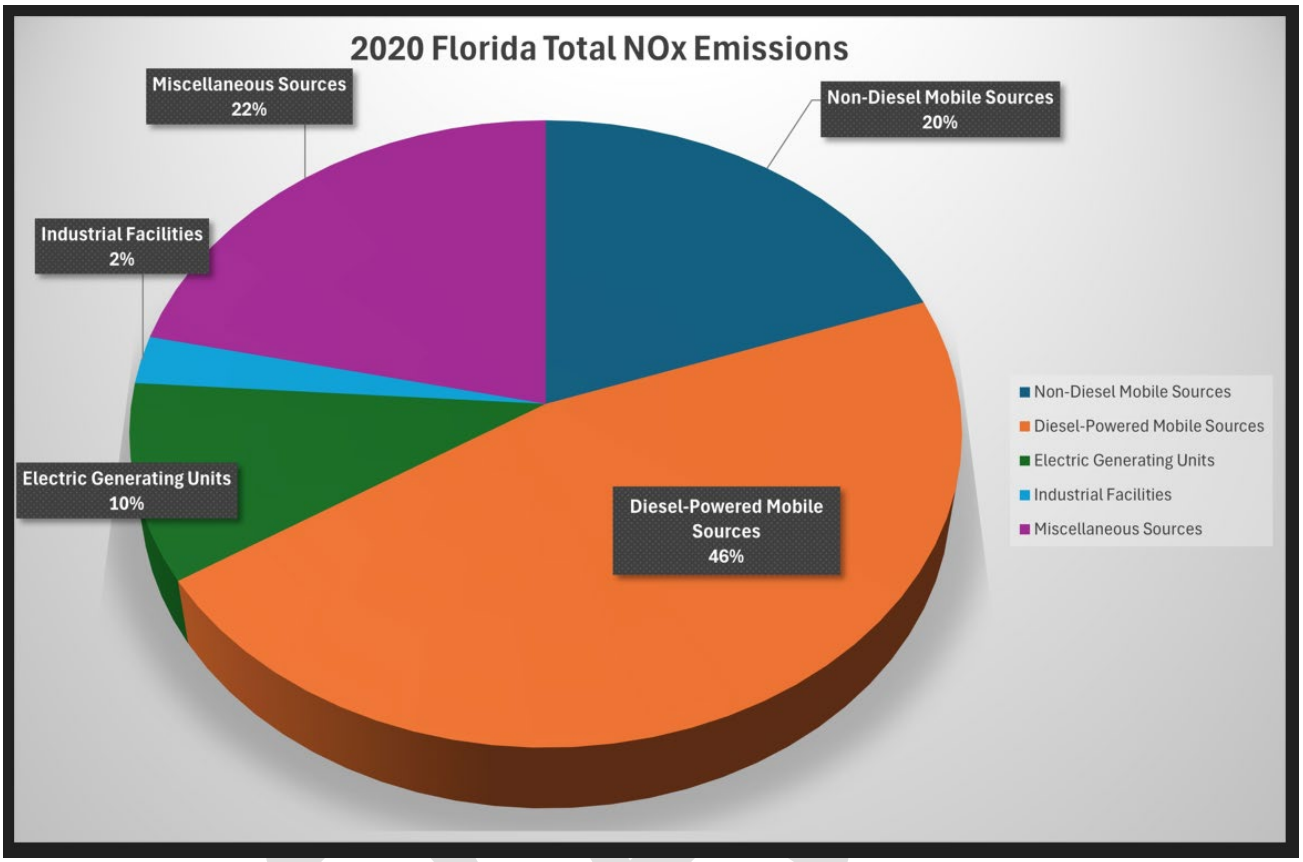


Figure 3. Percentage Distribution of Mobile Source NOx Emissions in Florida (2020 NEI)

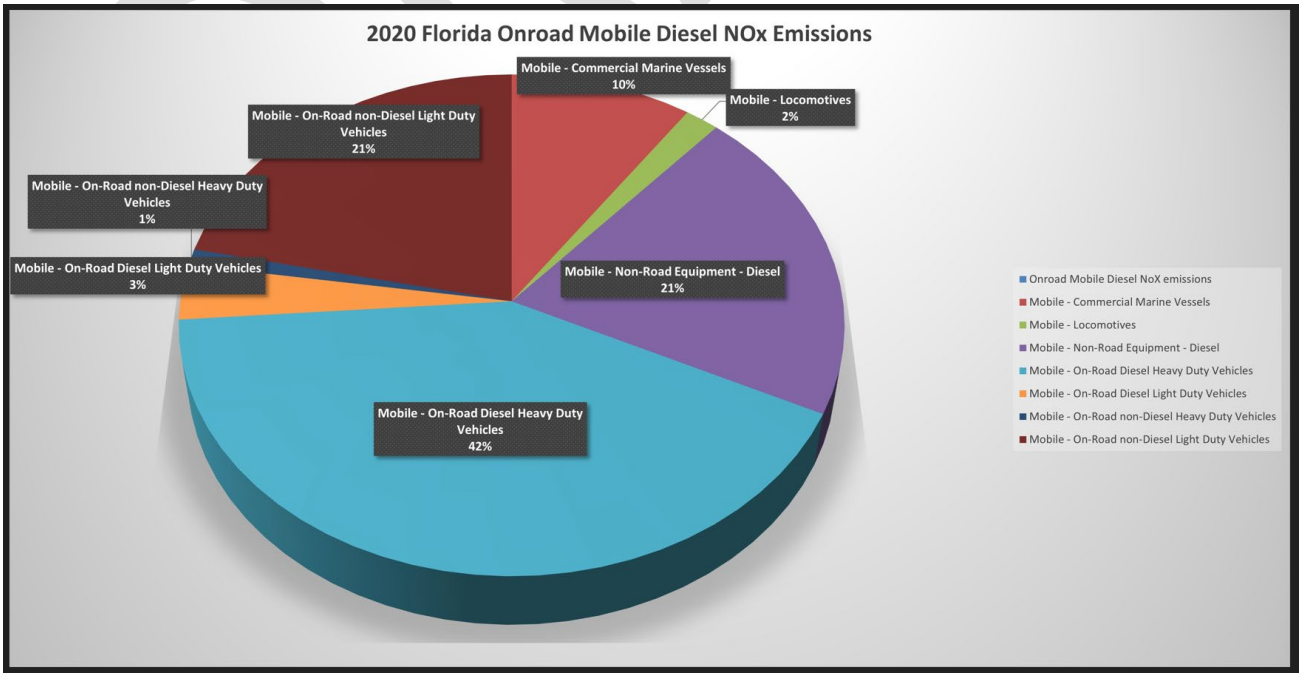


Figure 4. Distribution by County for All NOx Emissions in Florida (2020 NEI)

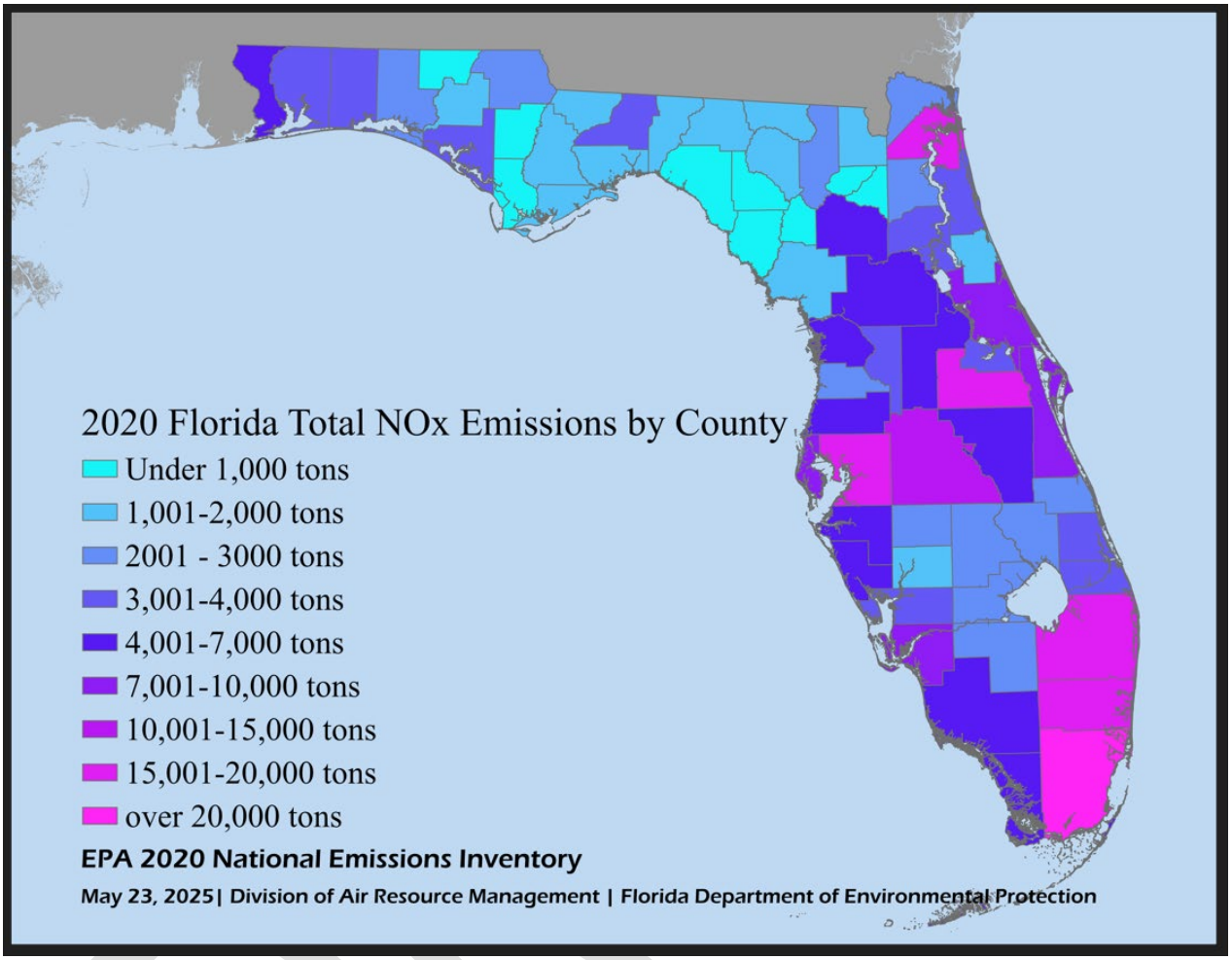
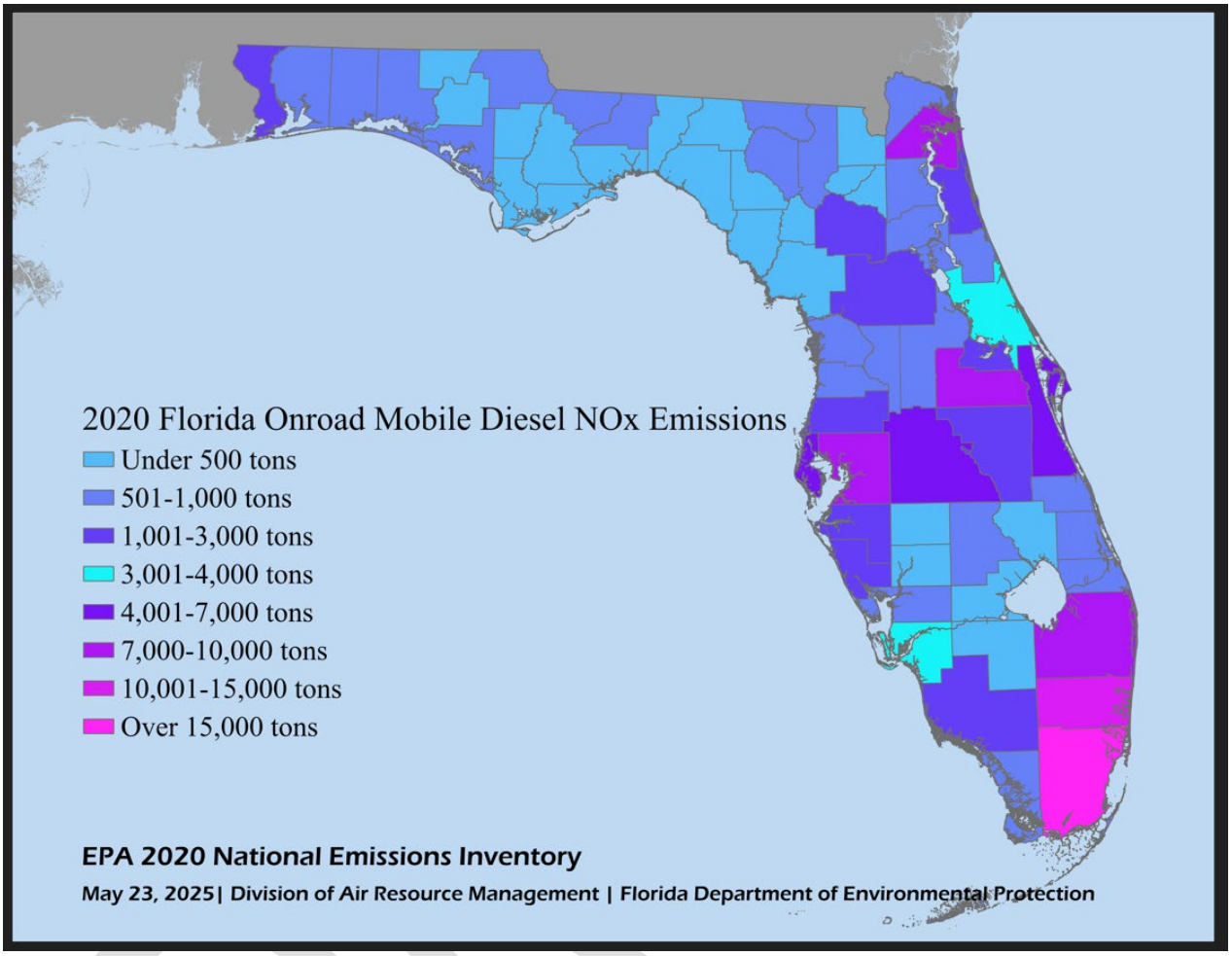


Figure 5. Distribution by County for Mobile Source NO_X Emissions in Florida (2020 NEI)



Using the 2020 NEI, the Department has updated the list of counties with the most NO_X, $PM_{2.5}$, and PM_{10} emissions from mobile diesel sources. **Table 1** provides an update to the top 10 counties for each of these pollutants, and Appendix C contains a full accounting of the tota mobile source NO_X, $PM_{2.5}$ and PM_{10} emissions in tons per year (tpy). These data reflect a significant reduction in total mobile source emissions, as follows:

- The cumulative mobile diesel source NO_X emissions from the 10 highest emitting counties (79,297 TPY) in 2020 was **21% lower** than the cumulative NO_X emissions from the 10 highest emitting counties in 2014 (101,291 TPY).
- The cumulative mobile diesel source $PM_{2.5}$ emissions from the 10 highest emitting counties (3,324 TPY) in 2020 was **48% lower** than the cumulative $PM_{2.5}$ emissions from the 10 highest emitting counties in 2014 (6,441 TPY).
- The cumulative mobile diesel source PM_{10} emissions from the 10 highest emitting counties (4,908 TPY) in 2020 was **34% lower** than the cumulative PM_{10} emissions from the 10 highest emitting counties in 2014 (7,494 TPY).

Table 1. Counties with the Highest Mobile Diesel Emissions in Tons Per Year (TPY) (2020 National Emissions Inventory [NEI])

Emissions of NO_X from Mobile Diesel Sources

County	Total NO_X (TPY)
Miami-Dade	16,239
Broward	10,893
Hillsborough	9,471
Duval	8,728
Palm Beach	8,336
Orange	8,312
Brevard	4,671
Pinellas	4,530
Polk	4,363
Lee	3,754

Emissions of $PM_{2.5}$ from Mobile Diesel Sources

County	Total $PM_{2.5}$ (TPY)
Miami-Dade	618
Broward	441
Orange	416
Hillsborough	391
Palm Beach	362
Duval	331
Pinellas	205
Polk	204
Brevard	178
Lee	178

Emissions of PM_{10} from Mobile Diesel Sources

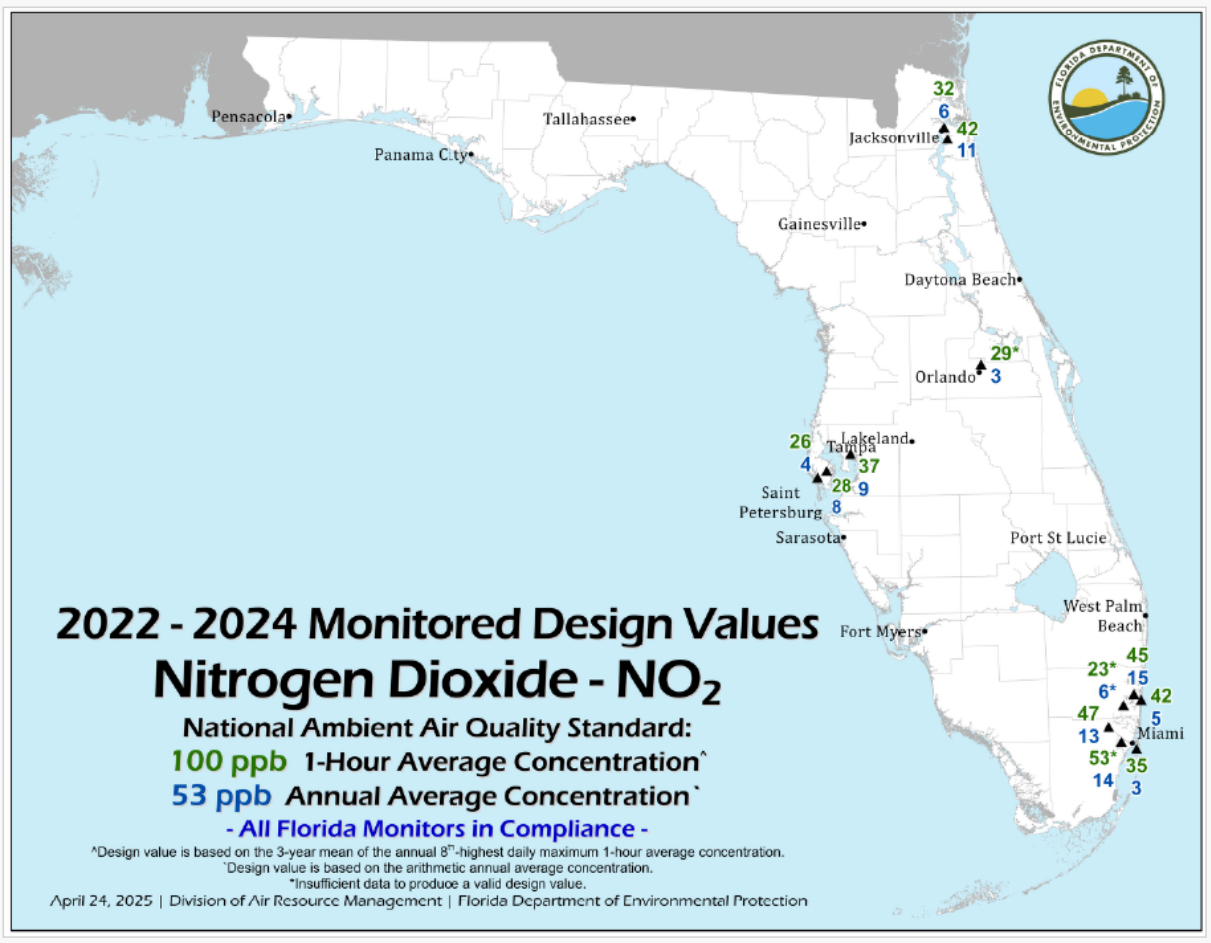
County	Total PM_{10} (TPY)
Miami-Dade	969
Broward	660
Orange	609
Hillsborough	556
Palm Beach	546
Duval	448
Pinellas	318
Polk	279
Lee	266
Brevard	257

E. Ambient Air Monitoring Data

Florida's ambient air monitoring network continues to show that all of Florida remains in attainment for all "criteria" air pollutants (i.e., pollutants for which EPA has established a National Ambient Air Quality Standard [NAAQS]),[29] including those commonly associated with diesel emissions – nitrogen oxides (NO_X), ozone, fine particulate matter ($PM_{2.5}$), and coarse particulate matter (PM_{10}).

Florida continues to have consistently low NO_2 levels statewide, reflected in annual and one-hour design values significantly below the NAAQS concentrations. As reflected in **Figure 6**, Florida's ambient monitoring network for NO_2 shows that all but one monitor are at levels 50 percent (or more) below the 1-hour NO_2 NAAQS, and all monitors are at levels 80 percent (or more) below the annual NO_2 NAAQS.

