



I VOLKSWAGEN SETTLEMENT STATE SCORECARD

Ranking the states on their plans for
the VW mitigation trust funds



Iowa PIRG
Education Fund

VOLKSWAGEN SETTLEMENT STATE SCORECARD

Ranking the states on their plans for
the VW mitigation trust funds

Iowa PIRG
Education Fund



WRITTEN BY:

MATT CASALE AND BRENDAN MAHONEY
U.S. PIRG EDUCATION FUND

MAY 2019

ACKNOWLEDGMENTS

Iowa PIRG Education Fund sincerely thanks Morgan Folger, Environment America Research & Policy Center, Diane E. Brown, Arizona PIRG Education Fund, Peter Skopec, WisPIRG Foundation, and Bay Scoggin, TexPIRG Education Fund, and Jon Sundby, RJ Cross, and Tony Dutzik of Frontier Group for their review of drafts of this document, as well as their insights and suggestions.

The authors bear responsibility for any factual errors. The recommendations are those of Iowa PIRG Education Fund. The views expressed in this report are those of the authors and do not necessarily reflect the views of our funders or those who provided review.

© 2019 Iowa PIRG Education Fund and Environment Iowa Research & Policy Center. Some Rights Reserved. This work is licensed under a Creative Commons Attribution Non-Commercial No Derivatives 3.0 Unported License. To view the terms of this license, visit creativecommons.org/licenses/by-nc-nd/3.0.

Layout: Alec Meltzer, meltzerdesign.net
Cover photo: Rhode Island Public Transit Authority

I CONTENTS

EXECUTIVE SUMMARY.....	1
INTRODUCTION.....	3
WHY ELECTRIC BUSES AND EV CHARGING INFRASTRUCTURE?	4
ELECTRIC BUSES.....	4
EV CHARGING INFRASTRUCTURE.....	6
MAKING THE GRADES.....	7
SCORECARD	9
SELECTED CASE STUDIES	11
WASHINGTON	11
RHODE ISLAND	11
NEW JERSEY.....	11
OREGON.....	12
COLORADO	12
TEXAS	12
MAINE.....	13
WISCONSIN	13
CONCLUSION.....	14
APPENDIX: VW FUNDS AND WEBSITES BY STATE.....	15
NOTES	17

EXECUTIVE SUMMARY

IT HAS BEEN ABOUT THREE YEARS since Volkswagen settled with federal authorities for violating emissions laws in hundreds of thousands of vehicles advertised as low emissions.¹ The settlement included billions of dollars to buy back the offending vehicles from consumers, as well as nearly \$3 billion for the Environmental Mitigation Trust, to be distributed to every state and territory where offending vehicles were sold.² The Environmental Mitigation Trust funds are designed to be used for transportation projects that reduce pollution in an effort to mitigate the harm done by Volkswagen through their emissions cheating.

Under the terms of the settlement, states can spend their share of the Environmental Mitigation Trust funds in several different ways, including by purchasing newer diesel vehicles, natural gas vehicles, and electric vehicles, as well as repowering older diesel vehicles with newer engines or electric motors.³ States are also allowed to use up to 15 percent of their award on electric vehicle (EV) charging infrastructure.⁴ How each state spends its share of the funds within these allowable uses is up to the state but must be set forth in a “Beneficiary Mitigation Plan” submitted to a trustee.⁵

Although technically allowable under the settlement, for states to spend this money

on outdated diesel or other fossil fuel technology would be a wasted opportunity. The Volkswagen settlement money presents states with a unique chance to accelerate transportation electrification, and this money should be spent towards that goal. Long-term exposure to vehicle exhaust is associated with respiratory problems, especially in children.⁶ Transportation is the largest source of greenhouse gas emissions in the nation, and the cars and trucks on our road account for the majority of those emissions.⁷

There is no question that we need cleaner vehicles on our roads – and there is no cleaner vehicle than an electric vehicle. No matter the electric grid, electric buses⁸ and electric vehicles⁹ produce less carbon pollution than their fossil fuel counterparts. Electric vehicles also have the advantage of getting cleaner as the power grid gets cleaner, and Americans have the option to power their buses and cars with renewable electricity. As a nation, we should be doing everything we can to accelerate the transition away from fossil fuel powered vehicles and plug into a cleaner and healthier transportation future.

Every state, with the exception of Florida and West Virginia, has now officially submitted its Beneficiary Mitigation Plan. This scorecard

grades each state’s plan on how well it is designed to take full advantage of the opportunity to invest in transportation electrification.

States’ grades range widely, but our analysis finds that many are failing to make the most of this unique opportunity to electrify their transportation systems.

Washington and Hawaii earned a top-of-the-class A+ for spending as much as the settlement allowed on electric vehicle charging infrastructure and electrified mass transit buses and ferries. Rhode Island and Vermont both garnered A’s. Each state committed substantial amounts to accelerate electrification, including electrifying their mass transit systems.

Thirty-seven states receive a D or an F. To date, these states have developed plans

that do not prioritize electric vehicles and instead make most, if not all, of the money available for outdated and polluting diesel or other fossil fuel-based technology.

But many of the states with poor grades still have an opportunity to redeem themselves. Their state plans set forth goals and priorities of each state, and detail what kinds of projects are eligible for funding. In large part, they set up a competitive grant process through which cities, towns, agencies, school districts, and companies can apply for funding for specific projects.¹⁰ This means that, even in states that received low grades on this scorecard, there remains the potential that good projects that accelerate electrification could still be funded.

A summary of the grades follows:

A+	Washington and Hawaii both receive an A+ for their plans to use all of their money to fund electric bus purchases, both for transit agencies and school districts, and electric vehicle charging infrastructure.
A	Rhode Island, and Vermont received A’s. Diesel vehicles are not eligible at all under Rhode Island’s plan, and eligible for only a small amount of money under Vermont’s.
B	California, Massachusetts and New York all received B’s for their VW settlement plans. While these plans prioritize investments in electric vehicles, especially electric buses, their plans potentially allow more than 15 percent of their awards to go towards diesel projects.
C	Colorado, Illinois, and six other states received a C’s. States that received a C may have included language which prioritizes investment in electric vehicles but did not give electric vehicles priority in funding, and allocated more than 15 percent of their funds to diesel projects.
D	Twenty-one states plus Washington, D.C. received D’s. Many of these states set aside 15 percent of their funds for electric vehicle charging equipment but did not prioritize electric vehicle investment in funding or their stated goals.
F	Fourteen states and Puerto Rico received F’s on our scorecard. These states adopted the settlement’s minimum guidelines for spending their allotment but did not take any steps to prioritize electric vehicle projects. These states’ plans could allow for up to 100 percent of their awards to go to diesel vehicle projects.

