

# Overview of Vehicle Repair and Replacement Assistance Programs

The transportation sector continues to be a major source of criteria pollutants and precursors, including nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) in ozone nonattainment and maintenance areas across the country. While vehicle emissions-per-mile have decreased due to advances in vehicle emission control technology, those controls can degrade over time leading to excess pollution. State and local governments implement vehicle inspection and maintenance programs (I/M) to identify high-emitting vehicles and notify owners or operators of the need to have their vehicles repaired.<sup>1</sup> Once those vehicles are repaired, they are retested to verify that the vehicles are operating according to EPA's vehicle emissions standards. However, I/M programs may present potential economic hardship and other concerns for low-income individuals in some ozone nonattainment areas. Specifically, these residents might own older, high-emitting vehicles and be less able to pay for car repairs needed as the result of not passing an I/M test. To address these concerns, some state and local governments fund vehicle repair or replacement assistance programs for low-income motorists. EPA encourages states with I/M programs to consider vehicle repair and replacement programs to meet the needs of low-income populations within their areas.<sup>2</sup>

## Introduction

Vehicle inspection and maintenance (I/M) is the periodic inspection of the emissions control systems of motor vehicles. The goal of I/M programs across the country is the same: identify and repair high-emitting vehicles to improve air quality in areas

- <sup>1</sup> For more information on I/M programs, see the "Overview of Vehicle Inspection and Maintenance (I/M) Programs" fact sheet available at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1013CC0.pdf>.
- <sup>2</sup> Proposed Rule: Determinations of Attainment by the Attainment Date, Extensions of the Attainment Date, and Reclassification of Areas Classified as Marginal for the 2015 Ozone National Ambient Air Quality Standards, 87 FR21854 (April 13, 2022).

that are not attaining the national ambient air quality standard (NAAQS).<sup>3</sup> EPA sets new vehicle emission standards to protect public health, but those regulations do not guarantee proper operation and maintenance of the vehicle's emission controls over its lifetime. State and local governments implement I/M programs to identify high-emitting vehicles and notify owners or operators to have their vehicles repaired. Some I/M programs address potential economic hardship and other concerns for low-income individuals through vehicle repair and replacement programs. Vehicle repair programs are the most common type of assistance program associated with I/M. These programs generally offer vouchers to low-income individuals who have failed an I/M emissions test. The vouchers can be used at participating repair facilities which are then reimbursed for the cost of repairs by the administering agency or organization. Vehicle retirement or replacement programs are another approach. Retirement or replacement programs incentivize the removal of older, high-polluting vehicles by replacing them with newer, less-polluting vehicles, including in some cases, hybrid, electric, or other fuel-efficient vehicles.

In 2022, EPA researched state and local I/M programs and found that repair assistance programs are present in at least five states (Arizona, California, Colorado, Oregon, and Utah), retirement or replacement assistance is available in two states (California and Utah), and the state of Vermont is in the process of launching a new repair assistance program after authorization by the state legislature.<sup>4</sup> In addition to the active and pending programs, several states offered I/M vehicle repair or replacement assistance programs in the past but ended for various reasons including lack of funding.

## **Repair or Replacement Assistance Program Design**

There are many factors to consider in the design, structure, and operation of vehicle emissions repair and replacement assistance programs. The following sections summarize the decisions that states have made regarding program type, motorist eligibility, type of assistance offered, and funding mechanisms.

### **Repair Assistance Programs**

As noted, vehicle repair programs are the most common type of assistance program associated with I/M. These programs generally offer vouchers to low-income individuals who have failed an I/M emissions test. The vouchers can be used at participating repair facilities which are then reimbursed for the cost of repairs by the administering agency or organization.

### **Repair Assistance Eligibility Requirements and Application Process**

Generally, repair assistance programs have eligibility requirements for participating motorists and their vehicles. Since repair assistance programs aim to reduce economic hardship, most have income-level eligibility requirements. Generally, the income requirement is tied to the federal

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<sup>3</sup> Some areas that were once in violation of the ozone NAAQS have chosen to retain their I/M programs as a part of a maintenance plan to continue to meet the NAAQS.

