# The Impact of Federal Regulations on Franchised Automobile Dealerships

For the National Automobile Dealers Association



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All statements, findings, and conclusions in this report are those of the authors and do not necessarily reflect those of the National Automobile Dealers Association.

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## **About CAR**

The Center for Automotive Research is a non-profit organization based in Ann Arbor, Michigan. Its mission is to conduct research on significant issues related to the future direction of the global automotive industry, organize and conduct forums of value to the automotive community, and foster industry relationships.

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## **Executive Summary**

At the request of the National Automobile Dealers Association (NADA), the Center for Automotive Research (CAR) conducted this study on the economic costs of U.S. light vehicle dealerships' federal regulatory compliance. Cost estimates are for 2012 and are based on interviews that took place in 2013 and 2014.

According to the analysis in this study, in 2012 the average dealership incurred \$182,754 annually in federal regulatory compliance costs for regulations pertaining to employment, business operations, vehicle financing, sales, marketing, and vehicle repair and maintenance. These regulatory costs comprised 21.7 percent of the average dealership's 2012 before-tax net profits, or nearly \$2,400 per dealership employee. Regulations pertaining to employment, accounting, and vehicle financing made up more than 63 percent of the estimated federal regulatory compliance costs.

Though estimating the cost of compliance with federal regulations is challenging, it is clear these costs are present and impactful at all levels of a dealership organization; indeed, the average dealership needed to sell 106 vehicles in 2012 just to recoup their regulatory compliance costs.

The \$3.2 billion spent on regulatory compliance in 2012 was passed on to consumers in the form of higher prices; resulting in an estimated economic cost (total of lost sales revenues and lost consumer plus producer surplus) to light vehicle dealerships of \$7.7 billion, and a 10,550 reduction in direct dealership employment. The overall impact on the U.S. economy—including direct, indirect, and expenditure-induced effects—is estimated at \$10.5 billion in lost economic output and more than 75,000 fewer jobs in 2012. Every \$1 increase in a dealership's regulatory compliance costs results in \$3.28 in lost output in the U.S. economy and a net loss to the U.S. Treasury of \$0.44.

U.S. light vehicle dealers must comply with a wide range of federal, state, and local regulations, which take time and add to the costs of doing business. As suggested above, these costs are passed along to vehicle purchasers in the form of higher prices, resulting in lower vehicle sales and reduced U.S. employment.

This study examines only the costs incurred by U.S. light vehicle dealerships to comply with a group of some 60 federal regulations; a mere subset of the full catalogue of federal regulations with which light vehicle dealerships must comply. Absent from this subset are "upstream" product regulations, such as federal fuel economy mandates imposed on vehicle manufacturers. The federal government itself estimates that vehicle regulations governing safety and emissions alone comprised 21.5 percent of the \$25,517 average cost of a new light-duty vehicle in 2012. Also absent from the subset of Federal regulations examined by this study are state and local mandates which cover other areas of concern or which layer on top of federal regulations, increasing the burden on dealership.

## Introduction

U.S. light vehicle dealerships must comply with a myriad of federal, state, and local regulations, and that compliance takes time and adds to the costs of doing business. These costs are passed along to automotive consumers in the form of higher prices, which result in overall lower vehicle sales. This study looks at U.S. light vehicle dealerships' aggregate cost of compliance with a set of selected federal regulations in the United States. The researchers then estimate the proportion of these costs that are passed on to consumers, the resulting reduction in sales volume, and the economic loss associated with light vehicle dealerships' federal regulatory compliance. The costs of compliance with federal product regulations and state and local mandates are excluded from this study. The U.S. Department of Commerce Bureau of Economic Analysis estimates that federal product regulations regarding safety and emissions comprised 21.5 percent of the \$25,517 average cost of a new vehicle in 2012.<sup>1</sup>

Light vehicle dealerships<sup>2</sup> are located throughout the country, and are substantial contributors to local, state, and U.S. economies. In 2012, there were over 17,500 firms engaged in the business of retailing cars and light trucks in the United States, with direct employment of more than 963,000 and annual payroll of over \$51 billion.<sup>3</sup> New vehicle dealership revenues of \$613 billion in 2011 represented 14.8% of all U.S. retail sales revenue,<sup>4</sup> and CAR estimates that automobile dealers generated over \$31 billion in sales, business, and employee personal income taxes to local and state governments, and over \$12.6 billion in federal employee personal income tax revenues in 2010.<sup>5</sup>

Dealers are subject to federal regulations that pertain only to those engaged in automotive and commercial truck retail, maintenance, and repair, but they also must comply with regulations that apply more broadly to all employers, all small businesses, all finance organizations, all advertisers, and all retailers. Automotive dealer-specific regulations cover a broad range of issues—including environmental concerns, tax and finance rules, and various consumer protections. Within this subset of regulations, there are some that are mandatory, where fines are levied for non-compliance; some that are required only to receive a benefit (such as a loan or tax credit); and some that are voluntary. There is a range of effort required to comply with each regulation—from very low efforts (refraining from prohibited practices), to very costly process burdens (capital expenditures, documentation, and filing evidence of compliance with government agencies).

<sup>&</sup>lt;sup>1</sup> U.S. Department of Commerce, Bureau of Economic Analysis. (2013).

<sup>&</sup>lt;sup>2</sup> Defined as establishments in NAICS classification 441110 New Car Dealers—This industry comprises establishments primarily engaged in retailing new automobiles and light trucks, such as sport utility vehicles, and passenger and cargo vans, or retailing these new vehicles in combination with activities, such as repair services, retailing used cars, and selling replacement parts and accessories.

<sup>&</sup>lt;sup>3</sup> NADA Data: State of the Industry Report. (2013).

<sup>&</sup>lt;sup>4</sup> U.S. Census, Statistics of U.S. Businesses. (2011).

<sup>&</sup>lt;sup>5</sup> Hill, Kim, Debbie Menk and Joshua Cregger. "Assessment of Tax Revenue Generated by the Automotive Sector." Center for Automotive Research. (April 2012).

## **Methodology**

This study involved an exhaustive review of existing government regulatory compliance analyses, a thorough literature review, primary data collection, estimation of the cost of dealership compliance with the set of selected federal regulations, and a comprehensive economic analysis to estimate the magnitude of the economic losses (higher vehicle prices and lower sales volumes) associated with federal regulatory compliance.

