



**Fiscal Year 2020 Implementation Guidelines:  
School Buses**

The State of Missouri is a beneficiary of the Volkswagen Diesel Emissions Environmental Mitigation Trust (VW Trust). As the lead agency, the Missouri Department of Natural Resources developed a 10-year Beneficiary Mitigation Plan for awarding over \$41 million to Missouri-specific projects by October 2027. Missouri's Beneficiary Mitigation Plan defines several award categories of eligible emissions reduction projects. School bus replacements are one such award category in addition to heavy duty and medium duty diesel trucks, nonroad diesel engines such as locomotives or marine engines, and other diesel replacement categories.

School bus replacements implemented through this award category will help achieve several goals included in Missouri's Beneficiary Mitigation Plan. In addition to achieving the specific goal of helping school districts replace their aging school bus fleets, this award category will also achieve Missouri's overall plan goal of reducing emissions of nitrogen oxides (NO<sub>x</sub>) by taking old buses out of service. Emissions from newer buses are over 90 percent cleaner than the emissions of older buses, meaning significantly less acute exposure to concentrated diesel emissions for bus drivers and students. Children are a sensitive population making them more susceptible to the negative health effects of air pollution. Therefore, any project that reduces children's exposure to diesel emissions inherently benefits populations that bear a disproportionate share of the air pollution burden as required in Missouri's Beneficiary Mitigation Plan.

### **Eligible School Buses**

In accordance with the federal consent decree, eligible school buses for replacement means diesel-powered Class 4-8 school bus style vehicles (Type A-D) with a gross vehicle weight rating greater than 14,000 pounds with engine model years between 1992 and 2009 used to transport students to and from school or school-related activities. Eligible replacement vehicles may be diesel, alternate-fueled, or all electric and must have an engine model year the same as the year the replacement project application is submitted or, at most, one year earlier. For a school bus to be eligible to receive funding, the school bus must be in service (licensed) in the State of Missouri at the time of award notification and have served in the previous year.

If a project is receiving funding from an additional source such as a DERA grant, a Congestion Mitigation and Air Quality (CMAQ) grant, or another state's share of the VW Trust funds, the Department cannot award VW Trust funds to the project. The Department may make exceptions only when the funding opportunity (i.e., grant) allows the combining of VW Trust funds on the same project. Applicants must obtain written authorization from the Department approving the combining of VW Trust funds with any other funding opportunity.

For the purposes of this award category, the following definitions apply:

- "Alternate Fueled" means a vehicle powered by an engine using a fuel other than, or in addition to, gasoline, ethanol, diesel, or biodiesel. This includes, but not limited to, compressed natural gas (CNG), liquid natural gas (LNG), propane, and diesel-electric hybrids.
- "All-electric" means a vehicle powered exclusively by electricity provided by a battery, fuel cell, or the grid.

- "Government-Owned" means owned by a public school district or charter school as defined by Section 160.400, RSMo.
- "Nongovernment-Owned" means owned by a private contractor that serves any school district in the State of Missouri, or owned by a private school (including faith-based schools)

**Maximum Funding Requests and Cost Share Requirements:**

Cost-share reimbursement amounts are based on two factors, and apply to all licensed buses in a school district bus fleet. The first factor is the school district's average fleet age, determined by averaging the vehicle model year of all school buses in the district's fleet, as printed on the title of each school bus. The second factor is the average annual fleet miles per bus rider per year. This second factor is calculated as the average miles driven by a bus in the school district fleet divided by the total pupils transported for that school district, as shown in the equation below. Once an applicant has determined their average fleet age and average miles per rider they can use those numbers to find their funding percentage on the funding percentage charts on the following page.

$$\text{Average Annual Miles per Bus Rider} = \frac{(\text{Total Miles Driven}) / (\text{Number of Buses in Bus fleet})}{\text{School District Total Pupils Transported}}$$

These factors can be determined in the following ways:

- **Average Fleet Age:** This is calculated as an average of the age of every bus in the bus fleet. Bus age should be based on the year printed on the vehicle title and the calendar year in which the application is submitted.
- **Number of Buses in Fleet:** This number should be the number of buses owned by the applicant that serve a particular school district. Contractors serving multiple districts should only include buses assigned to a particular district; similarly contractors who share a district with other bus owners should only include buses their company owns.
- **Total Pupils Transported:** This number can be found on the Department of Elementary and Secondary Education's (DESE) Annual Secretary of the Board Report (ASBR) Part IV, Section I. Include only "Eligible Daily Transported."
- **Total Miles Driven:** This number can be found in DESE's ASBR Part IV, Section III. Include both "Total Eligible Route Miles" and "Total Ineligible Route Miles."

