Final Regulatory Impact Analysis

# Consumer Assistance to Recycle and Save Act of 2009 

Office of Regulatory Analysis and Evaluation<br>National Center for Statistics and Analysis

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## Summary

The Act establishes a new program under which the government will provide incentives of either $\$ 3,500$ or $\$ 4,500$ to help consumers purchase or lease a new, more fuel efficient car, van, sport utility vehicle or pickup truck from a participating dealer when they trade in an old, less fuel efficient vehicle. The Act will have various economic, employment, safety and environmental effects. This analysis is mainly a qualitative discussion of the program with some projected quantitative administrative costs identified.

## Background

On June 24, the President signed the Consumer Assistance to Recycle and Save Act of 2009 into law. The Act directs NHTSA to set up a program in which owners of vehicles meeting statutorily specified criteria may receive a monetary credit for trading in their vehicle and purchasing or leasing certain new vehicles. If all of the conditions of eligibility are met, NHTSA would make an electronic payment to the dealer equal to the amount of the credit after the dealer provides NHTSA with sufficient documentation relating to the transaction.

The Act requires NHTSA to issue final regulations implementing the CARS Act within 30 days after the enactment of the Act, i.e., by July 24 . The nearness of this statutory deadline precludes the issuance of a notice of proposed rulemaking seeking public comment. The regulations must, among other things:
(1) set up a means for registering dealers to participate in the program;
(2) set forth the procedures for reimbursing dealers participating in the program;
(3) require that dealers use the credit as an addition to, instead of as a substitute for, other rebates and discounts advertised by the dealer or offered by the manufacturer;
(4) require that dealers disclose to the person trading in an eligible vehicle the best estimate of the salvage value of such vehicle and authorize dealers to retain $\$ 50$ of the amount paid for the salvage value as payment for the administrative costs of the program;
(5) establish, in consultation with the Environmental Protection Agency (EPA), requirements and procedures for the disposal of eligible trade in vehicles; and
(6) provide for a means to enforce penalties for violations of the program requirements.

NHTSA must also, not later than July 24, and in consultation with the EPA, make available on an Internet website information about the program, including instructions on

- how to determine if a vehicle is an eligible trade in vehicle;
- how to participate in the program;
- how to determine if a dealer is participating in the program; as well as a comprehensive list, by make and model, of eligible new vehicles that may be purchased as part of the program.

The CARS Act applies to new vehicles only. Thus, the purchase of used vehicles does not qualify under the program. The new vehicle must have a manufacturer's suggested retail price of not more than $\$ 45,000$ (before any dealer accessories, optional equipment, taxes or destination charges are added to the price).

The new vehicle must also achieve minimum combined fuel economy levels (Table 1). For passenger automobiles, the new vehicle must have a combined fuel economy value of at least 22 miles per gallon. The rule defines 3 different categories of trucks that are eligible for trade in. A Category 1 truck is a non-passenger automobile. This category includes sport utility vehicles (SUVs), small and medium pickup trucks and small and medium passenger and cargo vans. For category 1 trucks, the new vehicle must have a combined fuel economy value of at least 18 miles per gallon. A Category 2 truck is a large van or a large pickup truck. Vehicles in this category have a wheelbase length of more than 115 inches for pickup trucks and more than 124 inches for vans. For category 2 trucks, the new vehicle must have a combined fuel economy value of at least 15 miles per gallon. A Category 3 truck is a work truck and is rated between 8,500 and 10,000 pounds gross vehicle weight. This category includes very large pickup trucks (those with cargo beds 72 inches or more in length) and very large cargo vans. Category 3 trucks have no minimum fuel economy requirement; however, there are special requirements that apply to the purchase of category 3 vehicles.

The value of the credit given for the purchase or lease of a passenger car depends on the level of fuel efficiency improvement that is achieved by moving from the traded-in vehicle to the new vehicle. For new passenger cars, the new fuel-efficient vehicle must have a combined fuel economy value at least 4 miles per gallon greater than that of the traded-in vehicle to qualify for a $\$ 3,500$ rebate. If the difference is 10 mpg or more, it would qualify for a $\$ 4,500$ rebate. The value of the credit given for the purchase or lease of a category 1 or 2 truck also generally depends on the difference between the combined fuel economy of the vehicle that is traded-in and that of the new vehicle that is purchased or leased. If the new vehicle is a category 1 truck that has a combined fuel economy value that is at least 2 , but less than 5 , miles per gallon higher than the traded-in vehicle, the credit is $\$ 3,500$. If the new category 1 truck has a combined fuel economy value that is at least 5 miles per gallon higher than the traded-in vehicle, the credit is $\$ 4,500$. If the transaction involves two category 2 trucks each meeting the eligibility criteria, a gain of 1 mile per gallon results in a credit of $\$ 3,500$; a gain of at least 2 miles per gallon results in a credit of $\$ 4,500$. A category 3 truck that is traded in for a new category 2 truck is entitled to a $\$ 3,500$ credit, without fuel economy restriction. If the category 3 truck is traded-in for a new category 3 truck the credit is $\$ 3,500$, where the new truck must be of equal or lesser gross vehicle weight than the trade-in. Only 7.5 percent of the funds appropriated for the program may be used for credits for category 3 trucks.