A catalog of major federal regulations that apply to automobile dealers entitled, "The Regulatory Maze: NADA's Annual Update on Federal Regulations," served as the starting point in developing a collection of relevant federal regulations for this analysis. The full listing of the regulations included can be found in Appendix A. The 61 regulations selected for inclusion in this research pertain to employee relations, employee benefits, facilities, business administration, accounting, emergency planning, vehicle financing, sales, marketing, and environmental and employee health regulations relating to service and body shops. Costs of compliance with regulations required only to receive a benefit—such as paperwork associated with the Small Business Administration's Dealership Floor Plan Financing Program; new regulations for which the cost of compliance may not yet be known—such as the Affordable Care Act; or *de minimis* regulations—such as tax exemption procedures for diplomats' vehicle purchases; were excluded from this research. In addition, federal product regulations—such as safety or fuel economy mandates that apply to vehicle manufacturers—were also excluded from this research, as were any state or local regulations pertaining to light vehicle dealerships.

Accounting for the cost of regulatory compliance for automotive dealerships, and the economic consequences of this cost burden is a significant challenge. The U.S. government publishes estimates of time and/or cost required to comply with every regulation subject to the Paperwork Reduction Act of 1995 (PRA) at reginfo.gov, the regulatory portal of the Office of Management and Budget's (OMB) Office for Information and Regulatory Affairs (OIRA). OIRA reviews and publishes data and reports on the information collection activities for all federal government agencies. All federal agencies must estimate the burden of public information collection activities in service of regulatory compliance.

At the outset, researchers knew that supplemental data collection (through dealership surveys) would be necessary to fill in the blanks where government estimates were not available. As it turned out, CAR researchers found the available government regulatory compliance cost data proved to be inadequate for the purposes of estimating the regulatory cost burden borne by a single industry. In addition, government estimates were available for only about 20 percent of the subset of federal regulations included in this study. The study relies almost exclusively on the analysis of primary regulatory cost data collected from comprehensive case study interviews with light vehicle dealerships. Data were gathered through in-person and phone interviews using a structured interview protocol.

CAR researchers used the cost estimates gathered from structured interviews to feed into an economic analysis to determine the proportion of federal regulatory compliance costs that are passed along to consumers in the form of higher vehicle prices, and the loss of total sales volume attributed to these higher prices.

## **Review of Existing Data and Research**

While data collected by federal agencies on the burden imposed by many regulations, the quality of information on the regulatory compliance burden varies considerably by federal agency—despite concerted efforts to improve quality and achieve greater standardization<sup>6</sup>. There is often considerable uncertainty on the costs of regulatory compliance at the time a new rule is promulgated. As rules change or are amended or reauthorized over time, the government's cost and time burden estimates are revised to be more in line with actual hours and costs. Thus, government estimates tend to be more reliable for regulations that have been on the books for some time. For many rules, the government's estimate of the regulatory burden is available in terms of cost or hours, but not both measures.<sup>7</sup>

OIRA's parent agency, OMB, publishes a summary assessment of regulatory costs and benefits in an annual Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities. In addition, the U.S. Government Accounting Office (GAO) has issued reports on several of the individual regulatory actions or rules that were included in the final list of 61 rules included in this study. GAO's reviews assess the effectiveness of rulemaking, including the economic impact of the regulations they review, and suggest ways in which the regulation itself or the regulatory processes may be improved.

#### **Challenges to the Utilization of Government Regulatory Cost Estimates**

CAR's review of the federal regulatory burden on light vehicle dealerships began with an examination of available government regulatory evaluations. Sources reviewed included—but were not limited to: <u>regulations.gov</u>, government agency and program websites, the Federal Register, and OMB-OIRA's annual *Report to Congress* publication series. The text of regulatory, regulatory preambles, and the contents of regulatory dockets were explored to review Regulatory Impact Analyses (RIAs), Regulatory Flexibility Analyses (RFAs), and general economic impact estimates. The authors also reviewed non-governmental analyses of regulatory compliance costs found in scholarly reports and journals. Upon completing this review, researchers determined that due to numerous challenges in acquiring and normalizing the government's cost estimates to current dollars and a relevant unit of analysis, the proposed research could not rely on federal government regulatory cost estimates.

At the most basic level, regulatory estimates do not exist for all regulations that impact automobile dealerships. Of the 61 explored rules and regulations, regulatory cost estimates could only be obtained for a third. Other obstacles were the inaccessibility of evaluations, vintage, incomplete data, non-comparable methodologies, and the accuracy of the evaluations. These challenges are acknowledged by OIRA itself: "Individual regulatory impact analyses vary in rigor and rely on different assumptions,

<sup>&</sup>lt;sup>6</sup> There is some evidence that indicates an overall improvement in quality in regulatory cost assessments conducted after 1993 (post issuance of Executive Orders 12866 and 13563), but standardization has not yet been achieved.

<sup>&</sup>lt;sup>7</sup> For instance, the Federal Trade Commission's Consumer Product Warranty Rule Information Collection Review (ICR) is only provided in terms of hours, but the ICR for the National Highway Traffic Safety Commission's American Automobile Labeling Act (AALA) states the regulatory burden in terms of both hours and dollars.

including baseline scenarios, methods, and data, thus summing across estimates involves the aggregation of analytical results that are not strictly comparable."<sup>8</sup>

#### Inaccessibility of Data

A primary constraint on the use of governmental regulatory cost estimates is that the data were frequently inaccessible. Evaluations prior to 1995 can only be retrieved through acquisition of physical, archival copies. Accessing these records was too time-consuming and inefficient for the scope of this study. Also, existing regulatory information is not always publicly available, and reviews of certain data sources proved circular.<sup>9</sup> Other references within the OIRA reports were to the *Regulatory Information Service Center & Office of Information and Regulatory Affairs Combined Information System* (ROCIS), which is not publicly accessible.