<sup>4</sup> Vermont 2021 Acts and Resolves No. 55, Section 22-25. An act relating to the Transportation Program and miscellaneous changes to laws related to transportation. 2021. <https://legislature.vermont.gov/Documents/2022/Docs/ACTS/ACT055/ACT055%20As%20Enacted.pdf>. Also see the 2021 Report on Vermont's Statewide Vehicle Incentive Programs for additional history behind this program.

poverty levels, which are updated each year and vary by household size.<sup>5</sup> The specific threshold for eligibility varies by program, but generally ranges from 150% of the federal poverty level to 300% of the federal poverty level. One notable exception to the income requirement is Arizona, which offers repair assistance up to \$1,000 for all residents who fail a required emissions inspection regardless of income status.<sup>6</sup>

Vehicles must also meet specific criteria before receiving assistance. All programs included here require a failed emissions test. Generally, the failed inspection must (1) be a regular emissions test required by the I/M program and (2) have occurred within a given time period prior to the application for assistance (typically 30 or 60 days). One exception to this is the San Joaquin Valley Air Pollution Control District's (SJVAPCD) "Tune In and Tune Up" program, which also supports pre-emptive repairs for vehicles that are expected to fail an upcoming required inspection.<sup>7</sup> SJVAPCD hosts regular events where motorists can bring a vehicle that has either already failed a required smog check or that they have reason to think will fail (e.g., the Check Engine light is on). At the event, all vehicles undergo a free and voluntary emissions test, and vehicles that fail and are deemed repairable are issued a voucher for a participating facility. Some other programs, including Colorado's and Oregon's, also require that applicants have the vehicle evaluated by a certified technician at a state facility after failing a required emissions test and prior to being issued a repair voucher.<sup>8</sup> Certified technicians then diagnose the reason for the emissions failure and determine whether the vehicle is a good candidate for repair.

In addition to a failed emissions inspection, the vehicle must not have missing or tampered emissions control devices.<sup>9</sup> Several programs also require that the vehicle eligible for being repaired is model year (MY) 1996 or newer and has specifically failed an on-board diagnostics (OBD) test. Certain counties in Utah require that vehicles be MY 2004 or newer to receive repair assistance while older vehicles are eligible for replacement assistance instead. Finally, most programs require that the vehicle be registered in the eligible nonattainment area. However, in some cases, vehicles operated primarily in the nonattainment area but registered elsewhere may also be eligible. For example, students attending school within the eligible area or employees working in the eligible area may have their vehicle registered outside the area but could still qualify for the program.

## Assistance Offered

Motorists who meet the eligibility criteria are typically required to submit an application with proof of income and a failed emissions inspection. Once approved, applicants are typically offered assistance in the form of a voucher to a participating certified repair facility.<sup>10</sup>

<sup>5</sup> For more information on the Federal poverty levels, see <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines>.

<sup>6</sup> Arizona Department of Environmental Quality. Voluntary Vehicle Repair Program Overview. <http://azdeq.gov/CarHelp>. Accessed 5 August 2022.

<sup>7</sup> For more information on the San Joaquin Valley Air Pollution Control District's "Tune In And Tune Up" program, please visit <https://www.valleyair.org/drivecleaninthesanjoaquin/repair/>.

<sup>8</sup> For more information on Oregon's Clean Air Partners Program, please visit <https://www.oregon.gov/deq/Vehicle-Inspection/Pages/failed-vehicle.aspx>.

<sup>9</sup> Per 40 CFR 51.360(a)(3), "Waivers shall not be issued to vehicles for tampering-related repairs. The cost of tampering-related repairs shall not be applicable to the minimum expenditure."

<sup>10</sup> California's Consumer Assistance Program bypasses vouchers by having repair stations directly charge the state Bureau of Automotive Repairs for pre-approved costs.

The maximum amount of assistance available per motorist generally ranges from around \$500 to \$1,000, with motorists responsible for any costs over that amount. Several states also require a co-pay from motorists, which can either be a flat fee (generally \$30 to \$100) or a percentage of the total repair costs. In Utah, the level of assistance offered is linked to the level of need with additional money granted to individuals with higher need.