Table 1 summarizes the conditions that qualify vehicles in each category for specific incentive amounts. The trade-in vehicle that is a passenger car, category 1 truck or category 2 truck must have a combined EPA rating of 18 miles per gallon or less. All trade-in vehicles must have been manufactured less than 25 years before the date of the trade-in and, in the case of a category 3 vehicle, also be from a model year not later than model year 2001.

| If the type of new vehicle you want is a... | Table 1 <br> Incentive Amounts |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | The combined MPG* of the new vehicle must be... | The type of vehicle you trade-in^ is | Amount of incentive |  |  |
|  |  |  | If the difference in combined MPG between the new vehicle and trade-in vehicle is... | The inc | tive is... |
| Passenger Automobile <br> - All passenger cars. | At least 22 MPG | Passenger car, Category 1 or 2 truck | 4-9 MPG | \$3,500 |  |
|  |  |  | 10 MPG or more |  | \$4,500 |
| Category 1 Truck: $\dagger$ <br> - All SUVs w/ GVWR <=10,000 lbs. <br> - Pickups w/ GVWR <8,500 lbs. \& wheelbase <= 115 in. <br> - Passenger vans \& cargo vans w/ GVWR <8,500 lbs. \& wheelbase <= 124 in. | At least 18 MPG | Passenger car, Category 1 or 2 truck | 2-4 MPG | \$3,500 |  |
|  |  |  | 5 MPG or more |  | \$4,500 |
| Category 2 Truck: $\dagger$ <br> - Pickups w/ GVWR $<=8,500$ lbs. \& wheelbase > 115 in. <br> - Passenger vans \& cargo vans $\mathrm{w} /$ GVWR $<=8,500 \mathrm{lbs}$. \& wheelbase $>124$ in. | At least 15 MPG | Category 2 truck | 1 MPG | \$3,500 |  |
|  |  |  | 2 MPG or more |  | \$4,500 |
|  |  | Category 3 truck | NA $\ddagger$ | \$3,500 |  |
| Category 3 Truck: $\dagger$ <br> - Trucks w/ GVWR 8,500-10,000 lbs. that are either pickup trucks with cargo beds 72" or longer or very large cargo vans. | NA $\ddagger$ | Category 3 truck | NA $\ddagger$ <br> However, the new vehicle must have an equal or lesser GVWR. | \$3,500 |  |
| *MPG requirements are based on EPA's combined city/highway rating $\wedge$ All trade-in passenger, category 1 or category 2 vehicles must have a combined fuel economy rating of 18 MPG or less †GVWR = Gross Vehicle Weight Rating <br> $\ddagger$ Not applicable; Category 3 trucks do not have EPA MPG ratings |  |  |  |  |  |

The rule will require that traded-in vehicles be disposed of by having the dealer disable the engine ${ }^{1}$ and by having the Vehicle Identification Number (VIN) reported to the National Motor Vehicle Title Information System so that it would not be used in the future. Other parts may be salvaged, but within a prescribed period the vehicle must be crushed. The entity crushing or shredding the vehicles in this manner will be allowed to retain some parts of the vehicle for sale prior to crushing or shredding it, but these parts cannot include the engine or the drive train (unless with respect to the drive train, the transmission, drive shaft, or rear end are sold as separate parts).

## Size of the Program

The program has $\$ 1$ billion of funding available, of which up to $\$ 50$ million may be spent for the administration of the program. Therefore, between $\$ 950$ million and $\$ 1$ billion is available for vouchers. Vouchers will be in the amounts of either $\$ 3,500$ or $\$ 4,500$. Assuming the widest ranges, the number of vehicles that could be purchased with the help of funds in this program are 211,111 (\$950 million/ $\$ 4,500$ ) to 285,714 (\$1 billion/\$3,500). A round number close to the average of this range, and a best guess at this point, would be about 250,000 vehicles. To be eligible for the voucher, a transaction must occur between July 1, 2009, and November 1, 2009. In addition, an application must be received and processed by NHTSA prior to exhaustion of appropriated funds to be eligible for a voucher.

## Report to Congress

NHTSA is required to provide an evaluation of the CARS Act to Congress within 60 days of the end of the program. This evaluation will consist of a summary of the transactions that occurred as a result of the program and an analysis of the economics, employment, safety, fuel and environmental impacts.

A consumer survey has been designed to collect information regarding what consumers would have done without the incentive program in terms of the timing of the transaction and the purchase choice of the new vehicle (see Appendix A). This information is necessary to conduct an evaluation of the impacts that this program will have on fuel consumption, greenhouse gas emissions, employment, and other economic impacts, as required by Congress.