**Table: Government-Owned Funding Maximums**

Average Annual Miles per Bus Rider	Average Fleet Age		
	Older than 14 years	9 Years and Older	Newer than 9 years
25 miles per bus rider per year and greater	80% Up to \$72,000	60% Up to \$54,000	40% Up to \$36,000
Under 25 miles per bus rider per year	60% Up to \$54,000	40% Up to \$36,000	25% Up to \$22,500

**Table: Nongovernment-Owned Funding Maximums**

Average Annual Miles per Bus Rider	Average Fleet Age		
	Older than 14 years	9 Years and Older	Newer than 9 years
25 miles per bus rider per year and greater	20% Up to \$18,000	25% Up to \$22,500	20% Up to \$18,000
Under 25 miles per bus rider per year	15% Up to \$13,500	20% Up to \$18,000	15% Up to \$13,500

The Department based the cost share percentages and the maximum funding caps on a \$90,000 new school bus cost, to ensure that funds can be distributed fairly among Missouri school districts.

In an effort to allow schools to meet their particular needs, the Department is giving school districts an opportunity to downsize school buses to increase the amount of funding they can receive. Projects requesting a new school bus (Type A-D) with a capacity less than 15 (including driver), regardless of old school bus capacity, may add a certain percentage to their funding maximum. In consultation with the DESE, the Department has determined smaller buses are a safer alternative to transport small numbers of students compared to similar capacity vehicles (e.g., vans); additionally smaller school buses further reduce NO<sub>x</sub> emissions. School districts and private contractors may add 5 percent to their funding percentage and \$4,500 to the funding cap per project for replacements meeting this criterion. Per the federal consent decree, nongovernment entities may not request more than 25 percent of the cost of a replacement school bus. Nongovernment projects already funded at 25 percent before adding this downsizing incentive may however add the \$4,500 to the project’s maximum funding cap.

The Department is offering districts additional funds for the purchase of alternative-fueled school buses. These technologies can greatly reduce NO<sub>x</sub> emissions compared to conventional diesel vehicle replacements. Districts and private contractors purchasing alternative fuel may add \$15,000 to their funding cap per project for replacements meeting this criterion.

All-electric buses reduce NO<sub>x</sub> emissions even more than alternate fuel technologies. Districts and private contractors purchasing all-electric buses may request up to 50% of the project cost

(including the costs associated with installation and purchase of charging infrastructure), regardless of the funding percentage determined from the Funding Maximums Charts.

Applicants may not combine funding increases. A project that is both downsizing and switching to a non-diesel power source may not add both funding increases. For example, a public school district normally funded at 40 percent cannot add both 5 percent for downsizing and \$15,000 for an alternate fuel replacement. In this example, the school district could choose to use either the base funding of 40 percent of the total new school bus cost with a maximum funding cap equal to their base cap of \$36,000 plus \$15,000 for switching to alternate fuels, or increase their base funding to 45 percent with a maximum funding cap of \$40,500. Each project on an application may apply any single funding increase for which it qualifies.

### **Selection Process**

Applicants may request the replacement of up to three buses on an application, plus as many as two more buses if applying for new alternative fuel or all-electric buses. All districts and entities are eligible to apply under this funding opportunity for up to the maximum number of buses, regardless of funding awarded in previous application periods. This award category uses a lottery-style selection process to choose applications for an award, not individual projects. Additionally, the Department will award up to 10 all-electric bus projects, contingent upon applicant interest. These all-electric projects will be set aside for a separate lottery. The lottery approach provides an equal chance of selection to all applications. Awards are application based, so including more projects does not increase the probability of selection. In the event of your application selection, the Department will offer an award for each eligible project included in the application. The lottery-style selection process will operate until the complete disbursement of the allotted \$12 million for this category.