Figure 6. Florida Statewide Nitrogen Dioxide (NO_2) Design Values (2022-2024)

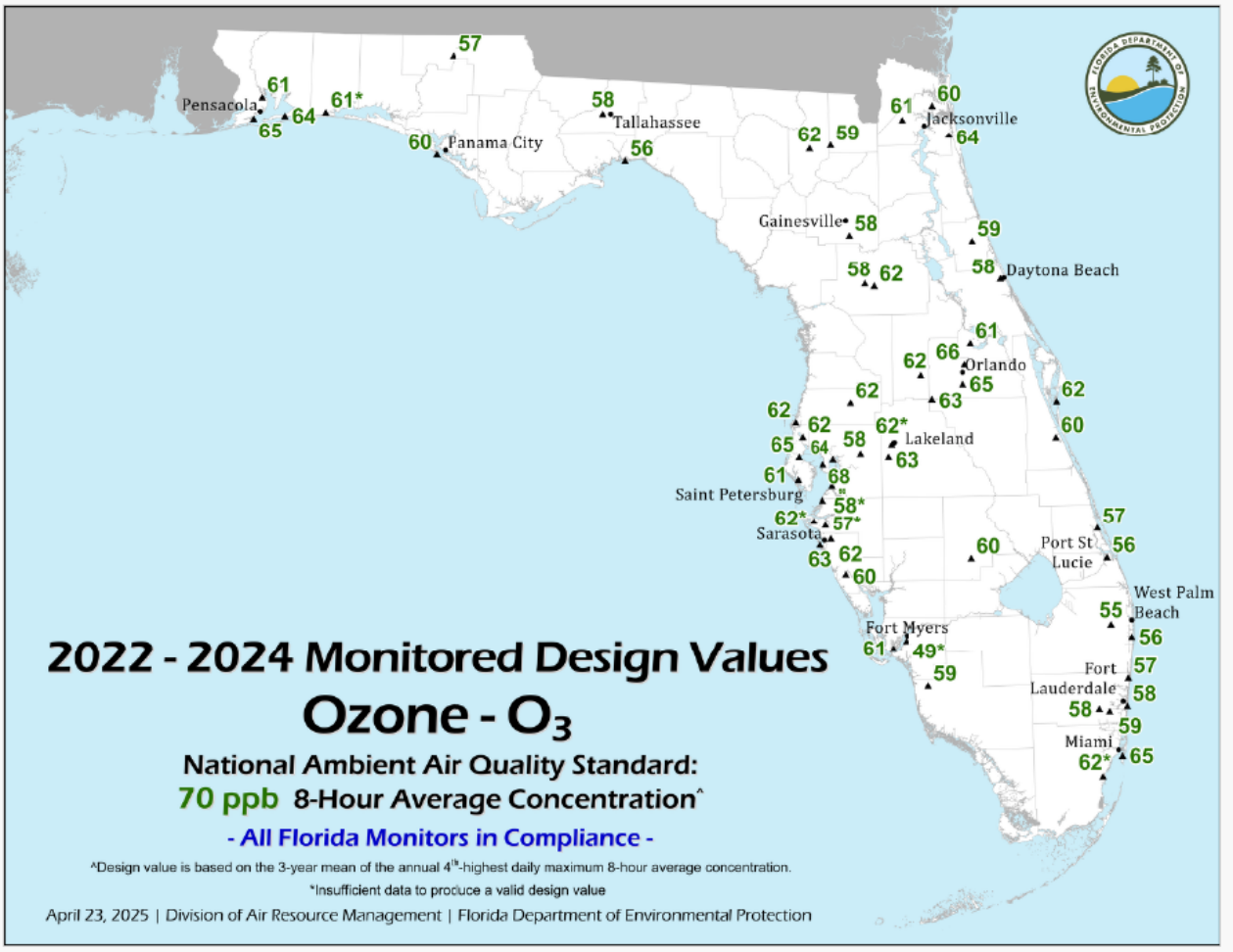


NO_X is a primary precursor pollutant for the formation of ground-level ozone (O_3). Ozone forms when NO_X and other precursor pollutants, including volatile organic compounds (VOCs), react in the presence of sunlight. Although moderate levels of ground-level ozone do occur in Florida, as

[29] More information about the National Ambient Air Quality Standards is available at: https://www.epa.gov/criteria-air-pollutants/naaqs-table.

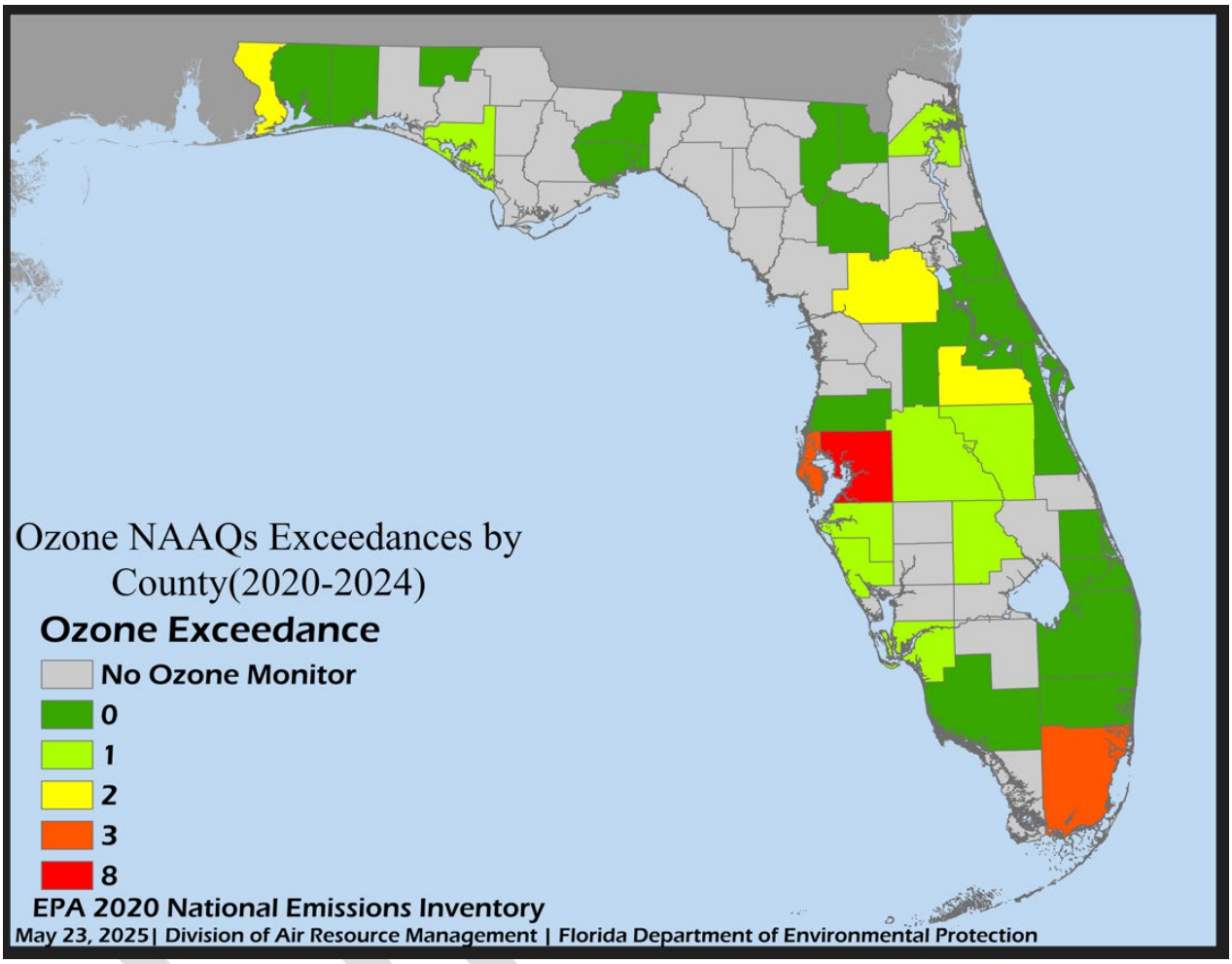
reflected in **Figure 7**, the Department's ambient monitoring network shows that there are no monitors exceeding the 2015 8-hour ozone NAAQS of 70 parts per billion (ppb).

Figure 7. Florida Statewide Ozone (O_3) Design Values (2022-2024)



As noted in Florida's 2019 Beneficiary Mitigation Plan, on occasion, there are days when meteorological conditions conducive to ozone formation cause an air monitor to measure ozone values above the 8-hour average concentration of 70 ppb. **Figure 8** provides updated county information for the number of days with at least one monitored reading above 70 ppb. Some counties have multiple air monitors that have been placed in locations based on federal regulations. This figure does not show how many air monitors are in each county, and which individual and/or combination of air monitors measured an exceedance. Additionally, this figure does not show official exceedances, but rather shows 2013-2017 data using the 2015 standard of 70 ppb. The standard for 2013 and 2014 was 75 ppb.

Figure 8. Number of Ozone (O_3) Exceedance Days by County (2020-2024) for the 2015 O_3 NAAQS (70 ppb 8-hour average concentration).



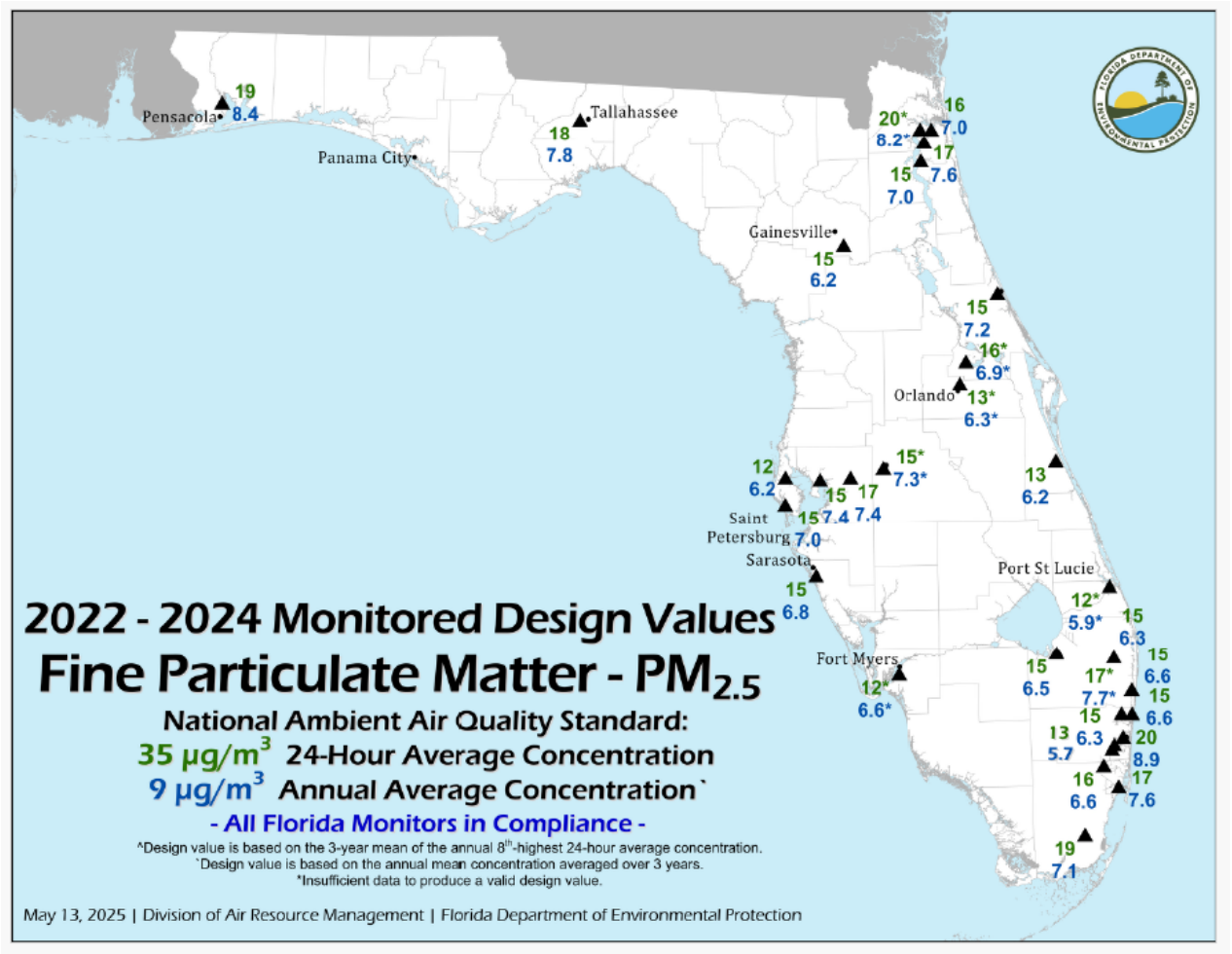
Another pollutant that diesel-powered vehicles emit is particulate matter (PM), specifically fine particulate matter (or $PM_{2.5}$). Depending on the monitoring location, different sources of $PM_{2.5}$ can be the primary driver of any local air quality issue. There are many sources of $PM_{2.5}$ including:

1. Naturally-occurring direct emissions of $PM_{2.5}$ (e.g. fires);
2. Naturally-occurring secondarily-formed $PM_{2.5}$ (e.g. biogenic VOCs);
3. Anthropogenic sources of directly-emitted $PM_{2.5}$ (e.g. $PM_{2.5}$ from mobile sources); and
4. Anthropogenic sources of secondarily-formed $PM_{2.5}$ (e.g. sulfur dioxide [SO_2] and NO_X emissions)

Florida's ambient monitoring network for $PM_{2.5}$ continues to shows statewide attainment with the NAAQS (i.e., there are no monitors exceeding either the annual or 24-hour $PM_{2.5}$ NAAQS). **Figure 9** shows the current design values for the annual and 24-hour $PM_{2.5}$ NAAQS across Florida.[30]

[30] As noted in Florida's 2019 Beneficiary Mitigation Plan, $PM_{2.5}$ design values generally increase towards the northern half of Florida and into the Panhandle, due in part to impacts from in-state and out-of-state wildfires and controlled burning activities.

Figure 9. Florida Statewide Fine Particulate ($PM_{2.5}$) Design Values (2022-2024)



6. Emissions Benefits Updates

Section 4.1 of Appendix D of the Final Trust Agreement requires that states provide a description of the range of emissions benefits projected to result from actions identified in their Mitigation Plans. As detailed in Florida's 2019 Beneficiary Mitigation Plan, the Department has estimated that from 2009 through 2018, the 33,160 affected Volkswagen vehicles sold in Florida combined to emit an annual average of 261 tons of excess NO_X emissions.[31]

The Department has utilized EPA's Diesel Emissions Quantifier (DEQ) to provide general data related to the NO_X emission reductions associated with the diesel emission reduction projects that Florida has completed to date under two categories – EMA #2 (School Buses and Transit Buses) and EMA #10 (DERA Projects). The Department will continue to use project-specific emissions factors and modeling software to estimate the range of air pollution reductions associated with emissions mitigation projects that remain to be completed.

[31] This estimate included the number of violating vehicles removed through the minimum 85 percent Volkswagen buy-back program requirement.

A. Electric School Buses

Table 2 shows the estimated annual emissions benefits and associated costs for electric replacement units under Eligible Mitigation Action No. 2 (School Buses). As detailed above, as of the date of this document, Florida has provided reimbursement to seven grantees for a total of 133 electric school buses (each of which replaces an existing eligible diesel school bus with an average estimated remaining useful life of a minimum of 6 years). To date, the average total cost to the grantee per new electric school bus has been $370,436, and the reimbursement paid to the grantee per new electric school bus has been $262,991 (or the equivalent of a 30.0% "Grantee Cost Share").

Table 2. Emissions Benefits Estimate for Replacement Units – Electric School Buses

Unit Type	Average Total Unit Cost (vehicle only)	30% Average Grantee Cost-Share		
		New Units to Date	NO_X Reduction (total in lb/y)	Annual Capital Cost Effectiveness $/Ton[32]
Electric School Bus	$370,436	133	15,000 lb/y	$23.29

A total of 50 additional electric school buses remain to be purchased under five grant agreements with Florida county school districts. Florida is committed to working with its DEMP grantees to gather post-project data from which to develop more complete accountings of the emissions benefits associatied with each project.

B. Electric Transit Buses

Table 3 shows the estimated annual emissions benefits and associated costs for electric replacement units under Eligible Mitigation Action No. 2 (Transit Buses). To date, Florida has provided reimbursement to three grantees for a total of 36 electric transit buses. The average total cost to the grantee per new electric transit bus has been approximately $1,028,000, and the reimbursement paid to the grantee per new electric transit bus has been $300,000 (or the equivalent of a 29.1% "Grantee Cost Share"). Under each project-specific grant agreement, each grantee is required to scrap a minimum of one existing eligible diesel transit bus with an average estimated remaining useful life of a minimum of six years for every three electric transit buses for which the grantee receives a fixed reimbursement of $300,000 per bus.[33]

[32] This figure assumes a remaining useful life of the replaced unit of a minimum of 10 years.
[33] Any grantee purchasing two or fewer new electric transit buses must also scrap a minimum of one eligible diesel transit bus.

Table 3. Emissions Benefits Estimate for Replacement Units – Electric Transit Buses

Unit Type	Average Total Unit Cost (vehicle only)	Approximately 30% State Cost Share ($300,000 fixed reimbursement per new electric bus purchased)		
		New Units to Date	NO_X Reduction (total in lb/y)	Annual Capital Cost Effectiveness $/lb
Electric Transit Bus	$1,028,000	38	19,400 lb/y	$19.06

A total of 175 additional electric transit buses remain to be delivered under ten grant agreements with Florida transit authorities. Florida is committed to working with its DEMP grantees to gather post-project data from which to develop more complete accountings of the emissions benefits associatied with each project.

C. DERA Projects

Figure 11 shows a representative example of the estimated annual emissions benefits and associated costs for Florida projects that are completed (or nearing completion) for replacement units under Eligible Mitigation Action No. 10 (DERA Projects). Florida is committed to working with its DEMP grantees to gather post-project data from which to develop more complete accountings of the emissions benefits associatied with each project.

Table 4. Emissions Benefits Estimates for Replacement Units – DERA Projects[34]

Unit Type	Average Total Unit Cost (equipment & labor)	40% Maximum State Cost-Share (60% Unit-Owner Contribution)		
		New Units	NO_X Reduction (total in lb/y)	Annual Capital Cost Effectiveness $/lb
Marine Diesel Engine Replacement – Commerial Ferry	$4,995,730	2	235,900	$16.99
Freight Switcher Locomotive Replacement / Repower	$3,500,000	2	66,520	$23.44

Florida is committed to working with its DEMP grantees to gather post-project data from which to develop more complete accountings of the emissions benefits associatied with each project.

7. Mitigation Plan Amendments

As stated in the Final Trust Agreement, states has the discretion to adjust their priorities and objectives under their State Beneficiary Mitigation Plans as necessary. In Florida's 2019 Mitigation Plan, Florida reserved the right to adjust the state's allocation of settlement funds between Eligible Mitigation Actions (EMAs) while maintaining the primary goal of the Mitigation Plan.

Florida has determined that it is in the interest of the state, the public, and the intended beneficiaries of the Volkswagen Settlement to utilize the remaining unallocated settlement funds available to the state for new projects under two additional categories of EMA: Class 8 Local Freight Trucks and Port Drayage Trucks (Eligible Large Trucks) (EMA #1); and Class 4-7 Local Freight Trucks (Medium Trucks) (EMA #6).

[34] To date, Florida has executed grant agreements for four (4)VW settlement-funded DERA projects in two project categories: Marine Diesel Engine Replacement – Commercial Ferry and Freight Switcher Locomotive Replacement / Repower. Figure 11 shows one representative example of each of these projects.

Florida reserves the right to allocate funds to projects under EMA #1 or EMA #6 in a proportion consistent with viable project availability within each eligible vehicle class as determined by future Notices of Funding Availability.

As detailed under the Mitigation Plan Updates section above, Florida anticipates that the total unallocated settlement funding available for these new projects will be approximately $40.6 million. Florida intends to reallocate to EMA #1 or EMA #6 any unspent or residual funds remaining from projects completed to date under each EMA or remaining after grantees complete any current or future projects under each EMA. Florida also intends to allocate to EMA #1 or EMA #6 any interest earned on the settlement funds principle managed on behalf of the State of Florida by the Trustee or on any funds unencumbered and held by the State of Florida after grantees complete any current or future projects under each EMA..

Florida intends to prioritize consideration of potential projects under EMA #1 and EMA #6 for both governmental and non-governmental owners and operators of vehicles used in community service, disaster management, and emergency response functions (e.g., garbage trucks, utility trucks, emergency response vehicles, delivery box trucks). Florida will consider both vehicle replacement projects (e.g., eligible diesel to new diesel; eligible diesel to new compressed natural gas [CNG]) and vehicle repower projects (eligible diesel to new diesel; eligible diesel to new CNG) for potential grant funding. Florida may also consider diesel to diesel or diesel to CNG repower projects for Class 8 and Class 4-7 truck fleets serving communities located in one or more of Florida's five air quality priority areas.

As detailed in Florida's 2019 Beneficiary Mitigation Plan, the Department identified five air quality priority areas within which the Department would prioritize certain diesel emission mitigation projects. To date, the majority of Florida's electric school bus projects (EMA #2), electric transit bus projects (EMA #2), and DERA projects (EMA #10) have been in these five air quality priority areas.[35] Florida will continue to pursue projects in these air quality priority areas while reserving the right to partner with governmental and non-governmental owners and operators of eligible Class 8 Trucks (EMA #1) and Class 4-7 Trucks (EMA #6) in other areas of the state engaged in disaster recovery and resiliency planning (i.e., fleet management and upgrades to legacy vehicles and equipment to address present and projected needs relating to hurricane and natural disaster preparedness), communities that have suffered disproportionate economic, environmental, and operational impacts from severe weather events in recent years, and which would also benefit from reductions in diesel-related emissions.

Section 4.1 of Appendix D of the Final Trust Agreement requires that states provide a description of the range of emissions benefits projected to result from actions identified in their Mitigation Plans. As noted above, the Department estimates that from 2009-2018, the 33,160 vehicles sold in Florida have an annual average of 261 tons of excess NO_X emissions.[36] This estimate includes the number of violating vehicles removed through the minimum 85 percent Volkswagen buy-back program requirement.

[35] As detailed under the Mitigation Plan Updates section, Florida's Light-Duty Zero-Emission Vehicle (ZEV) Supply Equipment projects (EMA #9) are located at strategically selected sites near Florida's major interstate highways throughout the state.

[36] This estimate includes the number of violating vehicles removed through the minimum 85 percent Volkswagen buy-back program requirement.

In implementing Florida's Diesel Emissions Mitigation Program, the Department has continued to utilize EPA's Diesel Emissions Quantifier (DEQ) [37] to provide general data related to the NO_X emission reductions associated with various Eligible Mitigation Actions.

Table 5 summarizes the estimated costs and NO_X emissions benefits potentially attributable to replacement unit types under each Eligible Mitigation Action to which Florida intends to direct the balance of the state's settlement funds. Each row represents the cumulative tons per year (TPY) of NO_X emissions and cost lifetime cost effectiveness of those reductions in dollars per ton per year.[38]

Table 5. NO_X Emissions Benefits Estimates for Representative Class 8 Truck Projects (EMA #1) and Class 4-7 Truck Projects (EMA #6)[39]

DERA NO_X Emissions Benefit in Tons Per Year (TPY)				
Unit Type	**Average Estimated Unit Cost**	**100% State Cost-Share – Governmental Partners (G)** **40% Maximum State Cost-Share (60% Unit-Owner Contribution) – Non-Governmental Project Partmers (NG)**		
		Number of New Units	**Percent NO_X Reduction**	**Annual Capital Cost Effectiveness $/lb (G)**
Class 8 (ex. garbage truck)	$350,000	Up to 116 (G) / 290 (NG)	77.6%	$8.91
Class 7 (ex. utility truck)	$250,000	Up to 162 (G) / 406 (NG)	88%	$12.64
Class 6 (ex. emergency response vehicle)	$350,000	Up to 116 (G) / 290 (NG)	76%	$46.94
Class 5 (ex. delivery box truck)	$175,000	Up to 232 (G) / 580 (NG)	86.4%	$46.94
***These are two examples of emissions benefits from eligible unit-types. For a full list of eligibility requirements, including all eligible unit-types, please visit the Department's DERA webpage and download EPA's DERA 2025 Program Guide.**				

[37] EPA's Diesel Emissions Quantifier (DEQ) is a tool that enables users to estimate emissions from diesel vehicles and equipment for both highway and nonroad vehicles and marine vessels. EPA's DEQ is available at: https://cfpub.epa.gov/quantifier/index.cfm?action=main.home.