In the Report to Congress, new vehicle sales will be broken down by manufacturer and by make, model, and model year and category of automobile. The dollar of amount of the vouchers applied to new vehicle sales will also be included. An analysis of the location of sale as well as the location of production by State will be included in the Report. The trade in vehicle summary will include a breakdown of all vehicles traded-in by manufacturer and by make, model, and model year and category of automobile. The distribution of vouchers by type of vehicle will be included in the Report. The average miles per gallon

[^0]will also be presented and compared to that of the new vehicles. The increase overall nationwide in fuel efficiency as well as the reduction of fuel consumption, greenhouse gases and particulates can then be estimated. This will be included as part of the benefit and cost analysis as discussed below.

## Benefits

## Direct Employment Impacts

The employment impacts of the Act will affect NHTSA, and may affect manufacturer employment, and dealer employment. At this time, NHTSA plans to hire 30 employees to handle this program over the period of 6 months. In addition, NHTSA believes it will be employing over 200 contractors for data entry, to oversee the program, information technology (IT) support, internal control and transactional support and to provide enforcement for program violations for 6 months. Thus far, NHTSA has identified \$33 million in direct government expenses.

Manufacturers and dealers employment levels are unlikely to be affected by the Act. Manufacturers may need to produce more vehicles or they may simply be rolling out inventory that has gone unsold in previous months. The employment effects for manufacturers might be that they keep current labor employed longer (delaying layoffs) or if new demand for vehicles is created, they may increase hours of production with current or new labor. It is difficult to predict what affect, if any, the program will have on dealers. Selling an additional 12 vehicles per average dealer over a few months (see later discussion for derivation of this number) will not have any employment impacts, but it is hard to judge what the additional showroom traffic and interest in the program will do for sales. Dealers may keep their staff employed at current levels, increase current staff hours or hire additional staff.

## Economic Impacts

The CARS program was designed, in part, as a recovery package for U.S. motor vehicle sales. It is estimated that the Act will increase the monthly average by about 62,500 vehicles, assuming that the 250,000 expected sales are distributed evenly over the life of the program (July 1, 2009 to November 1, 2009). Total projected sales including this projected increase falls short of prior year sales. The monthly sales data from 2008 is shown in Table 2 for the period of the program (July 1 - November 1). A sales increase of 250,000 vehicles during the same period last year would have resulted in a $6 \%$ increase over the respective period. Year-over-year increases (decreases) vary greatly by manufacturer depending on how their vehicles sold last year when fuel costs were significantly higher. Overall June 2009 auto sales are down 25.3 percent from June 2008.

| Table 2 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May | June | July | August | Sept | Oct. | Total <br> (July 1- Nov. 1) |
| 2008 | $1,397,360$ | $1,189,518$ | $1,136,539$ | $1,249,976$ | 965,160 | 838,592 | $4,190,267$ |
| 2009 | 926,130 | 860,101 | - | - | - | - | - |

There were approximately 19,700 dealerships at the start of 2009 . We will get a more up-to-date estimate from the manufacturers in the next few weeks. The program on average would only affect 12 sales per dealership $(250,000 / 19,700)$. However, dealers may see increased business due to overall increased traffic at dealerships. The Act allows the vouchers to be combined with manufacturer and dealer incentives and other government rebate programs, such as those available for hybrid vehicles.

The market share of sales by make, model and location (country or State) of vehicle production will be analyzed to disaggregate the benefits of the employment impacts to manufacturers and States. In addition, the Act requires information on the State in which the transaction takes place, which allow any impacts on dealer employment to be made.

The trade-in vehicle value to salvage yards will be variable and dependent upon the value of salvage parts before shredding or crushing. Either the dealer or the salvage yard may retain parts of the vehicle for sale, other than the engine block and drive train (unless with respect to the drive train, the transmission, drive shaft, or rear end are sold as separate parts), prior to disposal.

## Safety Impacts

The Act will accelerate the penetration of advanced safety equipment such as Electronic Stability Control (ESC), braking improvements, advanced air bags, and other modern safety innovations into the on-road vehicle fleet. To the extent that consumers replace older vehicles with new vehicles containing these safety improvements, this will likely improve the safety of the fleet for the accelerated period. Balanced against these are potential safety impacts from increasing the number of smaller vehicles in the on-road fleet (if the program results in some people purchasing smaller vehicles than they otherwise would have). Although modern vehicles of all sizes are much safer than older vehicles, occupants of smaller vehicles tend to be more vulnerable in certain crash situations, which could offset some of the increase in the safety of the on-road fleet.

