

**OKLAHOMA VOLKSWAGEN  
BENEFICIARY MITIGATION PLAN  
2024 UPDATE**

**UPDATED: June 20, 2024**

**LEAD AGENCY:**

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**OVERSIGHT AGENCY:**

**OKLAHOMA OFFICE OF THE SECRETARY OF ENERGY AND ENVIRONMENT**

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# **The goal of the Oklahoma Beneficiary Mitigation Plan is to cost-effectively reduce mobile Nitrogen Oxides (NOx) emissions throughout the State.**

## **I. BACKGROUND**

On October 25, 2016 and May 17, 2017, respectively, the Court entered the First and Second Partial Consent Decrees in *In re: Volkswagen "Clean Diesel" Marketing, Sales Practices and Products Liability Litigation*, MDL Case No. 2672 CRB (JSC). Pursuant to the Consent Decrees and entry of the subsequent Environmental Mitigation Trust Agreement on October 2, 2017, an Environmental Mitigation Trust was created for the purpose of funding actions mitigating excess Nitrogen Oxides (NOx) emitted by affected Volkswagen 2.0 L and 3.0 L diesel vehicles (Subject Vehicles). Wilmington Trust, N. A. has been named Trustee of the Volkswagen State Mitigation Trust. The initial settlement allocation for the State of Oklahoma is \$19,086,528.11 for 2.0 L vehicles and \$1,835,957.01 for 3.0 L vehicles, amounting to a total initial allocation of \$20,922,485.12.

The Oklahoma Beneficiary Mitigation Plan (BMP) expresses the intent of the State of Oklahoma to accept the allocated Trust funds as set forth in the State Trust Agreement. The purpose of the Oklahoma BMP is to provide the public with insight into Oklahoma's high-level vision for use of the Trust funds and information about the specific uses for which funding is expected to be requested. As stated in Section 4.1 of the State Trust Agreement, the BMP is not binding, nor does it create any rights in any person to claim an entitlement of any kind. Oklahoma may adjust its goals and specific spending plans at its discretion and, if it does so, shall provide the Trustee with updates to the Oklahoma BMP.

Oklahoma Executive Order 2017-33, signed on October 30, 2017, designates Oklahoma Department of Environmental Quality (DEQ) as the Lead Agency to act on behalf of and legally bind the State of Oklahoma with respect to the State Mitigation Trust, with oversight provided by the Oklahoma Office of the Secretary of Energy and Environment (OSEE).

### ***Initial Public Stakeholder Process***

DEQ initiated a stakeholder process on November 3, 2017. On this date, an official public comment period was opened through which DEQ requested comments prior to drafting the BMP. Stakeholders were notified of the public comment period through the DEQ website, email newsletters, social media, and collaboration with other interest groups. Written comments were accepted into the public record until December 5, 2017. The public comment period concluded with a public listening session on December 5, 2017, during which DEQ and the OSEE presented information on the Volkswagen Trust and accepted oral and written comments from stakeholders. Upon conclusion of the first public comment period, all stakeholder comments were considered in creating the BMP.

The first draft of the BMP was published on the DEQ website on April 24, 2018. On this date, comments were invited on the proposed BMP. Stakeholders were notified of the comment period through the DEQ website, email newsletters, social media, and collaboration with other interest groups. Written comments were accepted into the public record until May 24, 2018. During the comment period, a meeting was held on May 8, 2018, during which DEQ presented an overview of the BMP and accepted oral and written comments. All BMP comments received by the May 24<sup>th</sup> deadline were reviewed and considered by DEQ and OSEE staff. The decision was made to finalize and submit the proposed BMP without changes, reserving the right to amend the BMP at a later date, as necessary, pursuant to Section 4.1 of the State Trust Agreement. In addition, all comments received from stakeholders will continue to be taken into

consideration during program planning and future stages of Oklahoma's participation in the Volkswagen State Mitigation Trust.

### ***2021 Update Background and Purpose***

Since the original publication of the BMP, Oklahoma has initiated four programs that utilize the Volkswagen Settlement funding, and new data under the National Emissions Inventory (NEI) has been published that has changed the priority counties in the state. The 2017 NEI data and documentation was released in April 2020 and updated in January 2021; this new data changes the Top 10 Mobile NOx Counties by replacing Rogers, McClain, Grady, and Garvin counties with Muskogee, Garfield, Pottawatomie, and Ottawa counties.

The updated BMP was posted on the DEQ website (<https://www.deq.ok.gov/air-quality-division/volkswagen-settlement/>) on July 12, 2021 for a 30 day public comment period prior to submittal to the trust on August 16, 2021. Similarly, when the initial BMP was published for public review, the updated version was made available to the public for any stakeholders to comment. DEQ received one comment from stakeholders and submitted the updated BMP to the Trust on August 16, 2021.

### ***2024 Update Background and Purpose***

Using Volkswagen Settlement funding, Oklahoma has operated all five programs as anticipated in the original BMP. During the timeframe of these programs, the NEI has been updated. The most recent update in 2023 made data available from 2020 and has resulted in changed priority counties regarding NOx emissions. This change removes Comanche, Ottawa, and Pottawatomie Counties from the Top 10 Mobile NOx list and adds Rogers, McClain, and Woodward Counties.

This update includes the re-allocation of funding across the Eligible Mitigation Action categories. After conducting projects in all indicated categories, Oklahoma has determined certain categories to have been more successful than others. Therefore, moving allocations from less successful categories to categories experiencing better project success is necessary to fulfill the Trust agreement. These allocation changes are indicated in Section II of this document.

In addition, this update provided the opportunity to correct grammar and wording discrepancies. The most substantial of these corrections was changing the term Off-Road to the more widely used term Non-Road.