## **Retirement and Replacement Assistance Programs**

Retirement or replacement of older vehicles also improves air quality because newer model year vehicles tend to be cleaner and stay cleaner longer than older model year vehicles. The two states that currently incentivize retirement of a vehicle that has failed an emissions inspection are Utah and California.<sup>11,12</sup> California has multiple incentive programs that are currently operated separately, including the Consumer Assistance Program (CAP), the Enhanced Fleet Modernization Program (EFMP), and Clean Cars 4 All (CC4A). While various components of these programs focus on vehicle replacement, we focus here on the CAP/EFMP Scrap-Only Program because it requires a failed I/M emissions test. This program offers a cash incentive to retire high-emitting vehicles. Utah's replacement program offers vouchers towards the purchase of a new, lower-emitting vehicle in exchange for retiring the vehicle that failed the emissions test. Both programs require that the retired vehicle is dismantled and scrapped to ensure that high-emitting vehicles are not returned to the fleet, even outside the I/M area.

## **Vehicle Replacement Eligibility Requirements and Application Process**

Replacement assistance programs have similar motorist eligibility requirements as repair programs. Generally, motorists must have a household income under a threshold that is tied to federal poverty levels. Retirement and replacement programs generally have additional requirements for both the vehicle that is to be retired and the new vehicle being purchased.

California's CAP scrap-only retirement program requires that the vehicle to be retired has failed its most recent required smog check. Vehicles belonging to low-income motorists that have passed a smog check or are outside of I/M areas may also be eligible for an incentive funded by California's Enhanced Fleet Modernization Program if they meet certain requirements. In addition, the vehicle being retired must have been driven primarily in California for the prior two years, not be scrapped, and not be undergoing a transfer of ownership or registration into the state. The vehicle must also be operational and driven under its own power to the scrappage site.

For Utah's vehicle retirement program, the vehicle being retired usually must be MY 2003 or older and be driven under its own power to the dealership. As with repair programs, the vehicle also must have been registered or regularly operated in the eligible nonattainment area for at least 12 months. In most Utah counties, the vehicle must also have failed an emissions test within the past 30 days. The new vehicle purchased must also meet several requirements. First, it must be a Federal Tier 2 Bin 5 vehicle or higher (with more assistance offered for hybrid or electric vehicles)

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<sup>11</sup> For more information on Utah's Vehicle Repair and Replacement Assistance Program (VRRAP), see <https://deq.utah.gov/air-quality/incentive-programs-aq/vehicle-repair-and-replacement-assistance-program>.

<sup>12</sup> California's eligibility requirements and incentives were similar to Utah's current programs and included limits on model years, odometer readings, cost, and emissions rating for replacement vehicles.

and must be from the current model year or the previous six model years. Vehicles that meet these requirements may be purchased at a participating dealership, with the voucher going towards part of the cost.

## **Assistance Offered**

As with the repair assistance programs, motorists who meet the eligibility requirements first submit an application including proof of household income and documentation for a failed emissions test. For California's retirement-only program, the vehicle must then be driven to a contracted facility that will verify that the vehicle meets all requirements (e.g., is operational). Upon acceptance, the facility issues a check for the incentive amount directly to the motorist, which is later reimbursed by the relevant state program. Incentives are \$1,000 or \$1,500 depending on the income level of the motorist.

In Utah's program, replacement assistance is issued in the form of a voucher for use at participating dealerships, which also accept the vehicle being retired. The amount of the voucher generally ranges from \$3,750-\$6,875 and depends both on motorist income level and the emissions rating of the replacement vehicle with more money being provided for lower income individuals and lower-emissions vehicles.

## **Program Funding and Administration**

The structure of retirement or replacement programs varies. Some programs operate on the state level whereas others are administered by county or regional agencies. Some state level programs are operated by a department of the environment, an air quality control agency, or even through multi-agency partnerships. For example, Utah's program is centrally coordinated by the Utah Division of Air Quality but administered at the local level by county health departments. Whereas, in Oregon, the state Department of Environmental Quality partners with the United Way, which directly manages the financial aspects of the program.

The administration of retirement or replacement programs depend on both the structure of the I/M program and on the funding mechanism for the program. Funding sources for assistance programs vary widely and include state transportation funds, local transportation revenue, external grants, and public donations. Common funding mechanisms and examples of areas that have implemented them are summarized below.