## Fuel Consumption Impacts

The Act may also reduce fuel consumption by encouraging the purchase of more fuel efficient vehicles. For passenger automobiles, the new vehicle must have a combined fuel economy value of at least 22 miles per gallon. The difference must be at least 4 miles per gallon greater than the trade in vehicle. For category 1 trucks, the new vehicle must have a combined fuel economy value of at least 18 miles per gallon. For category 2 trucks, the new vehicle must have a combined fuel economy value of at least 15 miles per gallon. Category 3 trucks have no minimum fuel economy requirement; however, there are special
requirements that apply to the purchase of category 3 vehicles. Category 3 vehicles may be traded-in for new category 3 or category 2 vehicles of equal or lesser gross vehicle weight. The fuel consumption impacts of CARS will be dependent on the extent to which consumers replace low miles per gallon vehicles with more fuel efficient ones in direct response to the incentives supplied by the act. Changes in driving behavior, such as driving a new vehicle more frequently, may also offset the fuel consumption decrease. The net increase in fuel efficiency will be analyzed for the Report to Congress.

## Environmental Impacts

To the extent that CARS reduces fuel consumption, it will also impact and greenhouse gas production. Also to the extent that new vehicles are subject to more stringent EPA tailpipe standards than the trade-in vehicles, per-mile emissions of other pollutants should decrease. As with fuel consumption, the magnitude of these benefits ultimately depend on which types of vehicles consumers purchase and how their driving patterns change with the new vehicle. Changes in driving behavior, such as driving a new vehicle more frequently, will also impact any environmental benefits.

## Costs

Administrative Costs - NHTSA
Of the $\$ 1$ billion budget, $\$ 50$ million is allocated to cover government administrative costs. This includes the National Highway Traffic Safety Administration (NHTSA) costs for program development, website development, NHTSA enforcement hotline, formation of the dealer registration program (shared by NHTSA and dealers), formation of the salvage yard registration program (shared by NHTSA and salvage yards), enforcing penalties and final evaluation of the Act. NHTSA may also employ contractors for data entry and provide enforcement for program violations. So far, NHTSA has identified \$33 million in direct government expenses.

## Manufacturer Costs

We estimate that it will take vehicle manufacturers four hours to create a list of eligible dealers and eight hours to create a list of eligible vehicles by class category for NHTSA's use. There are 26 original vehicle manufacturers. NHTSA estimates that it would cost an average of $\$ 75$ an hour to collect the information. This would result in an average cost of $\$ 900$ per manufacturer ( $\$ 75$ * 12 hours) and a total cost on all manufacturers of $\$ 23,400$ (26 * \$900). Manufacturers are required to keep records of all transactions including all documentary materials under the CARS Act and regulations thereunder for a period of five calendar years from the date on which they were acquired by the manufacturer. This may be stored in electronic format or CD-ROM; the estimated costs are not expected to be significant and will likely total less than $\$ 500$ for all 250,000 transactions ${ }^{2}$.

[^1]
## Dealer Costs

We estimate that there will be two persons on average at each dealership $(19,700)$ that will be authorized to participate in the CARS program and that it will take 20 minutes to create a primary user's profile and 15 minutes to create a secondary user's profile to establish authorized user accounts. NHTSA assumes median hourly earnings of first-line supervisors/managers of retail sales workers in automobile dealers of \$34.98 (May 2006 data from the U.S. Bureau of Labor Statistics, May 2006 data adjusted for inflation to \$34. 98). The administrative costs for this area are estimated to be $\$ 401,978(19,700 * 35$ minutes/ 60 minutes $=11,492$ burden hours * $\$ 34.98$ per hour).

The dealer will fill out an electronic form to be sent to NHTSA about the transaction with information on the trade in vehicle and the new vehicle. The dealer will collect from the consumer information on the trade in vehicle's title, insurance information, registration information and ask the consumer to fill out the survey (see Attachment A). These pieces of information will be scanned into a PDF file and appended to the electronic form and sent to NHTSA as a voucher claim for reimbursement. Then there will be recordkeeping requirements. The total time for this effort is estimated to be 30 minutes.

| Table 3 <br> Dealer Administrative Time Burden |  |
| :--- | :---: |
| Task | Time <br> (minutes) |
| Collecting title, registration and insurance from consumer | 10 |
| Electronic entry of data into NHTSA web site | 15 |
| Providing and processing consumer survey | 1 |
| Scanning documents and survey to NHTSA | 4 |
| Total | 30 |

The average hourly earnings of retail sales workers in automobile dealerships is $\$ 17.13$ $(2008 \$)^{3}$. For the 125,000 burden hours ( 250,000 transactions at 0.5 hours), the total dealership cost would be $\$ 2,141,250$. These costs occur over the roughly 4 month life of the program between July 1, 2009 and November 1, 2009. Dealers must also adhere to the same recordkeeping requirements as manufacturers. The cost of recordkeeping for the period of five years from the date the record is acquired or generated is not expected to be significant.

Dealers will also incur an insignificant cost, perhaps $\$ 0.01 /$ form, to print out a copy of the survey to give to consumers or \$2,500 (250,000 * \$0.01).

