VERMONT

State of Vermont
Office of the Secretary
219 North Main Street
Barre, VT 05641
vtrans.vermont.gov

[phone] 802-476-2690
[fax] 802-479-2210
[ttd] 802-253-0191

Agency of Transportation

TO: Members, House and Senate Committees on Transportation and Appropriations

FROM: Joe Flynn, Secretary of Transportation

E-SIGNED by Joe Flynn
on 2021-02-10 19:33:28 GMT

DATE: February 10, 2021

SUBJECT: Agency of Transportation Section 1 (c) (2) of Act No. 121 of 2020 Report

The following reporting requirement is established by 1 (c) (2) of Act No. 121 of 2020 which states:

(2) The Agency shall, on or before February 15, 2021, file a written report with the House and Senate Committees on Appropriations and on Transportation with the following information:
(A) an update on enacted and anticipated federal COVID-19 legislation;
(B) an update on projects in the transportation program adopted under subsection (a) of this section that are not anticipated to proceed as planned in fiscal year 2021 and the reasons why;
(C) an update on projects not in the transportation program adopted under subsection (a) of this section that will proceed in fiscal year 2021 and the source of funding;
(D) the status of and funding remaining for the programs established pursuant to 2019 Acts and Resolves No. 59, Sec. 34;
(E) the balance of funding available for public transit under federal COVID-19 legislation; and
(F) any expected reduction in funding available for municipalities.

The following is the Agency of Transportation's report pursuant to the above requirement:

(A) ***an update on enacted and anticipated federal COVID-19 legislation:***

a. The Coronavirus Response and Relief Supplemental Appropriations Act, 2021 (CRRSAA), title IV of division M, Public Law (Pub. L.) 116-260, appropriated an additional $10,000,000,000 for Highway Infrastructure Programs (HIP). Of such amount, $50,360,938 of Federal Highway Administration funds is available for Vermont. The funds resulting from this apportionment are eligible to be obligated as follows:
   i. Activities eligible under section 133(b) of title 23, U.S.C. (surface transportation block grant program program);

   ii. Costs related to preventive maintenance, routine maintenance, operations, personnel, including salaries of employees (including those employees who have been placed on administrative leave) or contractors, debt service payments, availability payments, and coverage for other revenue losses.

b. The Cares Act provided $13,352,789 in Federal Transit Administration (FTA) funds to Vermont and CRRSAA awarded an additional $26,725,119 in FTA funds to Vermont.
   i. The Agency has budgeted $11,796,194 in CARES Act funds through FY2021. The balance of CARES Act funds, roughly $1.53 million are used in the proposed FY2022 budget.
   ii. The Agency has proposed using $24,300,000 from the CRRSAA funds in the FY2022 budget. The balance of approximately $2.4 million is planned to be used in FY2023.

c. The Cares Act provided approximately $299,000 in Federal Aviation Administration (FAA) funds to Vermont State Airports. In addition, several FAA Airport Improvement Program (AIP) projects will be funded at 100% FAA using Cares Act funds, and Burlington International Airport (BIA) will receive funds directly from FAA. CRRSAA awarded an additional estimate of $3,922,116 in FAA funds to Vermont. The FAA has not yet published the split between BIA and state-owned for the CRRSAA funds, although most of this funding is anticipated to pass through directly to BIA.

(B) ***an update on projects in the transportation program adopted under subsection (a) of this section that are not anticipated to proceed as planned in fiscal year 2021 and the reasons why***

The Agency does not anticipate any significant changes to planned project schedules during FY2021.

(C) ***an update on projects not in the transportation program adopted under subsection (a) of this section that will proceed in fiscal year 2021 and the source of funding***

The Agency does not anticipate that any projects that are not already authorized by the approved Transportation Program will advance in FY2021.