**Table 1: Examples of funding mechanisms for I/M vehicle repair and replacement programs**

Funding Mechanism	Examples
<p>Transportation Fund raised via motor vehicle fees and/or taxes</p>	<ul style="list-style-type: none"> <li>• Arizona’s dedicated Voluntary Vehicle Repair Program (VVRP) Fund is financed via a registration fee collected from certain diesel-powered vehicles in the state, in addition to other appropriations from the state legislature and local subdivisions.<sup>13</sup></li> <li>• The California Bureau of Automotive Repair’s Consumer Assistance Program (CAP) is funded via a dedicated account in the state’s Vehicle Inspections and Repair Fund (VIRF). The VIRF is appropriated by the state legislature and is financed in part by fees and fines associated with the state’s automotive repair and vehicle inspection programs.<sup>14</sup></li> <li>• The San Joaquin Valley’s Tune In and Tune Up program is funded by enhanced vehicle registration fees in eight counties.<sup>15</sup></li> </ul>
<p>Grants</p>	<ul style="list-style-type: none"> <li>• Utah’s Vehicle Repair and Replacement Assistance Program (VRRAP) has been funded since 2017 by an EPA Targeted Airshed Grant. These grants are available to the top five most polluted nonattainment areas for ozone and particulate matter to assist air pollution control agencies in reducing criteria air pollution.<sup>16</sup></li> <li>• Colorado’s I/M program uses Regional Air Quality Council (RAQC) grant funding to provide repair assistance to a limited number of motorists that apply for economic hardship waivers on a case-by-case basis.</li> </ul>
<p>Direct Donations</p>	<ul style="list-style-type: none"> <li>• Oregon’s I/M program collects donations from the public at its inspection sites, which are transferred to the local United Way chapter to fund the Clean Air Partners repair assistance program.<sup>17</sup></li> </ul>

<sup>13</sup> Arizona Department of Environmental Quality. Voluntary Vehicle Repair Program: Fiscal Year 2021 Annual Report. Publication #: EQR-21-15. November 2021. [https://static.azdeq.gov/vvrp/vvrp\\_annual\\_report\\_2021.pdf](https://static.azdeq.gov/vvrp/vvrp_annual_report_2021.pdf). For additional details, see Arizona Revised Statutes A.R.S. §49- 474.03(G) and A.R.S. §49-551(B).

<sup>14</sup> For general statutes on the Vehicle and Inspection Repair Fund, please see [California Business and Professions Code \(BPC\) Sections 9886 - 9886.4](#) and [California Health and Safety Code \(HSC\) Section 44061](#). For statutes specific to BAR’s Consumer Assistance Program, see [California Health and Safety Code \(HSC\) Section 44062.1](#) and [California Health and Safety Code \(HSC\) Section 44091](#).

<sup>15</sup> Pierce, Gregory, and Rachel Connolly. Can Smog Repairs Create Social Justice? The Tune In & Tune Up Smog Repair Program in the San Joaquin Valley. UCLA Luskin Center for Innovation, June 2018. [https://innovation.luskin.ucla.edu/wp-content/uploads/2019/03/Can\\_Smog\\_Repairs\\_Create\\_Social\\_Justice.pdf](https://innovation.luskin.ucla.edu/wp-content/uploads/2019/03/Can_Smog_Repairs_Create_Social_Justice.pdf).

<sup>16</sup> Carlile, Mat. “Vehicle Repair Program Helps Fix Older Cars to Improve Air Quality.” Utah Department of Environmental Quality (UDEQ), 25 August 2020. <https://deq.utah.gov/communication/news/vehicle-repair-program-helps-repair-older-cars-to-improve-air-quality>. Accessed 8 July 2022.

<sup>17</sup> Hatfield, Doug. Fact Sheet: Clean Air Partners (CAPS). State of Oregon Department of Environmental Quality, May 2020. <https://www.oregon.gov/deq/FilterDocs/capsfs.pdf>. Accessed 27 July 2022.



Despite program-level differences in administrative and funding structures, these assistance programs have many similarities from the motorist perspective. As discussed in more detail in the following section, characteristics such as eligibility requirements and amount of assistance are comparable across states.

## Other Consideration and Best Practices for Designing a Repair or Replacement Assistance Program

In addition to the basic structure and characteristics of these assistance programs, there are several design aspects that may affect program effectiveness. For example, challenges in implementing assistance programs may include funding uncertainty, lack of awareness among motorists, and administrative barriers (e.g., complex application processes for motorists).