[^2]In addition, the dealer must disable the trade in vehicle's engine. Costs for disabling the engine using a solution of sodium silicate are estimated to be $\$ 12.70$ per engine when estimated from ALLDATA. The estimates from National Automobile Dealers Association (NADA) consider time to disable the engine to be longer with a total cost of $\$ 18.03$. A comparison of costs between ALLDATA and NADA are available in Table 4.

| Table 4 <br> Estimated Cost to Perform Engine Disablement Procedure |  |  |
| :---: | :---: | :---: |
|  | ALLDATA | NADA |
| Material Cost <br> 2 quarts sodium silicate ${ }^{4}$ | \$6.60 | \$6.60 |
| Labor Cost \$15.24 hourly rate for automotive repair technician ${ }^{5}$ ( 0.4 hours ALLDATA ${ }^{6}, 0.75$ hours NADA ${ }^{7}$ ) | \$6.10 | \$11.43 |
| Total Cost | \$12.70 | \$18.03 |

The vehicle will no longer be drivable and it will have to be towed to the scrap yard. However, we believe that is typical for scrap yards to pick up vehicles using a tow truck and pay the dealer a nominal fee for the vehicle. The impact of performing these transactions under the CARS Act does not significantly differ from their regular business operations.

Total costs identified for dealers at this time is \$2,545,728 (\$401,978 + \$2,141,250 + 2,500 ) or $\$ 10.18$ per transaction plus the cost to disable the engine (between $\$ 12.70$ and $\$ 18.03$ ) for a total cost of $\$ 22.88$ to $\$ 28.21$. The CARS act allows the dealer to retain $\$ 50$ of the amount paid for the scrappage value to offset these administrative costs.

[^3]Salvage Auctions and Disposal Facilities Costs
Information on each vehicle that is scrapped is required to be sent to the National Motor Vehicle Title Information System (NMVTIS). There is a $\$ 1$ fee for entering vehicle information into NMVTIS for scrap dealers. Many dealers already deal with NMVTIS. NHTSA will also send information to NMVTIS of a CARS transaction and then another notice when we know that the title has been branded "dead". The cost to NHTSA for bulk deliveries to NMVTIS are estimated to be about $\$ 0.10$ per VIN. Scrap yards must also maintain records for five calendar years from the date on which they were acquired or generated by the facility. Additionally, the agency will be spot-checking scrap yards to confirm that vehicle engines have been crushed or shredded. The time cost and burden of spot-checking scrap yards is not known and no information about frequency of spot-checks has been provided.

Salvage auctions and disposal facilities are not expected to incur excessive labor or expense as a result of the CARS Act and the influx of vehicles to be recycled during the four month period. Estimates from auto recyclers and scrap yards are that nearly 11 million vehicles are processed (scrapped, shredded and/or crushed) annually ${ }^{8}$. If the tradein vehicles are distributed evenly over the life of the program this results in about a 6\% increase per month over their normal operations, which is not expected to be significant.

A provision of the program will require scrap dealers to recycle the mercury switches from vehicles. Not all vehicles contain these switches and some states already require scrap yards to remove and recycle mercury switches. In the course of these consultations and based on advice from EPA, the agency identified the National Vehicle Mercury Switch Recovery Program (NVMSRP) as a comprehensive source of disposal facilities generally committed to meeting State and Federal environmental laws. The NVMSRP was established in 2006 under a memorandum of understanding (MOU) among the EPA, environmental groups, manufacturers and disposal facilities, to recover and recycle mercury switches from end-of-life vehicles before they are scrapped, crushed or shredded. This purpose is in alignment with the CARS Act's requirement for proper vehicle disposition, including the removal of mercury switches. The MOU authorizes the End of Life Vehicle Solutions (ELVS), a corporation established by vehicle manufacturers, to carry out responsibilities of the NVMSRP, including establishing a process for participants to enroll in the program and maintaining a database of participants who recover and submit mercury switches.

Participants may enroll in the program by registering with ELVS. ELVS publishes a list of these participants by State on its website, www.elvssolutions.org. Currently, approximately 7,700 disposal facilities are participants, and EPA estimates that approximately 1,500 of these facilities actively turn in the switches. The agency has determined that disposal facilities that are participants on the ELVS list present the best assurance of compliance with State and Federal environmental laws.

[^4]With this in mind, NHTSA has identified disposal facilities that are ELVS participants for listing as approved disposal facilities under this program. However, to be eligible for participation in the CARS Program, these facilities will be required to turn in mercury switches and certify that they have done so. In addition, because the CARS Act directs the agency to ensure that pollutants are removed from vehicles and properly disposed of, that vehicles are crushed or shredded, and that NMVITS is updated to reflect the disposition of the vehicle, as a condition of participation in the Program, the listed participants must also remove pollutants from the vehicle in compliance with State and Federal law, crush or shred the vehicle, update NMVTIS to reflect the disposition of the vehicle, and certify to having done so.

