



Florida Department of Environmental Protection

Florida's Diesel Emissions Mitigation Program

Division of Air Resource Management
March 2018





Introduction and Agenda

Division of Air Resource Management Staff:

Preston McLane, Deputy Director

Hastings Read, Program Administrator

John Paul Fraites, Program Consultant

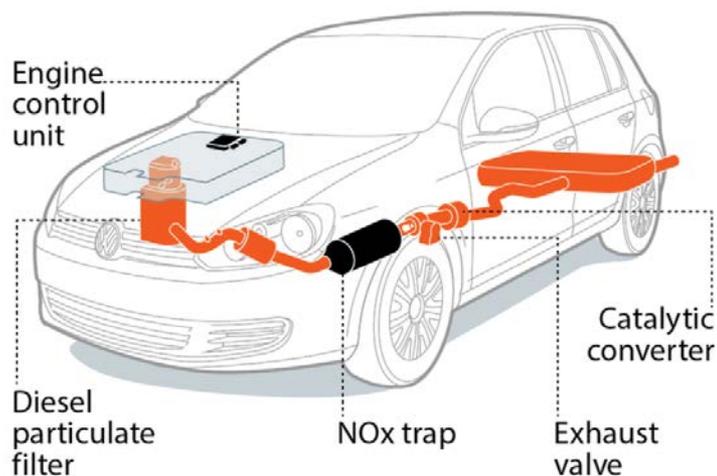
Agenda

1. Introduction and Meeting Overview 10 Minutes
2. Presentation: Planning for Florida's Diesel Emissions Mitigation Program 45 Minutes
3. Questions & Answers 20 Minutes
4. Closing of Formal Presentation 5 Minutes
5. Open Session for Meeting with Division Staff 40 Minutes



Volkswagen Settlement

In October 2016, Volkswagen (VW) settled with the U.S. government resolving claims that it violated the Clean Air Act by selling vehicles equipped with “**defeat devices**” that directed nitrogen oxides (NOx) controls to function during emissions testing, but not during normal vehicle operations.





Volkswagen Settlement

The Volkswagen Settlement consists of three major components:

- **Buyback or emissions modification** on at least 85 percent of the subject vehicles.
- **ZEV Investment** – \$2 billion to promote the use of zero emission vehicles and infrastructure.
- **Mitigation Trust Fund** – \$2.925 billion to fully remediate the excess NOx emissions from the subject vehicles.

The remainder of this presentation focuses exclusively on the **Mitigation Trust Fund** and **states' roles in using the available funds.**

VW/Audi Diesel Emissions Settlements

To see if your car qualifies

 VW Beetle 2013 - 2015	 VW Golf 2010 - 2015	 VW Jetta 2009 - 2015
 VW Passat 2012 - 2015	 Audi A3 2010 - 2013; 2015	

Visit VWCourtSettlement.com
Official Settlement Website



Mitigation Trust Fund

- On March 15, 2017, **Wilmington Trust** was selected as the independent trustee to administer the Mitigation Trust Fund.
- On October 2, 2017, the Final Trust Agreement was filed with the court, and established the **Mitigation Trust Fund**, which has a combined \$2.9 billion for beneficiaries to mitigate excess NOx emissions from subject vehicles.
- 50 states, the District of Columbia, and Puerto Rico were authorized to become beneficiaries under the **Environmental Mitigation Trust for State Beneficiaries**.





Florida's Beneficiary Status

- On November 28, 2017, Florida submitted to the Trustee a Certification to become a **State Beneficiary** under the Mitigation Trust Fund.
- On January 30, 2018, the Trustee designated Florida as a State Beneficiary.
- Florida is now eligible to receive approximately **\$166 million** in diesel emission reduction project funding over a period of up to 10 years.
- Florida is required to submit to the Trustee a **State Beneficiary Mitigation Plan** at least 30 days prior to submitting any project-specific funding request.





State Beneficiary Mitigation Plan

Florida must submit to the Trustee and make publicly available a **State Beneficiary Mitigation Plan** before receiving any trust funds.