(D) ***the status of and funding remaining for the programs established pursuant to 2019 Acts and Resolves No. 59, Sec. 34***

See attached status report for details. A brief summary follows:

VTrans launched the New PEV Incentive Program in December 2019. VTrans entered agreements with Drive Electric Vermont (through VEIC) and the State's electric distribution utilities to help administer the Program. For about the first year of the Program, VTrans paid for Drive Electric Vermont's administrative services through a $50,000 grant agreement that VTrans financed with air-quality settlement money transferred from ANR to VTrans. In addition, VTrans financed approximately $13,000 of administrative support from Drive Electric Vermont in the Program's first year through an annual PSD-VEIC grant agreement funded by an interagency MOA. VTrans executed no-cost contracts with the distribution utilities. Initial program incentive funding of $1.1M was fully drawn down by October 2020, and VTrans suspended the Program at that time.

VTrans relaunched the Program on November 5, 2020, with an additional $1M made available through the 2020 Transportation Bill. VTrans allocated up to $50,000 of that sum to an amended grant agreement with VEIC for continued administrative support from Drive Electric Vermont. VTrans also executed amended no-cost contracts with the utilities. About $579,000 of funding remains available for incentives under the New PEV Incentive Program.

In November 2019, VTrans entered a grant agreement with Capstone Community Action to run the used fuel-efficient vehicle incentive and emissions-repair programs. Capstone stood up a used fuel-efficient vehicle incentive program, which it calls MileageSmart, and began paying incentives under this program in September 2020. Capstone determined that it was not able to launch an emissions-repair program due to insufficient program resources. Capstone invested about $10,000 in designing an emissions-repair program before abandoning that effort. By December 2020 Capstone exhausted the remainder of the $150,000 that VTrans granted to Capstone to run both MileageSmart and the emissions-repair programs. Since that time, Capstone has continued to run MileageSmart at its own administrative cost. Of the $750,000 of incentive funding the Legislature made available for both MileageSmart and the emissions repair program, about $680,000 of incentive funding remains unspent.

(E) ***the balance of funding available for public transit under federal COVID-19 legislation***

a. CARES Act balance as of July 1, 2021 is projected to be $1.53M
b. CRRSAA Balance as of July 1, 2022 is projected to be $2.4M

(F) ***any expected reduction in funding available for municipalities.***

The Agency does not anticipate any reduction in funding available for municipalities. The Town Highway Structures and Class 2 Roadway grant programs were paused in FY2021. The Agency's FY2022 Governor's recommended Transportation Program proposes to fully restore the funding that was paused in FY2021. In addition, the FY2021 Transportation Program provided $7 million in additional funds to all municipalities that was distributed in the same apportionments prescribed under 19 V.S.A. § 306(a)(3) [General State aid to town highways].

Please feel free to contact me or Costa Pappis (802-793-5049) if you have questions.

Thank you.

cc: Chris Rupe, Joint Fiscal Office

Report on Vermont's Statewide Vehicle Incentive Programs

Prepared by VTrans Pursuant to the 2019 and 2020 Transportation Bills
Submitted January 31, 2021 for Calendar Year 2020

Submitted to:
House Committee on Transportation
Senate Committee on Transportation
House Committee on Energy and Technology
Senate Committee on Finance

I. Reporting Requirement

VTrans submits this report pursuant to section 34(a)(5) of the 2019 Transportation Bill (Act 59), as amended by section 14 of the 2020 Transportation Bill (Act 121). Section 34(a)(5), as amended, reads in full as follows:

> The Agency shall annually evaluate the programs to gauge effectiveness and submit a written report on the effectiveness of the programs to the House and Senate Committees on Transportation, the House Committee on Energy and Technology, and the Senate Committee on Finance on or before the 31st day of January in each year following a year that an incentive or repair voucher was provided through one of the programs. Notwithstanding 2 V.S.A. § 20(d), the annual report required under this section shall continue to be required if an incentive or repair voucher is provided through one of the programs unless the General Assembly takes specific action to repeal the report requirement.

II. Summary of Incentive Programs

This report covers the three statewide vehicle incentive programs established by the 2019 Transportation Bill, as amended by the 2020 Transportation Bill: 1) a new plug-in electric vehicle (PEV) incentive program, 2) a used fuel-efficient vehicle incentive program, and 3) a vehicle emissions-repair incentive program. This is the first report VTrans has submitted on these programs.