Introduction

IN 2016, VOLKSWAGEN ADMITTED to installing illegal emissions control software on more than half a million vehicles in the U.S. and entered into a massive multi-billion dollar settlement with federal authorities.¹¹ The majority of the settlement funds were set aside for compensation to owners of offending vehicles, but the settlement also included nearly \$3 billion for the Environmental Mitigation Trust to fund transportation projects across the country. The Environmental Mitigation Trust funds were allocated to each state and territory through a formula based on how many non-compliant vehicles were registered there. The awards range from around \$8 million (Alaska, Hawaii, Wyoming, Washington, D.C., Puerto Rico) to more than \$400 million (California).¹²

Under the terms of the settlement, states can spend their allocation of the Environmental Mitigation Trust funds in a number of ways, including purchasing newer diesel vehicles, natural gas vehicles, and electric vehicles, as well as repowering older diesel vehicles with newer engines or electric motors.¹³ States are also allowed to use up to 15 percent of their award on electric vehicle (EV) charging infrastructure.¹⁴

While technically allowed under the settlement, investing in diesel and natural gas technologies with Environmental Mitigation Trust funds would represent a significant missed opportunity to accelerate the transformation to an all-electric, clean-running transportation network that could help reduce illness and save lives. Electric vehicles are far less polluting than gasoline-powered cars, with half the carbon footprint, as well as fewer emissions of the pollutants that

contribute to poor air quality, asthma, respiratory diseases, and other illnesses.¹⁵

After the settlement was finalized, U.S. PIRG Education Fund released recommendations for how states should allocate their funds from the Environmental Mitigation Trust. To fully take advantage of the opportunity, we recommended that states should use the maximum allowable amount (15 percent) to invest in electric vehicle charging infrastructure and that the remaining amount (85 percent) be spent on new, all-electric transit and school buses to replace older, outdated diesel models.¹⁶

Almost every state has now developed a plan on how to use their share of the Environmental Mitigation Trust, as is required by the settlement.¹⁷ These state plans vary greatly, with some states committing large portions of their funds to zero-emissions vehicle projects, while others are continuing to incentivize new diesel vehicle purchases. This scorecard grades each state on how well it is designed to take advantage of the opportunity and invest in transportation electrification.



Photo Credit: Paolo Bona / Shutterstock

Why Electric Buses and EV Charging Infrastructure?

THE ADOPTION OF LARGE NUMBERS of electric vehicles, both of personal vehicles and public fleets like transit and school buses, offers many benefits, including cleaner air and the opportunity to reduce greenhouse gas emissions. Electric vehicles are far less polluting than gasoline-powered cars, with half the annual carbon footprint, as well as fewer emissions of the pollutants that contribute to smog.¹⁸ The environmental benefits of electric vehicles will continue to improve as America switches to clean, renewable energy.

The health impacts of air pollution in the U.S. are not distributed equally – transitioning to all electric buses and vehicles will greatly benefit disadvantaged communities that are disproportionately affected by transportation pollution.²¹

Electric Buses

Buses play a key role in our nation's transportation system, carrying millions of children daily to and from school and moving millions of Americans each day around our cities.²² Buses reduce the number of individual cars on our roads, make our communities more livable and sustainable, and provide transportation options for people of all ages and abilities.

Yet the majority of America's buses remain dirty – burning fossil fuels like diesel that put the health of our children and communities at risk and contribute to global warming.²³ The good news is that America can clean up its buses by making them electric. All-electric buses are now readily available, and they can help clean up our air while saving transit agencies, school districts and bus contractors money in the long-term.²⁴

Seventy-three million Americans living in 56 metropolitan and micropolitan areas and four rural counties experienced more than 100 days of degraded air quality in 2016.¹⁹ That is equal to more than three months of the year in which smog and/or particulate pollution was above the level that the EPA has determined presents “little to no risk.”²⁰

There is no cleaner option than an electric bus.²⁵ Replacing all of America's school buses with electric buses could avoid an average of 5.3 million tons of greenhouse gas emissions each year. Replacing all of the diesel-powered transit buses with electric buses in the United States could save more than 2 million tons of greenhouse gas emissions each year.²⁶



Photo Credit: stanvpetersen via pixabay.com.

With reduced operating costs and no tailpipe emissions, all-electric buses and charging stations can be a smart infrastructure investment for school districts and transit providers across the country.²⁷ Dramatic declines in battery costs and improvements in performance, including expanded driving range, have made electric buses a viable alternative to diesel-powered and other fossil fuel buses.²⁸ Each electric school bus can save school districts nearly \$2,000 a year in fuel and \$4,400 a year in reduced maintenance costs, saving tens of thousands of dollars on fuel and maintenance over the lifetime of a bus.²⁹ Similarly, the Chicago Transit Authority estimates that each electric transit bus in its fleet saves the city \$25,000 in fuel costs every year.³⁰

Although they save operators money in the long-term through reduced fuel and maintenance costs, electric buses still have higher upfront purchase prices than their diesel counterparts.³¹ This can be a significant hurdle for school districts and public transit agencies looking to make the switch on limited budgets. Electric buses are also a fairly new technology, and in order to facilitate a smooth transition, many bus operators want to pilot or test electric buses on their routes. But paying for those pilots or studies can be difficult.³²

The VW settlement money presents a unique opportunity for states to help bus operators fund pilot programs or studies, or to cover the additional costs of purchasing electric buses.

Still, several states plan to spend VW settlement money on new diesel buses to replace older buses or other heavy-duty vehicles with out-of-date emissions standards. Although this will have a net short-term emissions benefit, it wastes the transformative opportunity that is the VW settlement. These older diesel vehicles with out-of-date



Photo Credit: New York MTA

emissions standards are mostly nearing the ends of their useful lives and would need to be replaced soon, with or without the VW settlement money. The VW money should not serve as a substitute for whatever other source of funding would have been used for those replacements; instead it should be used to make up the difference in price between a new diesel replacement and new electric replacement.

For example, in Arizona, the state allocated about \$38 million of the state's share of the VW settlement to replacing old, outdated diesel school buses with new buses.³³ With that money, the state is funding the purchase of 330 new diesel school buses, meaning each new diesel bus cost around \$111,000.³⁴ A new electric school bus costs about \$230,000, including charging infrastructure.³⁵

Those old, outdated buses were going to need to be replaced soon, even if the VW settlement money didn't exist; the state or the school districts would have had to pay for the replacement of those buses with other funds. If, instead of fronting the entire purchase price for the new diesel bus, the state either provided separate funding or required school districts to obtain funding up to the \$111,000 it would cost to replace the bus in normal order, and then provided an additional \$119,000 per bus from the VW settlement to cover the cost difference

between a diesel and electric bus, Arizona could have replaced those old, outdated school buses with 309 new electric buses. If the state increased the allocation towards school by an additional \$1.3 million,³⁶ it could still have replaced 330 old diesel buses, but with 330 new electric buses instead of new diesel buses. The emissions benefits of 330 new electric buses far outweigh the emissions benefits of 330 new diesel buses.³⁷

EV Charging Infrastructure

Under the terms of the settlement, states can use up to fifteen percent of the Environmental Mitigation Trust funds to invest in electric vehicle charging infrastructure.³⁸ Thirty-five states have taken advantage of this opportunity.