[38] The emissions benefits estimates are based on a scenario using the total available funding amount identified in Section 4 of the Mitigation Plan for each unit type.

[39] The figures in this table are for average model year 2009 eligible diesel unit to new diesel unit replacement projects. Estimated emissions reductions would be greater for eligible diesel to CNG repower projects or full diesel to CNG unit replacement projects.

Consistent with the objectives of Florida's 2019 Beneficiary Mitigation Plan, Florida finds that the projects that the state has completed under each Eligible Mitigation Action to date, and the projects that will be completed under the two additional Eligible Mitigation Actions (EMA #1 and EMA #6) through the balance of the implementation of Florida's Diesel Emissions Mitigation Program will:

1. Reduce NO_X emissions for the remainder of the lifecycle for the units being replaced;
2. Improve air quality in areas that are adversely impacted by diesel emissions; and
3. Reduce exposure to other pollutants resulting from diesel combustion such as diesel particulate matter and organic hazardous air pollutants.

* * *

Appendix A – Florida's State Beneficiary Mitigation Plan (October 2019)

STATE OF FLORIDA
BENEFICIARY MITIGATION PLAN

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR RESOURCE MANAGEMENT
OCTOBER 2019

Pursuant to the Environmental Mitigation Trust Agreement for
State Beneficiaries, issued in partial fulfillment of diesel emissions
mitigation obligations under the Volkswagen Settlement
https://floridadep.gov/volkswagen

Table of Contents

Executive Summary

The Florida Department of Environmental Protection (Department) presents the Beneficiary Mitigation Plan (Mitigation Plan) for Florida in accordance with the Volkswagen Settlement's Environmental Mitigation Trust for State Beneficiaries (Final Trust Agreement). This Mitigation plan contains all of the elements required by the Final Trust Agreement.

The purpose of the Mitigation Trust is to provide money for mobile source emissions mitigation projects. Cumulatively, these projects are intended to mitigate the excess nitrogen oxides (NO_x) emissions caused by the Volkswagen vehicles operating without the legally required emissions controls.

The Department sought public input to develop the Mitigation Plan through Requests for Information (RFI), a public survey, in-person public informational meetings and webinars, and a public comment period for written comments to be submitted.

The primary goal of Florida's Mitigation Plan is to reduce emissions of NO_x, particulate matter, and hazardous air pollutants in areas where people live, work, and visit. To achieve this goal, Florida's Mitigation Plan will balance the following factors:

1. Prioritizing projects that replace eligible units with electric-powered and/or alternative fueled units;
2. Identifying the areas in Florida where the largest number of people are impacted by higher levels of emissions from diesel-powered vehicles and equipment; and
3. Identifying cost-effective mitigation projects, factoring in the prioritized fuel types.

The Department utilized a suite of available resources to designate comparatively overburdened areas which will provide the largest environmental benefits for the most people. This designation does not preclude other areas from funding.

The Mitigation Plan identifies the following categories of Eligible Mitigation Actions along with an estimated percentage breakdown for project-specific funding:

Eligible Mitigation Action	Allocation
School, Transit, and Shuttle Buses	70%
Light-Duty ZEV Supply Equipment	15% (Maximum Allowable)
Diesel Emissions Reduction Act (DERA)	15%

The Department intends to encumber as much of the total state allotment as possible for project-specific funding but reserves the right to allow for minimal funding on administrative costs. As stated in the Final Trust Agreement, Florida has the discretion to adjust priorities and objectives as necessary and reserves the right to adjust this goal and spending plans at the state's discretion while maintaining the primary goal of the plan. If the Mitigation Plan needs to be amended, the Department will provide the public and the Trustee with updates on any changes.

Volkswagen Settlement Summary

1. Introduction

On September 18, 2015, the United States (U.S.) Environmental Protection Agency (EPA) served the Volkswagen Group of America, Inc. (Volkswagen) with a Notice of Violation of the Clean Air Act (CAA). The EPA determined that Volkswagen violated section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(b), which prohibits the use of defeat devices to bypass, defeat, or render inoperative elements of vehicles' emission control systems that exist to comply with CAA emissions standards.[1] Additionally, by using defeat devices and then selling noncompliant vehicles, Volkswagen violated section 203(a)(1) of the CAA, 42 U.S.C. § 7522(a)(1), which prohibits the sale of any vehicles that do not conform to the emissions standards of the CAA.

Volkswagen's defeat devices allowed the 2.0-liter and 3.0-liter diesel vehicles to meet applicable federal nitrogen oxides (NO_x) emissions limits during controlled emissions tests while not meeting these limits during normal vehicle operation. NO_x is produced when fuel is burned in motor vehicles, power plants, industrial boilers, and other sources, and can be harmful to human health. NO_x is also a precursor pollutant for ground-level ozone (O_3), also known as smog. Ozone forms when NO_x and volatile organic compounds (VOC) mix in the air and react to heat and sunlight.[2]

2. Partial Consent Decrees

On October 25, 2016, Volkswagen entered into a Partial Consent Decree with the U.S. government settling claims that it violated the CAA by selling diesel vehicles that violated the EPA mobile source emission standards. Volkswagen's actions consisted of the installation and use of emission testing defeat devices in approximately 500,000 turbocharged direct injection (TDI) 2.0-liter diesel engine vehicles sold and operated in the U.S. from model year 2009 through 2015.

On May 17, 2017, Volkswagen entered into the Second Partial Consent Decree with the U.S. government settling additional claims that it violated the CAA by selling approximately 80,000 TDI 3.0-liter diesel engines also equipped with defeat devices.

To resolve the 2.0-liter and 3.0-liter diesel engine CAA violations, Volkswagen agreed to provide funding to mitigate the excess NO_x emissions emitted by the approximately 500,000 2.0-liter vehicles and 80,000 3.0-liter vehicles equipped with defeat devices.

3. Final Trust Agreement

On October 2, 2017, the Environmental Mitigation Trust Agreement for State Beneficiaries (Final Trust Agreement) was filed with the federal district court in Northern District of California, establishing the terms and conditions of the Mitigation Trust.[3] This action established October 2,

[1] U.S. Clean Air Act, 42 U.S.C. § 7522(a)(3)(b): https://www.gpo.gov/fdsys/pkg/USCODE-2009-title42/pdf/USCODE-2009-title42-chap85-subchapII-partA-sec7522.pdf
[2] Environmental Protection Agency Webpage on NO_2: https://www.epa.gov/no2-pollution
[3] Final Trust Agreement: https://floridadep.gov/sites/default/files/Executed-Trust-Agreements-Oct-02-2017.pdf

2017, as the Trust Effective Date. The Trustee, Wilmington Trust, N.A., will manage the funds held in trust for the beneficiaries according to the responsibilities listed in Attachment A, Section III of the Final Trust Agreement.[4]

In addition to establishing the Mitigation Trust, the Final Trust Agreement also included the following components which are separate from Florida's allocation under the Mitigation Trust:

- A requirement that Volkswagen spend $11 billion to buy back or install pollution control equipment for at least 85 percent of the 2.0-liter and 3.0-liter TDI engines (more information on vehicle buybacks and modifications is available at www.VWCourtSettlement.com);
- A $2 billion investment to promote the use of zero emission vehicles (ZEV) and infrastructure[5] (more information is available in EPA's Frequently Asked Questions On the Zero Emission Vehicle Investment).[6]

Under the terms of the Mitigation Trust, all 50 states, the District of Columbia, and Puerto Rico, are eligible to become beneficiaries and receive a pre-determined share of $2.865 billion in total Mitigation Trust funding. This sum is based upon the number of 2.0-liter and 3.0-liter diesel vehicles sold within all jurisdictions covered by the Mitigation Trust. Florida's share is more than $166 million, or 5.68 percent of the funds held in the Mitigation Trust. Florida's $166 million share is the combined amount from both the 2.0-liter settlement ($152.4 million) and the 3.0-liter settlement ($13.9 million), as specified in Appendix D-1B to the Mitigation Trust.[7]

The purpose of the Mitigation Trust is to provide money for mobile source emissions mitigation projects. Cumulatively, these projects are intended to mitigate the excess NO_x emissions caused by the subject 2.0-liter and 3.0-liter vehicles operating without the legally required emissions controls to mitigate the excess NO_x emissions attributable to these vehicles. The Department estimates that from 2009 through the mandated buyback period, the 33,160 vehicles sold in Florida have an annual average of 261 tons of excess NO_x emissions. This estimate includes the number of violating vehicles removed through the minimum 85 percent Volkswagen buy-back program requirement.

On November 28, 2017, the State of Florida elected to become a beneficiary under the Final Trust Agreement by submitting the completed Certification Form to the Trustee. The Certification, signed by the Governor of Florida, designated the Florida Department of Environmental Protection as Lead Agency for purposes of participation in the Environmental Mitigation Trust.[8] On January 30, 2018, the Trustee issued notification designating Florida as a beneficiary under the Trust.[9]

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[4] Environmental Mitigation Trust Agreement for State Beneficiaries: https://floridadep.gov/sites/default/files/Attachment-A-State-Environmental-Mitigation-Trust.pdf
[5] Electrify America: https://www.electrifyamerica.com/
[6] Environmental Protection Agency Zero Emission Vehicle Investment FAQ: https://www.epa.gov/sites/production/files/2016-11/documents/vw-faqs-app-c-final-11-18-16.pdf
[7] Department Link to Appendix D-1B: https://floridadep.gov/air/air-director/documents/appendix-d-1b-vw
[8] Notice of Filing of Certification for Beneficiary Status: https://floridadep.gov/air/air-director/documents/notice-filing-certification-beneficiary-status-vw
[9] Notice of Beneficiary Designation: https://floridadep.gov/air/air-director/documents/notice-beneficiary-designation

The Mitigation Trust specifies that once the Trustee designates the state a beneficiary, the state must, among other requirements, submit to the Trustee, a State Beneficiary Mitigation Plan (Mitigation Plan) prior to requesting funding for mobile source emissions mitigation projects. This document satisfies that requirement.

Beneficiary Mitigation Plan Requirements

All state beneficiaries must develop and submit to the Trustee a Beneficiary Mitigation Plan. Under Section 4.1 of the Final Trust Agreement, this Mitigation Plan must address the following elements:

1. An explanation of the process by which the Beneficiary sought and considered public input on its Beneficiary Mitigation Plan;
2. The state's overall goals for the use of the funds;
3. A description of how the state will consider the potential impact of the actions on air quality in areas that bear a disproportionate share of the air pollution burden within its jurisdiction;
4. The categories of eligible mitigation actions that the state anticipates will be appropriate to achieve these goals and an estimate of the percentage of funds to be spent on each of these actions; and
5. A description of the range of emissions benefits that would be realized by implementation of the actions identified in the Mitigation Plan.

Section 4.1 of the Final Trust Agreement also states that the Mitigation Plan "need only provide the level of detail reasonably ascertainable at the time of submission." The purpose of the Mitigation Plan is to "provide the public with insight into a Beneficiary's high-level vision for use of the mitigation funds and information about the specific uses for which funding is expected to be requested."

Aside from these required elements of every state Mitigation Plan, Florida has the following additional informational objectives for its Mitigation Plan:

- To inform the public on key elements of the Final Settlement Agreement; and
- To provide details on air quality in Florida relevant to the objectives of the Final Settlement Agreement.

1. Public Input

When developing Florida's Mitigation Plan, the Department sought and considered input from a range of interested parties, potential project partners, and members of the public through numerous discrete and interrelated public engagement, outreach, and educational efforts.

In April 2017, the Department created a webpage within the Department's website summarizing the process by which the Volkswagen Mitigation Trust Fund was established, detailing the mitigation actions eligible for funding, and directing users to a range of related resources concerning

the Settlement process.[10] The Department updated the website by posting Beneficiary Designation documents, a public survey, public informational meeting and webinar notices, presentation materials, and a post-public meeting Question and Answer document. The Department provided updates and uploaded documents to the webpage including the Mitigation Plan and will do so for the Volkswagen Settlement activities to follow. Concurrently with the publication of the website, the Department provided to the public an opportunity to subscribe to a mailing list that distributed news and updates relating to the Volkswagen Settlement from the Department. As of the publication date of this Mitigation Plan, this mailing list has more than 5,400 subscribers.

A. Requests for Information

In May 2017, the Department published six Requests for Information (RFI) seeking information from interested parties, potential project partners, and owners of units in the following categories:

1. Heavy and Medium Duty Trucks;
2. School, Shuttle, and Transit Buses;
3. Airport and Non-Road Equipment;
4. Ports – Shorepower and Marine Diesel;
5. Locomotives; and
6. Electric Vehicle Charging Stations.

The information received via these RFIs provided the Department with information regarding the types of potential project partners and the types of vehicles and equipment that could be eligible for replacement, repowering, or retrofitting, the location of potential projects, and the emissions benefits associated with potential projects.

B. Public Survey

In March 2018, the Department announced the availability of an online public survey asking a series of questions related to the requirements of the Mitigation Plan. The survey was available to interested individuals and members of the public and private sectors for a period of sixty (60) days. The Department conducted a series of five (5) in-person and two (2) webinar public informational meetings coinciding with the online public survey during the first thirty (30) days. There were 2,023 completed surveys submitted to the Department. The Department used the results to develop this Mitigation Plan. A full summary of survey results may be found in Appendix A.

The top two responses for ranking project-specific funding were:

1. School Buses, Shuttle Buses, and Transit Buses; and
2. Electric Vehicle Charging Stations.

[10] Department's Volkswagen Settlement Website: https://floridadep.gov/volkswagen

The top three responses for ranking factors for funding projects were:

1. Projects that replace diesel units with alternative fuels and/or electric vehicles and equipment;
2. Projects that focus on communities that bear a disproportionate share of the air pollution burden; and
3. Projects with greater emission reductions per dollar invested.

C. Informational Meetings and Webinars

The Department conducted five public informational meetings around the state to inform the public about the settlement, the actions taken by the Department, and the development of the Mitigation Plan. These public meetings included a presentation[11] by Department staff that summarized the required elements of the Mitigation Plan and the process the Department would follow in finalizing the Mitigation Plan. Additionally, the Department conducted two public informational webinars for those who were unable to attend in person. The public informational meetings and webinars were conducted on the following dates:

- Wednesday, March 21, 2018 – Informational Meeting, Jacksonville
- Thursday, March 22, 2018 – Informational Meeting, Tallahassee
- Tuesday, March 27, 2018 – Informational Meeting, Orlando
- Wednesday, March 28, 2018 – Informational Meeting, Temple Terrace
- Thursday, March 29, 2018 – Informational Meeting, West Palm Beach
- Thursday, April 19, 2018 – Webinar
- Thursday, April 26, 2018 – Webinar

Concurrent with the sixty (60) day public survey period, the Department issued a general request for written comments regarding all issues to be addressed in the state's Mitigation Plan. The Department considered these comments in drafting this Mitigation Plan, particularly as they related to the overall goals of the Mitigation Plan and the types of eligible mitigation actions that should be favored.

D. Draft Mitigation Plan Public Comment Period

A draft of this Mitigation Plan was made publicly available via Florida Administrative Register (FAR) notice for comment for a period of thirty (30) days, which started on July 17, 2019 and ended August 16, 2019, at 5:00 PM, ET. The Department compiled and reviewed all public comments and finalized the Mitigation Plan for submittal to the Trustee.

The Department received a total of 1,414 public comments. A general table describing the types of comments received are as follows (some submitted comments provided multiple suggestions, making the count greater than the number of submissions):

[11] The Department's Volkswagen Mitigation Plan presentation is available at: https://floridadep.gov/air/air-monitoring/documents/diesel-emissions-mitigation-program-public-informational-meetings

Electric Vehicle Proponents	Electric Bus Proponents	EV Infrastructure Proponents	Other
71	1307	47	47

The Department has considered all comments submitted and revised the Mitigation Plan, primarily to clarify the Department's initial intent. The Department has also provided a list of common themes from the public comment period. A list of revisions to the finalized Mitigation Plan and responses to common themes from the public comment period are included in Appendix E.

E. Future Public Outreach

As previously stated, the Department manages an electronic mailing list service for any interested individual to subscribe and receive updates on all activities and publications related to the Department's work on the Volkswagen Settlement. Interested individuals are encouraged to subscribe to this service.[12]

After submitting the Mitigation Plan, the Department plans to publish a suite of RFIs for the purpose of receiving detailed information on the programs for project-specific funding based on the Eligible Mitigation Actions selected for participation. The RFIs will be publicly noticed through the FAR as well as communicated through the Volkswagen Settlement email notification service and webpage.[13]

2. Overall Goal of Florida's Mitigation Plan

The primary goal of Florida's Mitigation Plan is to reduce emissions of NO_x, particulate matter, and hazardous air pollutants in areas where people live, work, and visit. To achieve this goal, Florida's Mitigation Plan will balance the following factors informed, in part, by the state's outreach efforts and input received from the public:

1. Prioritizing projects that replace eligible units with electric-powered and/or alternative fueled units;
2. Identifying the areas in Florida where the largest number of people are impacted by higher levels of emissions from diesel-powered vehicles and equipment; and
3. Identifying cost-effective mitigation projects, factoring in the prioritized fuel types.

As stated in the Final Trust Agreement, Florida has the discretion to adjust priorities and objectives as necessary and reserves the right to adjust this goal and spending plans at the state's discretion while maintaining the primary goal of the plan. If the Mitigation Plan needs to be amended, the Department will provide the Trustee and the public with updates on any changes.

3. Areas with a Disproportionate Share of the Air Pollution Burden

Most air pollutants in Florida occur in concentrations well below the National Ambient Air Quality Standards (NAAQS), though some air pollutants can occur in concentrations in local or regional

[12] Department Subscription Service: https://floridadep.gov/subscribe
[13] Florida Administrative Register: https://www.flrules.org/

areas that could potentially affect the health of Florida's residents and visitors. The pollutants of most concern are ground-level ozone and particulate matter, including the emissions of precursor pollutants, such as NO_x, sulfur dioxide (SO_2), VOCs, and hazardous air pollutants (HAPs).[14] The use of diesel-powered vehicles is a substantial contributor to the total amount of emissions that lead to ground-level ozone formation and increased concentrations of particulate matter. Emissions from diesel-powered vehicles can lead to localized impacts on air quality, especially in congested urban corridors.

Florida is attaining the NAAQS for the following criteria air pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone, particulate matter (both PM_{10} and $PM_{2.5}$), and lead (Pb). The vast majority of Florida is in attainment for SO_2, except for two small geographic areas centered around certain large stationary sources. These remaining two areas are in the process of being redesignated to attainment by EPA, which means that Florida should be in attainment for all NAAQS criteria air pollutants by 2020.

Air quality in Florida varies by geography. Generally, air quality is better in rural areas (with fewer total mobile and stationary sources of air pollution) than in more urban areas (which tend to have higher concentrations of both mobile and stationary sources of air pollution). Paragraph 4.1 of Attachment A of the Final Settlement Agreement requires beneficiaries to specify how they "will consider the potential beneficial impact of the selected Eligible Mitigation Actions on air quality in areas that bear a disproportionate share of the air pollution burden within its jurisdiction[.]"[15] In order to identify the specific geographic areas that "bear a disproportionate share of the air pollution burden," the Department utilized the following suite of available resources to develop Air Quality Priority Areas for project-specific funding.

1. The 2014 National Emissions Inventory;
2. Design values in Florida for NO_2, ozone, $PM_{2.5}$, and PM_{10};
3. The Environmental Justice Screening tool (EJSCREEN); and
4. U.S. Census population data.