A. New PEV Incentive Program

The 2019 Transportation Bill limited the new PEV incentive program to Vermont households with low and moderate incomes at or below 160 percent of the State's prior five-year average median household income. Based on U.S. Census data, program eligibility was capped at $96,122 until July 1, 2020, when the 2020 Transportation Bill changed the program's income eligibility requirements. The 2019 Transportation Bill required incentives to be structured by income, to apply to purchases and leases of new PEVs, to emphasize battery electric vehicles

(BEVS, also known as all-electric vehicles) over plug-in hybrid electric vehicles (PHEVs), and to apply to PEVs with a base MSRP of $40,000 or less.

VTrans established a program incentive structure that defined lower-income applicants according to the State's weatherization household income eligibility criteria, which varied by county of residence and the number of people in the household and which ranged from about $44,500 for a one-person household in most counties to about $96,700 for a household with eight or more people in certain other counties. Low-income applicants could receive incentives of $4,000 for a PHEV or $5,000 for a BEV. Moderate-income applicants could receive $1,500 for a PHEV or $2,500 for a BEV.

To be able to run the program with the funding made available, and as explained in more detail below, VTrans engaged in a cooperative management effort involving VTrans; Vermont's electric distribution utilizes (DUs); participating Vermont automobile dealers, organized through VADA (Vermont Vehicle and Automotive Distributors Association); and the Vermont Energy Efficiency Corporation (VEIC), through its Drive Electric Vermont (DEV) program. The program provided eligible consumers with two options for receiving an incentive. Under one option, applicants could receive the incentive directly from the dealer in the form of a reduction of the down payment on the vehicle (dealer point-of-sale or -lease incentive). The dealer would invoice the DU serving the applicant's place of residence, and the DU would then invoice VTrans for reimbursement. Under the second option, applicants could purchase the vehicle without an incentive and then receive the incentive by providing proof of purchase to the DU serving their place of residence (consumer-direct incentive). The DU would then invoice VTrans for reimbursement. DEV helped prepare program guidelines, application forms, and dealer agreements, maintained a detailed website for interested consumers, fielded consumer questions, tracked spending to ensure funds were not overdrawn, and maintained and organized program metrics.

The 2020 Transportation Bill, effective July 1, 2020, replaced the income-eligibility requirements based on total household income with income caps based on the applicant's adjusted gross income (AGI). In essence, applicants with AGIs between $50,000 and $100,000 are considered moderate income, and applicants with AGIs at or below $50,000 are considered low income. (These numbers vary somewhat depending on tax filing status, as specified in the bill.) The bill provides that moderate-income applicants may receive no more than one incentive of $1,500 for a PHEV or $2,500 for a BEV, whereas low-income applicants may receive no more than one incentive of $3,000 for a PHEV or $4,000 for a BEV.

DEV prepared a detailed program report on the New PEV Incentive Program pursuant to its grant agreement with VTrans, and that report is attached hereto. Detailed information on this program can also be found in the 2019 and 2020 Transportation Bills, in the amended VTrans-VEIC grant agreement attached hereto, in the program guidelines implementing the 2019 and 2020 Transportation Bills attached hereto, and on DEV's state incentive program webpage (https://www.driveelectricvt.com/why-go-electric/purchase-incentives).

B. Used Fuel-Efficient Vehicle and Emissions-Repair Incentive Programs

As detailed below, VTrans entered a grant agreement with Capstone Community Action to run the used fuel-efficient vehicle incentive and emissions-repair programs. The 2019 and 2020 Transportation Bills state that the used fuel-efficient vehicle incentive program must limit purchase incentive payments to used pleasure cars with EPA fuel efficiency ratings of at least 40 miles per gallon when these vehicles were new. Point-of-sale incentives must be provided through the State's network of community action agencies and must be limited to applicants with incomes that would qualify them for services through the State's Weatherization Program. The bills establish a maximum incentive of $5,000 under this program.

Capstone stood up a used fuel-efficient vehicle incentive program, which it calls MileageSmart, and began paying incentives under this program in September 2020. Under the 2019 and 2020 Transportation Bills, Capstone may require as a condition of the incentive that the owner of a vehicle that failed emissions-system testing or that is at least 15 years old with a fuel efficiency rating of less than 25 miles per gallon must remove that vehicle from operation. To avoid making the program more complicated than it already is, Capstone chose not to include this requirement in MileageSmart.