#### Age of Evaluation

The age of the regulations and their corresponding compliance cost evaluations present a series of challenges to any wide-ranging regulatory cost study. The age of an estimate may be problematic if it directly relates to the economic condition of the time. Differing data vintages can complicate the comparison, let alone the summation of cost estimates. The regulations examined as part of this study have widely ranging dates of promulgation. Even within a single regulation or rule, summing the initial cost estimate and the estimates of incremental cost associated with regulatory amendments may not be appropriate due to changes in underlying economic structures, and potential methodological differences between earlier and later estimates.<sup>10</sup> OIRA provides a salient quote:

"As discussed in previous Reports, OMB has chosen a ten-year period for aggregation because pre-regulation estimates prepared for rules adopted more than ten years ago are of questionable relevance today."<sup>11</sup>

#### Methodological Incompatibility

Methodological differences, whether resulting from agency-specific philosophies, constraints imposed by lack of data, or other factors, present challenges to the comparability of regulatory cost estimates arrived at separately. There is a great disparity in the quality, content, and methods of regulatory evaluations.<sup>12</sup> Where one evaluation may describe anticipated compliance costs as annualized costs

<sup>&</sup>lt;sup>8</sup> Office of Information and Regulatory Affairs. "2008 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities." 5.

<sup>&</sup>lt;sup>9</sup> One such example is the OIRA Report to Congress annual publication series, which provided total annualized cost estimates for some of the rules and regulations selected for this research. In a few cases, the OIRA report identified source documents as previous OIRA reports.

<sup>&</sup>lt;sup>10</sup> In other words, as regulatory evaluations age, the underlying assumptions are likely to lose relevance. What was an accurate or reasonable assessment at the time the evaluation was published may be wholly inapplicable today. For example, the incidence of a workplace hazard—such as asbestos—may be lower in the present day as a result of the regulation itself. In addition, new, and perhaps more cost-effective technologies to achieve compliance or mitigate risk may have proliferated; new and superior compliance procedures may have been developed; or general business practices may have changed so as to render the regulation near irrelevant. A routine governmental review of federal regulatory cost estimates could greatly improve the quality of the data that is available.

<sup>&</sup>lt;sup>11</sup> Office of Information and Regulatory Affairs. "2008 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities." 5.

<sup>&</sup>lt;sup>12</sup> Office of Information and Regulatory Affairs. "2013 Draft Report to Congress on the Benefits and Costs of Federal Regulations and Agency Compliance with the Unfunded Mandates Reform Act." 8-9.

imposed upon various industries, others may instead state the anticipated total cost to the private sector. Other complications arise from the fact that some cost estimates are detailed at an industry level, but there is inconsistency as to which industries are included.<sup>13</sup> Rarely do two regulatory evaluations consider the same selection of industries, and the majority of regulations identified by NADA do not discuss compliance costs to be incurred by the automotive dealer industry alone—or even its parent sector, retail trade. Researchers did not expect that regulatory cost estimates would be available at the industry level of light vehicle dealerships for every regulation included in this analysis, but given the varying granularity of the industry categories, it proved difficult to disaggregate published cost estimates to a standard unit of analysis for purposes of this study.

#### **Regulatory Cost Estimate Accuracy**

The accuracy of the published estimates is closely related to concerns already identified regarding methodological inconsistencies. A body of literature exists on the accuracy of governmental regulatory cost estimates, but most of this literature exists as *ex ante*, or studies performed prior to the adoption of regulations. These studies are often developed parallel to governmental RIAs, but may rely on different assumptions. Examinations of the accuracy of *ex ante* estimates vis-à-vis realized costs is limited by a relative dearth of post-regulation adoption, or *ex post*, evaluations of compliance costs. Where comparison studies of *ex ante* and *ex post* estimates have been possible, the studies have found that RIAs are substantially more likely to *overestimate* compliance costs than they are to *underestimate* the costs of regulatory compliance.<sup>14 15</sup>

Several factors contribute to the frequency of overestimation, ranging from particularities of the implemented methodologies, lack of requisite data, and other uncertainties. As RIAs are performed *ex ante*, various assumptions typically based on current business practices and available technologies must be made regarding likely compliance paths. Across the literature on the *ex ante* / *ex post* gap, the most frequently cited reason for *ex ante* overestimation is the unanticipated use of existing technologies or

Eisenberry, Ross and Shapiro, Isaac. "Deconstructing Crain and Crain: Estimated cost of OSHA regulations is way off base." Harrington et al. "On the Accuracy of Regulatory Cost Estimates."

<sup>&</sup>lt;sup>13</sup> For example, the 2012 Hazard Communication Final Rule describes anticipated costs to industries at the 3-digit NAICS level, while the 1991 Bloodborne Pathogens rule only discusses a handful of selected industries, primarily within the healthcare, education and protection (police, fire, etc.) industry groups. (U.S. Department of Labor, Occupational Safety and Health Administration. Hazard Communication. Occupational Exposure to Bloodborne Pathogens, Section 7-VII.)

<sup>&</sup>lt;sup>14</sup> Bailey et al. "Mind the gap! Comparing *ex ante* and *ex post* assessments of the costs of complying with environmental regulation."

Hammitt, James. "Are The Costs of Proposed Environmental Regulations Overestimated? Evidence from the CFC Phaseout."

Thompson et al. "Validating Benefit and Cost Estimates: The Case of Airbag Regulation."

<sup>&</sup>lt;sup>15</sup> Harrington et al. (2000) evaluate the accuracy of the *ex ante* regulatory compliance cost estimates presented in RIAs by comparing them to available private and academic ex post compliance cost estimates. The Harrington study includes 21 U.S. federal regulations, thirteen of which are from the U.S. Environmental Protection Agency (EPA), and eight are from the Occupational Safety and Health Administration (OSHA). The Harrington study considers the *ex ante* estimates of compliance costs to be accurate if the ex post figure falls within the range presented by the RIA. Where only a point estimate is presented in the *ex ante* study, they instead consider the *ex ante* estimates accurate if the ex post figures are within a range of  $\pm$  25 percent of the *ex ante* point estimate. Results of this analysis showed seven of the thirteen EPA regulations overestimated compliance costs, and two EPA regulations underestimated the cost. For the eight OSHA regulations, six overestimated compliance costs and one underestimated costs. (Harrington, et al. "On the Accuracy of Regulatory Cost Estimates." 306-307.)

the development of new technologies.<sup>16</sup> Common methodological sources of over-estimation include alteration of the rule prior to its promulgation yet after RIA completion, and the proclivity of agencies to estimate the expected maximum compliance cost rather than the expected actual cost. Uncertainty in the estimation of baselines encourages overestimation of the number of firms or workers which will be impacted by the regulation.<sup>17</sup> More general data limitations, such as a lack of data on the costs of relevant equipment or technologies, further contribute to the inaccuracy of compliance cost estimates.<sup>18</sup>

## **Primary Data Collection**

The concerns outlined in the previous section prevented use of official government regulatory cost figures in ascertaining the aggregated cost burden of federal regulations on light vehicle dealerships. Due to these concerns, the researchers proceeded to gather cost estimate data directly through case studies of a select group of dealerships.