A. National Emissions Inventory

The National Emissions Inventory (NEI) is a comprehensive and detailed estimate of air emissions for criteria air pollutants, criteria precursors, and 187 hazardous air pollutants (HAPs) from air emissions sources. The 2014 NEI is the most recent complete version released by EPA. The NEI is based primarily upon data provided by State, Local, and Tribal air agencies for sources in their jurisdictions and supplemented by data developed by EPA.[16]

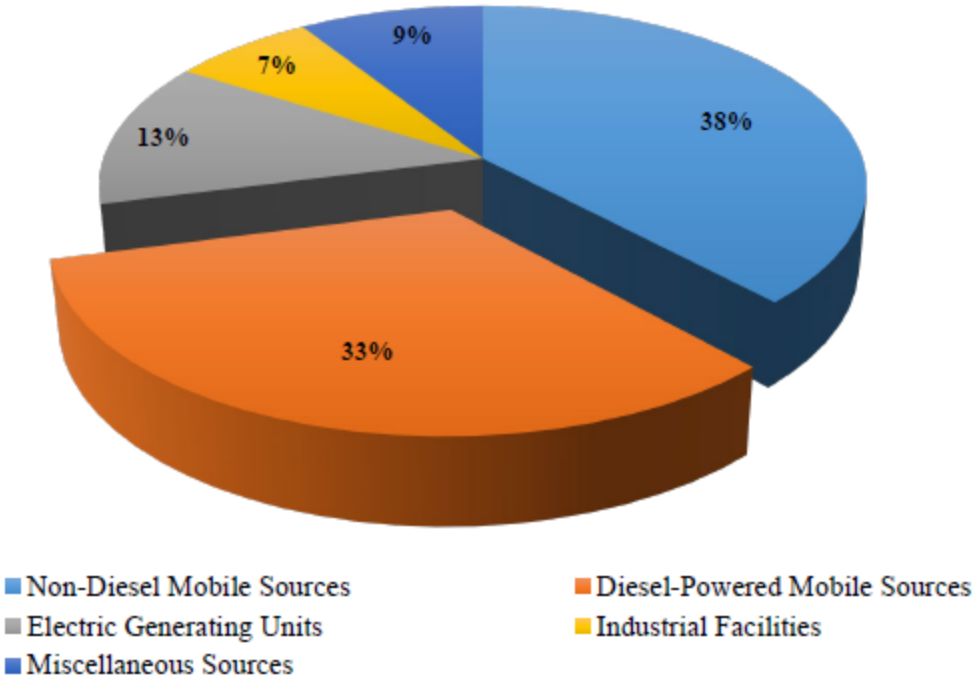
NEI on-road sources include emissions from on-road vehicles that use gasoline, diesel, and other fuels. These sources include on-road light-duty and heavy-duty vehicle emissions. EPA uses the Motor Vehicle Emission Simulator (MOVES) model to compute on-road emissions based on model inputs.[17] NEI non-road sources include off-road mobile sources that use gasoline, diesel, and other

[14] EPA VOCs: https://www.epa.gov/ozone-pollution
[15] Final Trust Agreement: https://floridadep.gov/air/air-director/documents/executed-trust-agreements-vw
[16] National Emissions Inventory: https://www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei
[17] EPA MOVES Model: https://www.epa.gov/moves

fuels. Source types include construction equipment, lawn and garden equipment, aircraft ground support equipment, and locomotives. For many non-road sources, the EPA uses the MOVES-NONROAD model.[18]

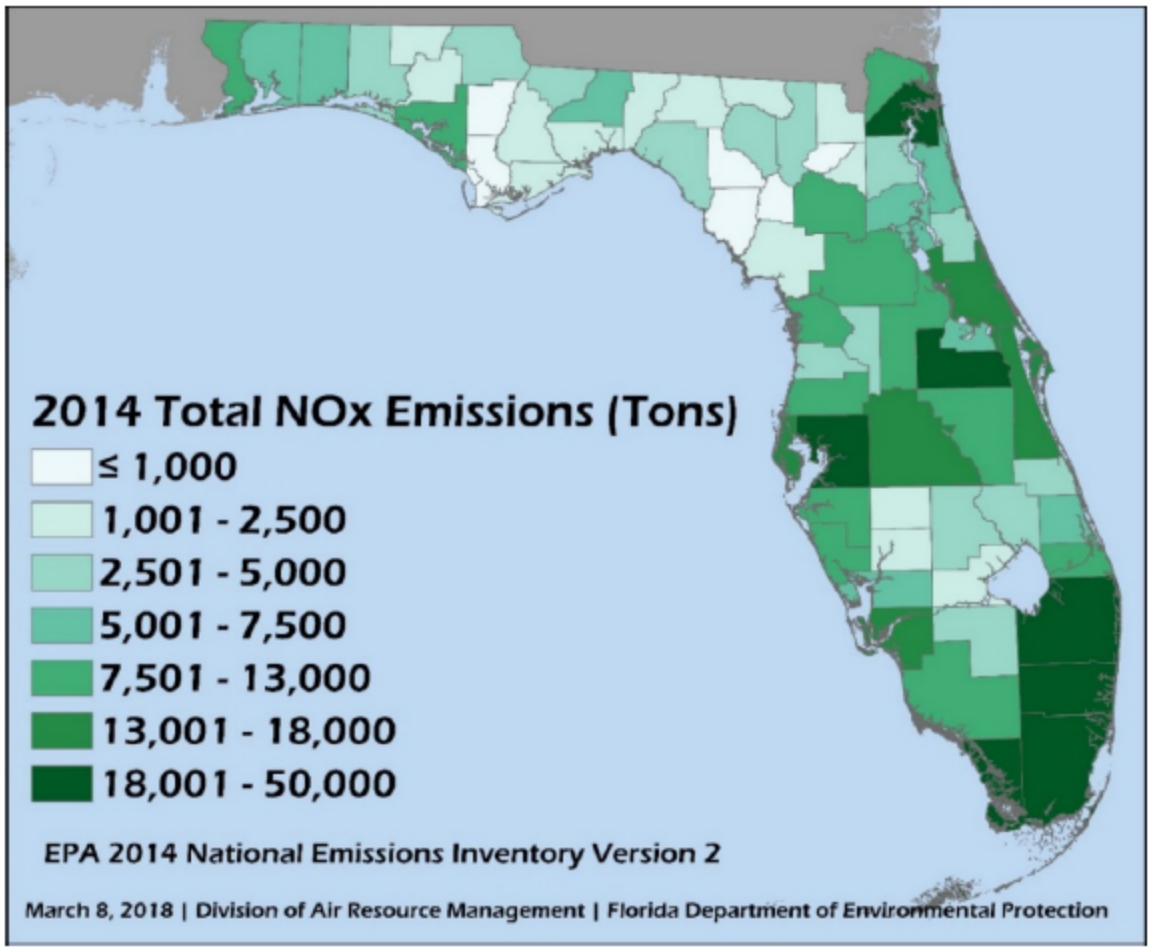
According to the 2014 NEI, Florida's total emissions of NO_x from all sources, both stationary and mobile, was 582,390 tons.[19] The vast majority of these NO_x emissions came from mobile sources. These sources emitted 416,565 tons in 2014, approximately 71% of the total statewide NO_x emissions. In Florida, approximately 33% of all NO_x emissions (194,638 tons) are from diesel-powered mobile sources. Figure 1 shows the sources of NO_x emissions in Florida. Figure 2 shows the distribution of total NO_x emissions by county.

Figure 1. Percentage Distribution by Sector for All NO_x Emissions in Florida (2014)



[18] EPA Nonroad MOVES Model: https://www.epa.gov/moves/nonroad-technical-reports
[19] EPA's 2014 NEI Data: https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data

Figure 2. Distribution by County for All NO_x Emissions in Florida (2014)



Of the 194,638 tons of NO_x emitted from diesel-powered mobile sources, the sources break down into the following specific subcategories:

- 100,709 tons from on-road diesel heavy-duty vehicles (e.g., tractor trailers);
- 63,675 tons from non-road diesel equipment (e.g., heavy forklifts);
- 16,786 tons from commercial marine vessels (e.g., cruise and container ships);
- 7,448 tons from on-road diesel light-duty vehicles (i.e., personal vehicles); and
- 6,020 tons from diesel-powered locomotives (e.g., switcher locomotives).

The Environmental Mitigation Trust Fund provides funding to reduce NO_x emissions from each of these categories (except on-road diesel light-duty vehicles), focusing on older and higher emitting mobile sources. Figure 3 show the main categories of NO_x emissions from diesel-powered mobiles sources. Figure 4 shows mobile sources of NO_x distributed by county.

Figure 3. Percent Distribution of Diesel-Powered Mobile Source NO_x Emissions (2014)

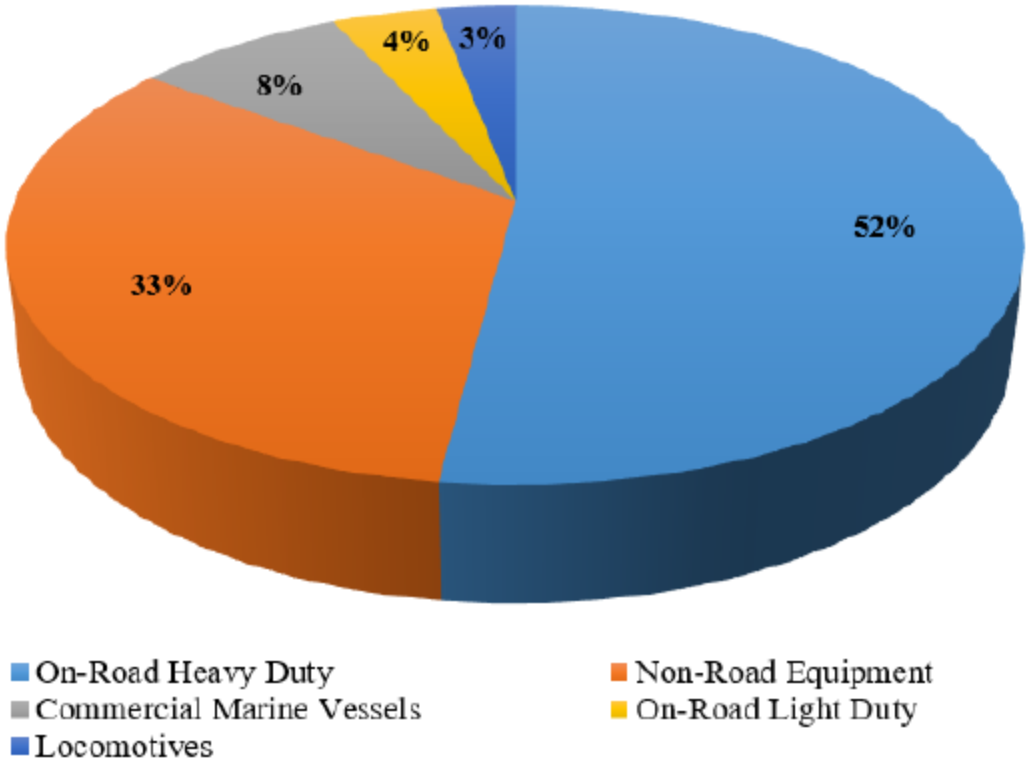
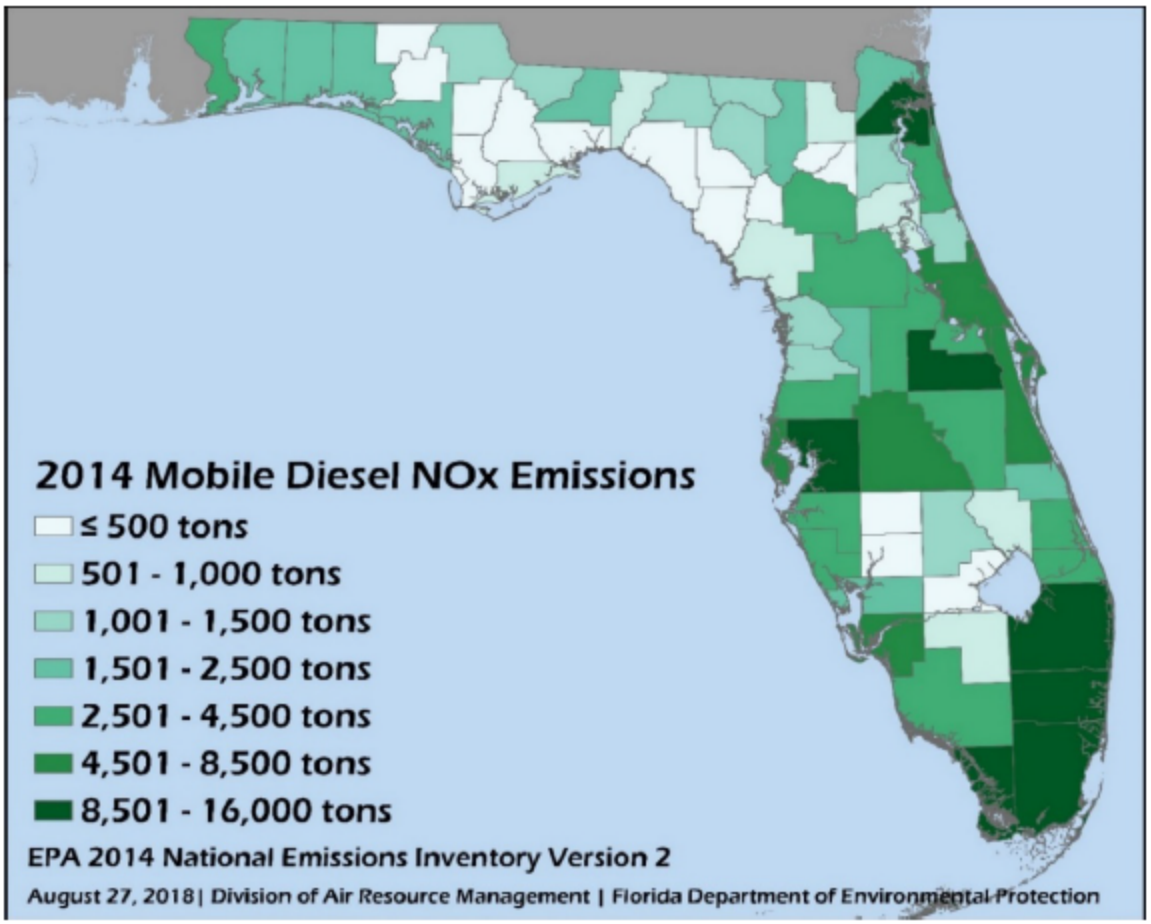


Figure 4. Distribution by County for Mobile Source NO_x Emissions in Florida (2014)



Use of the NEI provides insight as to where the sources of air pollution that could impact citizens' health are located. The NEI allows states to review county-level emissions data, sector-wide emissions data (i.e., point sources, mobile sources, or area sources), or a combination of both. Using the 2014 NEI, the Department has identified which counties have the most NO_x, $PM_{2.5}$, and PM_{10} emissions from mobile diesel sources. Figure 5 shows the top 10 counties. A complete county list may be found in Appendix B.

Figure 5. Counties with the Highest Mobile Diesel Emissions in Tons Per Year (TPY) (2014)

Emissions of NO_x from Mobile Diesel Sources

County	Total NO_x (TPY)
Miami-Dade	15,646
Monroe	14,699
Broward	11,944
Palm Beach	11,698
Hillsborough	11,160
Orange	9,205
Duval	8,608
Lee	6,832
Pinellas	6,044
Brevard	5,455

Emissions of $PM_{2.5}$ from Mobile Diesel Sources

County	Total $PM_{2.5}$ (TPY)
Miami-Dade	1,107
Broward	779
Palm Beach	760
Hillsborough	746
Monroe	682
Orange	614
Duval	545
Lee	469
Pinellas	417
Polk	322

Emissions of PM_{10} from Mobile Diesel Sources

County	Total PM_{10} (TPY)
Miami-Dade	1,429
Broward	951
Hillsborough	913
Palm Beach	864
Orange	751
Duval	661
Pinellas	570
Lee	557
Monroe	402
Volusia	396

B. Ambient Air Monitoring Data

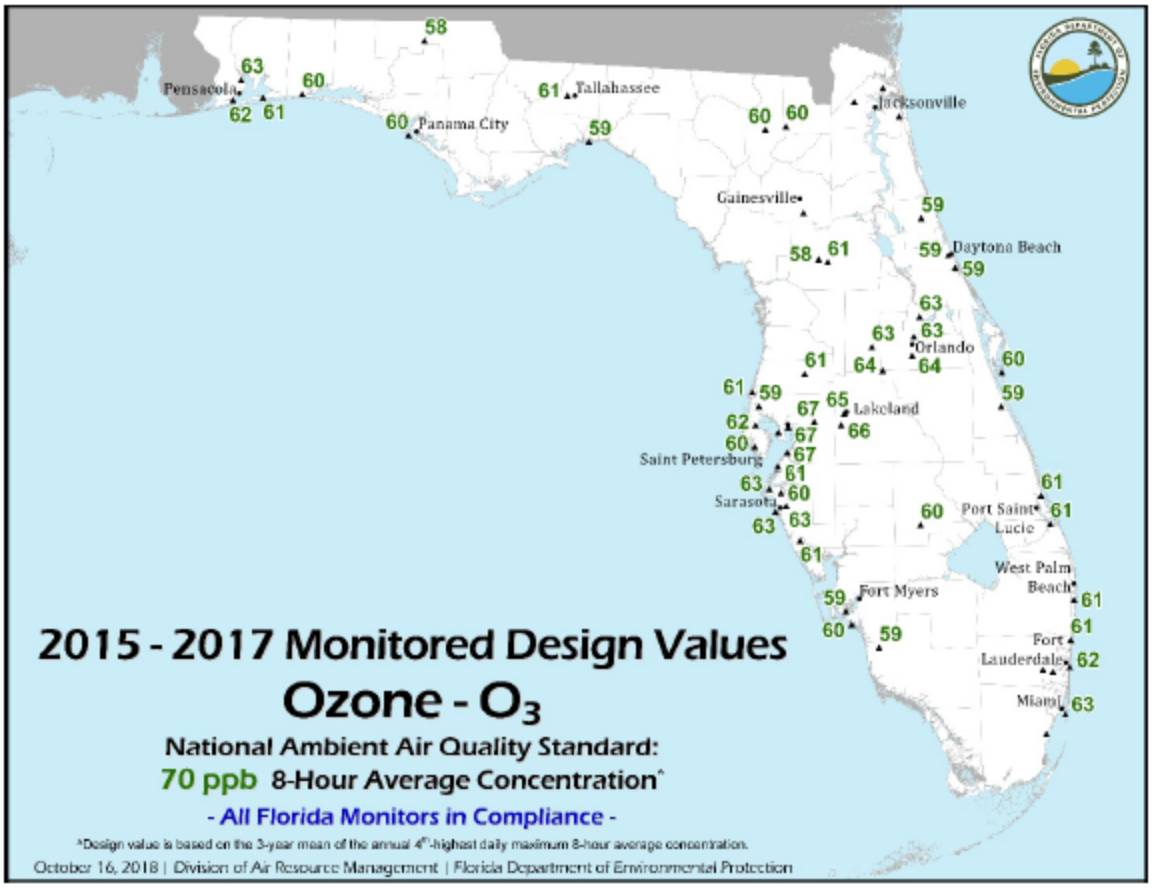
A simple quantification of emissions is only one of the indicators that helps to identify areas that bear a disproportionate burden. Another relevant factor is the actual monitored air quality around the state. As noted above, Florida's ambient air monitoring network shows that all of Florida is in attainment for ozone, NO_x, $PM_{2.5}$, and PM_{10}. However, some areas of the state have monitoring data that are closer to the NAAQS than others. For NO_2, the state has consistent levels of annual and one-hour concentration design values. Florida's ambient monitoring network for NO_2 shows that there are no monitors within 50 percent of the 1-hour NO_2 NAAQS or within 80 percent of the annual NO_2 NAAQS.

Although Florida's ambient monitoring network demonstrates that there are no monitored air quality issues relating to NO_2, NO_x remains one of the primary precursor pollutants for the formation of ground-level ozone. The formation of ozone occurs when NO_x and other precursor pollutants, such as VOCs, react in the presence of sunlight to form ozone, also known as ground-level ozone or smog. Exposure to high levels of ozone can cause respiratory issues, such as increased frequency of asthma attacks.[20]

Although moderate levels of ground-level ozone do occur in Florida, the Department's ambient monitoring network shows that there are no monitors exceeding the 2015 8-hour ozone NAAQS of 70 parts per billion (ppb). Figure 6 illustrates the ozone design values from 2015 to 2017.

[20] EPA's Webpage for Ozone Health Effects: https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution

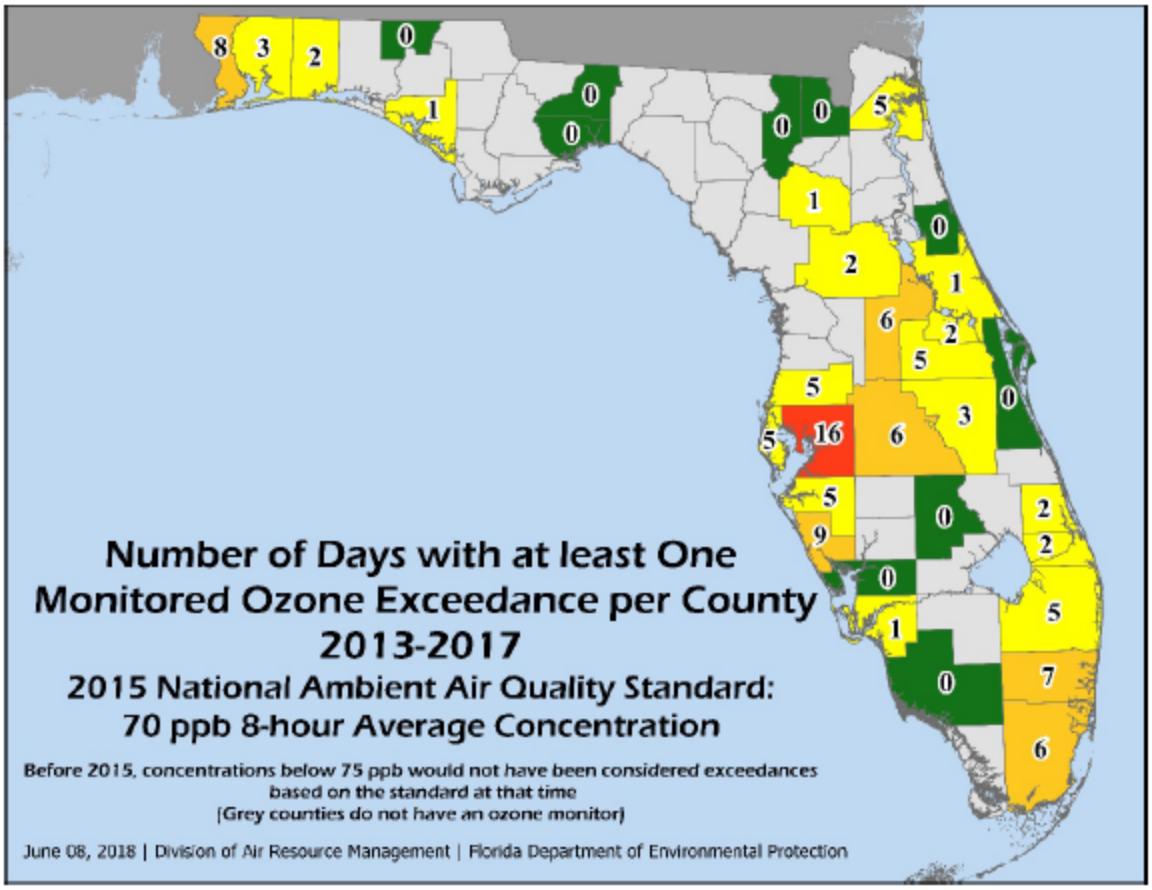
Figure 6. Ozone Design Values (2015-2017)



On occasion, there are days in the spring when meteorological conditions conducive to ozone formation cause an air monitor to measure ozone values above the 8-hour average concentration of 70 ppb. Figure 7 shows county information for the number of days with at least one monitored reading above 70 ppb. Some counties have multiple air monitors that have been placed in locations based on federal regulations. This figure does not show how many air monitors are in each county, and which individual and/or combination of air monitors measured an exceedance.[21] Additionally, this figure does not show official exceedances, but rather shows 2013-2017 data using the 2015 standard of 70 ppb. The standard for 2013 and 2014 was 75 ppb.