However, several implementation strategies and practices may improve the success of these programs. Based on reports and evaluations conducted by jurisdictions with existing assistance programs, successful practices include:

- *Invest in outreach and communications to increase motorist awareness of available assistance.* Advertise the program via radio and social media in multiple languages and ask participating repair facilities to share information about the assistance program with their customers. For example, the San Joaquin Valley’s “Tune In and Tune Up” events had over 40,000 participants between 2012-2017. Over half of participants learned about the program through radio advertisements (which were in both Spanish and English), while others learned about the program by word of mouth, from a smog repair shop, and from printed advertisements, TV advertisements, social media or other web-based outreach, or other sources.<sup>18</sup>
- *Make it easy and straightforward to participate.* Have inspection facilities hand out step-by-step application instructions to all motorists who fail an emissions test and create an online application form and dedicated phone line to assist motorists with application requirements. For example, Arizona’s Voluntary Vehicle Repair Program initially found that 90% of customers who failed emissions inspections left the testing facility without speaking to a manager about applying for assistance. Creating an online application form and distributing handouts with step-by-step instructions increased participation. Program leaders also recommended following up with participants throughout the multi-step process to ensure that all steps were completed.<sup>19</sup>
- *Make replacement options viable.* For replacement programs, the high cost of purchasing a new vehicle may be prohibitive even after assistance. Consider increasing the incentive amount based on income, supporting the purchase of used vehicles, and assisting participants in accessing fair vehicle loans. Consider partnerships with local lenders to offer discounted interest rates for low-emitting, high-efficiency vehicles.

<sup>18</sup> Pierce, Gregory, and Rachel Connolly. Can Smog Repairs Create Social Justice? The Tune In & Tune Up Smog Repair Program in the San Joaquin Valley. UCLA Luskin Center for Innovation, June 2018. [https://innovation.luskin.ucla.edu/wp-content/uploads/2019/03/Can\\_Smog\\_Repairs\\_Create\\_Social\\_Justice.pdf](https://innovation.luskin.ucla.edu/wp-content/uploads/2019/03/Can_Smog_Repairs_Create_Social_Justice.pdf).

<sup>19</sup> Arizona Department of Environmental Quality. Voluntary Vehicle Repair Program: Fiscal Year 2019 Annual Report. Publication #: EQR-19-20. December 2019. [https://static.azdeq.gov/vvrp/VVRP\\_annual\\_report\\_2019\\_Final.pdf](https://static.azdeq.gov/vvrp/VVRP_annual_report_2019_Final.pdf).

## More Information

For more information about I/M in your area, please visit your state's I/M site available at:  
<https://www.epa.gov/state-and-local-transportation/vehicle-emissions-inspection-maintenance-im-general-information#websites>

For more information on the vehicle repair and replacement assistance programs discussed in this document, please visit the links below:

- Arizona Voluntary Vehicle Repair Program - <http://azdeq.gov/carhelp>
- California Vehicle Repair and Replacement Assistance Programs
  - Consumer Assistance Program - <https://www.bar.ca.gov/consumer/consumer-assistance-program>
  - Clean Cars 4 All - <https://ww2.arb.ca.gov/our-work/programs/clean-cars-4-all>
  - San Joaquin Valley Air Pollution Control District Tune In And Tune Up - <https://www.valleyair.org/drivecleaninthesanjoaquin/repair/>
- Oregon Clean Air Partners Program - <https://www.oregon.gov/deq/Vehicle-Inspection/Pages/failed-vehicle.aspx>
- Utah Vehicle Repair and Replacement Assistance Programs
  - Cache County - <https://brhd.org/vehicle-repair-replace-program/>
  - Davis County - <http://www.daviscountyutah.gov/health/environmental-health-division/services/VRRAP>
  - Salt Lake County - <https://slco.org/health/air-quality/vehicle-emissions/vrrap/>
  - Weber County - <http://www.webermorganhealth.org/VRRAP/>

For questions concerning a particular state or program area, please contact the Mobile Source Contact at your EPA Regional Office (see Section 16 at the end of the following document):  
<https://www.epa.gov/transportation-air-pollution-and-climate-change/office-transportation-and-air-quality-contacts>

For general information on I/M, please visit the U.S. EPA site:  
<https://www.epa.gov/state-and-local-transportation/vehicle-emissions-inspection-and-maintenance-im-general-information>