EVs offer many benefits for Americans, including cleaner air and the opportunity to reduce greenhouse gas emissions. Electric vehicles are far cleaner than gasoline-powered cars and produce less carbon pollution and fewer of the emissions that lead to

smog and particulate pollution.³⁹ Unfortunately, the day-to-day experience of EV drivers seeking to charge up their vehicles has a long way to go to match the ease and convenience of refueling a gasoline-powered car – especially when it comes to public charging.⁴⁰

Electric vehicles are poised for explosive growth. In 2017, 199,826 electric vehicles were sold in the United States.⁴¹ In 2018, 361,307 electric vehicles were sold, an 80 percent increase over the prior year.⁴² Technological gains that allow electric vehicles to drive farther, charge faster, and be produced more affordably are revolutionizing the vehicle market. With adequate policy and infrastructure investments, Bloomberg New Energy Finance estimates that, globally, more than half of new cars sold by 2040 will be electric vehicles.⁴³

States need to be ready for a flood of electric vehicles. Hundreds of thousands of electric vehicles are hitting streets across America. Yet, as of now, most places are unprepared for this pending influx. These vehicles will need a place to charge, so public access to EV charging stations will be critical, especially since only about half of vehicles in the U.S. have a dedicated off-street parking space, like a driveway or garage.⁴⁴

States will require the installation of hundreds to thousands of publicly accessible electric vehicle chargers in order to serve the increased demand for electric vehicles.⁴⁵ The VW settlement money presents an opportunity for states to invest in the fast-charging infrastructure necessary to make a smooth transition to electric vehicles.



Photo Credit: MikesPhotos via pixabay.com

| Making the Grades

HOW DOES EACH STATE'S PLAN to spend the VW settlement money rate? We have assigned each state a grade between A+ and F based off eight grading categories. A point is awarded or withheld based on a state's performance in each category. The categories are designed to show whether electrification is prioritized by a plan's stated goals and/or funding allocations. There are separate categories covering a state's allocation of funding to diesel and other fossil fuel vehicle projects. The categories also cover whether electric buses specifically are prioritized. Finally, the grading system awards or withholds points based on a state's allocation to charging infrastructure projects.

The highest possible score is 8/8, or an A+. The letter grades descend for each point lost: **A** for 7/8, **B** for 6/8, **C** for 5/8, **D** for 4/8 or 3/8, and any state with 2/8 or less receives an **F**.

The eight criteria are listed below. (+1) indicates a point awarded, (+0) indicates a point withheld.

- 1. Are electric vehicles prioritized in funding? Yes (+1) or No (+0):** Electric vehicles are considered prioritized by funding allocations if electric vehicles receive the highest share of funding, are the first projects to be funded, or receive the highest reimbursement rate for competitive grants. If electric vehicles receive the same reimbursement rate or share of funding as diesel or alternative fuel vehicles, then electric vehicles are not considered prioritized.
- 2. Are electric vehicles prioritized in stated plan goals? Yes (+1) or No (+0):** States have developed and released written plans detailing how the state will allocate their share of the mitigation trust fund. Some states included language stating that electric vehicle projects would be given priority in competitive grant reviews or listed investment in electric vehicle technology as a goal of the state's overall plan to spend their allocation.
- 3. Are electric buses prioritized? Yes (+1) or No (+0):** In addition to determining the eligibility of fuel types, states have also taken steps to incentivize bus replacement projects by including language stating that these projects will be given priority, or by setting up a plan that will fund bus replacement projects first. If states have incentivized bus replacement projects and prioritized electric vehicles in either funding or stated goals, they receive this point.
- 4. Are diesel vehicles eligible for more than 15 percent of total award? Yes (+0) or No (+1):** States have taken steps to ensure that a variety of projects are eligible for awards. Not all vehicle types have electric replacement options now. If states have included funding for some diesel vehicle projects, but capped funding for these projects at 15 percent to ensure a vast majority of the funds go towards electric vehicle technology, they receive this point.

5. **Are diesel vehicles ineligible for funding? Yes (+1) or No (+0):** If a plan states that no funds will go towards the purchase of diesel vehicles the state will receive this point.
6. **Are other “alternative fuel” vehicles, like compressed natural gas or propane, eligible for 15 percent of total award? Yes (+0) or No (+1):** For projects without electric replacement options some states have also set aside parts of their award to fund other fossil fuel vehicle projects. If states cap funding for these projects at 15 percent of the total award they receive this point.
7. **Is charging infrastructure eligible? Yes (+1) or No (+0):** States which provide funds to purchase electric vehicle charging infrastructure received this point, either by allocating some percentage less than 15 percent to light-duty electric vehicle charging infrastructure, or by making electric bus charging infrastructure eligible for funding.
8. **Is the state using 15 percent of its award on charging infrastructure projects? Yes (+1) or No (+0):** The Settlement guidelines allow for up to 15 percent of a state’s total award to go towards electric vehicle charging infrastructure. If states provided the full 15 percent for charging infrastructure, they receive this point.

Scorecard

State	Categories								Grade
	1	2	3	4	5	6	7	8	
Alabama	No (+0)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	2/8 (F)
Alaska	No (+0)	No (+0)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	3/8 (D)
Arizona	No (+0)	Yes (+0)	Yes (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+0)	1/8 (F)
Arkansas	No (+0)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	2/8 (F)
California	Yes (+1)	Yes (+1)	Yes (+1)	No (+1)	No (+0)	No (+1)	Yes (+1)	No (+0)	6/8 (B)
Colorado	Yes (+1)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	5/8 (C)
Connecticut	Yes (+1)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	3/8 (D)
Delaware	No (+0)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	2/8 (F)
DC	Yes (+1)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	No (+0)	No (+0)	3/8 (D)
Florida*	Incomplete								0/8 (F)
Georgia	Yes (+1)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	No (+1)	Yes (+1)	Yes (+0)	5/8 (C)
Hawaii	Yes (+1)	Yes (+1)	Yes (+1)	No (+1)	Yes (+1)	No (+1)	Yes (+1)	Yes (+1)	8/8 (A+)
Idaho	No (+0)	No (+0)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	3/8 (D)
Illinois	Yes (+1)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	No (+0)	4/8 (D)
Indiana	Yes (+1)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	3/8 (D)
Iowa	No (+0)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	No (+0)	4/8 (D)
Kansas	Yes (+1)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	3/8 (D)
Kentucky	No (+0)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	2/8 (F)
Louisiana	No (+0)	Yes (+1)	Yes (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	3/8 (D)
Maine	No (+0)	Yes (+1)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	3/8 (D)
Maryland	Yes (+1)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	5/8 (C)
Massachusetts	Yes (+1)	Yes (+1)	Yes (+1)	No (+1)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	6/8 (B)
Michigan	Yes (+1)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	5/8 (C)
Minnesota	Yes (+1)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	5/8 (C)
Mississippi	No (+0)	Yes (+1)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	No (+0)	2/8 (F)
Missouri	No (+0)	Yes (+1)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	3/8 (D)
Montana	No (+0)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	4/8 (D)
Nebraska	Yes (+1)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	No (+0)	4/8 (D)