[21] EPA Webpage for the National Ambient Air Quality Standards: https://www.epa.gov/criteria-air-pollutants/naaqs-table

Figure 7. Exceedance Days from 2013-2017 Using the 2015 Standard

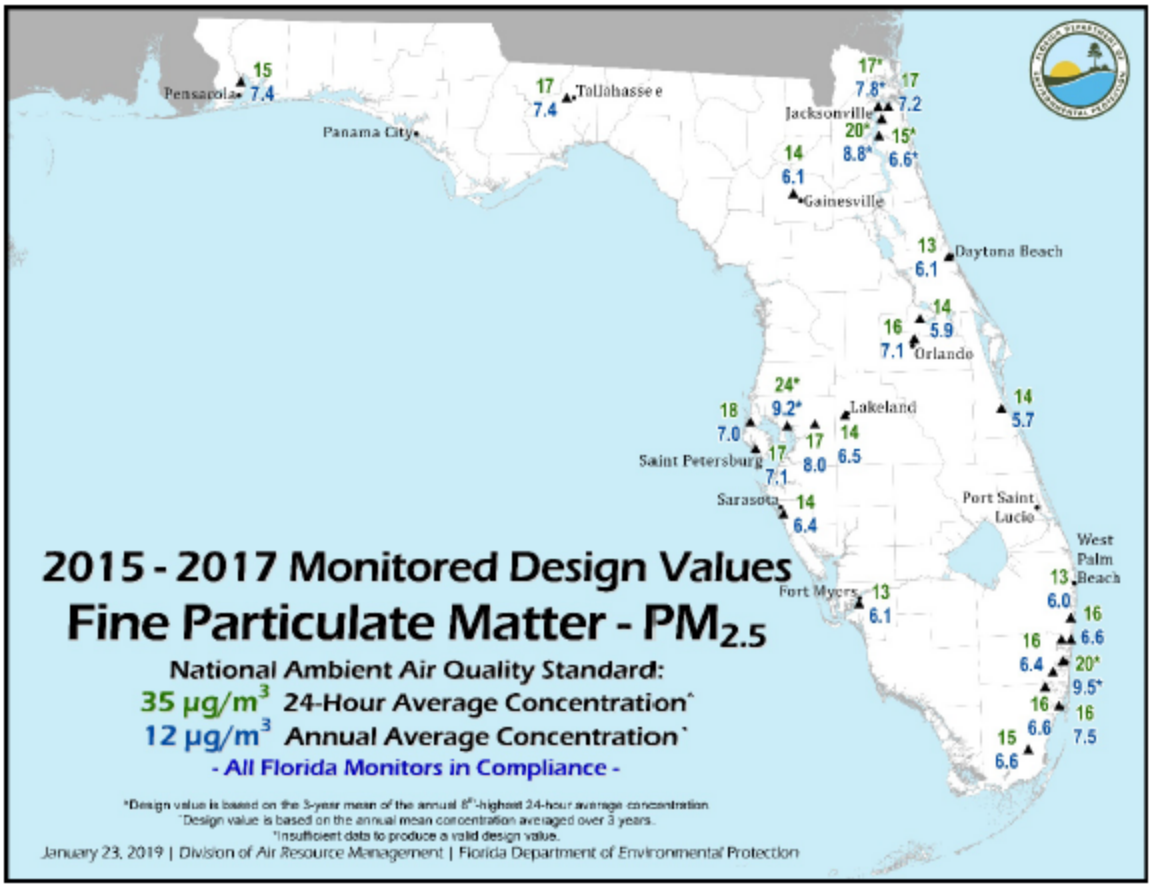


Another pollutant that diesel-powered vehicles emit is particulate matter (PM), specifically fine particulate matter, called $PM_{2.5}$. Depending on the location of the monitor, different sources of $PM_{2.5}$ can be the primary driver of any air quality issues. There are many sources of $PM_{2.5}$ including:

1. Naturally-occurring direct emissions of $PM_{2.5}$ (e.g. fires);
2. Naturally-occurring secondarily-formed $PM_{2.5}$ (e.g. biogenic VOCs);
3. Anthropogenic sources of directly-emitted $PM_{2.5}$ (e.g. $PM_{2.5}$ from mobile sources); and
4. Anthropogenic sources of secondarily-formed $PM_{2.5}$ (e.g. SO_2 and NO_x emissions)

Although there are a diverse set of sources of both primary and secondary particulate matter, Florida's ambient monitoring network for $PM_{2.5}$ shows that there are no monitors exceeding either the annual or 24-hour $PM_{2.5}$ NAAQS. Figure 7 shows the current design values for the annual and 24-hour $PM_{2.5}$ NAAQS around Florida. Generally, design values increase towards the northern half of Florida and into the Panhandle, partially due to impacts from in-state and out-of-state fires.

Figure 8. Statewide $PM_{2.5}$ Design Values



C. Environmental Justice Screening Tool

For estimating population impacts, the state utilized EPA's Environmental Justice Screening Tool, known as "EJSCREEN." EJSCREEN takes geographic area and provides specific demographic and environmental information and creates EJ indexes.[22]

The six (6) demographic indicators used by EJSCREEN are (1) Percent Low-Income; (2) Percent Minority; (3) Less Than High School Education; (4) Linguistic Isolation; (5) Individuals Under Age 5; and (6) Individuals Over Age 64.

The eleven (11) environmental indicators used by EJSCREEN are (1) National Scale Air Toxics Assessment Air Toxics Cancer Risk; (2) National Scale Air Toxics Assessment Respiratory Hazard Index; (3) National Scale Air Toxics Assessment Diesel PM (DPM); (4) Particulate Matter ($PM_{2.5}$); (5) Ozone; (6) Lead Paint Indicator; (7) Traffic Proximity and Volume; (8) Proximity to Risk

[22] EJSCREEN: https://www.epa.gov/ejscreen

Management Plan Sites; (9) Proximity to Treatment Storage and Disposal Facilities; (10) Proximity to National Priorities List Sites; and (11) Proximity to Major Direct Water Dischargers. EJSCREEN results were supplemented with additional information, including local knowledge, to get a better understanding of the issues as the tool does not provide data on every environmental impact and demographic indicator that may be relevant to a location.

EJSCREEN is used as an additional indicator to identify potential areas where more people may be exposed to more pollution, thus receiving a disproportionate share of the air pollution burden. The state used population density statistics within EJSCREEN to determine the number of people that may be impacted in the areas surrounding a project. For example, a project involving trucks that routinely drive through more populated areas may have more overall benefit than a similar project involving trucks that routinely drive along more rural routes.

EJSCREEN uses a formula to combine a single environmental factor with the demographic indicator to calculate an "EJ Index". The "EJ Index" uses the raw environmental indicators combined with census data on low-income and minority populations to determine counties where these populations are most burdened by air quality issues. Figure 9 is sorted by National Air Toxics Assessment Diesel PM "EJ Index" as it is most relevant to finding overburdened areas impacted by diesel emissions. A full County-level "EJ Index" may be found in Appendix C.

Figure 9. Output from EPA's Environmental Justice Screening Tool (EJSCREEN Version 2017) – County-Level EJ Indexes and Environmental Indicators

County*	EJ Index (percentile in state)			
	$PM_{2.5}$	Ozone	NATA Diesel PM	Traffic Proximity
Osceola	96	96	94	87
Orange	85	86	88	87
Miami-Dade	83	82	86	91
Broward	69	68	74	87
DeSoto	68	70	65	71
Hillsborough	58	58	65	77
Alachua	53	53	62	76
Duval	56	54	62	72
Hendry	76	78	62	68
Leon	54	53	62	66
Gadsden	82	76	61	61
St. Lucie	56	57	61	69
Palm Beach	54	55	59	78
Polk	59	60	59	67
Hardee	69	70	58	70

*This table shows fifteen (15) counties from the output of EPA's EJSCREEN. A complete output can be found in Appendix C of this Mitigation Plan.

D. Population Data

The final factor that the Department considered is the most recent population data for Florida. This is consistent with the state's overall goal of reducing emissions of NO_x, particulate matter, and organic hazardous air pollutants from diesel-powered mobile sources that impact the most people. Figure 10 shows population density by county and Figure 11 shows the most recent U.S. Census data identifying Florida's urban areas.

Figure 10. Population Density by County (2016)

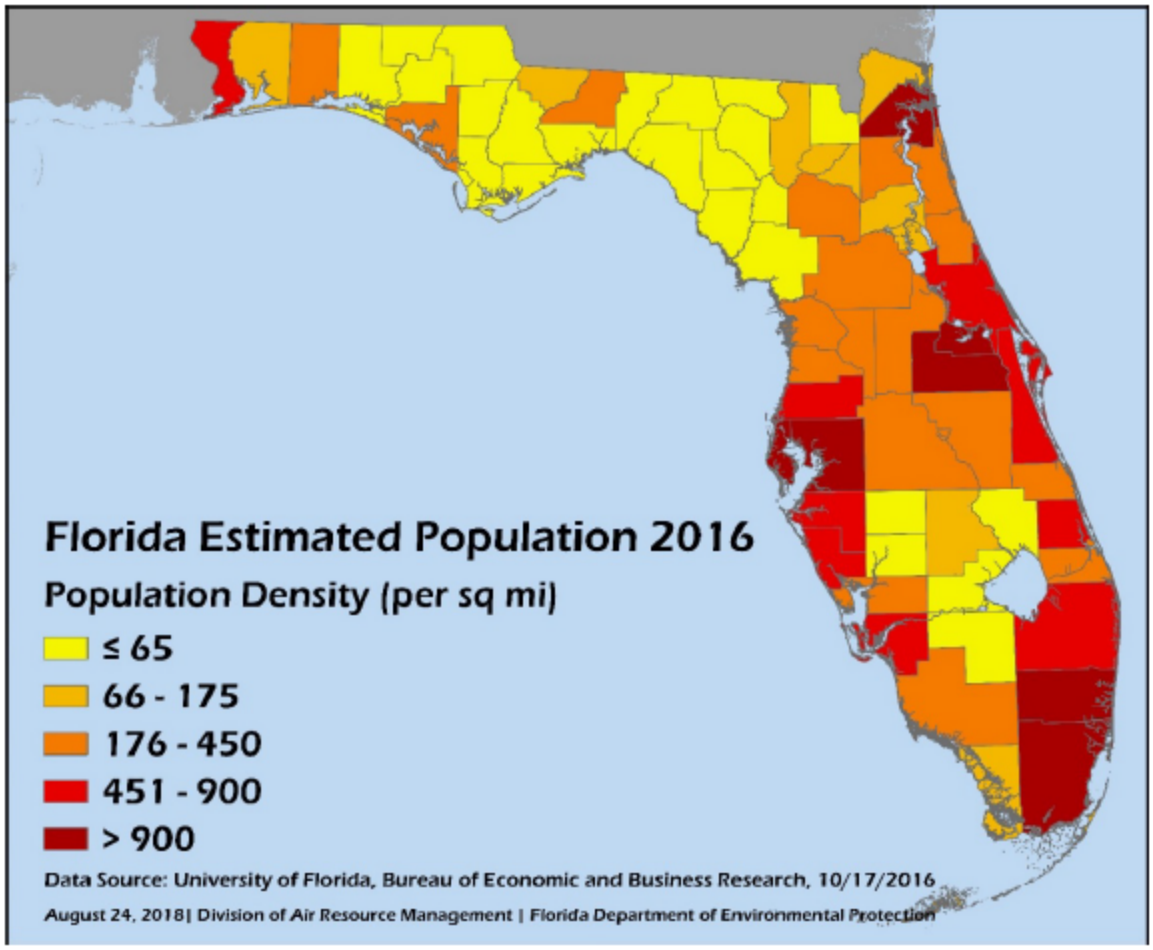
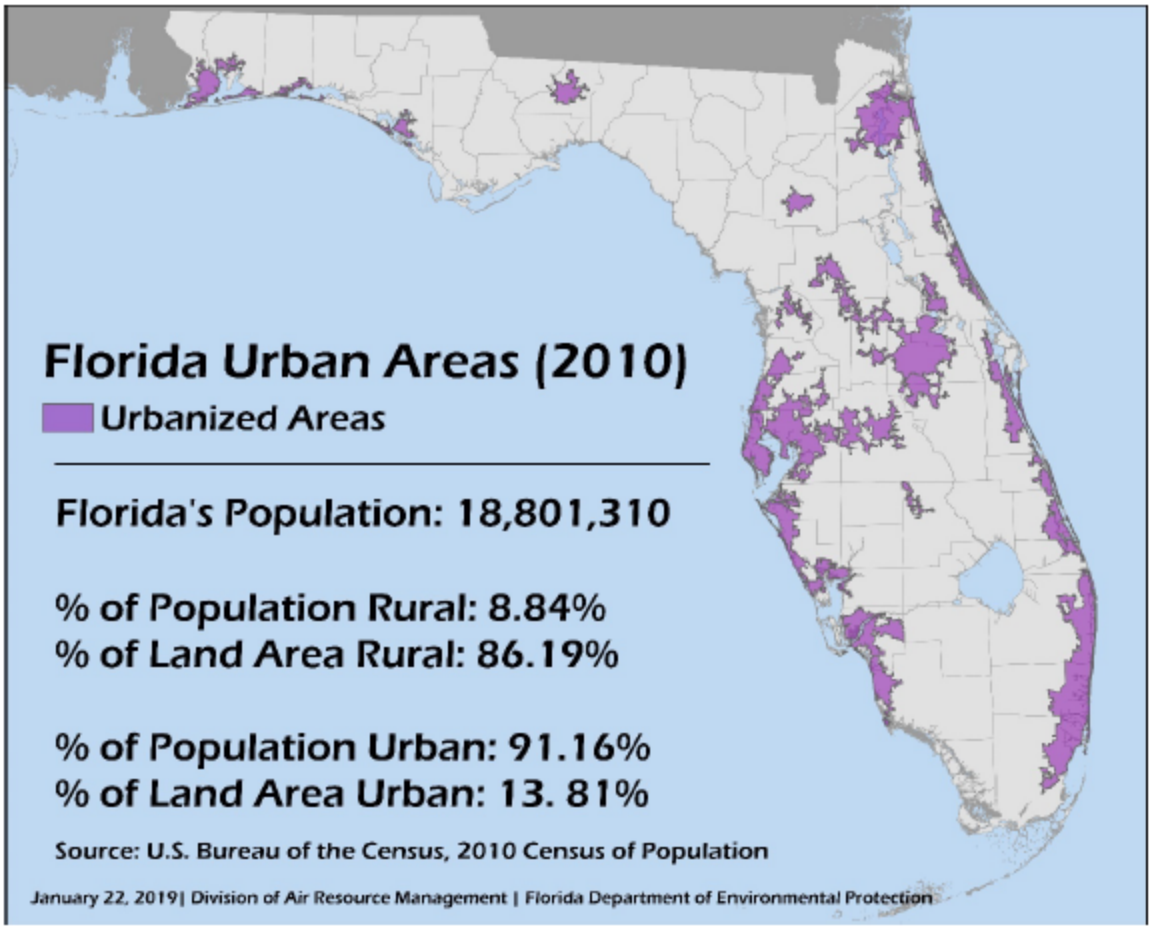


Figure 11. Florida Urban Areas (Latest U.S. Census Data, 2010)

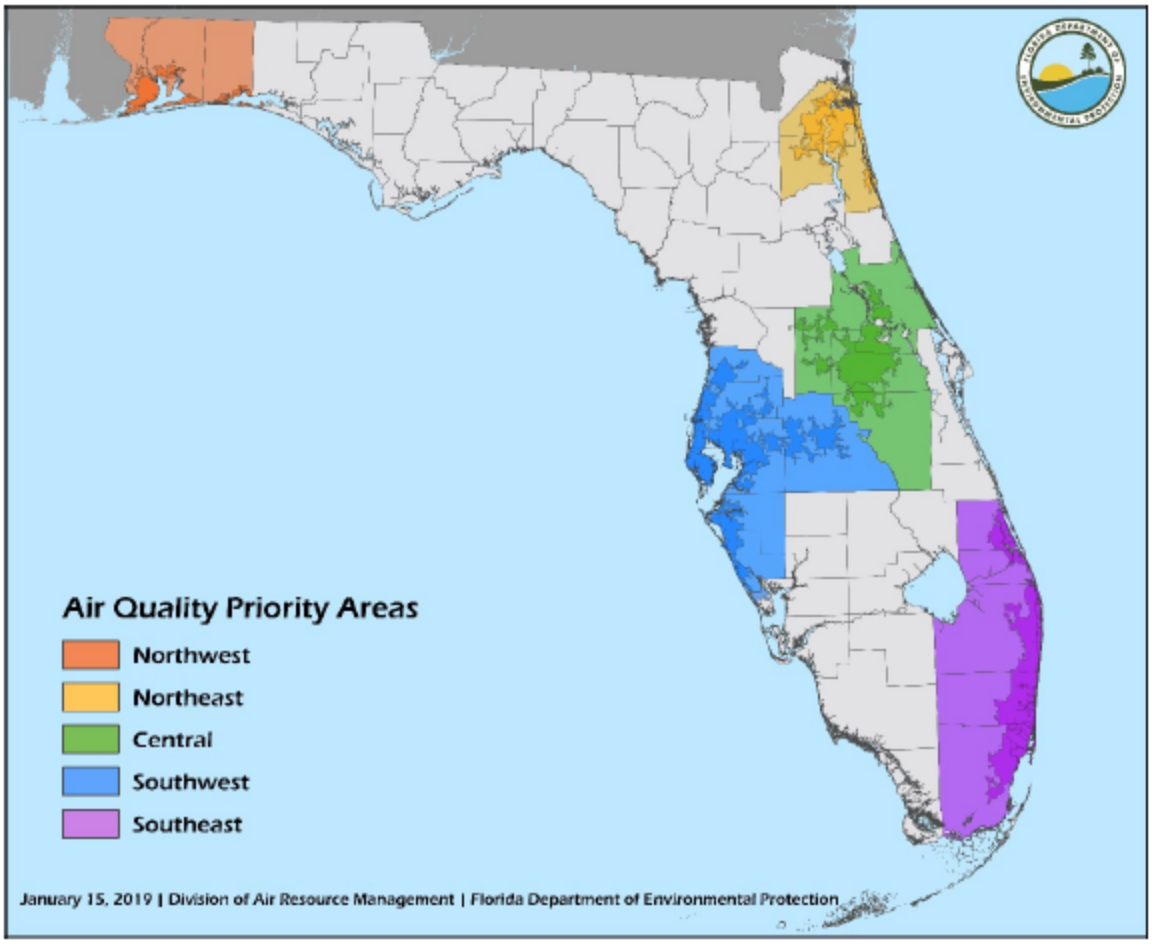


E. Air Quality Priority Areas

The Department identified five air quality priority areas using the four overburdened area factors discussed above (emissions inventories, air monitoring data, environmental justice indicators, and population data). The Department will prioritize these areas for certain diesel emission mitigation projects. The Department's overburdened areas analysis shows that mitigation funds spent in these priority areas will have the largest environmental benefits for the most people, consistent with the Department's overall goal of the Mitigation Plan.

The Department identified urban areas with the highest emissions, highest ozone design values, highest population, and highest environmental justice indicator. The Miami-Broward-Palm Beach, Tampa-St. Petersburg, Orlando, Jacksonville, and Pensacola urbanized areas were the highest urbanized areas for these factors. The Department then included nearby secondary urbanized areas that are connected to these five primary urbanized areas. The result of this analysis is shown in Figure 12, identifying priority counties, with a focus on the more urbanized areas within those counties.

Figure 12. Air Quality Priority Areas in Florida



These five air quality priority areas (incorporating the counties and primary and secondary urbanized areas in each) are as follows:

Southeast Florida

- Covering Broward, Martin, Miami-Dade, Palm Beach, and St. Lucie counties;
- Primary urbanized area: Miami-Broward-Palm Beach; secondary urbanized area: Port St. Lucie;

Southwest Florida

- Covering Hernando, Hillsborough, Manatee, Pasco, Pinellas, Polk, and Sarasota counties;
- Primary urbanized area: Tampa-St. Petersburg; secondary urbanized areas: Spring Hill, Zephyrhills, Lakeland, Winter Haven, and Sarasota-Bradenton;

Central Florida

- Covering Lake, Orange, Osceola, Seminole, and Volusia counties;
- Primary urbanized area: Orlando; secondary urbanized areas: Kissimmee, Deltona, Leesburg-Eustis-Tavares;

Northeast Florida

- Covering Clay, Duval, and St. Johns counties;
- Primary urbanized area: Jacksonville; secondary urbanized area: St Augustine;

Northwest Florida

- Covering Escambia, Okaloosa, and Santa Rosa counties;
- Primary urbanized area: Pensacola; secondary urbanized area: Fort Walton Beach-Navarre-Wright.

Florida's air quality priority areas for certain diesel emission reduction projects cover ~16,000,000 people (78% of all Floridians); ~125,000 tons of mobile-diesel NO_x emissions (65% of all Florida mobile-diesel NO_x); all areas within 10% of the 2015 ozone NAAQS (2015-2017) design values of 63 or above); and the top four Diesel PM "EJ Index" counties.

4. Eligible Mitigation Actions

Appendix D-2 of the Final Trust Agreement lists ten (10) Eligible Mitigation Actions for states to consider in the development of the Mitigation Plan. A complete copy of Appendix D-2 can be found as Appendix D-2 to the Mitigation Plan and can also be found on the Department's webpage.[23] Additionally, the Department has a helpful drop-down tool on the Volkswagen Settlement webpage to assist interested individuals in understanding the eligibility requirements of each of the ten (10) Eligible Mitigation Actions.[24] Florida considered which eligible mitigation actions would achieve

[23] DEP's Link to Appendix D-2 of the Final Trust Agreement: https://floridadep.gov/air/air-director/documents/appendix-d-2-vw

[24] DEP's Volkswagen Settlement Website with Drop-down Tool: https://floridadep.gov/air/air/content/volkswagen-settlement-mitigation-trust

the state's primary goal of improving air quality around the state and identifying projects projected to yield real and measurable environmental benefits.

