



Clean Transit Bus Request for Applications

Prepared by the Montana Energy Office at the Department of  
Environmental Quality

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## Table of Contents

Program Overview.....	3
Purpose.....	3
Point of Contact.....	4
Schedule of Events and Term .....	4
Eligibility Requirements.....	5
Cost Share.....	7
Application Materials and Instructions .....	8
DEQ Priorities and Project Competitiveness .....	8
Appendix A: Project Scoring Criteria Matrix.....	10
Appendix B: Priority Air Quality Counties and Areas .....	11

# Montana Clean Transit Bus Replacement Project 2019 Volkswagen Environmental Mitigation Trust Funding

## **Program Overview**

The Montana Department of Environmental Quality (DEQ) is issuing this Request for Applications (RFA) for Transit Bus replacement projects. This RFA is under the Volkswagen Environmental Mitigation Trust (EMT) Agreement for State Beneficiaries. Montana is a beneficiary of the Trust, and the DEQ has been designated as the lead agency to administer funds allocated to Montana. The purpose of the EMT is to address the additional nitrogen oxides (NOx) emissions from Volkswagen-manufactured diesel vehicles equipped with emissions testing defeat devices in violation of the federal Clean Air Act. Nitrogen oxides (NOx), are a family of poisonous gases that form when diesel and other fuel is burned at high temperatures. NOx pollution can irritate human respiratory function and can exacerbate asthma and increase susceptibility to respiratory infections.

Montana's total allocation of the EMT is \$12,600,000. Under the Volkswagen EMT, states can spend allocated funds on Eligible Mitigation Actions that are intended to mitigate mobile NOx emissions. Certain transit bus replacements are considered an Eligible Mitigation Action under the Trust Agreement. More information about eligible mitigation action categories can be found in Appendix D-2 of the Volkswagen Environmental Mitigation Trust Agreement for State Beneficiaries found here: <http://deq.mt.gov/Energy/transportation/VW-Settlement-Page> under "Settlement Documents."

Through this RFA, DEQ will provide up to \$2,500,000 for distribution to provide reimbursement funding for eligible transit bus replacement projects. The maximum funding request from each project sponsor and individual transit bus replacement varies by replacement bus technology and/or fuel and whether the project sponsor is a governmental or nongovernmental entity. Project cost share requirements also vary by project sponsor type and replacement vehicle technology/fuel. Detailed cost share requirements are provided on page 4 of this RFA.

## **Purpose**

This RFA seeks to support the overall goal of the Volkswagen Environmental Mitigation Trust (EMT) –reduction of mobile source NOx emissions—while also achieving the goals outlined in Montana's Volkswagen EMT Beneficiary Mitigation Plan finalized in October 2018. These goals include:

1. Achieving mobile source NOx emission reductions across Montana; focusing on areas with the highest mobile source NOx emissions.
2. Achieving long-term air quality benefits for the greatest number of Montanans.
3. Investing in clean alternative fuels/infrastructure.
4. Supporting long-term investments in zero-emission public transportation options.
5. Reducing diesel emission exposure of sensitive populations.

This opportunity will fund the replacement of 2009 engine model year or older class 4-8 transit buses with any new all-electric, diesel hybrid, compressed natural gas (CNG), or propane transit buses.

## **Point of Contact**

Starting on the issue date of this RFA, until successful applicants are selected and announced by DEQ, applicants are prohibited from communication regarding this RFA with any other Montana state agency staff, officials or evaluation team members regarding this solicitation, except for Bill Webb at the Department of Environmental Quality. Bill Webb's contact information is: e-mail: [biwebb@mt.gov](mailto:biwebb@mt.gov) and phone: 406-444-6465. Any unauthorized contact may disqualify the applicant from further consideration.

## **Schedule of Events and Term**

All applications along with associated application materials must be submitted to Bill Webb at DEQ by 5:00 pm on the deadline listed for each round funding to be considered eligible for funding.