## Impact on Related Industries

There are industries that may be negatively impacted by the Act. These include used car dealers and auto repair shops. For example, those interested in a purchasing a car may opt to purchase a new car instead of a used vehicle due to the incentive. A decrease in new vehicle price due to the incentive may also push down the price for reasonable substitutes, i.e. used vehicles, temporarily. In addition, since the trade in vehicle should be drivable, the consumer may forego repairing any physical or mechanical damage prior to trade in which would have generated profit for repair shops.

## Environmental Impacts

The Act may shorten the vehicle life cycle depending upon the age and condition of the trade in vehicles. An estimated 250,000 vehicles will be shredded or crushed which may have negative environmental impacts but only to the extent that the trade in vehicle life is shortened where it may otherwise have been driven longer and thereby delayed the end of the vehicle's life. ${ }^{9}$ Although parts of the vehicle such as the engine block and drive train (if not sold as individual parts) are required to be disposed of, approximately 75 percent of a vehicle is reusable or recyclable which reduces environmental impact. The residual left after crushing and shredding (glass, plastic, foam, textile and other residue) is then sent to a landfill. Recycling requirements regarding hazardous materials vary by State. The negative impact from the waste only exists to the extent that the vehicle may have been crushed or replaced sooner than it otherwise would have without the incentive. Even after the end of the program specifying the final environmental impacts will be extremely difficult.

## Societal Cost

There also exists an opportunity cost to society in that drivable vehicles may be removed from the road earlier than they otherwise would have absent of the CARS Act. The tradein vehicles may have been driven longer or the CARS Act may have no effect on the termination of the vehicle's life. Although the vehicle clearly has less value to the vehicle

[^5]owner than the amount of the voucher, the vehicle may have otherwise been sold in the used vehicle market rather than be destroyed. The extent to which this opportunity cost of drivable vehicles exists depends on the remaining life of the trade-in vehicles.

## REGULATORY FLEXIBILITY ACT AND UNFUNDED MANDATES REFORM ACT ANALYSIS

## A. Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980 (5 U.S.C. §601 et seq.), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996, requires agencies to evaluate the potential effects of their proposed and final rules on small businesses, small organizations, and small governmental jurisdictions in the United States.

Chapter 5 U.S.C. § 603 requires agencies to prepare and make available for public comment an initial and a final regulatory flexibility analysis (RFA) describing the impact of proposed and final rules on small entities if the agency decides that the rule may have a significant economic impact on a substantial number of small entities. Each RFA must contain:
(1) A description of the reasons why action by the agency is being considered;
(2) A succinct statement of the objectives of, and legal basis for, a proposal or final rule;
(3) A description of and, where feasible, an estimate of the number of small entities to which the proposal or final rule will apply;
(4) A description of the projected reporting, record keeping and other compliance requirements of a proposal or final rule including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;
(5) An identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap, or conflict with the proposal or final rule;
(6) Each final regulatory flexibility analysis shall also contain a description of any significant alternatives to the final rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the final rule on small entities.

1. Description of the reasons why action by the agency is being considered

NHTSA is carrying out the requirements of the Consumer Assistance to Recycle and Save Act of 2009 (the CARS Act).
2. Objectives of, and legal basis for, the proposal or final rule

The CARS Act is part (Title XIII) of the Supplemental Appropriations ACT, Public Law 111-32, 123 Stat. 1859.
3. Description and estimate of the number of small entities to which the proposal or final rule will apply
The final rule pertains to new vehicle dealers. In addition, the scrappage of the vehicle may affect businesses dealing with salvage yards and automotive metal recyclers. Business entities are defined as small businesses using the North American Industry Classification System (NAICS) code, for the purposes of receiving Small Business

Administration assistance. The criteria for determining size, as stated in 13 CFR 121.201, are either the number of employees in the firm or the retail sales of the business. The affected business categories are presented below with their respective maximum employee size standards. For establishments primarily engaged in new vehicle sales, the firm must have less than $\$ 29$ million annual sales receipts to be classified as a small business. The government does not procure automobile scrap metal supplies and therefore the Census Bureau does not provide information about the industry such as a small business size threshold or firm size data. The Environmental Protection Agency estimates the auto scrapping industry employs 40,000 people and there are an estimated 7,000 vehicle recycling operations nationwide. This averages about six employees per scrap dealer. Therefore, we will assume nearly every scrap dealer is a small business.

## Small Business Impacts

Data from the Census Bureau on employer firms by sales receipts of firm by North American Industrial Classification System (NAICS) Codes are shown in Table 3. This table indicates that there are 9,050 automotive dealers with less than $\$ 10$ million in average annual receipts, 6,821 dealers with sales receipts of $\$ 10$ million to $\$ 25$ million, 8,771 dealers with sales receipts greater than $\$ 25$ million and a total of 24,642 automobile dealers in the United States as of 2002. Data has not yet been released by firm size for more recent years and current data is expected to be significantly different. So although $\$ 29$ million is the current small firm size, the 2002 threshold will be used for the purpose of analysis ( $\$ 25$ million). The current number of dealers is 19,700.