The Department identified the following categories of Eligible Mitigation Actions for project-specific funding:

Eligible Mitigation Action	Allocation
School, Transit, and Shuttle Buses	70%
Light-Duty ZEV Supply Equipment	15% (Maximum Allowable)
Diesel Emissions Reduction Act (DERA)	15%

The Final Settlement Agreement allows for up to 15% of the total cost of each eligible mitigation action to be used for actual administrative expenditures, as described in Appendix D-2 of the Final Trust Agreement. The Department intends to encumber as much of the total state allotment as possible for project-specific funding but reserves the right to allow for minimal funding on administrative costs.

These types of projects are projected to meet the state's overall goal for reducing excess NO_x emissions in areas where improvement in air quality could yield the greatest public health benefits (due to a combination of population density and relatively poorer air quality levels) as the emission reductions will inure to communities around concentrated areas of mobile emissions sources.

Diesel Emissions Reduction Act (DERA)

The DERA State Grant Program is funded in part through federal grants administered by EPA. The DERA grant program is analogous to Appendix D-2 of the Final Trust Agreement because the program is designed to provide funding to reduce harmful emissions from diesel engines. This similarity makes the DERA Option under the Eligible Mitigation Actions a valuable option to leverage additional funds for the same purpose.[25] The Department has participated in DERA previously and posted a webpage dedicated to the DERA program.[26]

As stated in EPA's DERA 2019 Program Guide: "Projects may include, but are not limited to, diesel emission reduction solutions from the following heavy-duty emission source types:

1. Buses;
2. Medium-duty or heavy-duty trucks;
3. Marine Engines;
4. Locomotives; and
5. Nonroad engines, equipment or vehicles used in:
    a) Construction;
    b) Handling of cargo (including at a port or airport);
    c) Agriculture;
    d) Mining; or
    e) Energy production (including stationary generators and pumps)."

[25] EPA's Clean Diesel and DERA Funding: https://www.epa.gov/cleandiesel
[26] DEP's DERA Program Webpage: https://floridadep.gov/air/air-director/content/diesel-emissions-reduction-act-dera-florida

The Department's decision to use Mitigation Trust funds in conjunction with the DERA program will allow for funding project-types that were not selected as individual Eligible Mitigation Actions. Participating in DERA provides versatility for project types with the highest mitigation value based on the factor of cost per ton. The Department encourages those interested to visit the Department's DERA program webpage.[27]

5. Emissions Benefits

Section 4.1 of Appendix D of the Final Trust Agreement requires that states provide a description of the range of emissions benefits projected to result from actions identified in their Mitigation Plans. The Department estimates that from 2009-2018, the 33,160 vehicles sold in Florida have an annual average of 261 tons of excess NO_x emissions. This estimate includes the number of violating vehicles removed through the minimum 85 percent Volkswagen buy-back program requirement.

Florida has utilized EPA's Diesel Emissions Quantifier (DEQ) to provide general data related to the NO_x emission reductions associated with various Eligible Mitigation Actions.[28] The DEQ is an EPA tool that enables users to estimate emissions from diesel vehicles and equipment for both highway and nonroad vehicles and marine vessels. The DEQ is capable of the following:

- Calculating emissions from a single emissions reduction project; and
- Comparing fleet emissions using different retrofit control technologies.

Figures 13 and 14 show the potential annual emissions benefits for electric replacement units. The annual emissions benefits estimates are based on a scenario using the total available funding amount identified in Section 4 of the Mitigation Plan for each row of examples. This figure does not have a full list of fuel types and electric-powered units eligible for project specific funding but serves as a general range of annual emissions benefits. Not included in this estimate are the emissions benefits from the installation of light-duty electric vehicle charging stations. The Department is developing a method to estimate the emissions benefits from the full 15% allowed under the Final Trust Agreement for charging infrastructure.

Figure 13. Emissions Benefits Estimate for Electric Replacement Units

NO_x Emissions Benefits Based on Possible Cost-Share Amounts							
Unit Type *(70% or $116.4M each)*	**Estimated Unit Cost**	**80% Cost-Share (From State)**			**60% Cost-Share (From State)**		
		New Units	**TPY**	**Cost/lb./Year**	**New Units**	**TPY**	**Cost/lb./Year**
Electric School Bus	$350,000	415	51	$1,136	553	68	$856
Electric Transit Bus	$900,000	161	142	$410	215	190	$306

[27] Florida's DERA Webpage: https://floridadep.gov/air/air-director/content/diesel-emissions-reduction-act-dera-florida

[28] EPA's Diesel Emissions Quantifier (DEQ): https://cfpub.epa.gov/quantifier/index.cfm?action=main.home

Figure 14. Emissions Benefits Estimate Under DERA*

DERA NO_x Emissions Benefit in Tons Per Year (TPY)				
Unit Type *(15% or $24.9M each)*	**Estimated Unit Cost**	**40% Maximum State Cost-Share (60% Unit-Owner Contribution)**		
		Number of New Units	**TPY**	**Cost/lb./Year**
Tug Boat (Propulsion) Engine Replacement	$1,000,000	62	865	$14
Switcher Locomotive Engine Replacement	$1,000,000	62	197	$63

***These are two examples of emissions benefits from eligible unit-types. For a full list of eligibility requirements, including all eligible unit-types, please visit the Department's DERA webpage and download EPA's DERA 2019 Program Guide.**

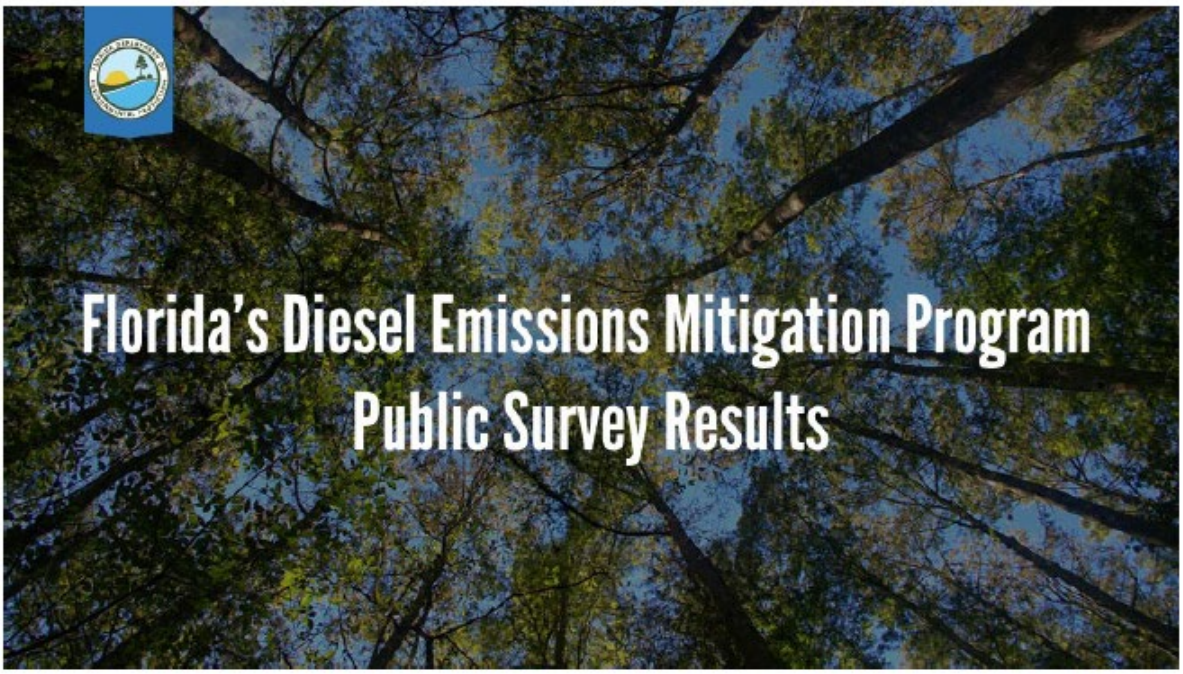
Once projects commence, the Department will use project-specific emissions factors and modeling software to estimate the range of air pollution reductions associated with each mitigation project.

The state expects that each Eligible Mitigation Action will:

1. Reduce NO_x emissions for the remainder of the lifecycle for the units being replaced;
2. Improve air quality in areas that bear a disproportionate share of the air pollution burden, as discussed under Section 3 above; and
3. Reduce exposure to other pollutants resulting from diesel combustion such as diesel particulate matter and organic hazardous air pollutants.

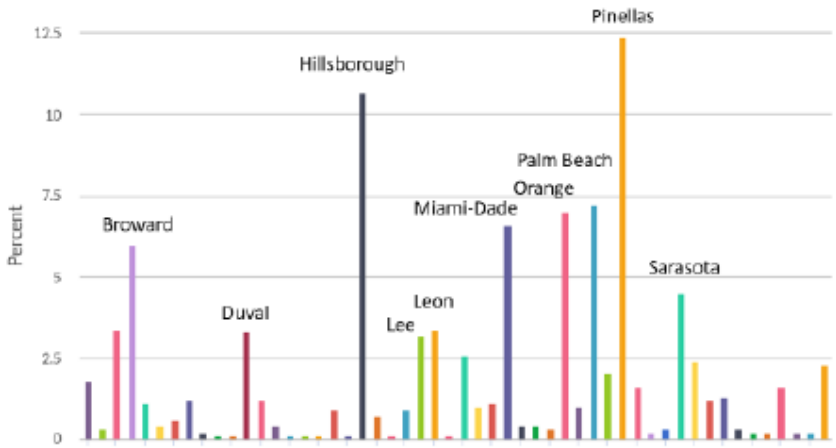
***

Appendix A


Florida's Diesel Emissions Mitigation Program
Public Survey Results

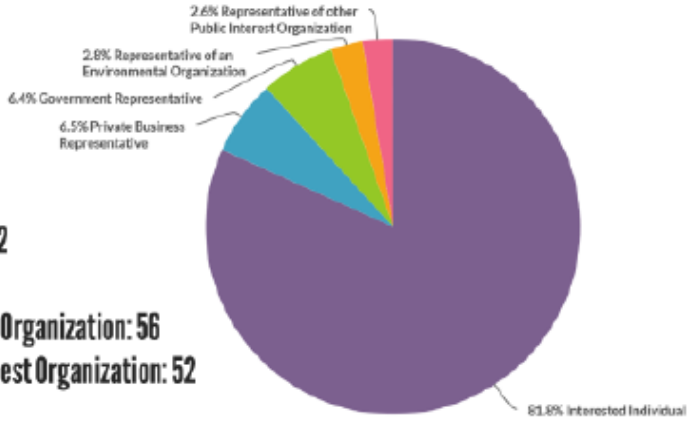
County Participation

1. In which county do you reside? (Total Completed Surveys: 2,023)



Respondent Description

2. Which of the following best describes you?

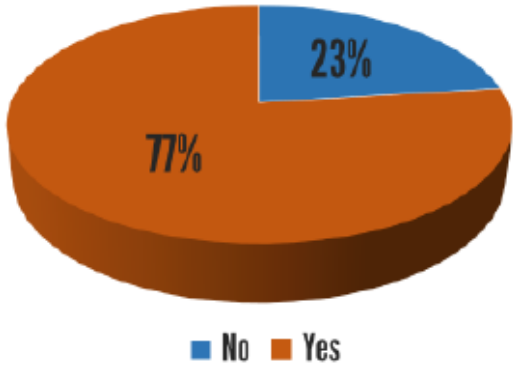


Response Totals

Interested Individual: 1,654
Private Business Representative: 132
Government Representative: 129
Representative of an Environmental Organization: 56
Representative of Other Public Interest Organization: 52

Project Funding Interest

3. Are you interested in receiving funding for a diesel emission reduction project?



Project Funding Interest Follow Up

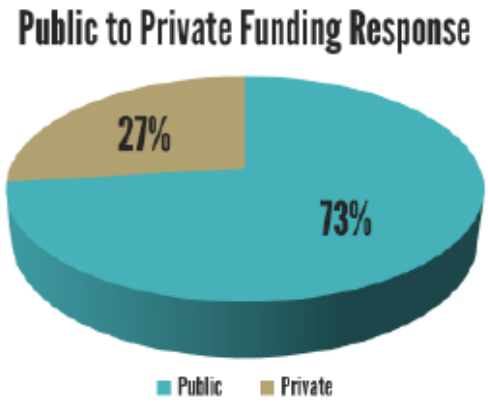
If yes, what type of project are you interested partnering or participating?

Common Responses include:

- Government fleet modernization
- Replacement of older diesel school buses
- EV charging station infrastructure
- Update statewide fleets of garbage collection
- Repowering of locomotives and heavy trucks
- Alternative fueling stations
- Private fleet replacement projects
- Repower of maritime equipment at state ports

Public/Private Breakdown

4. As a percentage, how should Florida divide the total available funding between government-owned vehicles and equipment and partnerships with business-owned vehicles and equipment?



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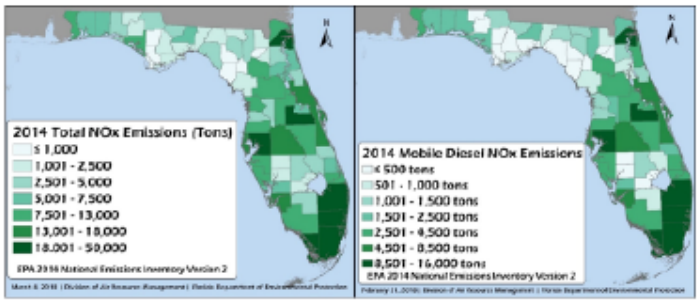
Project Category Ranking

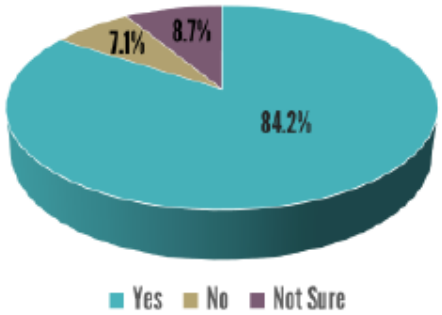
5. There are several major project categories to which the state may direct funding. Please rate these categories from 1 (most preferred) to 7 (least preferred).

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
School Buses, Shuttle Buses, and Transit Buses	1		11,778	1,939
Electric Vehicle Charging Stations	2		9,800	1,928
On-Road Medium and Heavy-Duty Diesel Trucks	3		7,738	1,794
Seaport Shorepower, Cargo Handling Equipment, and Marine Diesel Engines	4		6,233	1,780
Airport Ground Support Equipment	5		5,858	1,784
Locomotives	6		5,488	1,769
Non-Road Diesel Equipment	7		5,019	1,775

Current Emissions Sources Consideration

6. These maps show the relative concentrations of mobile-source air pollution in Florida and ozone levels relative to the National Ambient Air Quality Standard. Should Florida prioritize funding in areas with more emissions sources and higher ozone levels?





Project Factors Ranking

7. There are many factors that may be useful in identifying and prioritizing mitigation projects. Please rate the following from 1 (most preferred) to 7 (least preferred)

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Projects that replace diesel units with alternative fuels and/or electric vehicles and equipment	1		10,240	1,937
Projects that focus on communities that bear a disproportionate share of the air pollution burden	2		8,108	1,861
Projects with greater emission reductions per dollar invested	3		7,495	1,833
Projects that replace the highest emitting diesel units regardless of their location	4		7,208	1,856
Projects in areas with higher diesel engine emissions	5		7,119	1,837
Projects that incentivize business investment in cleaner technologies	6		6,755	1,846
Projects that focus funding on modernizing transportation hubs (seaports, airports, railyards)	7		5,860	1,832

Lowest Rank — Highest Rank

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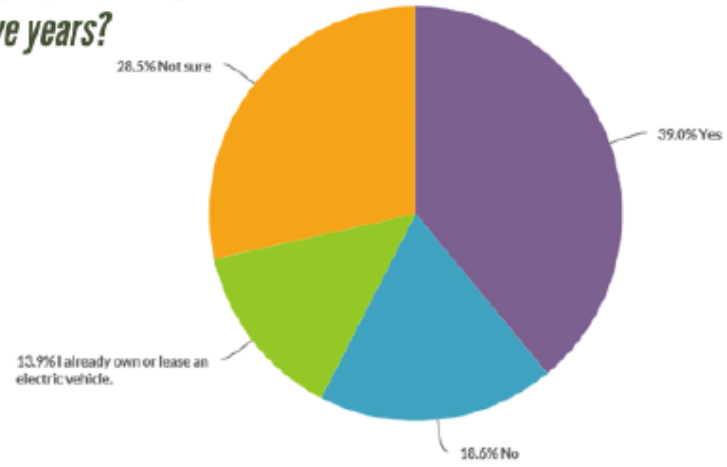
Electric Vehicle Ownership

8. Are you planning on buying or leasing an electric (plug-in) vehicle in the next five years?



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Electric Vehicle Ownership Follow Up

Common Responses to why include:

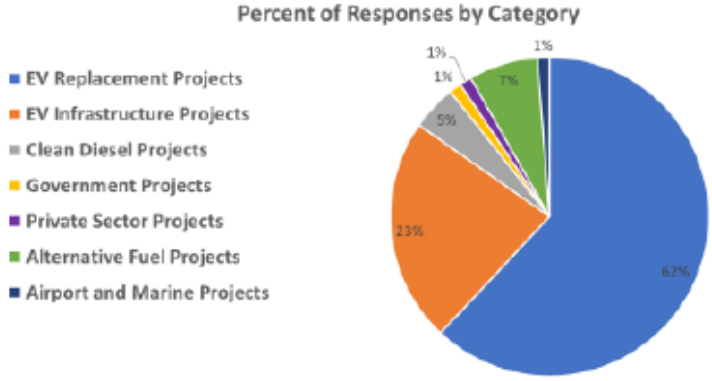
- I already own an electric vehicle
- Reducing gas consumption and vehicle emissions
- More cost effective in the long run
- Cheaper to operate over time
- To invest in cleaner energy

Common Responses to why not include:

- Too expensive
- The technology is too new
- Vehicles currently available won't meet fleet needs
- Available range/shortage of infrastructure
- Already own a hybrid vehicle
- Not wanting to wait for a charge
- Questionable reliability on new technology
- Just bought a new car recently/happy with current car

Opportunity for Comments

9. Please provide any additional information that you think may be helpful in developing Florida's Beneficiary Mitigation Plan.



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FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

Appendix B

Mobile Diesel NO_x, $PM_{2.5}$, PM_{10} by County (NEI Data 2014)

Emissions of NO_x from mobile diesel sources	
County	Total NO_x (TPY)
Miami-Dade	15,646
Monroe	14,699
Broward	11,944
Palm Beach	11,698
Hillsborough	11,160
Orange	9,205
Duval	8,608
Lee	6,832
Pinellas	6,044
Brevard	5,455
Polk	5,392
Volusia	5,245
Marion	4,415
Sarasota	4,146
Manatee	3,835
Collier	3,834
St. Johns	3,775
Pasco	3,544
Osceola	3,232
Seminole	3,098
Escambia	3,072
Alachua	3,001
St. Lucie	2,953
Martin	2,861
Lake	2,608
Leon	2,463
Okaloosa	2,170
Sumter	2,108
Charlotte	1,983
Indian River	1,953
Bay	1,888
Nassau	1,721

Emissions of $PM_{2.5}$ from mobile diesel sources	
County	Total $PM_{2.5}$ (TPY)
Miami-Dade	1,107
Broward	779
Palm Beach	760
Hillsborough	746
Monroe	682
Orange	614
Duval	545
Lee	469
Pinellas	417
Polk	322
Brevard	321
Volusia	321
Marion	269
Sarasota	268
Manatee	260
Collier	253
Pasco	230
St. Johns	209
Seminole	205
Osceola	205
Escambia	186
St. Lucie	174
Martin	167
Lake	166
Alachua	165
Leon	162
Okaloosa	131
Charlotte	119
Indian River	117
Bay	117
Sumter	104
Santa Rosa	96

Emissions of PM_{10} from mobile diesel sources	
County	Total PM_{10} (TPY)
Miami-Dade	1,429
Broward	951
Hillsborough	913
Palm Beach	864
Orange	751
Duval	661
Pinellas	570
Lee	557
Monroe	402
Volusia	396
Polk	382
Brevard	375
Sarasota	333
Marion	318
Manatee	308
Collier	307
Pasco	278
St. Johns	251
Seminole	249
Osceola	244
Escambia	210
Lake	201
Alachua	200
Leon	199
St. Lucie	196
Martin	185
Okaloosa	160
Indian River	140
Charlotte	140
Bay	138
Sumter	118
Santa Rosa	113

Emissions of NO_x from mobile diesel sources	
County	Total NO_x (TPY)
Walton	1,685
Santa Rosa	1,673
Columbia	1,590
Hernando	1,420
Flagler	1,346
Clay	1,236
Jackson	1,163
Citrus	1,095
Gadsden	976
Highlands	877
Suwannee	832
Hamilton	821
Madison	799
Baker	651
Putnam	605
Levy	601
Okeechobee	574
Jefferson	572
Hendry	571
Franklin	527
Washington	465
Bradford	455
DeSoto	440
Gulf	416
Holmes	407
Glades	375
Hardee	334
Wakulla	327
Taylor	297
Dixie	235
Gilchrist	181
Calhoun	177
Union	130
Liberty	108
Lafayette	92

Emissions of $PM_{2.5}$ from mobile diesel sources	
County	Total $PM_{2.5}$ (TPY)
Nassau	96
Walton	91
Flagler	88
Hernando	86
Clay	81
Citrus	71
Columbia	68
Highlands	54
Jackson	54
Gadsden	44
Suwannee	40
Hendry	37
Madison	34
Putnam	33
Okeechobee	31
Hamilton	31
Baker	30
Levy	29
DeSoto	29
Bradford	26
Jefferson	26
Franklin	24
Washington	22
Gulf	21
Hardee	21
Holmes	20
Wakulla	18
Glades	17
Taylor	14
Dixie	11
Gilchrist	10
Calhoun	10
Union	7
Liberty	6
Lafayette	5

Emissions of PM_{10} from mobile diesel sources	
County	Total PM_{10} (TPY)
Hernando	105
Walton	104
Flagler	101
Clay	96
Nassau	95
Citrus	87
Columbia	83
Highlands	63
Jackson	61
Gadsden	50
Suwannee	46
Hendry	42
Putnam	40
Madison	37
Hamilton	36
Okeechobee	36
Levy	34
Baker	33
DeSoto	33
Jefferson	29
Bradford	26
Washington	25
Hardee	25
Holmes	22
Wakulla	22
Franklin	21
Gulf	19
Glades	19
Taylor	17
Dixie	13
Gilchrist	13
Calhoun	12
Union	9
Lafayette	6
Liberty	6

Appendix C

EJSCREEN 2017 By County

EJSCREEN 2017 - Florida County-Level EJ Indexes (by Percentile)				
County	PM2.5	Ozone	NATA Diesel PM	Traffic Proximity
Alachua	53	53	62	76
Baker	21	24	32	55
Bay	25	29	38	24
Bradford	41	41	45	51
Brevard	32	30	29	15
Broward	69	68	74	87
Calhoun	54	53	50	55
Charlotte	28	27	31	23
Citrus	20	21	32	28
Clay	14	16	18	17
Collier	48	48	53	51
Columbia	43	44	47	35
DeSoto	68	70	65	71
Dixie	44	45	47	52
Duval	56	54	62	72
Escambia	45	46	50	70
Flagler	39	38	38	33
Franklin	49	49	48	35
Gadsden	82	76	61	61
Gilchrist	33	35	43	36
Glades	59	60	52	62
Gulf	43	44	47	38
Hamilton	70	66	56	57
Hardee	69	70	58	70
Hendry	76	78	62	68
Hernando	35	35	39	31
Highlands	49	49	52	57
Hillsborough	58	58	65	77
Holmes	43	45	47	54
Indian River	42	41	41	26
Jackson	59	56	52	54
Jefferson	69	64	57	57
Lafayette	53	52	49	59
Lake	34	33	36	43
Lee	44	44	48	58
Leon	54	53	62	66
Levy	46	46	48	54
Liberty	60	58	51	56
Madison	68	64	57	62
Manatee	31	31	40	57
Marion	41	41	45	60
Martin	30	26	25	19
Miami-Dade	83	82	86	91
Monroe	45	44	47	51
Nassau	14	17	24	30
Okaloosa	25	30	38	16
Okeechobee	64	66	58	67
Orange	85	86	88	87
Osceola	96	96	94	87
Palm Beach	54	55	59	78
Pasco	34	34	34	25
Pinellas	36	36	34	34
Polk	59	60	59	67
Putnam	53	54	53	63

EJSCREEN 2017 - Florida County-Level EJ Indexes (by Percentile)				
County	PM2.5	Ozone	NATA Diesel PM	Traffic Proximity
Santa Rosa	10	14	29	15
Sarasota	16	15	18	14
Seminole	38	38	36	66
St. Johns	3	3	6	18
St. Lucie	56	57	61	69
Sumter	0	0	0	16
Suwannee	45	46	48	50
Taylor	58	56	51	52
Union	61	60	53	50
Volusia	41	40	43	28
Wakulla	19	24	39	25
Walton	31	33	44	20
Washington	52	51	49	52
Yellow highlighted boxes are the highest percentile in the column.				