<b>Date</b>	<b>Event</b>
January 30, 2019	Issue FY2019 Request for Applications for Transit Bus Replacement Funding
February 2019 (Date TBD)	Webinar presentation on transit bus funding opportunity
March 27, 2019	First round of funding applications due to Bill Webb (by 5:00 pm local time)
April 17, 2019	First round of FY2019 project funding selections will be announced
May 22, 2019	DEQ will announce whether another round of funding will be opened under this RFP.
July 31, 2019	Second round of FY2019 applications due to DEQ
August 14, 2019	Second round of FY2019 project funding selections will be announced.
September 11, 2019	DEQ will announce whether another round of funding will be opened under this RFP.

The review team will score and rank complete and eligible applications submitted. If all the funds have not been exhausted in the first round, DEQ will open applications for a second round of application submissions and review. Depending on the funds available, DEQ will also contact each applicant not selected for funding during the first round of project selections to determine if they wish to have their application considered during a second round of project selection, if they'd like to submit a revised application, or if they would like to remove their application from consideration. New and revised applications will be reviewed and ranked alongside continuing project applications and new project selections will be made. DEQ will determine whether to open a third round of funding under this RFP if all the funds have not been exhausted in the first two rounds.

All projects should be completed within 20 months of the contract execution date. Payments for eligible project expenses will be made on a reimbursement basis after DEQ receives all required deliverables from the applicant. The term for funding of each successful applicant will begin when the final contract is signed by all the parties and will end 20 months from the contract execution date. Extensions for project completion may be allowed if the applicant provides a reasonable justification to DEQ. The diesel transit bus being replaced must be scrapped within 90 days of receipt of the replacement transit bus.

## Helpful Resources

- Volkswagen Environmental Mitigation Settlement: <http://deq.mt.gov/Energy/transportation/VW-Settlement-Page>
- Montana Beneficiary Mitigation Plan: <http://deq.mt.gov/Energy/transportation/VW-Settlement-Page>
- Argonne National Lab AFLEET tool: <https://afleet-web.es.anl.gov/afleet/>
- EPA’s EJScreen Environmental Justice Tool: <https://www.epa.gov/ejscreen>

## Eligibility Requirements

### Applicant Eligibility

Eligible Applicants include both Government and Non-Government entities. **Government** shall mean a federal, 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. **Non-Government** entities include for profit businesses and non-profit organizations identified as having a tax-exempt declaration of from the Internal Revenue Service.

### Project Eligibility

Transit buses eligible for replacement include 1992-2009 Class 4-8 Transit Buses. **Transit buses** are those used in frequent stop service. Transit buses do not include charter buses or school buses. Class 4-8 means that the transit buses are 14,001 lbs. and greater.

Noting that EPA emission standards for heavy-duty highway engines went into effect in vehicles with model year of 2007 and later, the State will prioritize replacement of school buses in Montana that are model year 2006 or older. Within this prioritized range, vehicles must not have been scheduled for retirement prior to three years from the date of this RFA (January 31, 2022) and must be in active service during the project period.

Eligible Transit buses may be replaced with any **Alternate Fueled** or **All-Electric Transit Bus**. Diesel for diesel replacement projects are not eligible for funding under this RFA. **Alternate Fueled** shall mean a vehicle that is powered by an engine which uses fuel different from or in addition to gasoline or diesel fuel (e.g., CNG, propane, diesel-electric hybrid). **All-Electric** shall mean powered exclusively by electricity provided by a battery, fuel cell, or the electric grid.

All replacement buses must be 2018 model year engine or newer and must operate in the project area for a minimum of 7 years.

No funds awarded under this RFA may be used for the purchase of vehicles to expand a fleet. All replacement transit buses will continue to perform a similar function and operation as the vehicle being replaced.

### Project Eligibility Summary Table

	<b>Old Transit Bus</b>	<b>New Transit Bus</b>
<b>Class/Gross Vehicle Weight rating</b>	Class 4-8, 14,001 lbs and greater	Same vehicle class as old bus
<b>Engine model year</b>	1992-2009 (preference for 2006 or older)	2018 and newer
<b>Fuel/Technology</b>	Diesel	All-Electric or Alternate Fueled
<b>Other</b>	Not scheduled for retirement before December 31, 2022	Must operate in project area for at least 7 years.