The updated BMP was posted on the DEQ website (<https://www.deq.ok.gov/air-quality-division/volkswagen-settlement/>) on May 15, 2024 for a 30 day public comment period prior to submittal to the trust on June 20, 2024. As when previous versions of the BMP were published for public review, the updated version was made available to the public for any stakeholders to comment. DEQ received one comment from stakeholders and submitted the updated BMP to the Trust on June 20, 2024.

## **II. SELECTED MITIGATION ACTIONS**

Oklahoma will consider all Eligible Mitigation Actions listed in Appendix D-2 to the State Trust Agreement except for Ocean Going Vessels Shorepower, but priority will be given to those projects which most closely support the State's goal. This 2024 update reflects the distribution of the Flex Fund between the DERA and On-Road categories, which have been the most successful of these funding programs. Table 1 and Chart 1 contains an estimation of funding percentages for each mitigation action category. A more detailed description of each funding category follows.

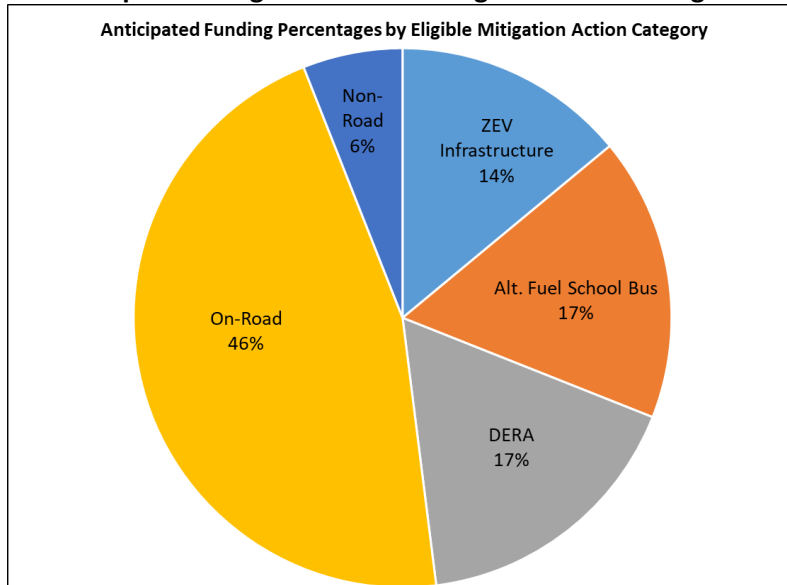
Project-End Adjustment Clause:

At the end of each program, it is expected for some amount of funds to remain due to projects coming in underbudget and/or an inability to award the complete amount. DEQ reserves the right to move remaining funds at program end to DERA and/or the On-Road Program, without amending the BMP. This will result in variation between the estimates below and the final funding percentages.

**Table 1: Anticipated Eligible Mitigation Action Categories and Funding Percentages**

<b>Eligible Mitigation Action Category</b>	<b>Funding %</b>
Alternative Fuel School Bus Program	17%
DERA Grants <ul style="list-style-type: none"><li>• School Buses</li><li>• Retrofits and other DERA-only projects</li></ul>	17%
On-Road Program <ul style="list-style-type: none"><li>• 1: Class 8 Local Freight Trucks and Drayage Trucks</li><li>• 2: Class 4-8 Shuttle Bus or Transit Bus</li><li>• 6: Class 4-7 Local Freight Trucks</li></ul>	46%
Non-Road Program <ul style="list-style-type: none"><li>• 3: Freight Switchers</li><li>• 4: Ferries/Tugs</li><li>• 7: Airport Ground Support Equipment</li><li>• 8: Forklifts and Port Cargo Handling Equipment</li></ul>	6%
Light Duty Zero Emission Vehicle Supply Equipment	14%
Reserve Flex Funding	0%
Interest <ul style="list-style-type: none"><li>• Accrued interest will be allocated as necessary according to needs and program success</li></ul>	
<b>TOTAL</b>	<b>100%</b>

**Chart 1: Anticipated Mitigation Action Categories and Funding Percentages**



***ZEV Infrastructure: 14%***

Oklahoma will utilize 14% of Trust funds toward *Category 9, Zero Emission Vehicles Supply Equipment*. In this way, the State can reduce emissions from On-Road non-Diesel Light Duty Vehicles, a sector that contributes significant quantities of NOx to Oklahoma’s annual emissions inventory. During the stakeholder process, near unanimous support was given to use all 15% allowed towards publicly accessible ZEV electric charging stations. Following initial publication of the first Oklahoma BMP, the full 15% was made available for electric charging through the ChargeOK funding program. Portions of the program ran under budget, and the final amount spent was 14%.

***Alternative Fuel School Bus Program: 17%***

During the stakeholder process, many comments were received supporting the use of Trust funds for school buses. Initially, 20% of Trust funds were allocated towards funding a variety of alternative fuel school bus projects described under Eligible Mitigation Action Category 2, Appendix D-2 of the State Trust Agreement, while funding for diesel school bus projects remained available under the existing Diesel Emissions Reduction Act option. Separation of alternative fuel school bus projects from the DERA program allowed more flexibility in setting match requirements for this type of project.

After running the Alternative Fuel School Bus Program successfully for several years, success of the program has begun to show a decline in interest from applicants. Therefore, DEQ is in the process of closing this program and re-incorporating alternative fuel school bus projects back into the DERA program. The final amount spent is estimated to be 17%.