This plan must:

- Explain the state's overall goal for use of the trust funds;
- List the categories of projects that the state expects to implement;
- Explain how the plan considers benefits to air quality in communities with a disproportionate air pollution burden; and
- Estimate the overall NO_x reductions that will be achieved through the diesel emission reduction projects.





Considerations in Mitigation Planning

The Department has identified seven **potential considerations*** that could be part of the State Beneficiary Mitigation Plan:

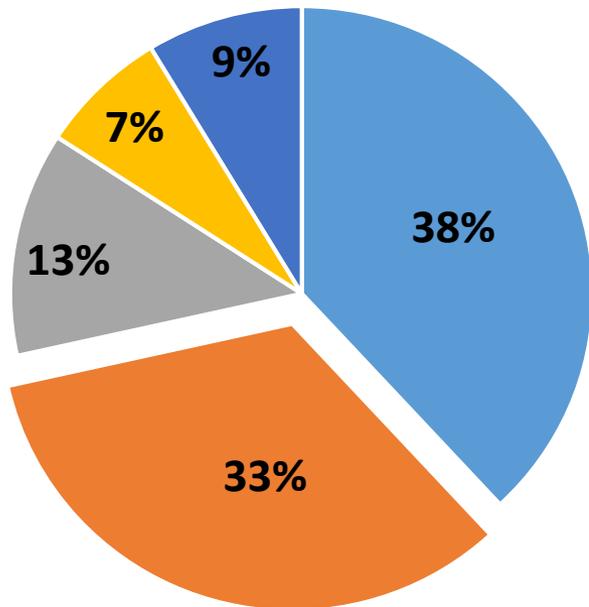
- Focusing on projects in communities that bear a disproportionate share of the air pollution burden;
- Identifying projects with greater emission reductions per dollar invested;
- Incentivizing business investment in cleaner technologies;
- Focusing on modernizing transportation hubs (seaports, airports, railyards);
- Replacing the highest emitting diesel units regardless of their location;
- Funding projects in areas with higher diesel engine emissions; and/or
- Replacing diesel units with alternative fuel (i.e. natural gas) and/or electric vehicles and equipment.

* The Plan could, of course, emphasize several of these considerations, but there would be trade-offs.



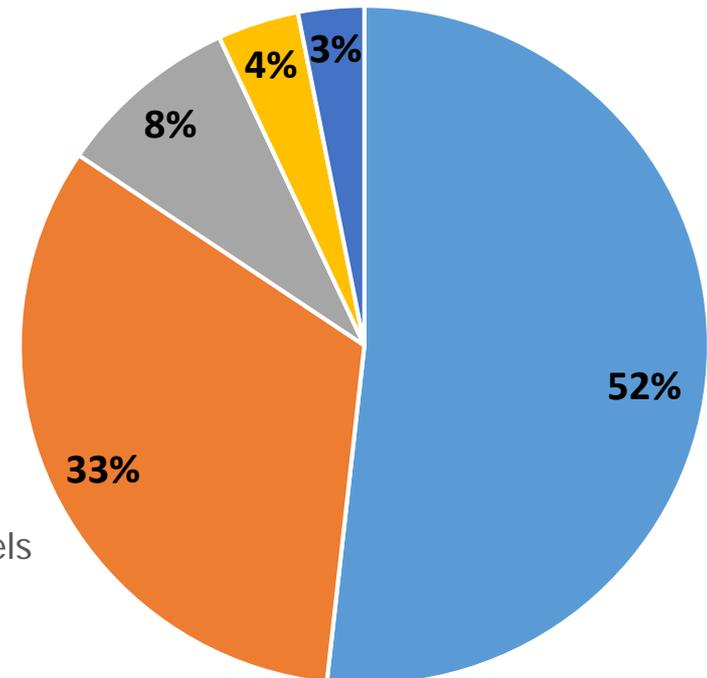
NO_x Emissions Distributions

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



- Non-Diesel Mobile Sources
- Diesel-Powered Mobile Sources
- Electric Generating Units
- Industrial Facilities
- Miscellaneous Sources

Percentage Distribution for Diesel-Powered
Mobile Source NO_x Emissions in Florida (2014)



- On-Road Heavy Duty
- Non-Road Equipment
- Commercial Marine Vessels
- On-Road Light Duty
- Locomotives