State	Categories								Grade
	1	2	3	4	5	6	7	8	
Nevada	Yes (+1)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	5/8 (C)
New Hampshire	No (+0)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	4/8 (D)
New Jersey	Yes (+1)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	5/8 (C)
New Mexico	Yes (+1)	No (+0)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	4/8 (D)
New York	Yes (+1)	Yes (+1)	Yes (+1)	No (+1)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	6/8 (B)
North Carolina	No (+0)	No (+0)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	3/8 (D)
North Dakota	No (+0)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	No (+0)	1/8 (F)
Ohio	Yes (+1)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	5/8 (C)
Oklahoma	No (+0)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	2/8 (F)
Oregon	No (+0)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	4/8 (D)
Pennsylvania	No (+0)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	2/8 (F)
Puerto Rico	Yes (+1)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	No (+0)	2/8 (F)
Rhode Island	Yes (+1)	Yes (+1)	Yes (+1)	No (+1)	Yes (+1)	No (+1)	Yes (+1)	No (+0)	7/8 (A)
South Carolina	Yes (+1)	No (+0)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	No (+0)	3/8 (D)
South Dakota	No (+0)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	No (+0)	1/8 (F)
Tennessee	No (+0)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	4/8 (D)
Texas	No (+0)	Yes (+1)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	3/8 (D)
Utah	Yes (+1)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	No (+0)	2/8 (F)
Vermont	Yes (+1)	Yes (+1)	Yes (+1)	No (+1)	No (+0)	No (+1)	Yes (+1)	Yes (+1)	7/8 (A)
Virginia	No (+0)	Yes (+1)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	4/8 (D)
Washington	Yes (+1)	Yes (+1)	Yes (+1)	No (+1)	Yes (+1)	No (+1)	Yes (+1)	Yes (+1)	8/8 (A+)
West Virginia**	No (+0)	No (+0)	No (+0)	No (+0)	No (+0)	Yes (+0)	Yes (+1)	No (+0)	1/8 (F)
Wisconsin	No (+0)	No (+0)	Yes (+1)	Yes (+0)	No (+0)	Yes (+0)	No (+0)	No (+0)	1/8 (F)
Wyoming	Yes (+1)	No (+0)	No (+0)	Yes (+0)	No (+0)	Yes (+0)	Yes (+1)	Yes (+1)	3/8 (D)

*Florida does not have a fully developed and published plan on which to base a grade.

**West Virginia's plan is still a draft that has not yet been finalized or submitted to the Trustee.

| Selected Case Studies

Washington

Washington is one of only two states to receive a perfect grade on this scorecard. Washington has committed to spending all of the VW settlement funds on accelerating transportation electrification. Most of the money will be spent on electric transit and school buses, some on electric ferries, and the maximum allowable 15 percent will be spent on electric vehicle charging infrastructure. Washington's \$112.7 million share will go a long way towards building a cleaner and healthier transportation future for the Pacific Northwestern state.

Rhode Island

Rhode Island is one of only two states, along with Washington, to commit to spend their full award on electric buses and charging infrastructure. The state has developed a plan that will take full advantage of its \$14.4 million share of the mitigation trust fund in order to jumpstart much needed investment in cleaner and more sustainable public transit. "These buses are part of our overall strategy to make smart investments in cutting-edge technology that drive economic growth while reducing our carbon footprint," Governor Gina Raimondo said in a statement following the plan's release.⁴⁶

The plan establishes an electric bus pilot program.⁴⁷ Under the program, the Rhode Island Public Transit Authority (RIPTA) will immediately receive funding to lease three electric transit buses. The buses will operate for three years and their performance will be analyzed by the transit agency. The pilot program is designed to help RIPTA develop a strategy to deploy up to twenty more electric transit buses over ten years. The

settlement money will fund the transition of a full 36% of Rhode Island's transit buses to zero-emissions models by 2030.

The only reason Rhode Island lost a point is because it dedicated ten percent of its funds to electric vehicle charging infrastructure, and not the maximum allowable 15 percent.

New Jersey

Like many states, New Jersey adopted a plan which incentivizes electric vehicles for non-government owned projects but still allows for diesel projects to be funded.⁴⁸ The New Jersey plan will reimburse up to 75 percent of the cost of an electric vehicle purchase by a non-government entity, and up to 40 percent for a diesel vehicle for a non-government entity. For government vehicles though, both electric and diesel projects can be fully reimbursed. The state does not set restrictions on how much of the funds will go towards diesel vehicles, meaning the plan allows for the entire award to go towards diesel projects.

However, much of the process happened while Governor Chris Christie was still in office. The new administration has signaled that electric vehicle projects will be given priority when it comes time to start distributing grants.⁴⁹ "Through this settlement, we have the opportunity to make investments to clean up our air, righting a wrong for disproportionately impacted communities and setting New Jersey on a path to a clean energy and transportation future," said Governor Phil Murphy at the start of his term.⁵⁰ Indeed, the first round of funding in February 2019 was used for electric buses for NJ Transit as well as electric vehicle charging stations.⁵¹

Oregon

On the surface, the Oregon plan sets out some ambitious goals to move Oregon to vehicle electrification.⁵² Unfortunately, the plan also incentivizes investment in new diesel technology. Before the Oregon Department of Environmental Quality (DEQ) released its plan to spend the state's share of the settlement, the Oregon legislature passed a directive which required the DEQ's plan to prioritize investments in updating the exhaust systems of diesel school buses.⁵³ This means that the first projects to receive funding will proliferate the use of diesel rather than encouraging a transition away from this highly polluting fuel. This approach is short sighted as it favors quick-fixes rather than prolonged, meaningful investment in projects that will improve Oregon's air quality.