The breadth and complexity of the selected regulations made the data gathering process better-suited for in-person interviews as opposed to web-based surveys. Dealership-relevant regulations were organized into categories, with descriptions of the specific dealership activities related to each category. For example, the employee relations category encompassed regulations such as the Americans with Disabilities Act, Equal Pay Act, Employment Verification Rules, and Federal Wage-Hour and Child Labor Laws, among others. Other categories included employee benefits, facilities, business administration, accounting, emergency planning, vehicle financing, sales, marketing, and environmental and employee health regulations relating to service and body shops. The costs associated with these categories were also organized by category, including costs for employee compensation, third-party contractors, capital equipment, and supplies. The regulations associated with each category were then used to create a structured interview framework for use during the interviews. A full description of the included regulations is found in Appendix A, and the interview framework document is in Appendix B.

## **Cost Impact Assessment**

The purpose of this paper is to assess the economic impact of Federal regulatory costs on motor vehicle dealerships. To do so, CAR researchers assumed that these costs are passed on to customers in terms of higher prices paid for new and used vehicles and vehicle maintenance and services. It was also assumed that higher prices would reduce dealership business from all departments, and result in lower economic contribution created by the motor vehicle retail sector. Because regulations increase dealership prices and reduce consumer's demand for dealership services, the loss of dealership economic contribution is deemed economic net loss, or so called "dead weight loss." In other words, CAR's model estimates: 1) the loss of consumer demand for the motor vehicle retail sector; 2) the loss of dealership economic contribution (which is consumer plus producer surplus lost, also "dead weight loss"); and 3) the

<sup>&</sup>lt;sup>16</sup> Bailey et al. "Mind the gap! Comparing ex ante and ex post assessments of the costs of complying with environmental regulation." 253-254.

Hammitt, James. "Are The Costs of Proposed Environmental Regulations Overestimated? Evidence from the CFC Phaseout." Eisenberry, Ross and Shapiro, Isaac. "Deconstructing Crain and Crain: Estimated cost of OSHA regulations is way off base." 2-3. Harrington et al. "On the Accuracy of Regulatory Cost Estimates." 300, 309, 310.

<sup>&</sup>lt;sup>17</sup> Ibid. 310-312.

<sup>&</sup>lt;sup>18</sup> Thompson et al. "Validating Benefit and Cost Estimates: The Case of Airbag Regulation." 804, 809-810.

equivalent loss of U.S. employment from above losses due to an higher prices created by the Federal government's regulation of motor vehicle dealerships.

To estimate motor vehicle dealership revenue loss due to an artificially higher price, one must first carefully define dealership producer price. The producer price index (PPI) differs from the consumer price index (CPI) because PPI measures changes over time in producers selling price, and CPI measures the changes in consumer's purchase price. In addition, PPI does not include sales and excise taxes, which are included in CPI. However, PPI includes other costs and expenditures to producers, which may or may not be passed on to consumers; these include distribution costs, and costs of regulatory compliance. According to the U.S. Bureau of Labor Statistics (BLS), the method to calculate PPI and CPI is a modified Laspeyres index, which includes the targeted commodity's quantity and price. Therefore, PPI can be treated as a revenue deflator for producers, and CPI as an expenditure deflator for consumers. For the purpose of this model, a motor vehicle dealership PPI is required. Unfortunately, BLS only publishes a motor vehicle dealership industry PPI series beginning in 2004 and for years thereafter. With assistance from NADA, CAR researchers were able to construct our own motor vehicle dealership industry PPI from 1978 to 2012, which consists of commodity PPI's of new motor vehicles, used motor vehicles, and automotive maintenance and repair services.

CAR's estimation model is as follows:

$$(\frac{R_t}{R_{t-1}}) = \propto + \eta \cdot (\frac{DP_t}{DP_{t-1}}) + \beta 1 \cdot (\frac{VP_t}{VP_{t-1}}) + \beta 2 \cdot (\frac{V_t}{V_{t-1}}) + \beta 3 \cdot U + \varepsilon$$

Where:

#### R = total dealership revenues

DP = producer price index of motor vehicle dealerships

*VP* = consumer price index of new motor vehicles

V = new motor vehicle sales, in units

#### *U* = *U*.*S*. *unemployment rate*

#### $\eta$ = the marginal impact of dealership prices on total dealership revenue (R)

The model also incorporates CPI-new vehicle as an explanatory variable. CPI-new vehicle measures consumer's purchase price of new motor vehicles. During the period of 1978-2012, an average of 60 percent of total dealership revenue was generated by new vehicle sales. Inclusion of CPI-new motor vehicle increases the explanatory power of the model, and allows for a more reliable estimate of dealership PPI elasticity.

In addition to being sensitive to PPI and CPI, dealership revenues are also affected by an array of factors that are not associated with price—such as interest rates and the general economic environment. Many macroeconomic indicators were considered and tested (see Appendix C), but only a few were finally

selected for inclusion in the model due to statistical problems such as multi-collinearity and autocorrelation. The final non-price explanatory variables included in the model are the unemployment rate and new vehicle sales volumes. The unemployment rate is a proxy for the general economic environment, and new vehicle sales volumes reflect the overall health of the automotive market. Both of these variables are crucial factors in the determination of dealership revenues.

## **Findings**

The results of the data collection interviews and model estimation are summarized and discussed below.

### **Interview Results**

CAR researchers then used a structured interview framework to guide the discussion with principals, general managers, comptrollers, and other staff of eight light vehicle dealerships to estimate cost of compliance with the selected federal regulations. These data were supplemented with data from a larger, multi-dealership conglomerate. The selected dealerships represented NADA's membership, including two that were part of a larger franchise (Dealers C and H), and four single-rooftops (Dealers A, B, D, and E), a range of domestic, Asian, and European brands sold; and a variety of price points, including economy, mid-range, and luxury vehicles. Additionally, two of the dealerships had a body shop (Dealers A and G), as certain regulations pertain only to those dealerships with body shop operations. The dealerships primarily were located in mid-Michigan, southeastern Michigan (Dealers A, B, C, D, and E) and northern Ohio (Dealers F and G), with one in Maryland (Dealer H). During the interviews, the order of topics was randomized to prevent any biases, and interviewees were encouraged to substantiate cost estimates, where appropriate. Interviewees were asked to use 2012 costs in their estimates.