Under the 2019 and 2020 Transportation Bills, the emissions-repair program applies to vehicles that failed emissions testing, that require repairs to pass testing that are not covered by warranty, and that will be able to pass inspection once repairs are made under the program. Incentives must be commensurate to the vehicle's fair market value and may not exceed $2,500. $2,500 incentives are available only for vehicles with fair market values of at least $5,000. Income-eligibility is measured by the same criteria as the State's Low Income Home Energy Assistance Program (LIHEAP). As explained below, Capstone has not been able to launch an emissions-repair program due to lack of expertise in the development and implementation of emissions repair programs and insufficient resources.

Capstone prepared a detailed report on the used fuel-efficient vehicle incentive program and the emissions-repair incentive program pursuant to its grant agreements with VTrans, and that report is attached hereto. Detailed information on these programs can be found in the 2019 and 2020 Transportation Bills, in the original and amended VTrans-Capstone grant agreements attached hereto, and on Capstone's MileageSmart webpage (https://www.mileagesmartvt.org/).

III. Budgeting and Contracting

The 2019 Transportation Bill authorized VTrans to spend up to $2M on all three statewide vehicle incentive programs. The Bill required VTrans to allocate at least $1.1M of that sum to the new PEV incentive program. Further, the Bill authorized VTrans to retain one or more contractors to assist with program administration and to set aside up to $150,000 of the total program funding for the administration of all three programs. VTrans decided to allocate $1.1M of incentives to the new PEV incentive program, $750,000 of incentives to the used fuel-efficient vehicle and emissions-repair incentive programs, and $150,000 to program administration.

After enactment of the 2019 Transportation Bill, VTrans initiated a simplified bid process to locate a contractor to run the new PEV incentive program. VTrans received one responsive bid, from the Center for Sustainable Energy (CSE), which runs PEV incentive programs in other states (CA, CT, MA, NY, NJ, and OR). CSE identified VEIC as a subcontractor and proposed designing and operating the new PEV incentive program in Vermont for $250,000. Even assuming that VTrans may have been able to whittle down CSE's initial asking price somewhat, the $150,000 available for administering all three incentive programs was insufficient to pay a contractor to run the new PEV incentive program, much less all three statewide vehicle incentive programs.

VEIC was not able to bid on running the new PEV incentive program itself and instead came in as a sub to CSE because VEIC's accounting rules would have required retaining a percentage of incentives paid in addition to its time-and-materials expenses. These rules would have driven VEIC's administrative fees well over budget. (VEIC applies a 9.3% indirect expense rate to all direct costs inclusive of incentive funds and labor incurred in connection with the programs it operates in accordance with its annual approved, Negotiated Indirect Cost Rate Agreement (NICRA) with the U.S. Department of Energy.)

Around the same time, VTrans also undertook negotiations with Capstone Community action to run the used fuel-efficient vehicle and emissions-repair incentive programs. VTrans and Capstone agreed that the entire $150,000 allocated for the administration of all three programs would be needed for Capstone to design and launch these two programs. Both programs are complex and needed to be designed from scratch.

With insufficient funds to contract at market value for the administration of all three incentive programs, and with insufficient capacity at VTrans and other state agencies to manage any of these programs in-house, VTrans reached out to the State's seven DUs to discuss the possibility of no-cost contracts to assist with the administration of the new PEV incentive program. (Green Mountain Power raised the idea at a DEV stakeholder meeting when VTrans explained the administrative challenges the statewide vehicle incentive programs were presenting.) The DUs agreed to pay dealers for point-of-sale or -lease incentives and to pay consumers for consumer-direct incentives and to invoice VTrans for reimbursement of incentives paid without charging VTrans administrative fees. Using $50,000 of air-quality settlement money transferred from the Department of Environmental Conservation (DEC), VTrans retained VEIC to assist with program guidelines, record keeping, and consumer outreach through its DEV program.