Eligible Mitigation Actions

1. Repower or replace **Class 8 local freight trucks and port drayage trucks** with new diesel, alternative fuel or electric engines;
2. Repower or replace **Class 4-8 school buses, shuttle buses or transit buses** with new diesel, alternative fuel or electric engines;
3. Repower or replace **Class 4-7 local freight trucks** with new diesel, alternative fuel or electric engines;
4. Repower or replace **pre-Tier 4 diesel switcher locomotives** with new diesel, alternative fuel or electric engines;
5. Repower or upgrade **diesel-powered ferries and tugs** with new diesel or alternative fuel engines;
6. Provide **electric shorepower equipment** for oceangoing vessels;
7. Repower or replace **diesel-powered airport ground support equipment** with electric engines;
8. Repower or replace **large forklifts and port cargo handling equipment** with electric engines;
9. Build new light-duty **zero emission vehicle supply equipment** (electric charging or hydrogen dispensing stations); and
10. Use trust funds to provide matching funds for state allocation of funding under the **Diesel Emission Reduction Act (DERA)**.

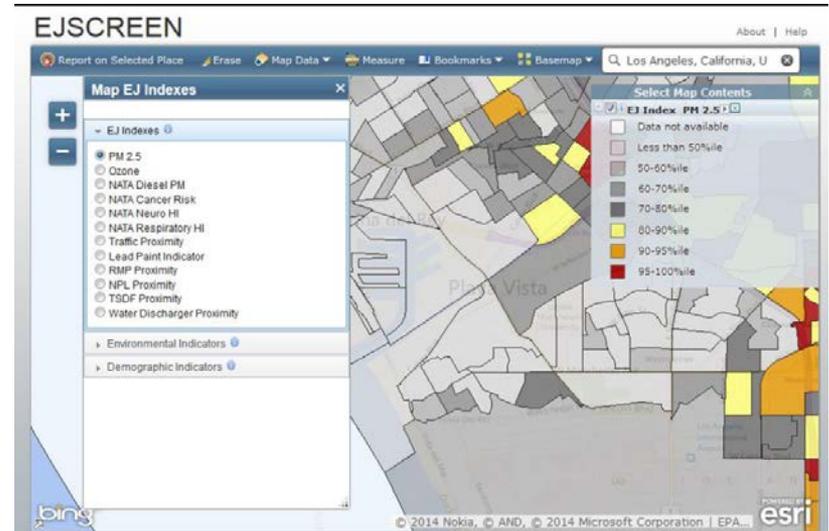
NOTE: Replaced engines or vehicles **must be scrapped**.