Colorado

The Colorado plan features a robust and detailed set of goals that make clear the state will give special considerations to electric vehicle projects.⁵⁴ Moreover, the goals list public transit electrification as a top priority. The funding allocations distribute 15 percent of the state's award to fund the purchase of electric vehicle charging infrastructure.

The plan sets aside \$18 million, approximately 26 percent of the state's total award, for transit bus replacements. Both electric and fossil fuel models are eligible for this share of the trust fund. An additional \$18 million will be used to establish a vehicle replacement program for school and shuttle buses, along with other heavy-duty vehicles. Electric, diesel, and other fossil fuel vehicles are all eligible to receive a share of the award. The plan also allocates \$11.7 million, 17 percent of the total award, into a "flexible funds" account which will be distributed after the initial funds are distributed. It is unclear which projects will be eligible to receive these flexible funds.

While the plan itself merits a "C" on this scorecard, the state's goals and remarks of the new administration of Governor Jared Polis, who came into office after the plan had already been finalized, suggest that the implementation of the plan would warrant a much higher grade.⁵⁵

Texas

Like other states on the lower end of the scorecard, Texas' mitigation plan does not incentivize electric vehicles over other fuel types.⁵⁶ It also includes provisions which could encourage further investment in diesel vehicles, despite the existence of cleaner alternatives. The plan does express that the state should prepare for widespread electric vehicle use. Regrettably, the discussions of EV investments are couched in discouraging language: "While the other mitigation actions will result in immediate reductions in NOX emissions and other pollutants," the report states, "funding ZEV infrastructure will help prepare the state for the increase use of ZEV in Texas." This language implies that electric vehicles will not help in immediately reducing emissions and improving air quality, which is simply not the case.

The plan also encourages prospective recipients to use the VW settlement to complement existing grant programs, especially the Texas Emissions Reduction Plan (TERP) grant program.⁵⁷ While combining a state's VW settlement award with grant and incentive programs opens up many new funding opportunities, it also gives preference to project types which are already receiving state or federal assistance. Moreover, many projects funded by TERP are new diesel or other fossil fuel vehicle purchases. Using the VW settlement as a complement to TERP could actually proliferate the use of diesel and other fossil fuel vehicles in Texas.

Maine

Maine's plan to spend its share of the Mitigation Trust Fund gives more focus to cost-effectiveness than fuel type.⁵⁸ Maine, along with several other states, are considering using a "Pounds of NOx reduction per spent" as the central metric in evaluating the usefulness of certain mitigation actions. While considering cost effectiveness can help states get the most out of their award, making it the central metric by which to make all funding decisions can limit thinking to the short term. Too much focus on short-term cost effectiveness supports continued investment in cheaper, but dirtier, diesel and fossil fuel vehicles.

This plan, however, was developed under outgoing Governor Paul LePage. He has since left office. The new governor, Janet Mills, has already dedicated over \$5 million from the state's separate clean air lawsuit against Volkswagen to implement policies to expand electric vehicle use in the state.⁵⁹

Wisconsin

The state of Wisconsin has thus far allocated \$42 million, or approximately 62.5 percent, of its total award, and is in the process of creating a plan to spend the remaining \$25.1 million. The two major programs funded by the Wisconsin plan so far are immediate replacement of retiring state vehicle and competitive capital grants for government and non-government owned vehicle projects.⁶⁰ Both programs are meant to lower the number of aging diesel vehicles with out-of-date emissions standards on the road. The \$32 million capital grant program established by the plan is specifically designed to prioritize the replacement of public transit buses. What is more, the plan gives special consideration to public transit routes which are critical for connecting employees with employers. This plan gives preference to areas where public transit is essential to residents, and therefore more frequently used.

Nonetheless, Wisconsin's current plan receives a failing grade in our analysis in part

because neither the state vehicle replacement program nor the capital grant program incentivize or prioritize electric vehicles, which means that a bulk of the award could end up going towards diesel vehicle projects.

Without a stated goal or incentive that favors all-electric buses, the capital grant program leaves it up to transit agencies to apply for electric buses. It should be noted that chronic underfunding of Wisconsin's public transportation systems has left many communities with large numbers of deteriorating and outdated buses in desperate need of replacement, placing tremendous pressures on local transit agencies. Nonetheless, some transit systems are taking full advantage of this opportunity to maximize benefits to public health and accelerate the transition to an all-electric transportation system, while others are not.

A statewide leader in this regard, the City of Racine applied for and will receive funding to replace six aging transit buses with all-electric buses.⁶¹ Madison, Milwaukee and La Crosse have begun purchasing all-electric buses through funding sources other than the VW settlement, but, like seven other cities awarded VW capital grant funds, are using the settlement money to buy new diesel buses.⁶² That means only six of the 58 new buses coming to Wisconsin will be electric.

Furthermore, Wisconsin's plan to date does not call for the expansion of EV charging infrastructure – though the new administration of Governor Tony Evers has proposed funding EV chargers using VW settlement money in its first state budget, and state legislators recently released a similar proposal.⁶³ Lieutenant Governor Mandela Barnes believes the new administration's budget will encourage electric vehicle purchases in the state.⁶⁴

While Wisconsin's current plan receives an "F" in our scorecard, effective implementation of the current plan and smart use of the remaining \$25.1 million in settlement funds could well boost the state's grade.

| Conclusion

VW BREACHED THE TRUST of its customers and put the health of the public and the environment at risk. But from its deception emerged an opportunity for states to put a down payment on the transition to a cleaner and healthier, all-electric transportation future. Some states, like Washington and Rhode Island, have taken full advantage of this opportunity and developed forward thinking plans to use the money to move closer to a fossil fuel free transportation system. Those states received high grades on the scorecard. Other states, however, are either spending the VW settlement money on outdated diesel technology or leaving open the possibility that it will be spent on outdated diesel technology. Because of that, their grades suffered.

But all hope is not lost for the states with low grades.

The state plans for spending the Environmental Mitigation Trust funds generally set forth the goals and priorities of each state and detail what kinds of projects are eligible for funding. In large part, they set up a competitive grant process through which cities, towns, agencies, school districts, and companies can apply for funding for specific projects. This means that, even in states that received low grades on this scorecard, there remains the potential that good projects that accelerate electrification could still be funded. So, for example, if a school district in a state that has received a D or an F wants to apply for a grant to fund an electric school bus pilot project, it should still do so. States with poor grades on their plans can still redeem themselves through the projects they ultimately choose to fund.