Appendix D

Eligible Mitigation Actions and Mitigation Action Expenditures

(Directly from Appendix D-2 of Final Trust Agreement)

APPENDIX D-2

ELIGIBLE MITIGATION ACTIONS AND MITIGATION ACTION EXPENDITURES

1. Class 8 Local Freight Trucks and Port Drayage Trucks (Eligible Large Trucks)
    a. Eligible Large Trucks include 1992-2009 engine model year Class 8 Local Freight or Drayage. For Beneficiaries that have State regulations that already require upgrades to 1992-2009 engine model year trucks at the time of the proposed Eligible Mitigation Action, Eligible Large Trucks shall also include 2010-2012 engine model year Class 8 Local Freight or Drayage.
    b. Eligible Large Trucks must be Scrapped.
    c. Eligible Large Trucks may be Repowered with any new diesel or Alternate Fueled engine or All-Electric engine, or may be replaced with any new diesel or Alternate Fueled or All-Electric vehicle, with the engine model year in which the Eligible Large Trucks Mitigation Action occurs or one engine model year prior.
    d. For Non-Government Owned Eligible Class 8 Local Freight Trucks, Beneficiaries may only draw funds from the Trust in the amount of:
        1. Up to 40% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine, including the costs of installation of such engine.
        2. Up to 25% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.
        3. Up to 75% of the cost of a Repower with a new All-Electric engine, including the costs of installation of such engine, and charging infrastructure associated with the new All-Electric engine.
        4. Up to 75% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.
    e. For Non-Government Owned Eligible Drayage Trucks, Beneficiaries may only draw funds from the Trust in the amount of:
        1. Up to 40% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine, including the costs of installation of such engine.
        2. Up to 50% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.

3. Up to 75% of the cost of a Repower with a new All-Electric engine, including the costs of installation of such engine, and charging infrastructure associated with the new All-Electric engine.
4. Up to 75% of the cost of a new all-electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.

f. For Government Owned Eligible Class 8 Large Trucks, Beneficiaries may draw funds from the Trust in the amount of:
   1. Up to 100% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine, including the costs of installation of such engine.
   2. Up to 100% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.
   3. Up to 100% of the cost of a Repower with a new All-Electric engine, including the costs of installation of such engine, and charging infrastructure associated with the new All-Electric engine.
   4. Up to 100% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.

2. Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Eligible Buses)
   a. Eligible Buses include 2009 engine model year or older class 4-8 school buses, shuttle buses, or transit buses. For Beneficiaries that have State regulations that already require upgrades to 1992-2009 engine model year buses at the time of the proposed Eligible Mitigation Action, Eligible Buses shall also include 2010- 2012 engine model year class 4-8 school buses, shuttle buses, or transit buses.
   b. Eligible Buses must be Scrapped.
   c. Eligible Buses may be Repowered with any new diesel or Alternate Fueled or All-Electric engine, or may be replaced with any new diesel or Alternate Fueled or All-Electric vehicle, with the engine model year in which the Eligible Bus Mitigation Action occurs or one engine model year prior.
   d. For Non-Government Owned Buses, Beneficiaries may draw funds from the Trust in the amount of:
      1. Up to 40% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine, including the costs of installation of such engine.
      2. Up to 25% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.

3. Up to 75% of the cost of a Repower with a new All-Electric engine, including the costs of installation of such engine, and charging infrastructure associated with the new All-Electric engine.
4. Up to 75% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.

e. For Government Owned Eligible Buses, and Privately-Owned School Buses Under Contract with a Public-School District, Beneficiaries may draw funds from the Trust in the amount of:
   1. Up to 100% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine, including the costs of installation of such engine.
   2. Up to 100% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.
   3. Up to 100% of the cost of a Repower with a new All-Electric engine, including the costs of installation of such engine, and charging infrastructure associated with the new All-Electric engine.
   4. Up to 100% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.

3. Freight Switchers
   a. Eligible Freight Switchers include pre-Tier 4 switcher locomotives that operate 1000 or more hours per year.
   b. Eligible Freight Switchers must be Scrapped.
   c. Eligible Freight Switchers may be Repowered with any new diesel or Alternate Fueled or All-Electric engine(s) (including Generator Sets), or may be replaced with any new diesel or Alternate Fueled or All-Electric (including Generator Sets) Freight Switcher, that is certified to meet the applicable EPA emissions standards (or other more stringent equivalent State standard) as published in the CFR for the engine model year in which the Eligible Freight Switcher Mitigation Action occurs.
   d. For Non-Government Owned Freight Switchers, Beneficiaries may draw funds from the Trust in the amount of:
      1. Up to 40% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine(s) or Generator Sets, including the costs of installation of such engine(s).
      2. Up to 25% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) Freight Switcher.
      3. Up to 75% of the cost of a Repower with a new All-Electric engine(s), including the costs of installation of such engine(s), and charging infrastructure associated with the new All-Electric engine(s).
      4. Up to 75% of the cost of a new All-Electric Freight Switcher, including charging infrastructure associated with the new All-Electric Freight Switcher.
   e. For Government Owned Eligible Freight Switchers, Beneficiaries may draw funds from the Trust in the amount of:
      1. Up to 100% of the cost of a Repower with a new diesel or Alternate

Fueled (e.g., CNG, propane, Hybrid) engine(s) or Generator Sets, including the costs of installation of such engine(s).
2. Up to 100% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) Freight Switcher.
3. Up to 100% of the cost of a Repower with a new All-Electric engine(s), including the costs of installation of such engine(s), and charging infrastructure associated with the new All-Electric engine(s).
4. Up to 100% of the cost of a new All-Electric Freight Switcher, including charging infrastructure associated with the new All-Electric Freight Switcher.

4. Ferries/Tugs
   a. Eligible Ferries and/or Tugs include unregulated, Tier 1, or Tier 2 marine engines.
   b. Eligible Ferry and/or Tug engines that are replaced must be Scrapped.
   c. Eligible Ferries and/or Tugs may be Repowered with any new Tier 3 or Tier 4 diesel or Alternate Fueled engines, or with All-Electric engines, or may be upgraded with an EPA Certified Remanufacture System or an EPA Verified Engine Upgrade.
   d. For Non-Government Owned Eligible Ferries and/or Tugs, Beneficiaries may only draw funds from the Trust in the amount of:
      1. Up to 40% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine(s), including the costs of installation of such engine(s).
      2. Up to 75% of the cost of a Repower with a new All-Electric engine(s), including the costs of installation of such engine(s), and charging infrastructure associated with the new All-Electric engine(s).
   e. For Government Owned Eligible Ferries and/or Tugs, Beneficiaries may draw funds from the Trust in the amount of:
      1. Up to 100% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine(s), including the costs of installation of such engine(s).
      2. Up to 100% of the cost of a Repower with a new All-Electric engine(s), including the costs of installation of such engine(s), and charging infrastructure associated with the new All-Electric engine(s).

5. Ocean Going Vessels (OGV) Shorepower
   a. Eligible Marine Shorepower includes systems that enable a compatible vessel's main and auxiliary engines to remain off while the vessel is at berth. Components of such systems eligible for reimbursement are limited to cables, cable management systems, shore power coupler systems, distribution control systems, and power distribution. Marine shore power systems must comply with international shore power design standards (ISO/IEC/IEEE 80005-1-2012 High Voltage Shore Connection Systems or the IEC/PAS 80005-3:2014 Low Voltage Shore Connection Systems) and should be supplied with power sourced from the local utility grid. Eligible Marine Shorepower includes equipment for vessels that operate within the

Great Lakes.

b. For Non-Government Owned Marine Shorepower, Beneficiaries may only draw funds from the Trust in the amount of up to 25% for the costs associated with the shore-side system, including cables, cable management systems, shore power coupler systems, distribution control systems, installation, and power distribution components.
c. For Government Owned Marine Shorepower, Beneficiaries may draw funds from the Trust in the amount of up to 100% for the costs associated with the shore-side system, including cables, cable management systems, shore power coupler systems, distribution control systems, installation, and power distribution components.

6. Class 4-7 Local Freight Trucks (Medium Trucks)
   a. Eligible Medium Trucks include 1992-2009 engine model year class 4-7 Local Freight trucks, and for Beneficiaries that have State regulations that already require upgrades to 1992-2009 engine model year trucks at the time of the proposed Eligible Mitigation Action, Eligible Trucks shall also include 2010-2012 engine model year class 4-7 Local Freight trucks.
   b. Eligible Medium Trucks must be Scrapped.
   c. Eligible Medium Trucks may be Repowered with any new diesel or Alternate Fueled or All-Electric engine, or may be replaced with any new diesel or Alternate Fueled or All-Electric vehicle, with the engine model year in which the Eligible Medium Trucks Mitigation Action occurs or one engine model year prior.
   d. For Non-Government Owned Eligible Medium Trucks, Beneficiaries may draw funds from the Trust in the amount of:
      1. Up to 40% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine, including the costs of installation of such engine.
      2. Up to 25% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.
      3. Up to 75% of the cost of a Repower with a new All-Electric engine, including the costs of installation of such engine, and charging infrastructure associated with the new All-Electric engine.
      4. Up to 75% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.
   e. For Government Owned Eligible Medium Trucks, Beneficiaries may draw funds from the Trust in the amount of:
      1. Up to 100% of the cost of a Repower with a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) engine, including the costs of installation of such engine.
      2. Up to 100% of the cost of a new diesel or Alternate Fueled (e.g., CNG, propane, Hybrid) vehicle.
      3. Up to 100% of the cost of a Repower with a new All-Electric engine, including the costs of installation of such engine, and charging infrastructure associated with the new All-Electric engine.

4. Up to 100% of the cost of a new All-Electric vehicle, including charging infrastructure associated with the new All-Electric vehicle.

7. Airport Ground Support Equipment
   a. Eligible Airport Ground Support Equipment includes:
      1. Tier 0, Tier 1, or Tier 2 diesel powered airport ground support equipment; and
      2. Uncertified, or certified to 3 g/bhp-hr or higher emissions, spark ignition engine powered airport ground support equipment.
   b. Eligible Airport Ground Support Equipment must be Scrapped.
   c. Eligible Airport Ground Support Equipment may be Repowered with an All-Electric engine, or may be replaced with the same Airport Ground Support Equipment in an All-Electric form.
   d. For Non-Government Owned Eligible Airport Ground Support Equipment, Beneficiaries may only draw funds from the Trust in the amount of:
      1. Up to 75% of the cost of a Repower with a new All-Electric engine, including costs of installation of such engine, and charging infrastructure associated with such new All-Electric engine.
      2. Up to 75% of the cost of a new All-Electric Airport Ground Support Equipment, including charging infrastructure associated with such new All-Electric Airport Ground Support Equipment.
   e. For Government Owned Eligible Airport Ground Support Equipment, Beneficiaries may draw funds from the Trust in the amount of:
      1. Up to 100% of the cost of a Repower with a new All-Electric engine, including costs of installation of such engine, and charging infrastructure associated with such new All-Electric engine.
      2. Up to 100% of the cost of a new All-Electric Airport Ground Support Equipment, including charging infrastructure associated with such new All-Electric Airport Ground Support Equipment.

8. Forklifts and Port Cargo Handling Equipment
   a. Eligible Forklifts includes forklifts with greater than 8000 pounds lift capacity.
   b. Eligible Forklifts and Port Cargo Handling Equipment must be Scrapped.
   c. Eligible Forklifts and Port Cargo Handling Equipment may be Repowered with an All-Electric engine, or may be replaced with the same equipment in an All-Electric form.
   d. For Non-Government Owned Eligible Forklifts and Port Cargo Handling Equipment, Beneficiaries may draw funds from the Trust in the amount of:
      1. Up to 75% of the cost of a Repower with a new All-Electric engine, including costs of installation of such engine, and charging infrastructure associated with such new All-Electric engine.
      2. Up to 75% of the cost of a new All-Electric Forklift or Port Cargo Handling Equipment, including charging infrastructure associated with such new All-Electric Forklift or Port Cargo Handling Equipment.
   e. For Government Owned Eligible Forklifts and Port Cargo Handling

Equipment, Beneficiaries may draw funds from the Trust in the amount of:

1. Up to 100% of the cost of a Repower with a new All-Electric engine, including costs of installation of such engine, and charging infrastructure associated with such new All-Electric engine.
2. Up to 100% of the cost of a new All-Electric Forklift or Port Cargo Handling Equipment, including charging infrastructure associated with such new All-Electric Forklift or Port Cargo Handling Equipment.

9. Light Duty Zero Emission Vehicle Supply Equipment. Each Beneficiary may use up to fifteen percent (15%) of its allocation of Trust Funds on the costs necessary for, and directly connected to, the acquisition, installation, operation and maintenance of new light duty zero emission vehicle supply equipment for projects as specified below. Provided, however, that Trust Funds shall not be made available or used to purchase or rent real- estate, other capital costs (e.g., construction of buildings, parking facilities, etc.) or general maintenance (i.e., maintenance other than of the Supply Equipment).

    a. Light duty electric vehicle supply equipment includes Level 1, Level 2 or fast charging equipment (or analogous successor technologies) that is located in a public place, workplace, or multi-unit dwelling and is not consumer light duty electric vehicle supply equipment (i.e., not located at a private residential dwelling that is not a multi-unit dwelling).

    b. Light duty hydrogen fuel cell vehicle supply equipment includes hydrogen dispensing equipment capable of dispensing hydrogen at a pressure of 70 megapascals (MPa) (or analogous successor technologies) that is located in a public place.

    c. Subject to the 15% limitation above, each Beneficiary may draw funds from the Trust in the amount of:

1. Up to 100% of the cost to purchase, install and maintain eligible light duty electric vehicle supply equipment that will be available to the public at a Government Owned Property.
2. Up to 80% of the cost to purchase, install and maintain eligible light duty electric vehicle supply equipment that will be available to the public at a Non-Government Owned Property.
3. Up to 60% of the cost to purchase, install and maintain eligible light duty electric vehicle supply equipment that is available at a workplace but not to the general public.
4. Up to 60% of the cost to purchase, install and maintain eligible light duty electric vehicle supply equipment that is available at a multi-unit dwelling but not to the general public.
5. Up to 33% of the cost to purchase, install and maintain eligible light duty hydrogen fuel cell vehicle supply equipment capable of dispensing at least 250 kg/day that will be available to the public.
6. Up to 25% of the cost to purchase, install and maintain eligible light duty

hydrogen fuel cell vehicle supply equipment capable of dispensing at least 100 kg/day that will be available to the public.

10. Diesel Emission Reduction Act (DERA) Option. Beneficiaries may use Trust Funds for their non-federal voluntary match, pursuant to Title VII, Subtitle G, Section 793 of the DERA Program in the Energy Policy Act of 2005 (codified at 42 U.S.C. § 16133), or Section 792 (codified at 42 U.S.C. § 16132) in the case of Tribes, thereby allowing Beneficiaries to use such Trust Funds for actions not specifically enumerated in this Appendix D-2, but otherwise eligible under DERA pursuant to all DERA guidance documents available through the EPA. Trust Funds shall not be used to meet the non- federal mandatory cost share requirements, as defined in applicable DERA program guidance, of any DERA grant.

Eligible Mitigation Action Administrative Expenditures

For any Eligible Mitigation Action, Beneficiaries may use Trust Funds for actual administrative expenditures (described below) associated with implementing such Eligible Mitigation Action, but not to exceed 15% of the total cost of such Eligible Mitigation Action. The 15% cap includes the aggregated amount of eligible administrative expenditures incurred by the Beneficiary and any third-party contractor(s).

1. Personnel including costs of employee salaries and wages, but not consultants.
2. Fringe Benefits including costs of employee fringe benefits such as health insurance, FICA, retirement, life insurance, and payroll taxes.
3. Travel including costs of Mitigation Action-related travel by program staff, but does not include consultant travel.
4. Supplies including tangible property purchased in support of the Mitigation Action that will be expensed on the Statement of Activities, such as educational publications, office supplies, etc. Identify general categories of supplies and their Mitigation Action costs.
5. Contractual including all contracted services and goods except for those charged under other categories such as supplies, construction, etc. Contracts for evaluation and consulting services and contracts with sub-recipient organizations are included.
6. Construction including costs associated with ordinary or normal rearrangement and alteration of facilities.
7. Other costs including insurance, professional services, occupancy and equipment leases, printing and publication, training, indirect costs, and accounting.

Definitions/Glossary of Terms

"Airport Ground Support Equipment" shall mean vehicles and equipment used at an airport to service aircraft between flights.

"All-Electric" shall mean powered exclusively by electricity provided by a battery, fuel cell, or the grid.

"Alternate Fueled" shall mean an engine, or a vehicle or piece of equipment that is powered by an engine, which uses a fuel different from or in addition to gasoline fuel or diesel fuel (e.g., CNG, propane, diesel-electric Hybrid).

"Certified Remanufacture System or Verified Engine Upgrade" shall mean engine upgrades certified or verified by EPA or CARB to achieve a reduction in emissions.

"Class 4-7 Local Freight Trucks (Medium Trucks)" shall mean trucks, including commercial trucks, used to deliver cargo and freight (e.g., courier services, delivery trucks, box trucks moving freight, waste haulers, dump trucks, concrete mixers) with a Gross Vehicle Weight Rating (GVWR) between 14,001 and 33,000 lbs.
"Class 4-8 School Bus, Shuttle Bus, or Transit Bus (Buses)" shall mean vehicles with a Gross Vehicle Weight Rating (GVWR) greater than 14,001 lbs. used for transporting people. See definition for School Bus below.

"Class 8 Local Freight, and Port Drayage Trucks (Eligible Large Trucks)" shall mean trucks with a Gross Vehicle Weight Rating (GVWR) greater than 33,000 lbs. used for port drayage and/or freight/cargo delivery (including waste haulers, dump trucks, concrete mixers).

"CNG" shall mean Compressed Natural Gas.
"Drayage Trucks" shall mean trucks hauling cargo to and from ports and intermodal rail yards. "Forklift" shall mean nonroad equipment used to lift and move materials short distances; generally includes tines to lift objects. Eligible types of forklifts include reach stackers, side loaders, and top loaders.

"Freight Switcher" shall mean a locomotive that moves rail cars around a rail yard as compared to a line-haul engine that moves freight long distances.

"Generator Set" shall mean a switcher locomotive equipped with multiple engines that can turn off one or more engines to reduce emissions and save fuel depending on the load it is moving.

"Government" shall mean a State or local government agency (including a school district, municipality, city, county, special district, transit district, joint powers authority, or port authority, owning fleets purchased with government funds), and a tribal government or native village. The term "State" means the several States, the District of Columbia, and the Commonwealth of Puerto Rico.

"Gross Vehicle Weight Rating (GVWR)" shall mean the maximum weight of the vehicle, as specified by the manufacturer. GVWR includes total vehicle weight plus fluids, passengers, and cargo.

Class 1: < 6000 lb.
Class 2: 6001-10,000 lb.
Class 3: 10,001-14,000 lb.
Class 4: 14,001-16,000 lb.

Class 5: 16,001-19,500 lb.
Class 6: 19,501-26,000 lb.
Class 7: 26,001-33,000 lb.
Class 8: > 33,001 lb.

"Hybrid" shall mean a vehicle that combines an internal combustion engine with a battery and electric motor.

"Infrastructure" shall mean the equipment used to enable the use of electric powered vehicles (e.g., electric vehicle charging station).

"Intermodal Rail Yard" shall mean a rail facility in which cargo is transferred from drayage truck to train or vice-versa.

"Port Cargo Handling Equipment" shall mean rubber-tired gantry cranes, straddle carriers, shuttle carriers, and terminal tractors, including yard hostlers and yard tractors that operate within ports.