#### **Dealership Statistics**

Table 1 summarizes the basic descriptive statistics for each dealership in the study.

	Dealer A	Dealer B	Dealer C	Dealer D	Dealer E	Dealer F	Dealer G	Dealer H
Annual Revenue (\$MM)	\$44.5	\$43.2	\$32.6	\$45.8	\$57.0	\$24.6	\$142.2	\$44.75
Employees (FTEs)	73	39	33	64	58	50	200	76
New Car Sales	844	599	233	1,318	1,230	347	2,972	1,011
Total Car Sales	1,644	1,860	725	1,624	1,516	820	4,812	1,625

#### Table 1: Individual Dealership Profiles

The mean revenue among the group was \$54.33 million dollars, and ranged from \$24.6 (Dealer F) to \$142.2 million dollars (Dealer G). Employment per dealership included in the case studies had a mean value of 74, and a range of 33 (Dealer C) to 200 full time equivalent employees (Dealer G). The average number of vehicles sold at the case study dealerships was 1,828, with the average for new vehicles sales being 1,069. The range of total vehicles sold was 725 (Dealer C) to 4,812 (Dealer G), and the number of new cars sold ranged from 233 (Dealer C) to 2,972 (Dealer G). Table 2 outlines the case study dealerships corresponding descriptive statistics.

#### Table 2: Case Study Dealership Profile

	Mean	Minimum Value	Maximum Value
Annual Revenue (\$MM)	54.33	24.6	142.2
Employees (FTEs)	74	33	200
Total Vehicle Sales	1,828	725	4,812
New Vehicle Sales	1,069	233	2,972

The average NADA member had annual revenues of \$38.4 million in 2012, which is just over 40 percent lower than the average case study dealership. Dealerships in this study sold an average of 1,828 total new and used vehicles, while the average NADA member's annual sales volume was 1,791 vehicles. The average NADA dealer employed 55 employees (FTEs) in 2012, compared to average employment of 74 for the case study dealerships. Single rooftop dealers comprised 33 percent of NADA's membership in 2012, and 37.5 percent of the dealers in this study; dealership groups with more than 2, but fewer than 10 stores make up 50 percent of NADA members vs. 37.5 percent of dealers in this study; and dealership groups with more than 10 stores represent 17 percent of NADA membership vs. 25 percent of the case study dealers.<sup>19</sup>

#### **Cost of Regulatory Compliance**

The volume-weighted average total cost of dealership compliance was found to be \$182,754 annually for calendar year 2012. These regulatory costs comprised 21.7 percent of the 2012 before-tax net profits, or nearly \$2,400 per dealership employee. When considering both new and used vehicle sales, the mean cost per vehicle is \$100. While this figure does not seem very large, the average dealership would have needed to sell 106 new and used vehicles in 2012 to recoup its regulatory compliance costs.<sup>20</sup>

Analysis of the mean values of compliance costs in Table 3 shows that the dealership financial burden is greatest for the regulations included in the vehicle financing category (which includes items such as Equal Credit Opportunity, Fair Credit Reporting, and Truth in Lending rules), and second greatest for those shown in the vehicle general category (which includes regulations covering government employment, payroll taxes, and wage and hour rules). Regulations in the sales, service and body shop, and marketing categories imposed lower degrees of compliance cost burden on dealers, respectively. A disproportionate share of the costs are clustered in the vehicle financing and general categories, with nearly two-thirds of the total mean cost of regulatory compliance represented by these two categories. This information is conveyed in Table 3—outlining the arithmetic mean costs<sup>21</sup> by category and subcategory, as well as the total mean cost of regulatory compliance found among the dealerships included in this study. Detailed descriptions of the regulations included in each of the categories and subcategories can be found in Appendices A and B.

<sup>&</sup>lt;sup>19</sup> Membership data provided by NADA Research Department.

<sup>&</sup>lt;sup>20</sup> The average dealership sold 819 new and 975 used cars in 2012. Estimate does not include other profit centers.

<sup>&</sup>lt;sup>21</sup> Not weighted by dealership sales volumes.

Category/Subcategory	Estimated Costs	Percent of Costs
Vehicle Financing	\$69,388	37%
Administrative	49,438	
Customer Finance Notices	19,949	
General	\$48,848	26%
Accounting	17,648	
Business Administration	13,139	
Emergency Planning	368	
Employee Benefits	3,691	
Employee Relations	13,523	
Facilities	480	
Sales	\$29,588	16%
<b>Customer Product Notices</b>	29,588	
Service and Body Shop	\$24,653	13%
Employee Health and Safety	13,379	
Environmental	11,273	
Vehicle Safety	-	
Marketing	\$14,526	8%
Advertising	1,423	
Customer Communication	13,104	
Grand Total	\$187,002	100%

Table 3: Average Federal Regulatory Compliance Cost by Category

Additional analysis shows that over 71 percent of the mean vehicle financing category of federal regulatory costs, which compose over 26 percent of the total mean dealer compliance costs, are within the administrative subcategory of vehicle financing. The remaining 29 percent of this category comprises the third greatest burden by subcategory within the total mean regulatory cost, and imposes nearly 11 percent of said cost. These subcategories represent costs dealers bear in complying with regulations such as the Equal Credit Opportunity Act and the Gramm-Leach Bliley Act. Costs are accrued by dealers on an internal basis, as well as through use of external contractors to assist in mandatory compliance.

The general category cost breakdown reveals that 36 percent of the mean costs in this category are attributed to the accounting subcategory, which is also more than 9 percent and the fourth largest cost subcategory of the observed total mean cost of compliance. The costs within this category primarily relate to general corporate and payroll tax compliance issues. The balance of costs in the general category is attributed to compliance with regulations such as the Americans with Disabilities Act, Family and Medical Leave Act, and rules on record-keeping and retention.

Two of the dealers included in this study are part of a larger dealer group (Dealers C and H). Interviewees at one of these dealerships (Dealer C) were unable to identify some, and possibly a large share, of its regulatory compliance costs. Possibly due to this dealership's more centralized business

operations, the managerial staff was less knowledgeable about regulatory compliance costs than other interviewees. Researchers made a good faith effort to speak with corporate level management at the group to gain further insight into the dealerships costs, though these efforts were ultimately unsuccessful. In light of this fact, descriptive statistics of the case study group may be slightly lower overall than would otherwise be true if additional information had been gained about this dealership's regulatory cost profile. Overall, however, the integrity of the data remains robust even in light of this likely underreporting.