Geographical Considerations

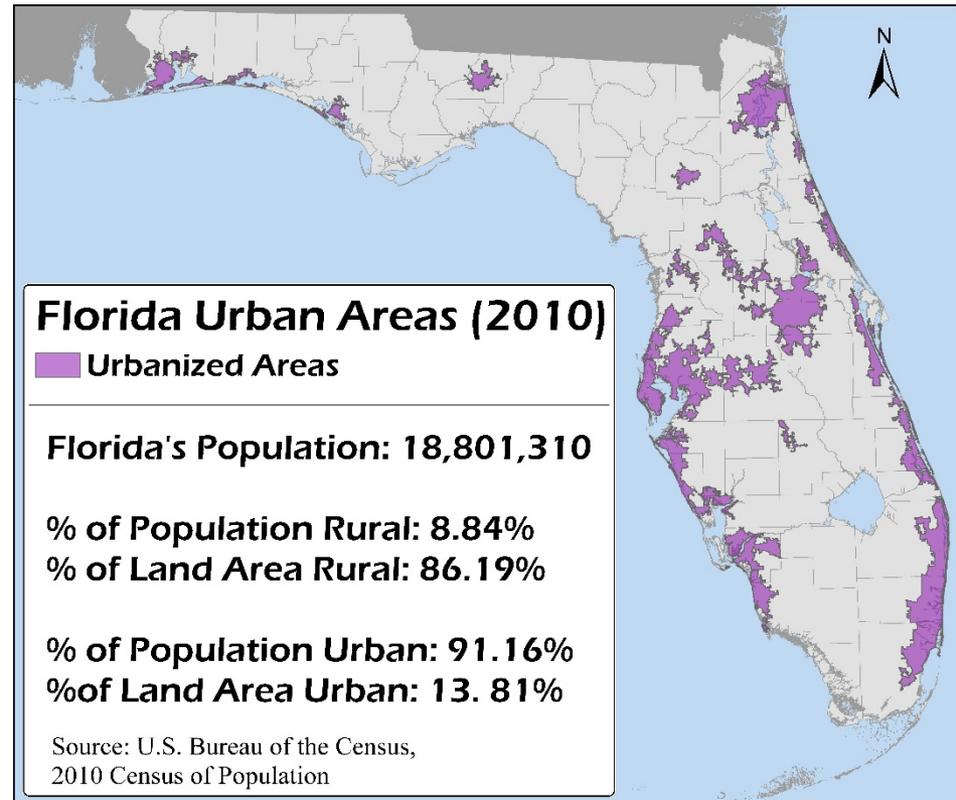
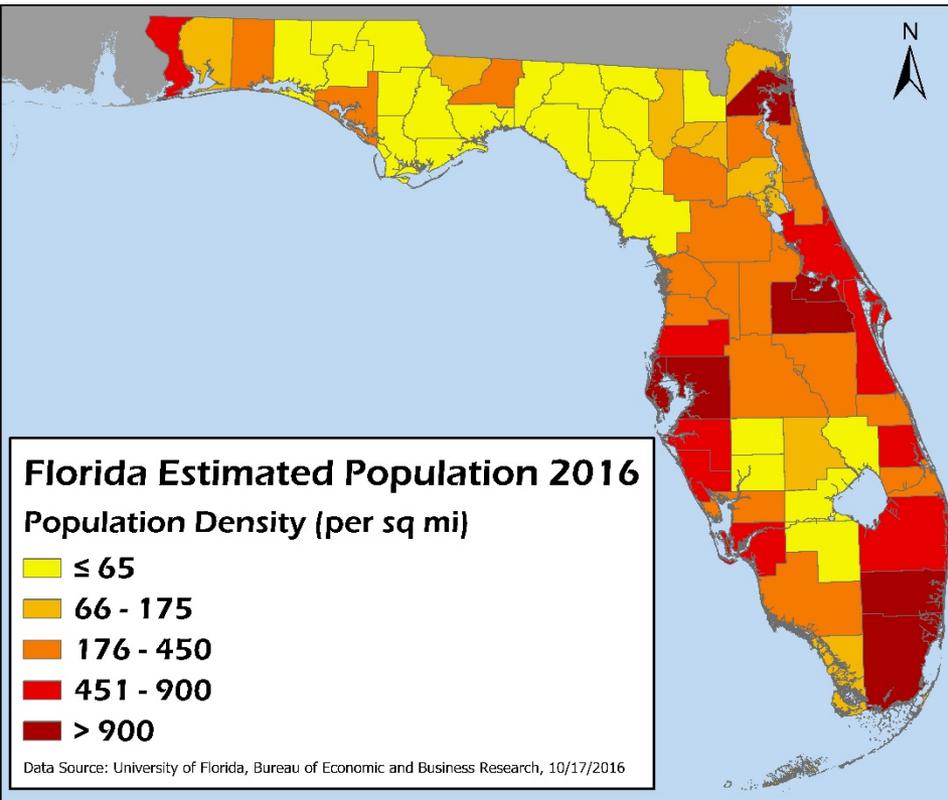
The Trust Agreement requires that states describe how they will consider potential benefits to air quality in **areas that bear a disproportionate share** of the air pollution burden.

- There are numerous approaches to identifying such areas, including the U.S. EPA's "EJSCREEN," Florida's air quality monitoring network data, and U.S. Census data.