"Plug-in Hybrid Electric Vehicle (PHEV)" shall mean a vehicle that is similar to a Hybrid but is equipped with a larger, more advanced battery that allows the vehicle to be plugged in and recharged in addition to refueling with gasoline. This larger battery allows the car to be driven on a combination of electric and gasoline fuels.

"Repower" shall mean to replace an existing engine with a newer, cleaner engine or power source that is certified by EPA and, if applicable, CARB, to meet a more stringent set of engine emission standards. Repower includes, but is not limited to, diesel engine replacement with an engine certified for use with diesel or a clean alternate fuel, diesel engine replacement with an electric power source (e.g., grid, battery), diesel engine replacement with a fuel cell, diesel engine replacement with an electric generator(s) (genset), diesel engine upgrades in Ferries/Tugs with an EPA Certified Remanufacture System, and/or diesel engine upgrades in Ferries/Tugs with an EPA Verified Engine Upgrade. All-Electric and fuel cell Repowers do not require EPA or CARB certification.

"School Bus" shall mean a Class 4-8 bus sold or introduced into interstate commerce for purposes that include carrying students to and from school or related events. May be Type A-D.

"Scrapped" shall mean to render inoperable and available for recycle, and, at a minimum, to specifically cut a 3-inch hole in the engine block for all engines. If any Eligible Vehicle will be replaced as part of an Eligible project, Scrapped shall also include the disabling of the chassis by cutting the vehicle's frame rails completely in half.

"Tier 0, 1, 2, 3, 4" shall refer to corresponding EPA engine emission classifications for nonroad, locomotive, and marine engines.

"Tugs" shall mean dedicated vessels that push or pull other vessels in ports, harbors, and

inland waterways (e.g., tugboats and towboats).

"Zero Emission Vehicle (ZEV)" shall mean a vehicle that produces no emissions from the on- board source of power (e.g., All-Electric or hydrogen fuel cell vehicles).

Appendix E

Draft Beneficiary Mitigation Plan

Public Comment Period Summary

Appendix E

Appendix E provides a summary of the prevalent comments from the draft Beneficiary Mitigation Plan public comment period and a full list of material changes made to the finalized Beneficiary Mitigation Plan after considering the public comments.

As stated in the body of the Mitigation Plan, the Department received 1,414 comments during the public comment period. The breakdown of these comments and the common themes of public comments are as follows:

Electric Vehicle Proponents	Electric Bus Proponents	EV Infrastructure Proponents	Other
71	1307	47	47

Common Themes of Public Comments

- Many commenters discouraged the use of funding to purchase new diesel-powered units.
- The majority of commenters supported the use of funds for electric buses.
- The maximum allowable 15 percent funding for electric vehicle charging infrastructure was widely supported.
- Many comments included a request for the Department to provide specific information about how the funds will be administered, including cost-share amounts, requirements, eligibility, timelines for funding, and how to apply for funds.
- Respondents asked the Department to assure that funding is available for areas not included in the five Air Quality Priority Areas.
- Respondents asked for clarification about which project types are eligible under DERA.

Mitigation Plan Summary of Edits (in order of appearance)

The following list includes all changes made to the Beneficiary Mitigation Plan after the public comment period. The Department has included the reasoning behind making the changes in an effort to provide context and address the common themes from the public comment period.

1. Executive Summary and Overall Goal of Florida's Mitigation Plan

Through public comments, the Department identified a need to clarify the factors the Department will consider in attaining the primary goal. The changes are to number the bullets and reword the third bullet to further delineate the three factors in order. The Department has made these changes to clarify the initial intent of the bullets: to show that the Department will identify mitigation projects that achieve the most emissions reductions per trust fund dollar invested, through the lens of the Department's prioritization of electric-powered and/or alternative fueled units. Additionally, the Department would like to reiterate that specifics about how the funds will be administered, including cost-share amounts, requirements, eligibility, timelines for funding, and how to apply for funds, are not required to be included in the Beneficiary Mitigation Plan. The Department would also like to reiterate that areas of the state not included in Air Quality Priority Areas are and will be eligible to receive project-specific funding. Programmatic decisions will be made after the

Request for Information (RFI) process has concluded. The RFI process commenced at the same time as the publishing and submittal of the finalized Beneficiary Mitigation Plan. Links to the RFIs can be found on the Department's Diesel Emissions Mitigation Program (DEMP) webpage.

See below for the strike-through and underline edits.

Primary goal stays the same:

"The primary goal of Florida's Mitigation Plan is to reduce emissions of NO_x, particulate matter, and hazardous air pollutants in areas where people live, work, and visit. To achieve this goal, Florida's Mitigation Plan will balance the following factors:"

Draft Mitigation Plan:

- Prioritizing projects that replace eligible units with electric-powered and/or alternative fueled units;
- Identifying the areas in Florida where the largest number of people are impacted by higher levels of emissions from diesel-powered vehicles and equipment; and
- Identifying ~~mitigation projects that achieve the lowest cost per ton of pollutants reduced.~~

Finalized Mitigation Plan:

1. Prioritizing projects that replace eligible units with electric-powered and/or alternative fueled units;
2. Identifying the areas in Florida where the largest number of people are impacted by higher levels of emissions from diesel-powered vehicles and equipment; and
3. Identifying cost-effective mitigation projects, factoring in the prioritized fuel-types.

2. Public Input Section D: Draft Mitigation Plan Public Comment Period

The Department reserved this space to provide a summary of the draft Mitigation Plan public comment period. The addition to the finalized Mitigation Plan are as follows:

"A draft of this Mitigation Plan was made publicly available via Florida Administrative Register (FAR) notice for comment for a period of thirty (30) days, which started on July 17, 2019 and ended August 16, 2019, at 5:00 PM, ET. The Department compiled and reviewed all public comments and finalized the Mitigation Plan for submittal to the Trustee.

The Department received a total of 1,414 public comments. A general table describing the types of comments received are as follows (some submitted comments provided multiple suggestions, making the count greater than the number of submissions):

Electric Vehicle Proponents	Electric Bus Proponents	EV Infrastructure Proponents	Other
71	1307	47	47

The Department has considered all comments submitted and revised the Mitigation Plan, primarily to clarify the Department's initial intent. The Department has also provided a list of common themes from the public comment period. A full list of revisions to the finalized Mitigation Plan and responses to common themes from the public comment period are included in Appendix E."

3. Diesel Emissions Reduction Act

The Department found a need to provide a list of units which are eligible under the Diesel Emissions Reduction Act (DERA). This addition clarifies the many unit types that are eligible under DERA, as some commenters mis-interpreted the inclusion of only tug boat and switcher locomotive projects in Figure 14 as an indication that these would be the only projects eligible under DERA. The strike-throughs and underlines after the first paragraph of the DERA section are as follows:

"As stated in EPA's DERA 2019 Program Guide: "Projects may include, but are not limited to, diesel emission reduction solutions from the following heavy-duty diesel emission source types:

1. Buses;
2. Medium-duty or heavy-duty trucks;
3. Marine Engines;
4. Locomotives; and
5. Nonroad engines, equipment or vehicles used in:
   a) Construction;
   b) Handling of cargo (including at a port or airport);
   c) Agriculture;
   d) Mining; or
   e) Energy production (including stationary generators and pumps).

The Department's decision to use Mitigation Trust funds in conjunction with the DERA program will allow for funding project types that were not selected ~~above~~ as individual Eligible Mitigation Actions. Participating in DERA provides versatility for project types with the highest mitigation value based on the factor of cost per ton. The Department encourages those interested to visit the Department's DERA program webpage."

4. Figure 13. Emissions Benefits Estimated Based on Selected Eligible Mitigation Actions

The Department has responded to many comments regarding Figure 13 by making clarifying revisions. The purpose of Figure 13 is to illustrate the need for a cost-share to purchase school and transit buses for both government and nongovernment entities. While the draft and finalized Mitigation Plan both state the prioritization of electric and alternate fueled units as a factor to meet the primary goal of the mitigation trust funds, the feedback the Department received was that Figure 13 could be misinterpreted as the Department favoring diesel based on the upfront cost disparity.

Therefore, the Department has revised the third factor to be clear that projects will be identified, based, in part, on the "emissions reductions per dollar of trust funds invested, factoring in the prioritized fuel types." Furthermore, the Department has removed the diesel emissions calculation from Figure 13 to make sure the purpose of the table is made clear and cannot be misunderstood to mean the favoring of diesel.

Additionally, the Department changed the unit of measurement from "cost, per ton, per year", to "cost, per pound, per year." This revision was deemed necessary because for bus projects, this is more in line with the scale of emissions from individual buses.

Finally, the Department has revised the potential range of illustrative cost-share amounts. In the interest of government and nongovernment entities, the Department has provided a more realistic range of cost-share percentages for the Department's use of mitigation trust funds. The purpose of the Mitigation Plan is to provide the Trustee an outline of Florida's use of mitigation trust funds; therefore, the Department's analysis of projects is based on the use of mitigation trust funds to purchase the unit. Public comments regarding the cost of ownership over the lifetime of the unit are valid; however, the Department is not including those considerations at this time, as these are not directly related to the use of Florida's share of mitigation trust funds. Certainly, an entity should consider the lifetime cost of ownership when deciding what type of unit to purchase. Here are the two figures to show the revisions made to Figure 13:

Draft Mitigation Plan – Figure 13

NO_x Emissions Benefit in Tons Per Year (TPY) Based on Possible Cost-Share Amounts							
Unit Type (Assuming 100% Funding Within Each Category)	Unit Cost	100% Cost-Share (Public)			50% Split Share (Public)		
		Number of New Units	TPY	Cost/Ton/ Year	Number of New Units	TPY	Cost/Ton/ Year
School Bus Electric Replacement (70% or $116.4M)	$350,000	332	41	$2,874,000	665	81	$1,434,674
School Bus Diesel Replacement (70% or $116.4M)	$100,000	1163	142	$820,000	2327	284	$409,995
Transit Bus Electric Replacement (70% or $116.4M)	$900,000	129	114	$1,023,000	258	228	$511,501
Transit Bus Diesel Replacement (70% or $116.4M)	$400,000	290	241	$482,000	581	483	$240,788

Finalized Mitigation Plan – Figure 13

NO_x Emissions Benefits Based on Possible Cost-Share Amounts							
Unit Type *(70% or $116.4M each)*	Estimated Unit Cost	80% Cost-Share (From State)			60% Cost-Share (From State)		
		New Units	TPY	Cost/lb./Year	New Units	TPY	Cost/lb./Year
Electric School Bus	$350,000	415	51	$1,136	553	68	$856
Electric Transit Bus	$900,000	161	142	$410	215	190	$306

5. Figure 14. Emissions Benefits Estimate Based Under DERA Option

The Department made conforming edits to make Figure 14 based on the revisions to Figure 13. Additionally, the Department added information to clarify that Figure 14 does not represent the only project types which will be funded through the DERA program. A full list of eligible projects is available on the Department's webpage by downloading EPA's 2019 DERA Program Guide, as well as the added information under the DERA section of the finalized Mitigation Plan. Here are the edits to Figure 14:

Draft Mitigation Plan – Figure 14

Potential DERA NO_x Emissions Benefit in Tons Per Year (TPY)				
Unit Type (Assuming 100% Funding Within the DERA Category)	**Estimated Unit Cost**	**40% Maximum Cost-Share (60% Owner Contribution)**		
		Number of New Units	**TPY**	**Cost/Ton/Year**
Tug Boat (Propulsion) Engine Replacement (15% or $24.9M)	$1,000,000	62	865	$28,783
Switcher Locomotive Engine Replacement (15% or $24.9M)	$1,000,000	62	197	$126,532

Finalized Mitigation Plan – Figure 14

DERA NO_x Emissions Benefit in Tons Per Year (TPY)				
Unit Type *(15% or $24.9M each)*	**Estimated Unit Cost**	**40% Maximum State Cost-Share (60% Unit-Owner Contribution)**		
		Number of New Units	**TPY**	**Cost/lb./Year**
Tug Boat (Propulsion) Engine Replacement	$1,000,000	62	865	$14
Switcher Locomotive Engine Replacement	$1,000,000	62	197	$63
***These are two examples of emissions benefits from eligible unit-types. For a full list of eligibility requirements, including all eligible unit-types, please visit the Department's DERA webpage and download EPA's DERA 2019 Program Guide.**				

6. Appendix E – Replaced

The Department decided to remove the two graphs in the draft Mitigation Plan's Appendix E, as the graphs provided limited value in illustrating emissions benefit calculations. This summary of revisions and public comment period summary document is the replacement Appendix E.

Appendix B – Florida Semiannual Report to the Environmental Trust for State Beneficiaries (July 10, 2025)

Environmental Mitigation Trust for State Beneficiaries
Semiannual Report

Beneficiary	State of Florida
Lead Agency	Florida Department of Environmental Protection
Reporting Period	January 1, 2025 - June 30, 2025

Fiscal Year	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	Total
Total Funds Received	$ 14,500,000.00	$ 68,441,811.60	$ -	$ 67,300,000.00	$ 1,250,000.00	$ -	$ 151,491,811.60
Funds Expended	$ -	$ 1,000,000.00	$ 2,499,784.16	$ 22,545,408.86	$ 12,209,473.71	$ 14,107,650.74	$ 52,362,317.47
Net Interest Earned (Through 5/31/2025)	$ 32,181.27	$ 366,512.68	$ 547,710.18	$ 1,305,216.63	$ 3,299,394.60	$ 3,827,357.29	$ 9,378,372.65
Remaining Balance							$ 108,507,866.78

Budget Summary

Eligible Mitigation Action (EMA)	Total Funds Allocated	Funds Received	Funds Encumbered	Net Interest Earned	Funds Expended	Funds Remaining	DERA Funds	Grantee Funds*	Total Project Cost
#10 DERA Option	$ 24,941,811.68	$ 3,450,000.00	$ 1,250,000.00	$ 158,830.65	$ 2,200,000.00	$ 1,408,830.65	$ 2,769,229.53	$ 9,636,462.08	$ 15,855,691.61
#9 Light-Duty ZEV Supply Equipment	$ 24,941,811.68	$ 24,941,811.60	$ 5,502,205.00	$ 2,057,446.49	$ 9,815,023.09	$ 17,184,235.00	N/A	$ 8,199,194.11	$ 23,516,422.20
#2 School, Transit, and Shuttle Buses	$ 116,395,121.18	$ 123,100,000.00	$ 74,483,536.82	$ 7,162,095.51	$ 40,347,294.38	$ 89,914,801.13	N/A	$ 29,974,998.76	$ 98,074,998.76

* Grantee Funds column represents grantee funds spent on completed and partially completed projects to date.

Current Projects	EMA	Project Summary
Electric Vehicle Charging Infrastructure (Phase 1)	9	The Department requested $13,500,000.00 for Eligible Mitigation Action #9 for the installation of charging equipment at 27 sites along Interstates 95, 75, and 4. The Department finalized grant agreements with 21 grantees, and six grant partners were unable to complete installation. All 21 project sites have been completed and are available for use, and reimbursements to grantees have been paid out in full. A total of $7,013,892.64 of the $13,500,000.00 received from the Trustee was spent on Phase 1 EVCI projects.
Electric School Bus	2	The Department requested $57,000,000 for the purchase of electric school buses out of the total $116,395,121.18 intended for use in Eligible Mitigation Action #2. The Department has entered into grant agreements with seven (7) Florida school districts: Broward County, Manatee County, Miami-Dade County, Orange County, Palm Beach County, Pinellas County, and Sarasota County. The total number of electric school buses funded under these seven grant agreements is 183. To date, three of these school districts have completed their projects, and four school districts are continuing to order and receive delivery of new electric school buses to replace eligible diesel school buses within their existing fleets. To date, the total number of buses delivered and in operation is 133. To date, the Department has dispersed $29,547,294.38 to electric school bus grantees.
Electric Vehicle Charging Infrastructure (Phase 2)	9	The Department requested $11,441,811.68 for the installation of direct current (DC) fast chargers at sites along Interstates 4, 10, 75, and 95. The Department funded 21 projects under Phase 2. All 21 project sites have been completed and are available for use. To date, the Department has paid out $2,810,130.45 to nine Phase 2 grantees, and the reimbursement process is under way for the twelve remaining projects.
Electric Transit Bus	2	The Department requested $66,100,000 for the purchase of electric transit buses under Eligible Mitigation Action #2. This funding request exhausted the $116,395,121.18 intended for use in Eligible Mitigation Action #2 and is using $6,704,878.82 of additional funds earned from Trustee investments. This project will also use $2,000,000 in additional funds made available from unspent money from the Department's electric school bus grant program and interest earned from Florida's trust account. The Department has 11 executed grant agreements with transit agencies, encumbering $66,900,000.00. The total number of electric transit buses funded under these ten grant agreements is 213. To date, the total number of buses ordered is 88, and the total number of buses delivered and in operation is 38. To date, the Department has dispersed $10,800,000 as reimbursements for the purchase of 36 electric transit buses.
Frieght Switcher Repowering	10	The Department requested $1,250,000 for the purchase and installation of two new switcher locomotive engines for a DERA Option project. This project is being funded out of the $24,941,811.68 intended for use in eligible mitation action #10 and is using $750,000 of EPA DERA funds as part of this project. The Department has executed two grant agreements with the grantee encumbering VW and DERA funds, and project completion is expected in September 2025.
For more information about the current projects, please visit https://floridadep.gov/volkswagen		

This information is true and correct and that the submission is made under penalty of perjury:

Jeffery F. Koerner
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Signed:_____ Date:_____

Jeffery Koerner, Director
Division of Air Resource Management
Florida Department of Environmental Protection

Appendix C – Mobile Diesel NO_X, $PM_{2.5}$, PM_{10} by County (NEI Data 2020)

Emissions of NO_x from mobile diesel sources	
County	**Total NO_x (TPY)**
Miami-Dade	16,239
Broward	10,893
Hillsborough	9,471
Duval	8,728
Palm Beach	8,336
Orange	8,312
Brevard	4,671
Pinellas	4,530
Polk	4,363
Lee	3,754
Volusia	3,537
Sarasota	2,707
Marion	2,679
Manatee	2,535
Collier	2,428
St. Johns	2,391
Seminole	2,378
Pasco	2,376
Escambia	2,311
Osceola	2,238
Alachua	2,110
Lake	1,908
Monroe	1,752
Bay	1,692
Sumter	1,676
St. Lucie	1.604
Martin	1,566
Leon	1,518
Okaloosa	1,508
Nassau	1,336
Santa Rosa	1,238
Walton	1,168

Emissions of $PM_{2.5}$ from mobile diesel sources	
County	**Total $PM_{2.5}$ (TPY)**
Miami-Dade	618
Broward	441
Orange	416
Hillsborough	391
Palm Beach	362
Duval	331
Pinellas	205
Polk	204
Brevard	178
Lee	178
Volusia	150
Sarasota	123
Manatee	120
Collier	119
Seminole	118
Marion	108
Pasco	106
Osceola	105
St. Johns	102
Escambia	93
Lake	92
Alachua	83
Sumter	74
Leon	73
Bay	69
St. Lucie	67
Okaloosa	65
Martin	65
Santa Rosa	54
Monroe	52
Walton	49
Clay	47

Emissions of PM_{10} from mobile diesel sources	
County	**Total PM_{10} (TPY)**
Miami-Dade	969
Broward	660
Orange	609
Hillsborough	556
Palm Beach	545
Duval	448
Pinellas	318
Polk	279
Lee	266
Brevard	257
Volusia	224
Sarasota	178
Seminole	173
Collier	166
Manatee	162
Marion	160
Pasco	160
Osceola	155
St. Johns	141
Escambia	134
Lake	131
Alachua	119
St. Lucie	107
Leon	104
Sumter	96
Bay	93
Okaloosa	93
Martin	91
Santa Rosa	75
Monroe	68
Walton	65
Clay	65

Emissions of NO_x from mobile diesel sources	
County	**Total NO_x (TPY)**
Charlotte	1,085
Clay	1,068
Indian River	1,022
Columbia	996
Hernando	993
Citrus	740
Jackson	716
Suwanee	700
Gadsden	667
Flagler	632
Hamilton	624
Highlands	553
Putnam	523
Baker	481
Madison	463
Levy	455
Okeechobee	386
Washington	344
Hendry	340
Jefferson	332
Bradford	317
DeSoto	288
Wakulla	273
Franklin	272
Glades	256
Holmes	249
Taylor	234
Hardee	215
Gulf	204
Dixie	165
Gilchrist	151
Calhoun	111

Emissions of $PM_{2.5}$ from mobile diesel sources	
County	**Total $PM_{2.5}$ (TPY)**
Nassau	46
Indian River	45
Charlotte	43
Hernando	40
Columbia	35
Citrus	33
Suwanee	27
Jackson	26
Flagler	26
Gadsden	26
Highlands	24
Hamilton	23
Putnam	20
Baker	18
Levy	18
Hendry	17
Okeechobee	16
Madison	16
DeSoto	14
Wakulla	13
Washington	13
Jefferson	12
Bradford	12
Hardee	10
Glades	9
Holmes	9
Franklin	9
Taylor	9
Gulf	7
Gilchrist	7
Dixie	6
Union	5

Emissions of PM_{10} from mobile diesel sources	
County	**Total PM_{10} (TPY)**
Indian River	65
Charlotte	63
Hernando	60
Nassau	59
Citrus	49
Columbia	48
Flagler	37
Suwanee	37
Jackson	35
Gadsden	34
Highlands	32
Putnam	29
Hamilton	28
Baker	24
Levy	23
Hendry	22
Okeechobee	22
Madison	21
DeSoto	18
Washington	17
Wakulla	16
Bradford	16
Jefferson	15
Hardee	13
Holmes	12
Taylor	11
Glades	11
Franklin	11
Gulf	10
Gilchrist	9
Dixie	8
Union	6

Emissions of NO_x from mobile diesel sources	
County	**Total NO_x (TPY)**
Union	109
Liberty	82
Lafayette	78

Emissions of $PM_{2.5}$ from mobile diesel sources	
County	**Total $PM_{2.5}$ (TPY)**
Calhoun	4
Lafayette	4
Liberty	3

Emissions of PM_{10} from mobile diesel sources	
County	**Total PM_{10} (TPY)**
Calhoun	6
Lafayette	5
Liberty	4

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR RESOURCE MANAGEMENT

2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400
(850) 717-9000
https://floridadep.gov/volkswagen