For the second dealer that was part of a larger group (Dealer H), CAR researchers disaggregated composite data for the group and brought it to a single-rooftop level. In this case, CAR worked with the dealer group to assess costs at a group level for the sake of efficiency and thoroughness. This method, as opposed to the method referenced in the preceding paragraph, allowed the researchers to account for a greater portion of actual costs than would otherwise had been possible. The findings were then scaled using the number of group dealerships as a divisor. Therefore, descriptive statistics for this dealer profile are the mean findings for the larger enterprise.

It can be challenging for dealers to identify all costs associated with federal regulatory compliance. Some activities are spread among many facets of the business and accounting conventions do not support simple cost analysis. Other cost centers represent activities the dealers themselves admit they would do even if not regulated to do so. However, the data are clear that federal regulatory compliance costs are present and meaningful at all levels of the dealerships' organizations.

#### **Economic Model Results**

A multivariable linear regression was performed using the ordinary least square estimation method. The results are shown below, with t-statistics in parentheses. The coefficients are significant at the 5 percent level of confidence, and the model does not suffer from serial correlation (Durbin-Watson = 2.37).

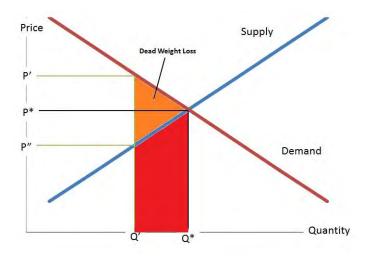
$$\left(\frac{R_t}{R_{t-1}}\right) = -0.74 + 0.47 \cdot \left(\frac{DP_t}{DP_{t-1}}\right) + 0.61 \cdot \left(\frac{VP_t}{VP_{t-1}}\right) + 0.72 \cdot \left(\frac{V_t}{V_{t-1}}\right) - 0.01 \cdot U + \varepsilon$$

$$(-3.90) \quad (2.02) \qquad (3.82) \qquad (14.58) \qquad (-2.18) \qquad \text{R-Square} = 0.90$$

The regression results indicate that U.S. vehicle demand (V) has the strongest impact on dealership revenue, with one percent increase in market demand resulting in a 0.72 percent increase in dealership revenue. This result indicates that dealership revenue is strongly reliant on overall market demand. The result confirms our data observations, and confirms CAR researchers' expectations.

The marginal impact of new vehicle price (VP) in the model ranks second, with a revenue elasticity of 0.61. This result implies that the relationship between dealership revenue and new vehicle prices is positive, but slightly inelastic. The result is expected, because the average dealership generated 40 percent of its revenue from used vehicle sales and services of all types. Especially during market downturns, the share of revenue that comes from items other than new car sales becomes more critical for dealers, which is confirmed in the model results. Higher vehicle prices not only generate higher new vehicle sales revenue, but also results in higher used vehicle residual value, and maintenance and service income for dealerships.

The producer price elasticity is moderate, and is estimated at 0.47. This result implies that dealership revenue is only marginally affected by dealership producer prices. For every 1 percent increase in dealership producer price (or cost), dealership revenue increases only 0.47 percent. On the other hand, this result implies that the price elasticity for quantity demand is -0.53. The price elasticity for quantity demand is rather important to the study, because it will be used for calculating both loss of sales and dead weight loss due to higher price, which is illustrated in Figure 1 below.





In this figure, P\* and Q\* represent an equilibrium price and quantity had the Federal regulations not existed. P' and Q' represent the price paid by the consumer and market demand with Federal regulations in effect. P" represents the unit price received by dealers after regulatory costs are subtracted from the revenue. The difference between P' and P" is the Federal regulatory compliance cost per unit, and the difference between Q\* and Q' represents the demand loss due to higher price. The red area represents the loss of dealership business, and the orange area in the center is the economic dead weight loss due to higher prices as a result of Federal regulatory compliance costs that are passed through to the consumer.

#### The sensitivity of dealership price to dealership expense increase

Dealership prices are very sensitive to dealership expenses, largely due to the dealerships' cost structure and net profits. The relationship between dealership expense and dealership gross sales can be described by the following equation:

$$P \cdot Q - COGS = Gross Profit = (PQ) \cdot x\% = E + \pi$$

Where:

 $P \cdot Q = Total Revenue$ 

COGS = Cost of Goods Sold

x% = Gross margin

*E* = *Selling*, *General*, *and Administrative Expenses* 

 $\pi = Net \ profit \ before \ tax$ 

If gross sales remain constant, every dollar in increased expense causes the same amount of decrease in profit. In terms of percentage, one percent increase in expense will result in  $\frac{E}{\pi}$  percent decrease in profit. If a dealer would like to maintain its net profit when expenses increase by one percent, the dealer would need to increase its price by  $\frac{E}{\pi + E}$ %.

According to NADA's financial data, the average U.S. dealership gross margin was 13.7 percent from 2000 to 2012, the total selling, general, and administrative expenses was 12 percent, and net profit margin was 1.7 percent. NADA's financial data indicates for every percentage point increase in dealership expense, dealership net profit will decrease by seven percent, *ceteris paribus*. A dealer seeking to maintain its profit would have to increase prices by .88 percent.

#### Federal regulatory compliance cost, and its impact on the U.S. economy

CAR's field interviews with dealers indicate that in 2012, the average dealership's federal regulatory compliance costs were \$182,754 per rooftop (weighted average), or \$100 per new and used vehicle sold, or \$2,371 per dealership employee. These regulatory compliance costs accounted for 3.7 percent of total sales, general, and administrative expenses.

Dealerships' regulatory compliance costs were relatively small given that the average general expense was \$4.7 million and annual revenues were \$56.7 million per rooftop for the dealers included in this study. Assuming they had the same profit margin as the national average, a 3.7 percent increase in expenses equates to a 26 percent net profit decrease for the dealerships interviewed. If the dealers were to make up for that lost profit by raising prices, prices would need to increase 3.2 percent, *ceteris paribus*. Although CAR researchers were not able to survey or observe to what extent expenses were passed on to consumers, it is reasonable to believe that dealerships increase prices to make up lost profit rather than take a financial hit to their bottom line. For the purpose of this study, the assumption is that the entire cost of federal regulatory compliance is passed on to consumers.