Appendix: VW Funds and Websites by State

State	Grade	State Funding	State VW Website
Alabama	F	\$25,480,967	http://adeca.alabama.gov/Divisions/Energy/VW/Pages/default.aspx
Alaska	D	\$8,125,000	http://www.akenergyauthority.org/Programs/vwsettlement
Arizona	F	\$56,660,078	https://vwsettlement.az.gov/
Arkansas	F	\$14,647,709	https://www.adeq.state.ar.us/air/planning/vw.aspx
California	B	\$422,636,320	https://ww2.arb.ca.gov/index.php/our-work/programs/volkswagen-environmental-mitigation-trust-california
Colorado	C	\$68,739,918	https://environmentalrecords.colorado.gov/HPRMWebDrawer/RecordView/1239351
Connecticut	D	\$55,721,169	https://www.ct.gov/deep/lib/deep/air/mobile/vw/CT_VW_Final_Mitigation_Plan.pdf
Delaware	F	\$9,676,682	http://www.dnrec.delaware.gov/Air/Documents/delaware-vw-mitigation-plan.pdf
DC	D	\$8,125,000	https://doee.dc.gov/page/volkswagen-settlement
Florida	F	\$166,278,744	https://floridadep.gov/air/air-director/content/volkswagen-settlement-florida-mitigation-fund
Georgia	C	\$63,624,725	https://opb.georgia.gov/vw-settlement-agreement
Hawaii	A+	\$8,125,000	https://energy.hawaii.gov/vw-settlement/vw
Idaho	D	\$17,349,037	https://www.deq.idaho.gov/air-quality/vw-diesel-settlement/
Illinois	D	\$108,679,676	https://www2.illinois.gov/epa/topics/air-quality/driving-a-cleaner-illinois/vw-settlement/Pages/default.aspx
Indiana	D	\$40,935,880	https://www.in.gov/idem/airquality/2712.htm
Iowa	D	\$21,201,737	https://iowadot.gov/VWSettlement/default.aspx
Kansas	D	\$15,662,238	http://www.kdheks.gov/bar/air-monitor/dieselgrant/dieselvw.html
Kentucky	F	20,378,649	https://eec.ky.gov/Pages/Volkswagen-Settlement.aspx
Louisiana	D	\$19,848,805	https://deq.louisiana.gov/page/louisiana-volkswagen-environmental-mitigation-trust
Maine	D	\$21,053,064	https://www.maine.gov/mdot/vw/
Maryland	C	\$75,714,238	https://mde.maryland.gov/programs/Air/MobileSources/Pages/MarylandVolkswagenMitigationPlan.aspx
Massachusetts	B	\$75,064,424	https://www.mass.gov/guides/volkswagen-diesel-settlements-environmental-mitigation
Michigan	C	\$64,807,014	https://www.michigan.gov/egle/0,9429,7-135-70153_70155_70156-397560--,00.html

State	Grade	State Funding	State VW Website
Minnesota	C	\$47,001,661	https://www.pca.state.mn.us/air/volkswagen-settlement
Mississippi	F	\$9,874,413	https://www.mdeq.ms.gov/air/vw-mitigation-trust/
Missouri	D	\$41,152,051	https://dnr.mo.gov/env/apcp/vw/index.html
Montana	D	\$12,602,424	http://deq.mt.gov/Energy/transportation/VW-Settlement-Page
Nebraska	D	\$12,248,347	http://deq.ne.gov/NDEQProg.nsf/OnWeb/AirVW
Nevada	C	\$24,874,024	https://ndep.nv.gov/air/vw-settlement
New Hampshire	D	\$30,914,841	https://www.nh.gov/osi/energy/programs/vw-settlement.htm
New Jersey	C	\$72,215,085	https://www.state.nj.us/dep/vw/
New Mexico	D	\$17,982,600	https://www.env.nm.gov/vw-settlement/
New York	B	\$127,701,806	https://www.dec.ny.gov/chemical/109784.html
North Carolina	D	\$92,045,658	https://deq.nc.gov/about/divisions/air-quality/motor-vehicles-and-air-quality/volkswagen-settlement
North Dakota	F	\$8,125,000	https://deq.nd.gov/AQ/planning/VW.aspx
Ohio	C	\$75,302,522	https://www.epa.ohio.gov/oe/
Oklahoma	F	\$20,922,485	http://www.deq.state.ok.us/aqdnew/vwsettlement/
Oregon	D	\$72,967,518	https://www.oregon.gov/deq/aq/programs/Pages/VW-Diesel-Settlement.aspx
Pennsylvania	F	\$118,569,539	https://www.dep.pa.gov/business/air/volkswagen/pages/environmental-mitigation-trust-agreement.aspx
Puerto Rico	F	\$8,125,000	http://www.agencias.pr.gov/agencias/jca/Pages/vw.aspx
Rhode Island	A	\$14,368,857	http://www.dem.ri.gov/programs/air/vwsettle.php
South Carolina	D	\$33,895,491	https://doi.sc.gov/889/Volkswagen-Settlement
South Dakota	F	\$8,125,000	https://denr.sd.gov/des/aq/aaVW.aspx
Tennessee	D	\$45,759,914	https://www.tn.gov/environment/program-areas/energy/state-energy-office--seo-/tennessee-and-the-volkswagen-diesel-settlement.html
Texas	D	\$209,319,163	https://www.tceq.texas.gov/agency/trust
Utah	F	\$35,177,506	https://deq.utah.gov/air-quality/volkswagen-settlement
Vermont	A	\$18,692,130	https://dec.vermont.gov/air-quality/vw
Virginia	D	\$93,633,980	https://www.deq.virginia.gov/Programs/Air/VWMitigation.aspx
Washington	A+	\$112,745,650	https://ecology.wa.gov/Air-Climate/Air-quality/Vehicle-emissions/Volkswagen-enforcement-action/VW-federal-enforcement-action
West Virginia	F	\$12,131,842	https://transportation.wv.gov/highways/programplanning/Pages/Volkswagen-Environmental-Mitigation-Trust-Settlement.aspx
Wisconsin	F	\$67,077,457	https://doa.wi.gov/Pages/vwsettlementwisconsin.aspx
Wyoming	D	\$8,125,000	http://deq.wyoming.gov/admin/volkswagen-settlement/

Notes

1 David Shepardson, “U.S. appeals court upholds Volkswagen’s \$10 billion diesel settlement,” Reuters, July 9, 2018, accessed at <https://www.reuters.com/article/us-volkswagen-emissions/u-s-appeals-court-upholds-volkswagens-10-billion-diesel-settlement-idUSKBN1JZ21G>; Russell Hotten, “Volkswagen: The scandal explained,” BBC News, Dec. 10, 2015, available at <https://www.bbc.com/news/business-34324772>.

2 “About the Settlement,” NASEO & NACAA VW Settlement Clearinghouse, accessed at <https://vwclearinghouse.org/about-the-settlement/>.