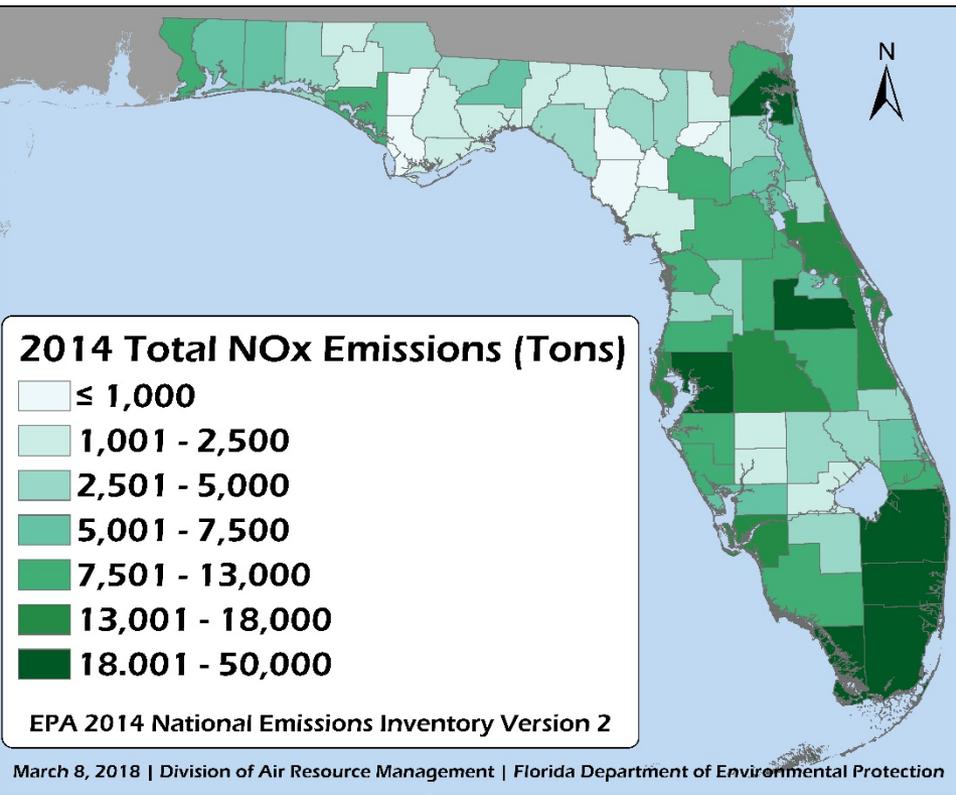
State Population



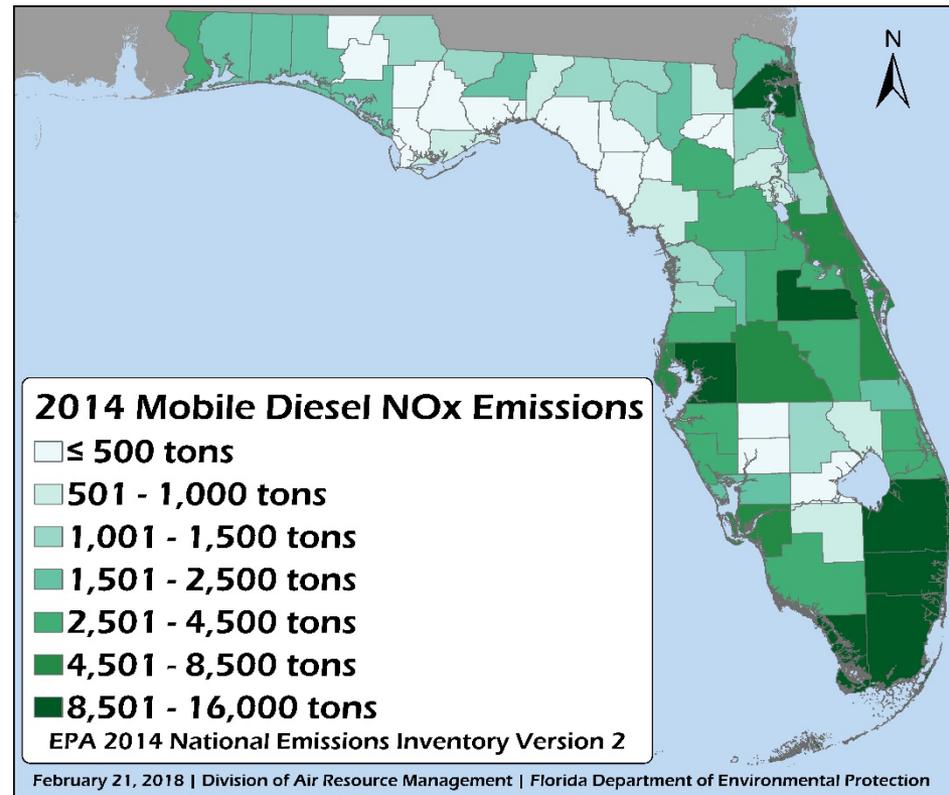
Population data could be used to identify projects that would benefit more densely populated areas.