***Diesel Emissions Reduction Act Match Funding: 17%***

In many of the past funding cycles, DEQ has used the Diesel Emissions Reduction Act (DERA) grant program to fund school bus projects. A few comments were also received supporting the use of technologies such as retrofits, which are accepted under the DERA program, but are ineligible under other Eligible Mitigation Action categories listed in Appendix D-2 of the State Trust Agreement. Using the DERA option of Appendix

D-2 allows Trust funds to be used as a State match to leverage additional monies, making DERA a cost-effective option and increasing project opportunities.

Over the past several years, interest and success in the DERA program remains strong, and funding at the federal level has increased, which means a higher match is required at the state level to leverage additional monies. For these reasons, the percentage is being increased from 10% to 17%.

***On-Road Program: 46%***

The On-Road Program funding allotment includes Categories 1, 2, and 6 of Appendix D-2. However, because diesel school bus projects are included in the 17% of funding allocated for the DERA option and the Alternative Fuel School Bus program has been allocated 17% of available funds, school buses will not be eligible under the 46% allocated for On-Road Projects. All other potential projects described under Categories 1, 2, and 8 of Appendix D-2, including shuttle and transit buses, will be eligible to receive a portion of this 46%.

Because On-Road Heavy Duty Diesel Vehicles contribute the most NO<sub>x</sub> to Oklahoma's emissions inventory, more funds will be reserved for projects reducing emissions from those sources. As of the 2024 update, changing technologies are opening new demand and opportunity for conversion of some fleets to hydrogen fuel. The On-Road Program has also been among the most successful, so estimated percentages are being increased from the original 20% to 46%.

***Non-Road Program: 6%***

The Non-Road Program funding allotment includes all potential projects as described in Categories 3, 4, 7 and 8 of Appendix D-2. Several comments were received supporting projects involving freight switchers, airport ground support equipment, and forklifts and port cargo handling equipment. Each of these projects were made eligible under the Non-Road Program.

Although Oklahoma is not known for marine transport and Commercial Marine Vessels are not highly ranked as a contributing sector to Oklahoma's ambient NO<sub>x</sub> levels, this category was not eliminated as a potential project. During the stakeholder process, comments were received supporting ferry boat projects. While such a project would not rank highly according to the National Emissions Inventory Target Sectors described in Section IV, it is possible that such a project would have been selected over other project applications if it had ranked highly on *Mobile NO<sub>x</sub> Emissions Reductions in Historically High Ozone Areas*, *Mobile NO<sub>x</sub> Emissions Reductions in Registered Volkswagen Vehicle Areas*, and/or *Cost Effectiveness*.

This program was launched in 2023, and there were not enough applicants to award the originally allocated 20%. Therefore, DEQ is in the process of closing this program. The final amount spent is estimated to be 6%.

***Reserve Flex Funding: 0%***

The Reserve Flex Funding (originally set at 15%) is re-allocated with this update. DEQ has assessed results of the program, changing market conditions and technology advancements, and re-allocated Reserve Flex Funding accordingly. Funds are being distributed between the DERA and On-Road programs.

### III. ESTIMATED EMISSIONS BENEFITS

Anticipated emissions benefits from these projects will vary widely and will depend upon the details of each individual project. For vehicle replacement and retrofit projects, factors which may affect emissions calculations include vehicle classification and weight rating, horsepower, year of engine manufacture, fuel, and details of operation (gears, miles, hours of use, speed, etc.). For ZEV infrastructure projects, factors which may affect emission reduction calculations may include amount of use/charges given, types of vehicles being replaced, types of vehicle miles being driven, and fuel mix of the power pool. Because many of these details can only be obtained after individual vehicles and projects have been identified and selected, current emission reduction estimations must rely on broad descriptions and project examples. More precise calculations can be performed after project selection and completion.

While the majority of eligible mitigation actions will garner co-benefits of emission reductions for many pollutants, projects will be analyzed primarily based upon mobile NOx emission reductions because the Volkswagen Settlement Trust Fund was created specifically to mitigate excess emissions of this pollutant. Very basic estimated mobile NOx emissions benefits for each project category, along with reductions from example projects, are as follows:

#### **Category 1: Class 8 Local Freight Trucks and Drayage Trucks**

Depending on the specific project and heavily variable by fuel type and EMY, a project which replaces or repowers a Class 8 diesel truck may expect to see NOx emissions reductions which range from 35-100%.

Category 1 Project Example		
Vehicle/Equipment Description	Project Description	% NOx Emission Reductions
Class 8 Diesel Freight Truck, EMY 2008	Replace with Class 8 Diesel Freight Truck, EMY 2018, CARB low-NOx certified (0.05) engine	92.3*

\*Example calculated by ERG Diesel Funding Optimizer.

#### **Category 2: Class 4-8 School Bus, Shuttle Bus, or Transit Bus**

Depending on the specific project and heavily variable by vehicle class and EMY, a project which replaces or repowers a Class 4-8 diesel bus may expect to see NOx emissions reductions which range from 29-100%.

Category 2 Project Example		
Vehicle/Equipment Description	Project Description	% NOx Emission Reductions
EMY 2010 Diesel Transit Bus	Replace with EMY 2018 CNG Transit Bus	69*

\*Example calculated by ERG Diesel Funding Optimizer.



### **Category 3: Freight Switchers**

Depending on the specific project and heavily variable by Tier, fuel type, and operating hours, a project which replaces or repowers a locomotive freight switcher may expect to see NOx emissions reductions which range from 78-100%.

<b>Category 3 Project Example</b>		
Vehicle/Equipment Description	Project Description	% NOx Emission Reductions
Tier 3 Locomotive Switcher using 19,400 gallons of fuel per year	Repower with 2018 All-Electric Engine	100*
Tier 2 Locomotive Switcher	Repower with 2018 Tier 4 engine	86*

\*Calculations are from EPA's Diesel Emissions Quantifier.