Table 5
Number of New Automobile Dealers by Sales Receipts 2002 data

| Sales <br> Receipts | NAICS | $<\$ 10$ million | $\$ 10$ mil. to <br> $\$ 25$ mil. | $>\$ 25$ million | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Automobile <br> Dealers (new <br> only or new <br> and used) | 441110 | 9,050 | 6,821 | 8,771 | 24,642 |

Source: Bureau of the Census, 2002 Economic Census Establishment and Firm Size

Pursuant to the Regulatory Flexibility Act, the agency must determine whether the final rule will result in a significant economic impact on a substantial number of small businesses. Using the most recent data regarding firm size there are 24,642 dealers, where uncertain number of will participate in the CARS program. Of those 24,642 dealers, we believe that 15,871 companies are small businesses under the Regulatory Flexibility Act having fewer than $\$ 25$ million in sales receipts. We estimate that $2 / 3$ of all businesses would be a substantial number of small businesses. The number of small businesses, 15,871 out of the 24,642 total dealers, amounts to 64 percent. Almost all salvage yards and automotive metal recyclers qualify as small businesses. The impact of performing
transactions under the CARS Act does not significantly differ from their regular business operations of salvaging, keeping records on and crushing 11 million vehicles a year.

We do not consider this final rule to have a significant economic impact on the small dealerships due to the costs incurred for report and recordkeeping. Even though we do not have exact cost estimates for these dealers, we do not believe that they will be economically significant. Salvage and scrap dealers, wrecking yards will also incur some administrative costs due to recordkeeping costs but the overall impact is not expected to be significant.

While a substantial number of small businesses will be affected by the final rule, the agency believes that the final rule will not have a significant economic impact on a substantial number of small vehicle dealers or salvage and scrap dealers.

## 4. Description of the projected reporting, record keeping and other compliance requirements for small entities

This final rule does contain new record keeping and compliance requirements for participating dealers. As a result of the requirements, these dealers will need a scanner, fax machine, and computer system capable of storing and transmitting the necessary data pursuant to the requirements of CARS. The Act also requires the cooperation of salvage yards and scrap dealers and thus they may incur some cost by the oversight requirements required to enforce the CARS Act. These costs are not expected to be significant
5. Duplication with other Federal rules

There are no relevant Federal regulations that duplicate, overlap, or conflict with the final rule.
6. Description of any significant alternatives to the final rule

The CARS Act did not have any significant alternatives.

## B. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (Public Law 104-4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditures by State, local or tribal governments, in the aggregate, or by the private sector, of more than $\$ 100$ million annually (adjusted annually for inflation with base year of 1995). Adjusting this amount by the implicit gross domestic product price deflator for the year 2008 results in $\$ 133$ million ( $122.42 \div 92.106=1.33$ ). The assessment may be included in conjunction with other assessments, as it is here.

This final rule is not anticipated to result in any expenditure by State, local or tribal governments, and will not result in expenditures of more than $\$ 133$ million annually. The final rule would result in Federal expenditures of $\$ 50$ million. These effects have been discussed previously in this Final Regulatory Impact Analysis.

## Appendix A

## Consumer Survey for the CARS Act

The survey is voluntary and does not affect the consumers' eligibility for the program. It will be administered at the dealership at the time of sale as a census of all consumers who participate in the program and is expected to take roughly 2 minutes to complete. There will be no stratification or weighting techniques involved in the collection of the data as it will be presented to all participants. The survey results will be entered into a database and stored by NHTSA. This data will be used solely for the purpose of evaluation of the program and only aggregate data will be presented which will not allow identification of individual transactions. The survey consists of three questions.

The first question asks the consumer about the timing of the trade in. If a consumer is encouraged to purchase or lease a vehicle much earlier than they would otherwise have done, then there is a greater benefit to the manufacturer and dealer, and therefore, the overall program. This is due to the assumption that every car will someday be replaced and the time value of money (i.e. purchases made today are worth more to a manufacturer than in the future). Dealers currently have large inventories of unsold vehicles and accelerating their purchase is a primary goal of the CARS program.

In the second question, the consumer is asked to identify what type of vehicle they would have chosen without the incentive. If the consumer would have purchased or leased the same type of vehicle then the incentive had no determinable impact on consumer choice. If the incentive motivated the consumer to purchase or lease a more fuel-efficient vehicle then the program would be more beneficial by decreasing fuel consumption and pollution for example. This data will also indicate whether the more fuel efficient cars were purchased or leased out of preference or due to the incentive.

Question three requests the miles the consumer drove the trade in vehicle in the past year. The number of miles driven in the past year provides information about the type of car the trade in represented to the consumer; a primary vehicle (e.g. to commute to work) or a rarely used vehicle. Replacing more frequently driven vehicles will a have a larger benefit to the program than one used only several times a year. Annual mileage will also be useful in helping the agency determine the fuel consumption and pollution impacts of the program.