3 “About the Settlement,” NASEO & NACAA VW Settlement Clearinghouse, accessed at <https://vwclearinghouse.org/about-the-settlement/>.

4 U.S. EPA, Frequently Asked Questions (FAQ) For Beneficiaries to the Volkswagen Mitigation Trust Agreements, October 2017, available at <https://www.epa.gov/sites/production/files/2017-10/documents/faq-ben.pdf>.

5 “About the Settlement,” NASEO & NACAA VW Settlement Clearinghouse, accessed at <https://vwclearinghouse.org/about-the-settlement/>.

6 Environmental and Human Health, Inc., *The Harmful Effects of Vehicle Exhaust: A Case for Policy Change*, 2006, available at <http://www.ehhi.org/exhaust06.pdf>.

7 “Sources of Greenhouse Gas Emissions,” U.S. Environmental Protection Agency, accessed at <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>.

8 Jimmy O’Dea, Union of Concerned Scientists, *Electric vs. Diesel vs. Natural Gas: Which Bus is Best for the Climate?*, July 19, 2018, available at <https://blog.ucsusa.org/jimmy-odea/electric-vs-diesel-vs-natural-gas-which-bus-is-best-for-the-climate>.

9 David Reichmuth, Union of Concerned Scientists, *New Data Show Electric Vehicles Continue to Get Cleaner*, March 8, 2018, available at <https://blog.ucsusa.org/dave-reichmuth/new-data-show-electric-vehicles-continue-to-get-cleaner>.

10 For example, Texas is now accepting applications for the first round of funding under its mitigation plan with more than \$58 million for projects that replace or repower school buses, transit buses, and shuttle buses. See Texas Commission on Environmental Quality, “Texas Volkswagen Environmental Mitigation Program,” accessed at <https://www.tceq.texas.gov/agency/trust> (last visited May 10, 2019).

11 David Shepardson, “U.S. appeals court upholds Volkswagen’s \$10 billion diesel settlement,” Reuters, July 9, 2018, accessed at <https://www.reuters.com/article/us-volkswagen-emissions/u-s-appeals-court-upholds-volkswagens-10-billion-diesel-settlement-idUSKBN1JZ21G>.

12 “About the Settlement,” NASEO & NACAA VW Settlement Clearinghouse, accessed at <https://vwclearinghouse.org/about-the-settlement/>.

13 U.S. Environmental Protection Agency, *Detailed Comparison of VW Eligible Mitigation Action 1-9 and Eligible Mitigation Action #10 (DERA Option)*, June 2017, <https://www.epa.gov/sites/production/files/2017-01/documents/vw-dera-option-elgble-mitig-compar-2017-01.pdf>.

14 United States District Court Northern District of California, Partial Consent Decree, Appendix D, accessed at <https://www.justice.gov/opa/file/871306/download>.

15 Alternative Fuels Data Center, *Emissions from Hybrid and Plug-In Electric Vehicles*, accessed at https://afdc.energy.gov/vehicles/electric_emissions.html; Environmental and Human Health, Inc., *The Harmful Effects of Vehicle Exhaust: A Case for Policy Change*, 2006, available at <http://www.ehhi.org/exhaust06.pdf>.

16 Lauren Aragon and Matt Casale, U.S. PIRG Education Fund, *From Deceit to Transformation: How States Can Leverage Volkswagen Settlement Funds to Accelerate Progress to a Clean Transportation System*, July 2017.

17 Florida has yet to publish an official plan.

- 18 Alternative Fuels Data Center, *Emissions from Hybrid and Plug-In Electric Vehicles*, accessed at https://afdc.energy.gov/vehicles/electric_emissions.html.
- 19 Elizabeth Riddlington and Christy Leavitt, Frontier Group and Environment America Research & Policy Center, *Trouble in the Air: Millions of Americans Breathe Polluted Air*, June 2018.
- 20 Elizabeth Riddlington and Christy Leavitt, Frontier Group and Environment America Research & Policy Center, *Trouble in the Air: Millions of Americans Breathe Polluted Air*, June 2018.
- 21 Nam P Nguyen and Julian D Marshall, Environmental Research Letters, Impact, efficiency, inequality, and injustice of urban air pollution: variability by emission location, 2018, available at <https://iopscience.iop.org/article/10.1088/1748-9326/aa9cb5/pdf>.
- 22 School buses: National Wildlife Federation, "Fast Facts About School Transportation," available at <https://www.nwf.org/Eco-Schools-USA/Become-an-Eco-School/Pathways/Transportation/Facts.aspx>; Transit buses: American Public Transportation Association, *2018 Public Transportation Fact Book*, December 2018, available at <https://www.apta.com/wp-content/uploads/Resources/resources/statistics/Documents/Fact-Book/2018-APTA-Fact-Book.pdf>.
- 23 Alana Miller, et. al, U.S. PIRG Education Fund, *Electric Buses: Clean Transportation for Healthier Neighborhoods and Cleaner Air*, May 2018.
- 24 Alana Miller, et. al, U.S. PIRG Education Fund, *Electric Buses: Clean Transportation for Healthier Neighborhoods and Cleaner Air*, May 2018.
- 25 Jimmy O'Day, Union of Concerned Scientists, *Electric vs. Diesel vs. Natural Gas: Which Bus is Best for the Climate?*, July 2018.
- 26 Alana Miller, et. al, U.S. PIRG Education Fund, *Electric Buses: Clean Transportation for Healthier Neighborhoods and Cleaner Air*, May 2018.
- 27 Alana Miller, et. al, U.S. PIRG Education Fund, *Electric Buses: Clean Transportation for Healthier Neighborhoods and Cleaner Air*, May 2018.
- 28 Alana Miller, et. al, U.S. PIRG Education Fund, *Electric Buses: Clean Transportation for Healthier Neighborhoods and Cleaner Air*, May 2018.
- 29 Clinton Global Initiative V2G EV School Bus Working Group, *ZEV School Buses – They're Here and Possibly Free* (presentation), 22 April 2016, available at <https://green-technology.org/gcsummit16/images/35-ZEV-School-Buses.pdf>.
- 30 Chicago Transit Authority, *Electric Bus*, accessed 6 February 2018, archived at <https://web.archive.org/web/20180206213131/http://www.transitchicago.com/electricbus/>.
- 31 California Air Resources Board, 5th Innovative Clean Transit Workgroup Meeting (presentation – slide 40), 26 June 2017.
- 32 Nichola Groom, "U.S. transit agencies cautious on electric buses despite bold forecasts," Reuters, December 12, 2017, available at <https://www.reuters.com/article/us-transportation-buses-electric-analysis/u-s-transit-agencies-cautious-on-electric-buses-despite-bold-forecasts-idUSKBN1E60GS>.
- 33 State of Arizona, *Beneficiary Mitigation Plan*, June 2018.
- 34 State of Arizona, *Governor Ducey Awards \$5 Million For 45 New School Buses* (Press Release), April 8, 2019, available at <https://azgovernor.gov/governor/news/2019/04/governor-ducey-awards-5-million-45-new-school-buses>. Note that the state has not allocated the full \$38 million, only \$36.8 million.
- 35 Alana Miller, et. al, U.S. PIRG Education Fund, *Electric Buses: Clean Transportation for Healthier Neighborhoods and Cleaner Air*, May 2018. State of Arizona, *Governor Ducey Awards \$5 Million For 45 New School Buses* (Press Release), April 8, 2019, available at
- 36 Over the originally allocated \$38 million. Arizona is receiving at total of over \$56 million in VW settlement money, so this would be possible. State of Arizona, *Beneficiary Mitigation Plan*, June 2018.
- 37 Jimmy O'Day, Union of Concerned Scientists, *Electric vs. Diesel vs. Natural Gas: Which Bus is Best for the Climate?*, July 2018.
- 38 United States District Court Northern District of California, Partial Consent Decree, Appendix D, accessed at <https://www.justice.gov/opa/file/871306/download>.