VTrans entered into a grant agreement with VEIC and seven identical no-cost contracts with the DUs and launched the new PEV incentive program on December 16, 2019. The participation of all seven of the State's DUs (including VPPSA, which represents numerous municipal utilities) allowed the new PEV incentive program to be available to all Vermonters, regardless of which utility service territory they lived in. The no-cost contracts with the DUs to assist with the new PEV incentive program and the use of air-quality settlement funds for DEV's services in support of that program freed up the $150,000 of program administration funds for the used fuel-efficient vehicle and emissions-repair programs to be run by Capstone. VTrans and Capstone entered into a grant agreement for this purpose on November 27, 2019.

The 2020 Transportation Bill, which took effect July 1, 2020, made certain changes to the eligibility requirements for the new PEV incentive program, and VTrans instructed DEV to change the program guidelines accordingly. The $1.1M of incentive funding for the new PEV incentive program was fully drawn down on October 1, 2020, and VTrans suspended the program at that time. The 2020 Appropriations Bill (Act 154), which allocated an additional $1M for the new PEV incentive program, including up to $100,000 for additional administrative support from DEV, was not enacted until October 2, 2020. The 2020 Transportation Bill required VTrans to continue using no-cost contracts with the DUs to administer incentive payments. Apparently, the DUs were not consulted with respect to this expectation. Although the DUs did agree to sign amended no-cost contracts with VTrans, the Legislature will need to consult with the DUs about whether they may not be willing to renew these contracts.

VTrans executed an amended grant agreement with VEIC for $50,000 and amended no-cost contracts with the DUs, leaving $950,000 of new incentive money for the new PEV incentive program. VTrans relaunched the program on November 5, 2020. Copies of the amended grant agreement with VEIC and the amended no-cost contract with the DUs are attached.

Prior to the execution of an amended VTrans-VEIC grant agreement, VEIC informed VTrans that it was close to exhausting the $50,000 of DEC air quality settlement money that funded the original grant agreement. VTrans authorized VEIC to charge additional expenses over and above its original grant of $50,000 to an annual VEIC-Public Service Department (PSD) grant agreement that multiple agencies fund to support DEV’s broader work supporting the State’s vehicle electrification policies. The other signatory agencies, including PSD and DEC, concurred with this arrangement. VEIC ultimately invoiced PSD approximately $13,500 under the VEIC-PSD grant agreement for continued administration of the new PEV incentive program between time VEIC exhausted its original $50,000 grant and the time VTrans and VEIC executed an amended grant agreement to provide VEIC with an additional $50,000 of funding.

VTrans and Capstone entered into a grant agreement on November 27, 2019. The agreement tasked Capstone with developing and operationalizing the used fuel-efficient vehicle and emissions-repair incentive programs on a time-and-materials basis. After several meetings with VTrans, DEC’s Air Quality and Climate Division, and the Department of Motor Vehicles, Capstone launched the used fuel-efficient vehicle incentive program (MileageSmart) in mid-March 2020. However, Capstone determined that it was not able to stand up both the used fuel-efficient vehicle incentive program and the emissions-repair incentive program. Although VTrans and the other agencies worked with Capstone to try to overcome obstacles to standing up the emissions-repair program, the parties were not able to agree on a path forward within the $150,000 budget available for both Capstone programs.

The pandemic lockdown and associated economic fallout arrived in Vermont just after Capstone launched the used fuel-efficient vehicle incentive program. Capstone diverted its attention to responding to the pandemic, meaning that it did not pay out any incentives under this program in the ensuing months. Capstone also abandoned the emissions-repair program.

In anticipation of the expiration of the original grant agreement between VTrans and Capstone on June 30, 2020, VTrans and Capstone entered into an amended grant agreement on June 25, 2020. The amended grant agreement between VTrans and Capstone, which is attached, also anticipated the enactment of the 2020 Transportation Bill on June 30, 2020. The 2020 Transportation Bill required Capstone to operationalize the emissions-repair program by July 1, 2021. It also authorized VTrans to allocate up to $50,000 of additional administrative funding to Capstone to run both the used fuel-efficient vehicle and emissions-repair incentive programs. However, the $50,000 of additional administrative funding for Capstone was not appropriated until the enactment of the Appropriations Bill (Act 154) on October 2, 2020.