**The following projects are not eligible:**

- ⊗ Fleet expansion projects
- ⊗ Buses or charging equipment purchased before the grant agreement/contract associated with this RFA is signed.
- ⊗ Transit buses and/or related fueling technologies that are not commercially available
- ⊗ Rebuilds of existing vehicles
- ⊗ Repowered or re-manufactured engines
- ⊗ Charter bus replacement
- ⊗ School bus replacement

**Recycling and Scrappage of Replaced Transit bus:**

Applicants must ensure that any bus to be replaced under this RFA is scrapped and shall bear the cost of scrapping. Successful applicants must agree to meet the following scrapping requirements:

- a) All eligible transit buses to be replaced under this RFA must be scrapped within ninety (90) days of new vehicle delivery.
- b) **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 and to disable the chassis by cutting the vehicle's frame rails completely in half.
- c) Written and photographic evidence of appropriate scrapping including verification of engine serial number and Vehicle Identification Number (VIN) is required as part of the deliverables submitted to DEQ and for final payment. Bus owner is responsible for documenting the scrapping of the existing bus. DEQ will provide successful applicants with a vehicle scrapping verification form.

**Eligible Costs/Expenses**

Subject to the cost share requirements and limits, eligible costs and expenses include:

- Total purchase cost of class 4-8 transit buses with any new alternate fueled or all-electric buses.
- Total purchase cost of eligible transit buses may include required costs to acquire the vehicle(s) such as taxes and delivery fees.
- For All-Electric replacement projects, acquisition and installation costs for associated charging infrastructure (All-Electric infrastructure costs) subject to cost-share requirements and limits.

**Ineligible Costs/Expenses**

- ⊗ Costs not integral to Transit Bus function (e.g., idle reduction technologies, etc.) cannot be considered eligible for reimbursement. Cost estimates must be provided as supporting documentation.
- ⊗ Expenses associated with scrapping of eligible Transit Buses to be replaced are ineligible for funding.
- ⊗ Expenses incurred before the awarding of a grant are ineligible for funding.

**Application Eligibility**

Applications and all required materials must be submitted to Bill Webb via email by 5:00pm local time, on the date of the application deadline for each round, to be considered in that round. See Application Materials and Instructions below for more details about submitting a complete application.

## **Cost Share**

All projects are subject to the following funding limits and cost share requirements. The funding limit percentages for eligible transit buses refer to a percentage of the total eligible costs associated with transit bus purchases. Other sources of funding, including federal funding can supplement Volkswagen EMT funding.

### **Electric Transit Bus or Fuel Cell Bus Replacement Projects**

	Funding Limits Per Bus	Applicant cost share per bus	Charging infrastructure funding limits	Maximum total award per applicant*
Government applicant	60% or \$475,000, whichever is less	40%	60% or \$50,000, whichever is less	\$1,000,000
Non-Government Applicant	50% or \$400,000, whichever is less	50%	50%, or \$50,000, whichever is less	\$850,000

\*Total award for All-electric replacements includes cost of buses and charging infrastructure

### **Diesel Electric Hybrid Transit Bus Replacement Projects**

	Funding Limits Per Bus	Minimum Applicant Cost Share Per Bus	Maximum total award per applicant
Government Applicant	40% or \$200,000, whichever is less	60%	\$400,000
Non-government Applicant	25% or \$127,500 whichever is less	75%	\$255,000

### **Other Alternate Fueled Transit Bus Replacement Projects (CNG, Propane)**

	Funding Limits Per Bus	Minimum Applicant cost share per bus	Maximum total award
Government Applicant	20% or \$70,000 whichever is less	80%	\$140,000
Non-government Applicant	15% or \$54,000 whichever is less	85%	\$108,000

## **Evaluation Priorities**

A review team will evaluate, score, and rank all complete and eligible grant applications, including all supporting documentation (see the list of required supporting documentation in the Application Requirements Section below) using scoring criteria outlined in DEQ Priorities and Project Competitiveness on page 8-9 and Appendix A of this RFA. The goal of the Volkswagen Environmental Mitigation Settlement is to reduce NOx emissions from mobile sources, so the project must achieve a reduction of NOx emissions. This will occur by permanently

removing the higher polluting diesel buses from service and replacing them with cleaner electric and alternative fueled buses purchased under this program.