### **Category 4: Ferries/Tugs**

Depending on the specific project and heavily variable by Tier, fuel, and technology type, a project which replaces, repowers, or upgrades a ferry or tugboat may expect to see NOx emissions reductions which range from -10-100%. The possible negative and 0% NOx emission reductions would occur after installation of a few selected EPA-verified engine upgrade kits. While most engine upgrade kits produce significant reductions in NOx emissions, a few of these kits produce zero or an increase in NOx emissions while reducing emissions other than NOx. However, projects which do not produce NOx emission reductions will not be eligible under Oklahoma's Volkswagen settlement funding programs.

<b>Category 4 Project Example</b>		
Vehicle/Equipment Description	Project Description	% NOx Emission Reductions
Tier 2 Diesel Ferry Boat	Install EPA certified engine upgrade kit: Caterpillar Emissions Upgrade Group	37*

\*Calculated manually from federal emission standards.

### **Category 6: Class 4-7 Local Freight Trucks**

Depending on the specific project and heavily variable by vehicle class, fuel type, and EMY, a project which replaces or repowers a Class 4-7 freight truck may expect to see NOx emissions reductions which range from 78-100%.

<b>Category 6 Project Example</b>		
Vehicle/Equipment Description	Project Description	% NOx Emission Reductions
EMY 2001 Class 4 Diesel Truck	Replace with EMY 2018 Class 4 Diesel Truck	91*

\*Example calculated by ERG Diesel Funding Optimizer.

### **Category 7: Airport Ground Support Equipment**

Because only all-electric replacements and repowers are eligible, NOx emission reductions from eligible airport ground support equipment are 100%.

Category 7 Project Example		
Vehicle/Equipment Description	Project Description	% NOx Emission Reductions
Certified 5 g/bhp-hr spark-ignition airport ground support equipment	Replace with all-new electric ground support equipment	100*

\*Although it is understood that some emissions will be emitted upstream by electric generation, calculations depicted reflect zero emission vehicle exhaust.

**Category 8: Forklifts and Port Cargo Handling Equipment**

Because only all-electric replacements and repowers are eligible, NOx emission reductions from eligible forklifts and port cargo handling equipment are 100%.

Category 8 Project Example		
Vehicle/Equipment Description	Project Description	% NOx Emission Reductions
Forklift with 8000 lb capacity	Repower with electric engine	100*

\*Although it is understood that some emissions will be emitted upstream by electric generation, calculations depicted reflect zero emission vehicle exhaust.

**Category 9: Light Duty Zero Emission Vehicle Supply Equipment**

Emission reductions resulting from the installation of ZEV supply equipment will be difficult to quantify. The most accurate reduction estimates will be based on vehicle miles displaced by use of the charging station as well as the fuel mix of the electric grid at a given point in time. Emission reductions will vary dependent upon number and type of vehicle miles, as well as vehicle classification and fuel type. It is likely that emission reductions from these charging stations will be low initially but grow over time as people become more aware of the locations of the charging stations and as electric vehicles become more prevalent. “Free ridership,” or the number of ZEV miles that would have occurred regardless of the existence of the project-funded charging station, cannot be avoided or quantified. However, the increase in ZEV purchases that result from the existence of project-funded charging stations and any emission reductions from those extra vehicles which occur statewide will also not be quantifiable. We will be able to create much more accurate emission reduction estimates for these projects after they are completed. For the purposes of this BMP, because all projects are removing miles traveled by an emissions-generating vehicle and replacing it with miles driven by a ZEV, NOx emission reductions are assumed to be 100%.

Category 9 Project Example	
Project Description	% NOx Emission Reductions
Installation of 4 electric fast-charge stations in front of a local theater venue	100

\* Although it is understood that some emissions will be emitted upstream by electric generation, calculations depicted reflect zero emission vehicle exhaust.

**Category 10: DERA Grants**

Depending on the specific project and heavily variable by project type, EMY, and GVWR, a project which replaces, repowers, or retrofits a DERA-eligible vehicle may expect to see NOx emissions reductions which range from 20-100%.

Category 10 Project Examples		
Vehicle/Equipment Description	Project Description	% NOx Emission Reductions
School Bus, Diesel Fuel, EMY 1997	Replacement with EMY 2018 Diesel Fuel vehicle	96

\*Calculations are from EPA’s Diesel Emissions Quantifier.

#### IV. PRIORITIES

**The goal of the Oklahoma Beneficiary Mitigation Plan is to cost-effectively reduce mobile NOx emissions throughout the State.** The methods by which Oklahoma intends to meet this goal are described in the priorities below.

##### **Cost-Effectiveness**

To achieve the greatest overall tonnage of mobile NOx emissions reduction, Oklahoma will prioritize projects that are most cost effective in terms of cost per ton of mobile NOx reduced. Cost effectiveness will be determined by the estimated reductions, the price and technology type of each proposed project, and the percentage of project match offered by applicants.