The June 25, 2020 amened grant agreement required Capstone to operationalize the used fuel-efficient vehicle incentive program no later than September 1, 2020 and to complete building the emissions-repair program and begin operationalizing it no later than July 1, 2021. VTrans did not seek to enter into a second amended grant agreement with Capstone after the Appropriations Bill passed because the Legislature was clear that these additional $50,000 of administrative funds were to be used for both the used fuel-efficient vehicle and emissions-repair programs, and Capstone was firm that it would not be able to stand up and operationalize an emissions-repair program. Capstone relaunched its used fuel-efficient vehicle incentive program (MileageSmart) in September 2020.

Later in the fall, VTrans and DEC met with Capstone to better understand the obstacles to establishing and running the emissions-repair program. VTrans and DEC then communicated with agency staff in a few jurisdictions with emissions-repair programs (California, Oregon, and Salt Lake County in Utah) to try to get a realistic picture of the resources that would be needed to run an emissions-repair program in Vermont. A summary evaluation of the effectiveness of all three of Vermont's vehicle incentive programs, including some basic financial metrics, follows.

IV. Program Evaluations

A. New PEV Incentive Program

The initial incentive funding of $1.2M for the new PEV incentive program was exhausted between program launch on December 16, 2019 and October 1, 2020. This rapid utilization of incentive funds took place despite the dampening effect of the global pandemic on vehicle sales, especially in the second quarter of 2020. The program was suspended on October 1, when initial incentive funding was exhausted, pending VTrans' execution of a new grant agreement with DEV and renewed no-cost contracts with the DUs. VTrans relaunched the program when this process was completed on November 5, 2020. Since that time, the new incentive pool of $950,000 has already been drawn down to under $650,000.

The New PEV Incentive Program is an important tool for accelerating PEV consumer uptake in Vermont. Program funding has not enabled VTrans to conduct follow-up research to determine the level of free ridership or to fully understand the demographics of incentive recipients and non-recipients. However, DEV's report (attached) shows that close to half the incentives have gone to low-income consumers, with the remaining going to the moderate-income category.

Prior to July 1, 2020, program eligibility was based on household income, with higher incentives available to individuals with low household incomes and to those who purchased or leased all-electric vehicles rather than plug-in hybrids. Organizing eligibility by household income raised some questions about what exactly constitutes a household. Further, the program application form required incentive recipients to cooperate in program audits, including providing the State with access to their tax returns upon request. However, VTrans had no practical way to determine whether an applicant's household income was greater than the individual applicant's income because only the applicant who signed the application form was required to release tax returns or otherwise cooperate in an audit. The 2020 Transportation Bill eliminated these issues by basing program eligibility on the applicant's AGI.

To date, VTrans has conducted two program audits of incentive recipients who purchased or leased their PEVs prior to July 1, 2020, when the 2020 Transportation Bill changed the program's eligibility requirements. Each audit selected a random sample of ten incentive recipients. Upon receipt of the tax-return release form, VTrans forwarded the form to the Tax Department, which then told VTrans whether the incentive recipient's income exceeded the household income threshold for the level of the incentive received. All ten audited applicants cooperated and passed the first audit. In the second audit, all ten applicants eventually cooperated (one took some prompting), and nine of the ten passed. The applicant who failed the audit returned his incentive promptly and explained that he had not yet filed his taxes at the time he received his incentive and therefore did not realize that he was not income-eligible when he purchased his vehicle. VTrans added the returned incentive to the incentive funding pool.

VTrans has not yet conducted any audits of incentive recipients since the eligibility requirements changed on July 1, 2020. However, VTrans became aware of an individual who received two incentives for two different PEVs and is in the process of seeking the return of the second incentive. This individual received one incentive prior to July 1, 2020 and one after that date. The application form prior to July 1, 2020 specified that incentives were limited to one per household, and the form after that date limited incentives to one per individual or married couple filing jointly.

VTrans has denied consumer-direct incentives to individuals who violated program rules by failing to obtain preapproval and who purchased or leased their PEVs when the program was suspended and funding was not available. On the other hand, VTrans has agreed to provide consumer-direct incentives to individuals who failed to obtain preapproval while the program was funded. The preapproval requirement is important to ensure that the incentive budget is not overdrawn and to protect PEV purchasers from seeking consumer-direct incentives, only to be denied because funding has been depleted. Steady, dedicated program funding would help avoid confusion and disappointment by consumers who fail to obtain preapproval when funding is depleted.