## The questionnaire is as follows:

## Survey of Consumer Response to CARS Initiative

## (Commonly known as 'Cash for Clunkers')

Please answer the following 3 questions regarding your trade-in transaction. Your answers are for program evaluation purposes only and will not influence your eligibility in any way. Please put an $X$ in the box by the appropriate answer.

Question \#1: If you were not offered the CARS program trade-in incentive, would you still have traded in your current vehicle to purchase a new or used vehicle this month?
a) Yes
b) No

If no, when were you planning to trade-in, sell or dispose of your vehicle?Within the next year
4 years8 yearsabout 1 year 5 years 9 years2 years 6 years 10 years
3 years 7 years More than 10 years

Question \# 2: If you were not offered the CARS program trade-in incentive, when you disposed of this vehicle, would you have purchased another vehicle?
a) No
b) Yes, a new vehicle (Please select one type below)
c) Yes, a used vehicle (Please select one type below)a) a subcompact car (for example a Honda Fit, or a Toyota Yaris, etc.)b) a compact car (ex. Ford Focus, Nissan Sentra, Toyota Corolla, Honda Civic, etc.)c) a mid-sized car (ex. Chevrolet Malibu, Nissan Altima, Toyota Camry, etc.)d) a large car (ex. Chrysler 300, Ford Crown Victoria, etc.)e) a small SUV (ex. Honda CR-V, Ford Escape, etc.)f) a mid-sized SUV (ex. Ford Explorer, Honda Pilot, etc.)g) a large SUV (ex. Chevrolet Suburban, Ford Expedition, etc.)h) a small pickup (ex. Ford Ranger, etc.)i) a mid-sized pickup (ex. Dodge Dakota, Toyota Tacoma, etc.)j) a large pickup (ex. Chevrolet Silverado, Ford F-150, etc.)k) a full sized passenger van (ex. Ford E-Series, Chevrolet Express, etc.)I) a full sized cargo van (ex. Chevrolet Express, Dodge Sprinter, etc.)m) a mini-van (ex. Toyota Sienna, Dodge Caravan, etc.)n) other type (specify) $\qquad$
Question \#3: What is your best estimate of the number of miles you drove the traded-in vehicle during the past 12 months?
7,500-9,999
$\square$ 15,000-17,499 10,000-12,49917,500-19,9995,000-7,499 12,500-14,99920,000 or more


[^0]:    ${ }^{1}$ The agency has determined that a quick, safe, inexpensive, and environmentally benign process to disable the engine is to drain the oil from the crankcase, replace it with a 40 percent solution of sodium silicate, and run the engine for a short time.

[^1]:    ${ }^{2}$ There is estimated to be 9,615 records per manufacturer (250,000 transactions/26 manufacturers); 450 kb of data was estimated per transaction when compared to PDF document of similar size. The cost per manufacturer is then $\$ 18.05$ per manufacturer based on current market prices and estimated number of transactions for electronic storage and $\$ 1.57$ for disk storage. For electronic storage, the total cost to all manufacturers would then be $\$ 469.39$ (26 manufacturers*\$18.05) and $\$ 40.81$ (26 manufacturers*\$1.57) for disk storage.

[^2]:    ${ }^{3}$ U.S. Bureau of Labor Statistics: http://www.bls.gov/iag/tgs/iagauto.htm\#earnings

[^3]:    ${ }^{4} \mathrm{CQ}$ concepts website. $\$ 13.22$ per gallon or $\$ 3.30$ per quart. A 55 gallon drum is $\$ 394.07$ so the cost could be as low as $\$ 3.60$ per vehicle if sodium silicate is used for other purposes and purchased in bulk. http://cqconcepts.com/chem_sodiumsilicate.php
    ${ }^{5}$ Labor rate is from the US Bureau of Statistics http://data.bls.gov/cgi-bin/print.pl/iag/tgs/iagauto.htm
    ${ }^{6}$ Time based on oil change allowance as listed for a 1992 Ford Crown Victoria on the ALLDATA.com website. NADA estimates time cost to be longer:
    ${ }^{7}$ Time based on NADA estimate:
    Pull the ticket, find the vehicle, and pull into the shop. 10 minutes
    Properly place the vehicle on the lift, and raise
    Unscrew the oil plug, drain the oil
    Screw the plug back in, lower the vehicle from the lift
    Pour 2 quarts of Sodium Silicate (\$7.00) into the engine Run the vehicle for 5 minutes (or until the engine stops) Return the vehicle to storage and close the ticket

    5 minutes
    10 minutes
    5 minutes
    2 minutes
    5 minutes
    8 minutes 45 minutes

[^4]:    ${ }^{8}$ Source: http://www.epa.gov/NE/assistance/salvageyard/index.html

[^5]:    ${ }^{9}$ To clarify this concept with an example: Suppose a car is drivable for a period of 12 years, but is instead driven only for 10 years and then destroyed. There is a period of 2 years where the vehicle, instead of being driven to the full extent of its life, is replaced by a new vehicle.