##### **Mobile NOx Emissions Reduction**

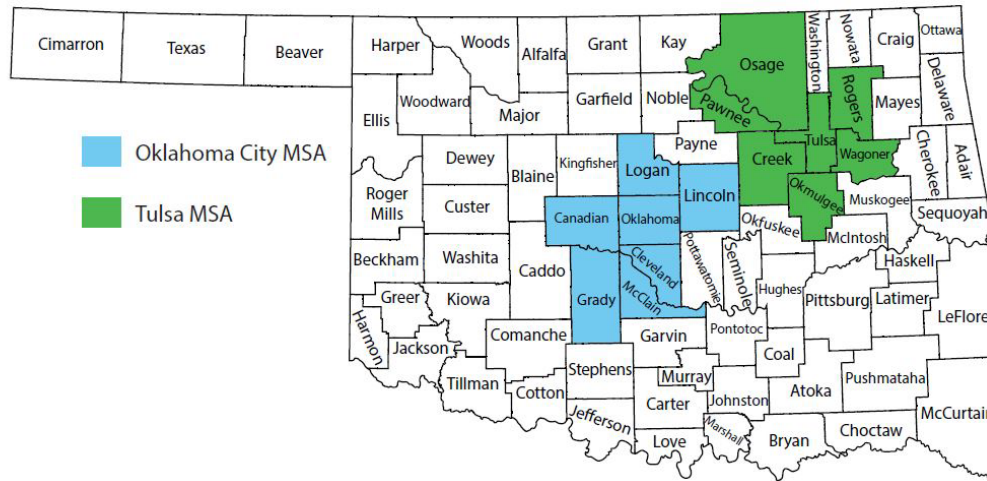
Oklahoma will give priority to projects that fall within geographical areas and emission sectors that have the greatest impact on Oklahoma’s overall mobile NOx emissions as described below.

##### ***Mobile NOx Emissions Reductions in Historically High Ozone Areas***

Within Oklahoma, the most significant negative impact of mobile NOx is its contribution to the formation of ambient ozone, Oklahoma’s primary pollutant of concern. Thus, geographical areas with high ozone design values will be targeted.

While Oklahoma does not have difficulty maintaining compliance with the National Ambient Air Quality Standards (NAAQS) for NOx, certain factors create a challenge in maintaining ozone levels compliant with the NAAQS, including: Oklahoma’s topography, climate, spread-out centers of population, and proximity to upwind population centers. Because formation of ozone is the State’s most significant negative impact from NOx pollution, Oklahoma will favor Eligible Mitigation Actions that propose to reduce ambient ozone in counties with the most likelihood of exceeding the ozone NAAQS. These counties (Map 1), which make up the Oklahoma City and Tulsa Metropolitan Statistical Areas, are identified by observed high ozone design values as well as the frequency and occurrence of Ozone Watch and Ozone Alert Days.

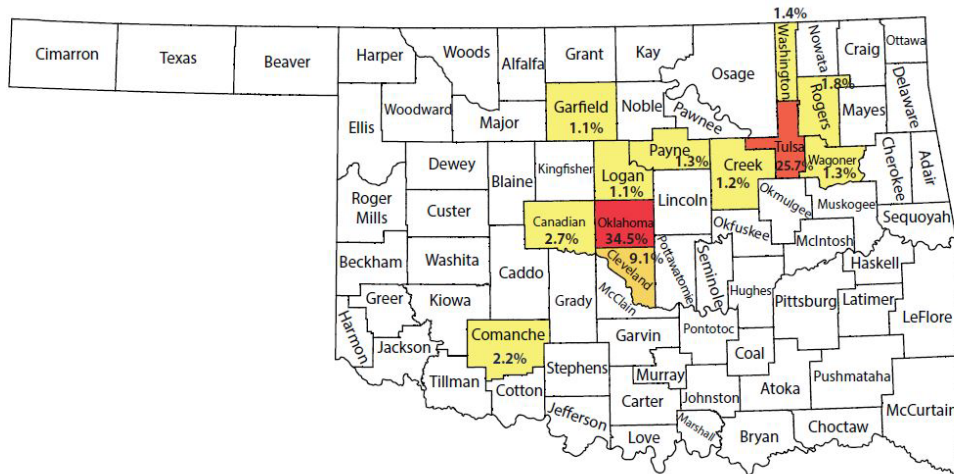
**Map 1:  
Oklahoma City and Tulsa Metropolitan Statistical Areas**



**Mobile NOx Emissions Reductions in Volkswagen Registration Areas**

Given existing databases, an exact count of Subject Vehicles by area is difficult to accurately gauge. The Oklahoma Attorney General reported that there were 3,855 Subject Vehicles in Oklahoma (Petition Complaint at ¶17, *State v. Volkswagen AG, et al.*, No. CJ-2016-3047 (Dist. Ct. Okla. Cty. Okla. June 15, 2016)). Based on Oklahoma Tax Commission data and filtering by year and model, it was determined that there were 5,894 gasoline and diesel Volkswagen, Audi, and Porsche vehicles registered statewide in 2016. A reasonable estimate for the location of Subject Vehicles has been derived from the number of Volkswagen, Audi, and Porsche vehicle registrations in each county for Subject Vehicle years (Map 2). Mobile-source projects funded in these counties will assist in mitigating existing impacts previously emitted from Subject Vehicles.

**Map 2:  
Counties with >1% of Estimated Affected VW (et al.) Vehicles**



### **Mobile NOx Emissions Reductions in National Emissions Inventory Target Sectors and Areas**

In addition to targeting geographical areas with high ozone values, Oklahoma also intends to target Eligible Mitigation Actions on mobile source sectors and areas contributing the most NOx to the 2020 National Emissions Inventory (NEI). This inventory represents the most recent data.

A summary of NOx emissions from Oklahoma's mobile source sectors can be seen below in Table 2, Chart 2, and Chart 3. The NEI sectors do not precisely match the Eligible Mitigation Action categories described in Appendix D-2 of the State Trust Agreement, but they correlations can still be drawn. In the NEI, Heavy Duty Vehicles begin at 8,501 lbs. For comparison to terminology used in the State Trust Agreement, this includes vehicles of Gross Vehicle Weight Rating (GVWR) 2 and above.