The New PEV Incentive Program has experienced relatively low overhead compared to incentive payments. DEV managed this program for about $63,500 between about November 2019 and November 2020. Since that first year included program design, DEV will likely be able to keep within its $50,0000 grant award this year. The DUs have been doing significant work for the program free of charge. Negotiating, writing, and managing the grants and contracts supporting the New PEV Incentive Program has placed a considerable burden on VTrans. However, considering just the direct payments to VEIC for DEV's services compared to the incentives paid out, the program is cost-effective, with administrative costs amounting to about 5.8% of incentives paid in the first year. ($63,500/$1,100,000 x 100 = 5.8%.) By comparison, hiring a contractor to run the entire program could have pushed administrative costs over 20%. ($250,000/$1,100,000 x 100 = 22.7%.)

It should not be assumed that the DUs will continue to support this program through no-cost contracts, and the Legislature is advised to consult with the DUs on this point and to provide funding for alternative arrangements if the DUs cannot continue to be available. As noted above, hiring a contractor to run this program could have cost as much as $250,000. To provide one example of program costs from a nearby state, Connecticut's CHEAPER incentive program has a $3M budget with administrative overhead of 12.5% ($375,000). Budgets tend to be higher in early years because of the front-loaded costs of program setup. Larger states can achieve economies of scale that may not be available in Vermont for lowering the cost-benefit ratios of incentive programs.

Vermont's new PEV incentive program will remain an important tool for reaching the State's vehicle electrification goals at least until passenger combustion vehicles and electric vehicles reach cost parity, which may still be at least a few years away, and possibly until such time that the sale of new combustion vehicles can be prohibited through regulation. Consideration could be given to extending this program to medium- and heavy-duty vehicles (MHDs) until they, too, become established technology. It may be possible to combine a used-PEV incentive program with the new PEV incentive program to achieve economies of scale, and it may also be possible to combine these programs with a Replace Your Ride program of the sort the Vermont Energy Action Network has been working on.

B. Used Fuel-Efficient Vehicle Incentive Program (MileageSmart)

While MileageSmart incentives are not limited to PEVs, over half the incentives Capstone has paid have supported PEVs, and most or all of the rest have been conventional hybrids. Capstone reports, "As of 12/14/2020, the MileageSmart program had issued $52,682.75 in incentives for 14 vehicles, an average of $3,763.05 per car." Capstone reports that its administrative expenses for MileageSmart as of that date exceeded $131,000. This means that administrative costs were about 249% of incentives paid. ($131,000/$52,683 x 100 = 248.7%.)

As noted, the administrative costs of an incentive program are typically frontloaded because of the costs of setting up the program, so it is likely that the cost-benefit ratio of MileageSmart will improve over time. VTrans also recognizes that this program makes a real difference in the lives of the Vermonters who can benefit from it. However, some of the costs of the program stem from Capstone's provision of financial counseling to program applicants and its efforts to ensure that as few applicants as possible drop out of the application process. These high labor costs may not change much as the program matures.

From a climate and air-quality perspective, it could be more cost-effective to add a used PEV incentive program to the State's new PEV incentive program. The State could fund a separate Capstone program to provide counseling to program participants who seek it. Otherwise, applicants for used-PEV incentives would be responsible for making their own deals and securing their own loans, in the same manner as low- and moderate-income applicants under the new PEV incentive program.

Used-PEV incentives do not directly accelerate PEV market share because used vehicles are already in the market. However, successfully electrifying the transportation sector requires not only technological change, but also cultural change. A used-PEV incentive program may introduce electric motoring to a broader demographic quicker than a new PEV incentive program alone. In addition, used PEV incentives serve the interests of equity and environmental justice by helping all Vermonters benefit from electric vehicles. VTrans suggests that the Legislature consider the costs of running the used fuel-efficient vehicle program compared to its benefits, both environmental and social, and decide whether this program should be modified or replaced. A used PEV incentive program of some kind, with additional incentives for low-income Vermonters, is important for meeting the Vermont's transportation electrification targets.