Higher vehicle prices lead to a dead weight loss of both consumer and dealer surplus. The dead weight loss equation is as follows:

$$DW = 0.5 \cdot (Q^* - Q') \cdot (P' - P'')$$

This basic equation can be transformed into the following expression<sup>22</sup> using price elasticity for demand and supply:

$$DW = 0.5 \cdot \left(\frac{\Delta P}{P^*}\right)^2 \cdot \left(\frac{|e_D e_S|}{e_S - e_D}\right) \cdot P^* Q^*$$

Where:

$$\left(rac{\Delta P}{P^*}
ight)$$
 = percent change of dealership price due to regulatory compliance = 3.2%

 $e_{S}$  = Price elasticity for supply = 1.0

 $e_D$  = Price elasticity for demand -0.53

 $P^*Q^* = 2012$  per dealership revenue at equilibrium = \$38 million

*P*′ = 2012 dealership producer price index = 159.8

 $P^*$  = dealership equilibrium producer price index = 156.5

 $P^{"}$  = price index received by dealers = 154.7

The price elasticity for demand is estimated to be -0.53 in the regression, and the price elasticity for supply is assumed to be 1.0 for the purposes of this study. The loss of dealership business and the economic dead weight loss per dealership are calculated as follows:

Loss of Dealership Business =  $0.5 \cdot (156.5 + 154.7) \cdot (Q^* - Q') = $434,591$ 

Dead Weight Loss = 
$$0.5 \cdot (3.2\%)^2 \cdot \left(\frac{0.53}{1.53}\right) \cdot $38 million = $6,741$$

The estimates above indicate each dealership (rooftop) lost \$441,332 worth of net business and economic activity in 2012 due to dealership price inflation related to federal regulatory compliance costs. For the entire U.S. light vehicle dealership industry (17,540 dealers in 2012<sup>23</sup>), the direct economic loss is estimated to have been \$7.7 billion and 10,550 fewer direct dealership jobs in the U.S. economy.<sup>24</sup>

For the regulatory impact on U.S. employment, CAR utilized a specially constructed regional economic impact model, and customized the analysis applying the total loss of \$7.7 billion across personal

<sup>&</sup>lt;sup>22</sup> Nicholson, Walter, *Microeconomic Theory, Basic Principles and Extensions, Ninth Ed.* P.324.

<sup>&</sup>lt;sup>23</sup> NADA Data, op. cit.

<sup>&</sup>lt;sup>24</sup> Inclusive of the \$7.7 billion direct economic cost and 10,550 direct jobs.

consumption expenditures on new vehicles, used vehicles, motor vehicle parts, and motor vehicle repair and maintenance services. The analysis also took into account regulatory compliance spending of \$3.2 billion (\$182,754 multiplied by 17,540 dealers) and applied it to non-residential investment. The result shows that the cost burdens of the subset of Federal regulations assessed in this study that are borne by the U.S. light vehicle dealers cost the U.S. economy 75,865 jobs<sup>25</sup>, more than \$10.5 billion in lost economic output, \$3.6 billion in personal income, and \$655 million in proprietors' income. The cost of dealership compliance with the selected federal regulations assessed in this study ultimately cost the federal government nearly \$1.4 billion in lost social insurance contributions, lost personal tax revenues, and higher transfer payments to individuals.<sup>26</sup>

Category	2012 Result
GDP	-\$6.0 billion
Economic Output	-\$10.5 billion
Personal Income	-\$3.6 billion
Proprietors' Income	-\$655 million
Net Impact on Federal Government Revenues	-\$1.4 billion
Social Insurance Contributions	-\$389 million
Personal Tax Receipts	-\$544 million
Current Transfer Payments	+\$438 million
Total Employment Impact	-75,865
Direct Light Vehicle Dealership Employment	-10,550
Indirect (Supplier) Employment	-21,844
Expenditure-Induced (Spin-off) Employment	-43,471

Table 4: Economic Results of U.S. Light Vehicle Dealerships' Compliance Costs with Select Federal Regulations

Of the nearly 76,000 fewer jobs in the economy in 2012 as a result of federal regulatory compliance, the retail trade sector suffers most with more than 23,000 jobs lost (10,550 direct jobs at light vehicle dealerships). Job losses in the other services sector (except public administration) rank second, with 14,000 fewer workers. The only sector that shows a job gain is the construction sector, where 3,076 jobs were created by private non-residential investment. Table 5 details the industry sectors affected by the regulatory compliance spending and the loss of dealership business due to higher dealership price.<sup>27</sup>

<sup>&</sup>lt;sup>25</sup> In addition to the direct employment consequences for light vehicle dealerships (-10,550 jobs), there were losses in other sectors of the economy including indirect employment effects (21,844 fewer jobs at businesses that supplier the light vehicle retailers, including vehicle and parts manufacturers), and expenditure-induced effects (43,471 fewer jobs in the overall economy due to the lower levels of total personal income spent on goods and services).

<sup>&</sup>lt;sup>26</sup> Transfer payments to individuals include federal unemployment insurance and other public assistance expenditures.

<sup>&</sup>lt;sup>27</sup> Some argue that federal regulatory compliance also generates economic activity and employment. For example, there are businesses formed to provide training or training materials to educate dealers' employees on how to comply with the regulations. Motor vehicle dealerships in the United States spend roughly \$3.2 billion per year in payments to third parties to comply with federal regulations. The economic impact analysis addresses this argument by investing \$3.2 billion in private non-residential sector. However, the negative impact of federal regulatory compliance on dealership business outweighs this spending effect by as much as 2.4-to-1.

Table 5: Employment Impact of Higher Vehicle Prices and Lower Vehicle Sales Volumes due to U.S. Light Vehicle Dealerships' Federal Regulatory Compliance Costs

Employment Impact U.S. Total - 2012 Estimates	
Total U.S. Job Loss	(75,865)
Retail Trade	(23,730)
Direct New Car Dealers (subset of Retail Trade)	(10,550)
Other Services, except Public Administration	(14,314)
Wholesale Trade	(8,079)
Manufacturing	(7,416)
Administrative and Waste Management Services	(4,253)
Health Care and Social Assistance	(3,963)
Professional, Scientific, and Technical Services	(3,878)
Finance and Insurance	(3,070)
Transportation and Warehousing	(2,676)
Accommodation and Food Services	(2,190)
Real Estate and Rental and Leasing	(1,586)
Arts, Entertainment, and Recreation	(1,242)
Information	(1,079)
Management of Companies and Enterprises	(886)
Educational Services	(646)
Utilities	(142)
Construction	3,076
Others	209

## **Summary of Results**

The economic analyses in this study indicate that, for a typical U.S. franchised light vehicle dealership with 2012 revenue of \$38 million; the average federal regulatory compliance annual expenditure was \$182,754 per rooftop. These regulatory costs comprised 21.7 percent of the 2012 before-tax net profits, nearly \$2,400 per dealership employee, and a total of \$3.2 billion in compliance costs across all U.S. light vehicle dealerships.