### **Contract Term**

The term for funding each successful applicant will begin when the final contract is signed by all parties and will end on or before 20 months after the contract execution date.

### **Reporting Requirements and Payment Requests**

Quarterly reporting will be required from the project start date until the project is completed and project funds are received. More information on quarterly reporting, including deadlines and report templates will be provided to recipients after award notification. Payment of project expenses will take place on a reimbursement basis after DEQ receives documentation of scrapping, vehicle replacement and other required deliverables. The successful applicant must purchase the vehicle(s) and submit required proof of total costs and reimbursement invoice documentation before payment can occur.

### **Application Materials and Instructions**

Applicants must complete and submit the following information via e-mail to Bill Webb by 5pm on the deadline for each round of funding:

- 1) Completed transit bus funding application with signature of individual responsible for authorizing and overseeing the completion of the project.
- 2) Copy of Existing Transit Bus Title (s): A copy of the title of the transit bus to be replaced to ensure that the model year and VIN are correct.
- 3) A clear legible photo of the engine label that captures the engine make, model, year, horsepower, serial number and engine family name for each bus proposed for replacement.
- 4) A clear, legible photo of the vehicle identification number (VIN) plate that includes VIN and gross vehicle weight rating (GVWR) for each bus proposed for replacement.
- 5) Bids for the replacement transit bus and charging equipment/infrastructure. Please provide three different bids for replacement buses for each bus to be replaced. If you are not able to receive three bids, please include a written explanation of the reason why.
- 6) A letter of commitment for match and the transit bus retirement policy of the applicant. Minimum cost share requirements are listed on pages 5-6 of this RFA. Please indicate if any matching funds will come from federal sources and/or if other partners will be contributing matching funds.

### **Applicant's Signature**

The application must be signed (electronically or in ink) by an individual authorized to legally bind that party. The applicant's signature on an application in response to this RFA guarantees that the offer has been established without collusion and without effort to preclude the State of Montana from obtaining the best possible supply or service. Proof of authority of the person signing the request for application response must be furnished upon request.

### **DEQ Priorities and Project Competitiveness**

Each application will be ranked according to the following evaluation ranking criteria. Please submit one application per bus.



- A. **Lifetime NOx emissions**- Projects achieving the greatest lifetime NOx emission reductions will receive priority over projects with lesser emissions reductions. Lifetime NOx reductions will be calculated using the following formula: **(Remaining useful life of existing bus X Estimated Annual NOx Emission reduction)**. The remaining useful life is calculated as the difference between 19 years and the age of the existing vehicle **engine**. For example, the remaining life of a bus with a 2006 model year engine would be six years. Annual NOx reduction estimates must be calculated with Argonne National Lab's AFLEET tool located at: [https://greet.es.anl.gov/afleet\\_tool](https://greet.es.anl.gov/afleet_tool)
- B. **Priority Air Quality Areas**- Priority will be given to projects operating within counties that include areas that are currently in non-attainment, maintenance, or high risk for pollutants associated with mobile sources under the National Ambient Air Quality Standards (NAAQS). Priority counties also include those with the highest onroad mobile-source NOx emission rankings for Montana as provided in the 2014 National Emissions Inventory (2014 NEI). Projects operating in eligible designated Class I areas will also be given priority. Wilderness areas were not included due to very limited to no vehicle use in these areas. See Appendix B for a listing of priority air quality areas, NEI county rankings, and Class I areas.
- C. **Annual Ridership**- Priority will be given to projects that would benefit the greatest number of riders. This criterion will be evaluated based on annual ridership for each bus.
- D. **Annual Diesel Gallons** -Projects replacing currently operating diesel buses that use greater amounts of diesel fuel on an annual basis will be given priority over projects that replace buses that use less diesel fuel on an annual basis.
- E. **Annual Greenhouse Gas Emissions**- Projects with lower annual estimated greenhouse gas emissions will be given priority over those with higher annual greenhouse gas emissions. Annual greenhouse gas emissions must be estimated using Argonne National Lab's AFLEET tool located here: <https://afleet-web.es.anl.gov/afleet/>
- F. **Total mileage of bus being replaced**- Projects that seek to replace transit buses with **lower** total mileage will be given priority over those projects that replace buses with higher total mileage.
- G. **Sensitive populations**- Priority will be given to projects operating in sensitive areas or serving sensitive populations. These areas/populations may bear a disproportionate burden associated with high concentrations of diesel emissions. Please describe and include any supporting information (route maps, etc.) on whether the transit bus operates in or near the following sensitive locations:
  - a. Schools, childcare facilities (daycare, preschool, etc.)
  - b. Senior housing, or assisted living facilities.