C. Emissions-Repair Program

The VTrans-Capstone grant agreements require Capstone to set up not only a used fuel-efficient vehicle incentive program, but also the emissions-repair program authorized by the 2019 and 2020 Transportation Bills. VTrans and Capstone, along with DEC and DMV, met on several occasions to map out the elements of an emissions-repair program. However, after investing about $10,000 in this effort, Capstone determined that it did not have the appropriate expertise and resources to run both a used fuel-efficient vehicle incentive program and an emissions-repair incentive program.

In its attached report, Capstone describes the major obstacles encountered. The obstacles Capstone identified and communicated to VTrans and DEC included determination of warranty coverage and lack of technical expertise regarding emissions repairs. DEC offered to provide Capstone with specific program knowledge to alleviate the concerns listed above.

VTrans and DEC met with government officials from a few other jurisdictions that offer emissions-repair incentives and determined that the costs of program administration far exceed the funding currently available in Vermont. In other jurisdictions, these programs are run by government agencies with dedicated staffing (sometimes including professional mechanics) and durable budgets. Salt Lake County, Utah, with a population of about 1.2M people, has run an emissions-repair program over the past six years, and although their administrative cost for the emissions repair component was not tracked separately, as it came from their overall vehicle inspection and maintenance budget, their Bureau Manager estimated staff time to run the emissions repair component of their program equivalent to one fulltime employee (FTE). Other jurisdictions utilize readily available vehicle information such as age and odometer reading to decrease the amount effort in determining warranty applicability as well as the automotive industry's part and labor guide to easily verify repair costs are appropriate.

DEC views an emissions-repair program in Vermont as critical towards helping people repair cars with significant remaining useful life when they cannot afford a new car, even with incentives, and protecting public health and air quality. A vehicle that fails an emissions inspection is considered an excessive polluting vehicle and is often polluting at least 50% more than when its emissions systems are maintained and in good repair. An emissions repair program would also help to avoid issuance of emissions inspection waivers authorized by DMV and therefore cause fewer instances of deferred maintenance of vehicles. Vermont agencies do not have the capacity to run this kind of program; however, contracting with a private administrator with adequate technical resources and knowledge of emissions repair programs could be a viable and cost-effective path forward.

V. Conclusions

The 2019 and 2020 Transportation Bills authorized three statewide vehicle incentive programs. Unfortunately, the funding made available to VTrans for these programs fell far short of program costs. To save money, VTrans executed no-cost contracts with the State's DUs to assist with the administration of the new PEV incentive program. VTrans also retained VEIC is assist with program management through DEV. This program has been cost-effective and successful. Survey research would assist with understanding the program's impacts. The DUs may not agree to continue assisting with program administration once their grant agreements with VTrans terminate this fall. VTrans recommends that the Legislature consult with the DUs on this point and make alternative arrangements, with appropriate funding, if the DUs are longer available.

VTrans executed grant agreements with Capstone to run the used fuel-efficient vehicle incentive program (now known as MileageSmart) and the emissions-repair incentive program. Capstone began paying incentives under MileageSmart in September 2020. Although MileageSmart may still be experiencing high administrative costs compared to incentives granted due to the front-loaded costs of running the program, the financial counseling Capstone provides to applicants also contribute to the program's high administrative costs. MileageSmart is helping people in need, and because most of the fuel-efficient vehicles incentivized through MileageSmart have been PEVs, the program has been advancing the State's goal of electrifying the transportation sector. It is possible that the benefits of MilegeSmart could be achieved more affordably through a used PEV incentive program combined with the new PEV incentive program, along with separate funding for Capstone to provide financial counseling to program applicants who seek it.

Capstone was not able to stand up the emissions-repair incentive program. However, standing up an emissions-repair program in Vermont by contracting with a private administrator with adequate technical resources and knowledge of emissions repair programs could be a viable and cost-effective path forward. An emissions-repair program would assist people who need emissions repairs to a vehicle that passes the safety inspection but are not in a position financially to purchase a vehicle, even with the incentive funds available. Repairing a vehicle that has significant remaining useful life can make more sense than purchasing a vehicle. The program would also advance the State's goals of protecting air quality by ensuring that vehicles are able to operate as designed to reduce emissions and protecting public health.