

Transportation for Vermonters

AARP-VT • American Heart Association • American Lung Association in Vermont • Capstone Community Action • CarShare Vermont • Chittenden Area Transportation Management Association • Local Motion • Renewable Energy Vermont • Vermont Chapter of the Sierra Club • Vermont Clean Cities Coalition • Vermont Energy Investment Corporation • Vermont Natural Resources Council • Vermont Public Interest Research Group

VW Environmental Mitigation Trust
Attn: Deirdra Ritzer
The Vermont Agency of Natural Resources
Department of Environmental Conservation
Air Quality and Climate Division
1 National Life Drive, Davis 2
Montpelier, VT 05620

January 12, 2018

Dear Ms. Ritzer:

Thank you for the opportunity to comment on the Draft Beneficiary Mitigation Plan. Transportation for Vermonters (T4VT) believes that these funds, if invested carefully, can yield environmental, health, and economic benefits for Vermonters across the state, while providing a model for thinking about our future transportation system.

Transportation for Vermonters (T4VT) is a diverse coalition committed to working together, creatively and across sectors, to achieve a sustainable, accessible, and equitable transportation system in our rural state. We believe that a robust and efficient statewide system for sustainable mobility benefits all Vermonters, our communities, our environment, and our economy. We offer the following comments, which we believe should guide the investment of these funds in order to realize these multiple benefits.

Focus on electrification so that these one-time investments are catalytic and transformative.

Finding ways to spend less money and less energy on transportation in a rural state is daunting, but necessary: Approximately 47 percent of Vermont's greenhouse gas pollution comes from the transportation sector, and Vermonters typically spend about 25 percent of their income on transportation (15 percent is considered "affordable"). In addition, according to the Clean Air Task Force's study, the cost of health impacts in Vermont from fine diesel particles was \$29 million in 2005. While we'll ultimately need a range of transportation solutions, from land use to transit, electric vehicles are one important tool. The settlement funds are a unique opportunity to catalyze a market – electrification – that is at a tipping point for transformation and will help Vermont meet its energy and health goals. However, initial investment is required for this transformation to happen.

Because of this, settlement funds should be focused on electrification, including allocating the full amount of the settlement allowable (15 percent) for electric vehicle charging infrastructure.

Consequently, it is our position that none of the funds should be used to purchase new diesel technology. Instead, these one-time funds should be used strategically, to catalyze market

transformation for new technologies – not to boost those that are already market-ready and in the queue to replace existing diesel vehicles.

When looking at how best to electrify the transportation sector, it is our position that key opportunities exist in the electric bus sector - both transit and school buses.

We are at a pivotal point for the new – but fast-emerging – electric bus technologies. We recommend investing settlement funds early on in school and transit buses. Each present their own opportunities, though importantly, investing in both early speeds market transformation so that the technologies can be broadly available to people across the entire state.

Electric school buses make a difference where it matters most: cleaning the air for our children and helping them see that a clean transportation future is possible. Children are among the most vulnerable to health impacts from air pollution caused by diesel emissions, in part simply because of their higher respiration rates, but also due to the long bus rides that many Vermont children take.

School buses additionally provide a benefit to the electric grid by charging during off-peak times and smoothing out demand. Predictable routes and times as well as predictable downtimes provide ample opportunities for charging. Electric school buses can use power from the grid and help ease grid constraints, ensuring the most efficient use of our transmission infrastructure while making this new technology available to students in one of the most rural parts of the state.

Electric transit buses offset a significant amount of NOx and other greenhouse gases given their intensity of use – particularly considering that the average diesel transit bus gets just 4.5 miles per gallon. Savings vary by bus models, but to give an example, switching one diesel transit bus to an electric bus can lead to annual savings of over 50 tons of greenhouse gases, 445 metric tons of CO₂, nearly 300 lbs of CO, and 628 lbs of NOx. Multiplied over the estimated 12 year lifespan of a bus, and multiple buses across a fleet, Vermont stands to gain real environmental benefits and make progress toward its goals.

With both transit and school buses, targeting investments of electric buses to grid constrained areas - for example, the Sheffield-Highgate Export Interface, the constrained region of the grid in the Northeast Kingdom – provides an additional opportunity.

Spending the funds now on electric buses would ensure that we seize the opportunity to catalyze this market – particularly given the model year restriction that limits these funds to older models.

To achieve maximum, long-term benefits from the funds, set priorities that advance settlement requirements *and* a range of state goals and co-benefits.

The beneficiary plan should be developed to align with existing state goals, and to achieve co-benefits wherever possible. Not only can these funds improve transportation in Vermont, but by targeting these funds to reach existing energy, climate, job creation, and health goals, we can accomplish a much broader set of positive impacts, ensuring maximum return on investment of these funds, for more people.