NOx Emissions Inventories



March 8, 2018 | Division of Air Resource Management | Florida Department of Environmental Protection

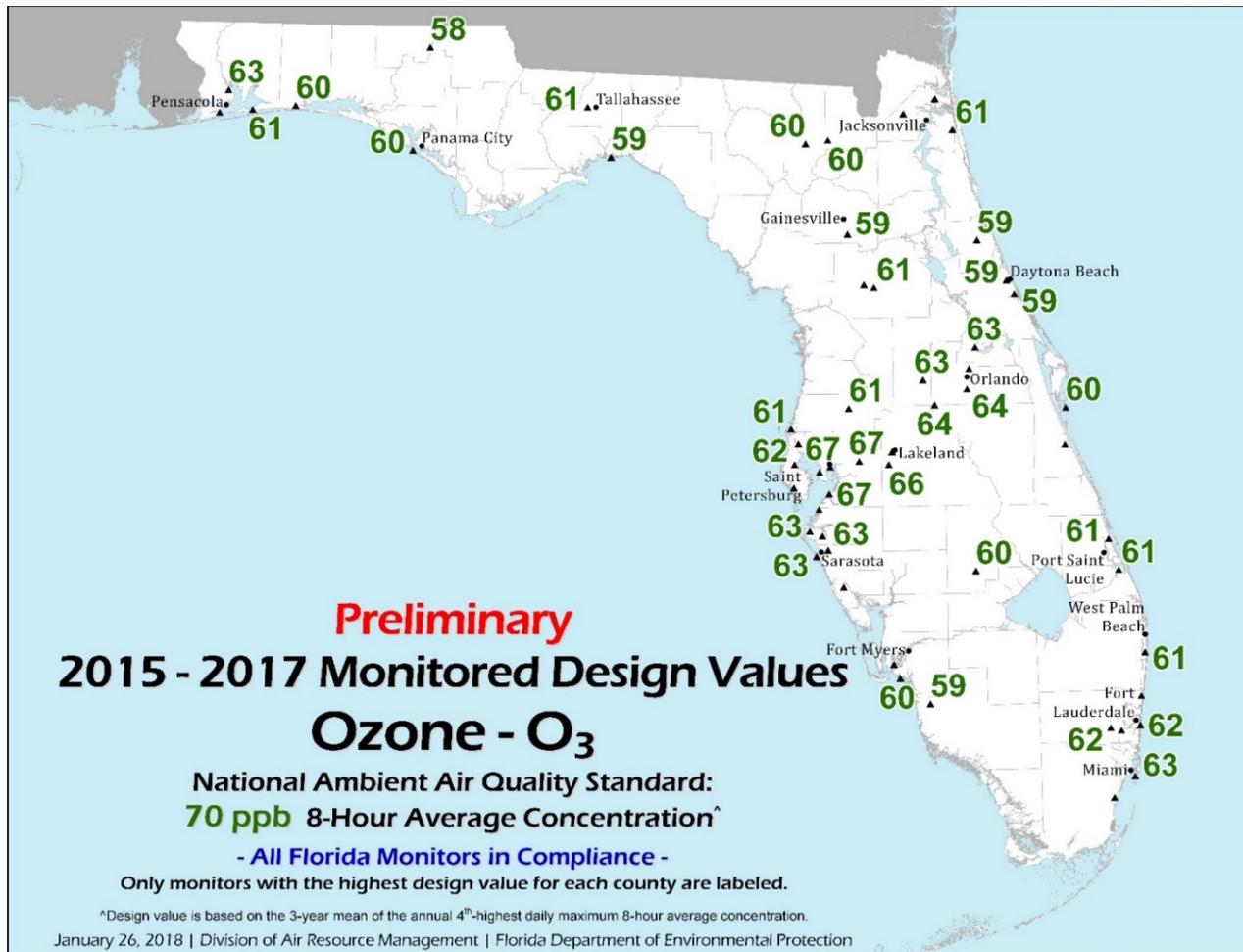


February 21, 2018 | Division of Air Resource Management | Florida Department of Environmental Protection

Emissions inventories could be used to identify areas that have disproportional levels of NOx emissions.



Ozone Design Values



Design values for ground-level ozone (i.e. smog) could be used to identify areas that have higher concentrations of ground-level ozone.



Emissions Benefits

- The Settlement requires that each State Beneficiary Mitigation Plan provide a description of the **expected range of emissions benefits** (i.e. total estimated tons of NO_x reductions) to be achieved under the plan.
- This will vary depending on the considerations that guide the project selection process.

FOR CONTEXT:

- Approximately 33,160 of the 580,000 affected VW vehicles were in Florida.
- The Department estimates that these vehicles emitted approximately 500 tons of excess NO_x per year.





Emissions Benefits

Example Eligible Mitigation Actions

Replacing old on-road diesel vehicles with new diesel vehicles

- Emissions estimated using EPA's Diesel Emissions Quantifier (DEQ) tool.
- New alternate fuel vehicle emissions closely approximate new diesel fuel vehicle emissions. Replacing with electric would result in lower emissions.

DEQ Inputs
Model year 1999 Annual mileage: 30,000
Model year 1999 Annual mileage: 15,000
Model year 1999 Annual mileage: 45,000



Type	NO _x Emissions (lbs/yr)			PM Emissions (lbs/yr)		
	Eligible Unit	New Unit	% Reduced	Eligible Unit	New Unit	% Reduced
Class 8 Truck	686	44	94%	42	2	95%
School Bus	266	22	92%	19	0.4	98%
City Bus	1,764	100	94%	89	1.6	98%



Emissions Benefits