Based on the following 2020 NEI data, project priorities will include the top four emission sectors: On-Road Diesel Heavy Duty Vehicles, On-Road non-Diesel Light Duty Vehicles (to be targeted tangentially through *Category 9: ZEV Supply Equipment*), Locomotives, and Non-Road Diesel Equipment.

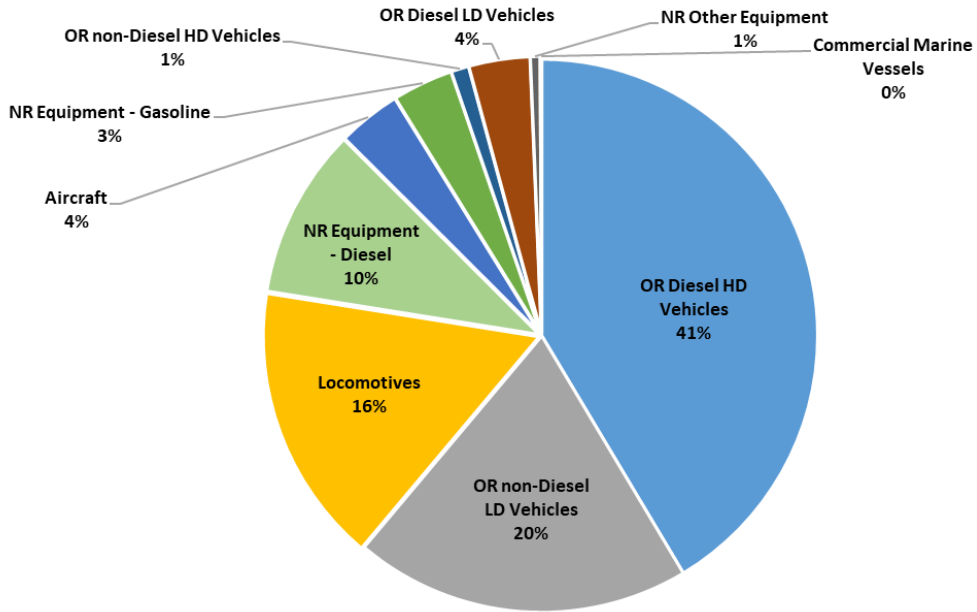
It is not required that Eligible Mitigation Action Projects impact these sectors to receive funding. Projects which impact emissions from other sectors may be funded if they rank highly in *Mobile NOx Emissions Reductions in Geographical Target Areas*, *Mobile NOx Emissions Reductions in Volkswagen Registration Areas*, and *Mobile NOx Emissions Reductions in Cost Effectiveness*.

**Table 2: Oklahoma 2020 NEI Mobile Source NOx Emissions and Correlating App. D-2 Categories**

<b>SECTOR</b>	<b>NOx (tons)</b>	<b>App. D-2 Category Correlation</b>
On-Road non-Diesel Light Duty Vehicles	15,242	Category 9
On-Road Diesel Heavy Duty Vehicles	32,023	Categories 1, 2, 6
Locomotives	12,652	Category 3
Non-Road Equipment - Diesel	7,702	Categories 7,8
Aircraft	2,866	n/a
On-Road Diesel Light Duty Vehicles	2,766	n/a
Non-Road Equipment - Gasoline	2,744	Categories 7,8
On-Road non-Diesel Heavy Duty Vehicles	801	Categories 1, 2, 6
Non-Road Equipment - Other	438	n/a
Commercial Marine Vessels	69	Category 4

**Chart 2\*:**

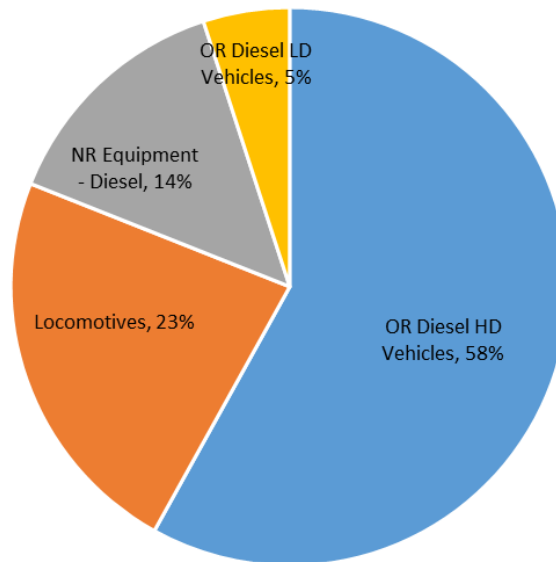
**NOx Mobile Emissions Inventory for Oklahoma (2020 NEI)**



\*Where OR=On-Road, NR=Non-Road, HD=Heavy Duty, and LD=Light Duty

**Chart 3\*:**

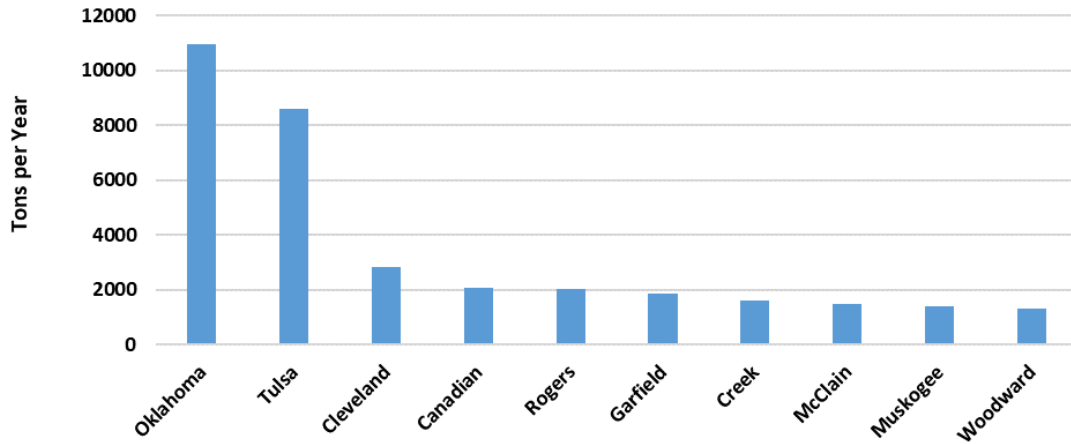
**NOx Mobile Diesel-Powered Emissions Inventory for Oklahoma (2020 NEI)**