We feel that clear prioritization criteria will be essential for potential applicants to understand what types of projects are being solicited. To achieve this we suggest that the final Beneficiary Mitigation Plan, as well as any application and guidance materials, make that clear through the organization of the priorities and a transparent weighing system of the criteria.

To ensure that multiple goals are achieved, we recommend a project prioritization scheme that:

- *Gives priority to projects that help meet existing state goals*, such as increasing the share of renewable energy in transportation to 10 percent by 2025, and 80 percent by 2050; advancing Vermont's Zero Emission Vehicle Action Plan; and helping achieve state greenhouse gas emission targets. Key health goals - including encouraging active lifestyles and assessing the health impacts of our energy system - can be found on p. 3 of the state's 2016 Comprehensive Energy Plan.
- *Prioritizes investments that will benefit those most impacted*. The VW Mitigation Trust requires that states describe how a mitigation action helps communities that bear a disproportionate share of the negative impacts of these emissions. Since Vermont does not currently have air quality nonattainment areas, we need to identify other areas with concentrated air quality issues that may benefit, such as communities located near congested areas, school bus loading and unloading areas, communities with high rates of asthma, and the populations most susceptible to health problems from transportation pollution such as elderly persons with existing health conditions, low-income communities, and children. For example, to help address health disparities in Vermont, funds could be targeted to communities where rates of disease caused and/or exacerbated by air pollution are highest (Franklin Grand Isle - high rates of chronic obstructive pulmonary disease (COPD), Rutland/Washington - asthma, and Franklin - heart disease and stroke).
- *Prioritizes projects that build on Vermont's success*: According to U.S. Environmental Protection Agency (EPA) data, Vermont has the lowest NOx emission rate from electricity generation in the country. Since one of the primary goals of the VW Mitigation Trust is to reduce NOx emissions, plugging into Vermont's clean electricity is an effective way to immediately reduce NOx emissions. Vehicles that are plugged in today will only get cleaner over time as the state continues to make progress toward its Renewable Energy Standard. Building on this clean energy foundation keeps money in state, inspires innovation, and creates jobs.
- *Supports existing laws, such as Vermont's anti-idling law*: While it is our hope that the vast majority of vehicles funded will be electric (and thus not produce emissions from idling), grant proposals that include an idling reduction and enforcement policy for an applicant's fleet, municipality and/or property (if applicable) should be given extra weight. Given that the VW funds will not replace the vast majority of polluting vehicles, prioritizing idling reduction is an easy, cost-effective way to make the VW money go further in reducing NOx emissions. If any applications for non-electric vehicles are permitted, an idling reduction and enforcement policy should be required for those vehicles.

In addition, we strongly recommend taking the long view when calculating the costs and benefits of individual projects, in particular:

- When calculating the costs of new technologies, use overall lifecycle costs, which include purchase *and* operations and maintenance costs, rather than just comparing purchase prices.
- When calculating NOx and other greenhouse gas emissions reduction benefits of different technologies, use lifecycle emissions rather than just tailpipe emissions.

Administering the funds for a successful program

The process of administering the funds – from soliciting and reviewing applications to disbursing the money – will be a complex one. It will take dedicated resources to ensure that potential applicants are aware of the opportunity. In addition, providing support to applicants, who may have a range of capacity and experience, will be essential to ensure equitable access to the funds. For example, schools – particularly smaller, rural schools – may be challenged to put together proposals or to develop and manage an electric school bus project. In order to make sure that such applicants have access to this opportunity, there will need to be some technical assistance to support these activities – both the application and administration. Otherwise there may be interest but not the capacity to advance projects, which would be a lost opportunity.

We recommend that dedicating staff solely to this program to ensure success and accessibility. This may ultimately require hiring new staff, and budgeting for administrative expenses should be done in a way that allows for this eventuality.

We also recommend that ANR collaborate with other agencies whose previous grant making experience could be helpful. For example, the collaboration between ACCD and the Air Quality Division to distribute grant funds for EV charging stations in Vermont’s state designated downtowns and villages makes ACCD a logical partner for efficient distribution of the 15 percent of funds for charging infrastructure. Similarly, the Clean Energy Development Fund, which is already working with utilities on electrification efforts, and has a strong track record in deploying new, cost-effective technology, would be well positioned to coordinate electrification projects between applicants and utilities as necessary to ensure these projects are beneficial to the grid.

Vermont’s choices about how to invest these funds provide an opportunity for leadership on what can be achieved through thoughtful investments in our transportation system.

By focusing on electrification, and especially on investments in evolving technologies such as electric school and transit buses, Vermont has the opportunity to improve our children’s health and our communities’ bottom lines while reinforcing our commitment to transportation choices, affordability, and clean energy. We hope that the Agency of Natural Resources will craft the plan, its priorities, and the administration of the program as suggested above in order to achieve this exciting potential.

We welcome any questions, and look forward to supporting the successful deployment of these funds across the state.

Sincerely,

Transportation for Vermonters