- 39 David Reichmuth, Union of Concerned Scientists, *New Data Show Electric Vehicles Continue to Get Cleaner*, March 8, 2018, available at <https://blog.ucsusa.org/dave-reichmuth/new-data-show-electric-vehicles-continue-to-get-cleaner>.
- 40 See Alana Miller, et al., Environment California Research and Policy Center, *Ready to Charge: Five Ways California Can Improve Charging to Unleash the Power of Electric Cars*, April 2019.
- 41 Steve Loveday, Inside EVs, "2018 U.S. Plug-In EV Sales Report Card," December 2018, available at <https://insideevs.com/news/341824/december-2018-us-plug-in-ev-sales-report-card/>.
- 42 Steve Loveday, Inside EVs, "2018 U.S. Plug-In EV Sales Report Card," December 2018, available at <https://insideevs.com/news/341824/december-2018-us-plug-in-ev-sales-report-card/>.
- 43 Bloomberg New Energy Finance, *Electric Vehicle Outlook 2017*, July 2017.
- 44 Elizabeth Traut et al., "U.S. Residential Charging Potential for Electric Vehicles," *Transportation Research*, 25(D): 139-145, doi: 10.1016, December 2013.
- 45 See Alana Miller, et al., Environment California Research and Policy Center, *Ready to Charge: Five Ways California Can Improve Charging to Unleash the Power of Electric Cars*, April 2019.
- 46 State of Rhode Island, *Raimondo, Congressional Delegation Unveil RIPTA's First Electric Buses* (Press Release), October 22, 2018, <https://www.ri.gov/press/view/34479>.
- 47 Rhode Island Department of Environmental Management, *Beneficiary Mitigation Plan Volkswagen Environmental Mitigation Trust Agreement*, August 2018.
- 48 New Jersey Department of Environmental Protection, *State of New Jersey Beneficiary Mitigation Plan*, December 2018.
- 49 Office of the Governor of New Jersey, *ICYMI: New Jersey Moving Forward With Plans To Improve Air Quality Using Volkswagen Settlement Funds*, Oct. 5, 2018, <https://nj.gov/governor/news/news/562018/approved/20181005c.shtml>.
- 50 Office of the Governor of New Jersey, *ICYMI: New Jersey Moving Forward With Plans To Improve Air Quality Using Volkswagen Settlement Funds*, Oct. 5, 2018, <https://nj.gov/governor/news/news/562018/approved/20181005c.shtml>.
- 51 New Jersey Department of Environmental Protection, *DEP to Use First Round of Volkswagen Settlement Funds for Electric Vehicle Charging Stations, NJ Transit Electric Buses* (Press Release), Feb. 28, 2019, https://www.nj.gov/dep/newsrel/2019/19_0011.htm.
- 52 Oregon Department of Environmental Quality, *VW Environmental Mitigation Plan for the State of Oregon*, March 2018.
- 53 Oregon Department of Environmental Quality, *VW Environmental Mitigation Plan for the State of Oregon*, March 2018.
- 54 Colorado Department of Public Health and Environment, *Beneficiary Mitigation Plan*, March 2018.
- 55 Nic Garcia, "Gov. Jared Polis pushes Colorado toward zero-emission vehicles with first executive order," *The Denver Post*, Jan. 17, 2019, available at <https://www.denverpost.com/2019/01/17/colorado-jared-polis-zero-emission-standards/>.
- 56 Texas Commission on Environmental Quality, *Volkswagen Environmental Mitigation Trust Beneficiary Mitigation Plan for Texas*, November 2018.
- 57 Texas Commission on Environmental Quality, "Texas Emission Reduction Plan," available at <https://www.tceq.texas.gov/airquality/terp> (last visited April 15, 2019).
- 58 Maine Department of Transportation and Department of Environmental Protection, *Maine Beneficiary Mitigation Plan*, 2018.
- 59 Office of Governor Janet T. Mills, *Governor Mills and Efficiency Maine Announce Initiatives to Expand Electric Vehicle Use Across Maine* (Press Release), March 21, 2019.
- 60 Wisconsin Department of Administration, *Wisconsin Beneficiary Mitigation Plan for the Volkswagen Environmental Mitigation Trust*, May 1, 2018.

61 “Racine expecting to receive \$6.1 million for electric buses,” *The Journal Times*, Nov. 30, 2018, available at https://journaltimes.com/news/local/racine-expecting-to-receive-million-for-electric-buses/article_d78df960-e334-58b5-a5a5-b7e1e3e94284.html.

62 Madison: City of Madison Metro Transit, *All-Electric Buses Coming to Madison in 2020* (Web Page), accessed on May 3, 2019 at <https://www.cityofmadison.com/metro/contact/all-electric-buses-coming-to-madison-in-2020>; Milwaukee: Corrinne Hess, “Bus Rapid Transit moving forward In Milwaukee County,” *Wisconsin Public Radio*, November 13, 2018. La Crosse: Zach Prelutsky, “La Crosse receives grant to help purchase new electric buses,” *WEAU*, August 24, 2018. Diesel buses: Chris Hubbuch, “Wisconsin to spend \$25.8 million of Volkswagen diesel fines on new diesel buses,” *Wisconsin State Journal*, December 10, 2018.

63 Patrick Marley and Lee Bergquist, “Assembly Republicans on Earth Day back plans for electric vehicle charging stations,” *Milwaukee Journal Sentinel*, April 22, 2019.

64 Jessie Opoien, “Lt. Gov. Barnes, MGE push for more electric vehicle charging stations,” *The Cap Times*, March 28, 2019.