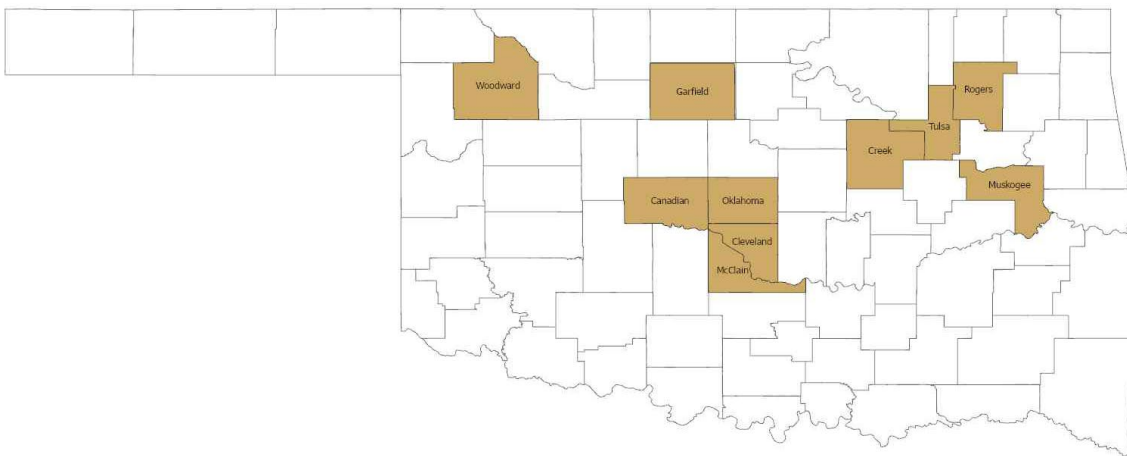
\*Where OR=On-Road, NR=Non-Road, HD=Heavy Duty, and LD=Light Duty

The National Emissions Inventory can be used to identify Oklahoma counties with the most mobile NOx emissions. Oklahoma will give greater consideration to projects occurring in those counties that comprise the top 10 contributors of this sector as depicted below in Chart 4 and Map 3.

**Chart 4:**  
**Top 10 Counties for Mobile NOx Emissions  
in Oklahoma (2020 NEI)**



**Map 3:**  
**Top 10 Oklahoma Counties by All Mobile NOx Emissions (2020 NEI)**



**Geographic Overview of Mobile NOx Emissions Reductions**

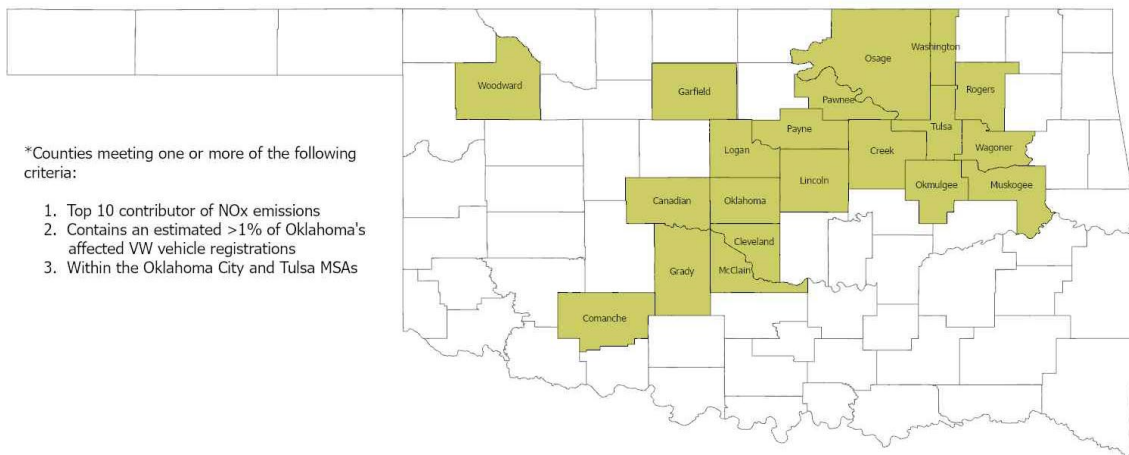
Funding is not limited to the counties identified in the above analyses. However, greater consideration may be given to said counties during the selection process. A summary of these counties is given in Table 3 and Map 4.