Example Eligible Mitigation Actions

Replacing old non-road diesel units with new diesel units

- Emissions estimated using EPA's Diesel Emissions Quantifier (DEQ) tool.
- New alternate fuel vehicle emissions closely approximate new diesel fuel vehicle emissions. Replacing with electric would result in lower emissions.

DEQ Inputs	Type	NO _x Emissions (lbs/yr)			PM Emissions (lbs/yr)		
		Eligible Unit	New Unit	% Reduced	Eligible Unit	New Unit	% Reduced
1,000 HP Tier 0 engine Annual hours of operation: 3,000 	Switcher Locomotive	9,518	542	94%	236	6	97%
Two 1,000 HP uncontrolled engines Annual hours of operation: 1,000 	Tug Boat	28,702	796	97%	3,798	76	98%
175 HP uncontrolled engine Annual hours of operation: 1,000 	Airport Equipment	1,956	64	97%	264	2	99%



Next Steps

- The **Diesel Emissions Mitigation Program Public Survey** will be available online through May 11, 2018.
- The Department will use responses obtained through this survey in developing Florida's State Beneficiary Mitigation Plan.
- Individuals interested in submitting **general comments** on Florida's approach to the developing the State Beneficiary Mitigation Plan may also **email** those comments to: VWMitigation@FloridaDEP.gov
- At this time, **the Department is not soliciting funding requests** or proposals for any specific diesel emissions mitigation project.



Important Links

[Volkswagen Settlement Webpage](#)

[Diesel Emissions Mitigation Program Public Survey](#)

Volkswagen Settlement Email Subscription Sign-Up:

<https://floridadep.gov/subscribe>

Contact Information

Division of Air Resource Management:

John Paul Fraites, (850) 717-9021

Diesel Emissions Mitigation Program Email:

VWMitigation@FloridaDEP.gov



Florida Department of Environmental Protection

Florida's Diesel Emissions Mitigation Program

Questions?