DEQ will use the environmental and demographic indicators in EPA's Environmental Justice screening tool and compare demographic information and environmental and economic risk factors against the rest of Montana's population to help evaluate this criterion. The tool can be found at: <https://www.epa.gov/ejscreen>

## Appendix A: Project Scoring Criteria Matrix

Criteria*	Low 1 point	Medium 3 points	High 5 points	Weight	Total**
Total lifetime NOx reductions estimate (lbs.) per bus) *	1-700 lbs.	701-1,400 lbs.	1,401 lbs. or greater	5	
Located in Priority Counties or Class I areas listed in Appendix B	Not located in top 1-10 highest for mobile on road NOx emissions. And <i>not</i> located in nonattainment, maintenance, or Class I area.	Located in county ranking 1-10 highest for on road NOx emissions, or Maintenance area	Located in Nonattainment area or Class I area	5	
Annual Ridership of bus to be replaced*	15,000 riders or less	15,001-25,000 rides	25,001 or greater rides	4	
Current annual diesel fuel gallons used for bus being replaced*	1,000-3000 gallons	3,001-6,000 gallons	6,001 gallons or greater	4	
Estimated annual greenhouse gas emissions* (CO <sub>2</sub> , etc.)	81 or greater short tons	41-80 short tons	0-40 short tons	3	
Total engine miles of the bus being replaced (odometer reading)	250,000 miles or greater miles	150,000-249,000 miles	Less than 150,000 miles	3	

\*Estimate total per bus being replaced. Each bus will be scored separately.

\*\*The total points for each criterion will be calculated by multiplying the score by the weight.

### Additional criteria for consideration:

Criteria Description	Maximum Points
Project operates in or near sensitive locations and/or serves sensitive populations. Sensitive locations are listed in item G. in evaluation criteria above. Sensitive populations are those that are at greater risk of exposure to air pollution when compared to the rest of Montana. DEQ will use EPA's EJ screening tool to help evaluate risk factors.	25

## **Appendix B: Priority Air Quality Counties and Areas**

Counties that include nonattainment, maintenance, or at-risk areas for certain pollutants associated with mobile sources (transportation).

<b>Pollutant</b>	<b>County</b>	<b>Status</b>
PM-2.5	Lincoln	Nonattainment
PM-2.5	Flathead	At risk
PM-2.5	Missoula	At risk
PM-2.5	Lewis and Clark	At risk
PM-2.5	Silver Bow	At risk
PM-2.5	Powder River	At risk
PM-2.5	Ravalli	At risk
CO	Yellowstone	Maintenance
CO	Cascade	Maintenance
CO	Missoula	Maintenance

### **Eligible Class I Areas**

- Fort Peck Reservation
- Northern Cheyenne Reservation
- Flathead Reservation
- Yellowstone National Park
- Glacier National Park

### **Mobile Onroad NOx emissions- Top 10 Counties**

1. Yellowstone
2. Gallatin
3. Missoula
4. Jefferson
5. Cascade
6. Mineral
7. Big Horn
8. Flathead
9. Lewis and Clark
10. Stillwater