**Table 3: Priority Counties**

Oklahoma City MSA	Tulsa MSA	>1% VW Registration	Top 10 Mobile NOx
Canadian	Creek	Canadian	Canadian
Cleveland	Okmulgee	Cleveland	Cleveland
Grady	Osage	Comanche	Creek
Lincoln	Pawnee	Creek	Garfield
Logan	Rogers	Garfield	McClain
McClain	Tulsa	Logan	Muskogee
Oklahoma	Wagoner	Oklahoma	Oklahoma
		Payne	Rogers
		Rogers	Tulsa
		Tulsa	Woodward
		Wagoner	
		Washington	

**Map 4:**

Priority Counties\*



**Extra Considerations for Mobile NOx Emissions Reductions**

Projects that occur outside of target counties but focus on a geographical area bearing a disproportionate share of the air pollution burden will also receive priority. DEQ considers areas bearing a disproportionate share of air pollution burden to include counties that show historically high ozone concentrations,



counties in which the greatest number of Subject Vehicles have been registered, and areas that receive a disproportionate share of traffic from diesel fleets. Section V herein contains more detail on what locations may necessitate extra consideration for bearing a disproportionate share of air pollution burden.

Geographical location will be important in the ranking and selection of projects but will not be considered a funding requirement. Projects that do not demonstrate any of the above geographical priorities will also be considered. Such projects occurring outside of target areas may be selected for funding if they rank highly in National Emissions Inventory Target Sectors and *Cost Effectiveness*.

## **V. ENVIRONMENTAL IMPACT**

DEQ will consider the potential beneficial impact of Eligible Mitigation Actions on air quality in areas within its jurisdiction that bear a disproportionate share of the air pollution burden by giving funding priority to certain geographical areas. For more detail, see *Section II, Mobile NOx Emissions Reductions*.

In addition, Oklahoma also considers those air quality locations which bear a disproportionate share of air pollution burden from diesel fleets to be those which meet the following criteria:

- The I-40, I-35, and I-44 traffic corridors
- Truck stops
- Ports
- Rail yards
- Terminals of freight or passenger lines
- Construction sites
- Bus Depots/yards
- Distribution centers

## **VI. PUBLICLY AVAILABLE INFORMATION**

As Oklahoma moves forward with utilizing these funds, the State commits to make publicly available all funding requests and related records submitted by the State to the Trustee for mitigation projects, along with details on all expenditures of Trust Funds. These records and a copy of the published BMP are available on the DEQ website at the link below:

<https://www.deq.ok.gov/air-quality-division/volkswagen-settlement/volkswagen-settlement-history/>

DEQ will submit semiannual progress reports to the Trustee for each Eligible Mitigation Action, no later than six months after receiving the first disbursement of Trust Assets, and thereafter no later than January 30 and July 30 of each year. More about the contents of semiannual reports appear in Section 5.3 in the State Trust Agreement.

## **VII. CLOSING STATEMENTS**

The Eligible Mitigation Actions outlined within this BMP represent the best and most cost-effective methods to mitigate negative impacts of excess mobile NOx emissions from affected Volkswagen vehicles. This BMP is intended to be broad enough and flexible enough to last the duration of the Trust; however, Oklahoma retains the right to adjust goals and amend the BMP at some future date as permitted in Section 4.1 of the State Trust Agreement.

## DEFINITIONS AND ACRONYMS

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“Appendix D-2” shall mean Appendix D-2 to the State Trust Agreement, which lists eligible mitigation actions.

“Beneficiary” shall mean the State of Oklahoma, acting as the governmental entity determined to be a Beneficiary pursuant to Section IV of the Environmental Mitigation Trust Agreement for State Beneficiaries.

“Court” shall mean the United States District Court for the Northern District of California.

“Eligible Mitigation Action” shall mean any of the actions listed in Appendix D-2 to the State Trust Agreement.

“EMY” shall mean Engine Model Year.

“DEQ” shall mean the Oklahoma Department of Environmental Quality.

“Design Values” shall mean the ozone design value used by EPA to designate and classify an area as to whether it attains or does not attain the National Ambient Air Quality Standard (NAAQS). In 2015, EPA lowered the ozone NAAQS to an 8-hour standard of 0.070 parts per million (ppm) to be calculated as described in 40 CFR Part 50. A monitoring site attains the 8-hour ozone standard when the last 3-year average of the annual fourth-highest daily maximums is less than or equal to 0.070 ppm.

“GVWR” shall mean “Gross Vehicle Weight Rating”

“Lead Agency” is the lead for purposes of the Beneficiary’s participation in the Environmental Mitigation Trust (“Trust”) as a beneficiary, and has the delegated authority to act on behalf of and legally bind the Beneficiary for purposes of the Trust.

“State Trust Agreement” shall mean the final, executed Environmental Mitigation Trust Agreement for State Beneficiaries filed with the Court on October 2, 2017 in *In re: Volkswagen “Clean Diesel” Marketing, Sales Practices and Products Liability Litigation*, MDL Case No. 2672 CRB (JSC).

“State Mitigation Trust” or “Trust” shall mean the Environmental Mitigation Trust established for State Beneficiaries.

“Subject Vehicles” shall mean: (i) the “2.0 Liter Subject Vehicles,” as defined in the First Partial Consent Decree in *In re: Volkswagen “Clean Diesel” Marketing, Sales Practices, and Products Liability Litigation*, MDL No. 2672 CRB (JSC) (Dkt. No. 2103-1); and (ii) the “3.0 Liter Subject Vehicles,” as defined in the Second Partial Consent Decree in that case (Dkt. No. 3228-1).

“Trust Effective Date” or “TED” shall mean the date that the United States filed the fully executed final version of the State Trust Agreement with the Court, which was October 2, 2017.

“Trustee” shall mean Wilmington Trust, N.A., acting solely in its role as the Trustee of the State Mitigation Trust as appointed in accordance with Paragraph 3.0 of the State Trust Agreement, or a successor trustee pursuant to subparagraph 3.7.2 of the State Trust Agreement. Each reference to the Trustee shall include the Trustee and its officers, directors, and employees.

“ZEV” shall mean Zero Emission Vehicle