The resulting higher costs due to the potential loss of business revenue plus economic dead weight loss totaled \$441,332 per rooftop—equating to \$7.7 billion in direct losses to U.S. light vehicle dealerships and 10,550 fewer direct U.S. dealership jobs. This translates to \$245 for every new and used vehicle sold, or nearly \$8,035 for every dealership employee.

Accounting for the direct, indirect (suppliers to dealerships), and expenditure-induced (spin-off) effects of federal regulatory compliance costs results in a total loss of \$10.5 billion to the U.S. economy, and a net employment impact of nearly 76,000 fewer jobs across all sectors. This translates to \$334 for every new and used vehicle sold, or nearly \$10,925 for every direct dealership employee.

The net impact of federal regulatory compliance costs borne by U.S. light vehicle retailers on the federal government itself is \$1.4 billion in lower tax and social insurance revenues and higher unemployment and public assistance expenditures. Every \$1 increase in a dealership's federal regulatory compliance costs results in \$3.28 in lost output in the U.S. economy, and a net loss to the U.S. Treasury of \$0.44.

## **Appendix A: List and Description of Federal Regulations**

The following describe which regulations the dealerships considered when providing a cost estimate for each regulatory category.

## GENERAL

- EMPLOYEE RELATIONS
  - Americans with Disabilities Act (ADA): Dealerships with 15 or more employees must reasonably accommodate disabled workers and job applicants.
  - Employee Discrimination:
    - Age Discrimination in Employment Act: Protects older individuals against agebased employment discrimination.
    - Equal Pay Act: Prohibits wage discrimination on basis of sex.
    - Federal Civil Rights Act: Bars employment discrimination on the basis of race, sex, color, religion, or national origin. Prevents employers from asking job applicants certain questions (such as age, marital status, or childbearing plans). Prohibits workspace sexual harassment, including behavior that creates a hostile work environment.
    - **Genetic Information Nondiscrimination Act:** Prohibits discrimination based on health-related employee DNA information.
  - Employment Verification Rules: Dealerships must verify the employment eligibility of prospective new employees using the I-9 form and proper support documentation. Use of E-verify is optional.
  - Federal Wage-Hour and Child Labor Laws: Addresses minimum-wage and overtime pay standards and exemptions as well as standards for employing minors, including teen driving restrictions. Federal minimum wage is \$7.25 per hour; state minimum wage rates may be higher.
  - IRS/DOL Worker Classification: The IRS has launched a Voluntary Classification Settlement Program (VCSP) aimed at encouraging employers to admit to past worker misclassifications. When making worker classification decisions, dealerships should be careful, conservative, and prepared to document their decisions. The IRS and the Department of Labor use multi-factory legal standards and tests to evaluate whether workers are "employers" or "independent contractors." Of greatest importance: the level of control employers exercise over workers as measured by the means and manner of the work performed.
  - National Labor Relations Board (NLRB) unionization rules: Governs unionization activities, including employee rights, election rules, postings, unfair labor practices, and others.

#### EMPLOYEE BENEFITS

 Affordable Care Act: Extensive health-care reforms enacted in 2010 affect dealerships and their health-care plans. For example, large dealerships (with more than 50 full-time employees) must decide by January 1, 2014, whether they will offer health coverage that meets the federal requirements or pay a penalty. Many other reporting, recordkeeping, and other duties will apply to dealerships and other businesses. For more information, visit www.healthreform.gov.

- **Consolidated Omnibus Budget Reconciliation Act (COBRA):** Requires dealerships with 20 or more employees to continue health-care coverage for ex-employees and their families for 18 to 36 months, depending on circumstances.
- **Employee Retirement Income Security Act (ERISA):** Dealers offering retirement or health plans must, among other things, provide employees with plan information, keep records, abide by fiduciary responsibilities, and set up a grievance process.
- **Family and Medical Leave Act (FMLA):** Dealerships must post a notice informing employees of their right to take limited, unpaid leave for personal and family medical emergencies and must comply with appropriate requests for such leave. Special provisions apply to leave related to military service.
- **Health Insurance Portability and Accountability Act:** Generally prohibits health insurers from denying coverage to workers who lose or change jobs and bars insurers from excluding coverage for preexisting conditions for more than a year.
- Uniformed Services Employment and Reemployment Rights Act (USERRA): Governs the employment and reemployment rights of members of the U.S. uniformed services.
- FACILITIES
  - **Americans with Disabilities Act (ADA):** Dealerships with 15 or more employees must reasonably accommodate disabled workers and job applicants.

### BUSINESS ADMINISTRATION

- **Electronic Records Retention:** Revenue Procedure 98-25 explains the IRS requirements for retaining computerized accounting records.
- **FTC Safeguards Rule:** Dealers must develop, implement, and maintain—and regularly audit—a comprehensive, written security program to protect customer information.
- IRS Cash-Reporting Rule: Dealers receiving more than \$10,000 in cash in one transaction or in two or more related transactions must file IRS/FinCEN Form 8300 with the IRS within 15 calendar days and must provide written notice that the report was filed to the person named on the report by January 31 of the following year. "Cash" includes certain cashier's checks, traveler's checks, money orders, and bank drafts.
- Mandatory Workplace Posters: Notices, such as "Your Rights Under the FMLA," "Equal Employment Opportunity Is the Law," "Federal Minimum Wage," and "Notice: Employee Polygraph Protection Act," must be conspicuously displayed.
- **Miscellaneous record-keeping requirements:** A multitude of requirements govern the length of time records must be maintained. Examples: personal and corporate income tax records must be kept at least three years; notification forms for underground storage tanks must be kept indefinitely; and copies of Form 8300 cash reports must be kept for five years.
- Office of Foreign Assets Control (OFAC) restrictions: Dealerships may not enter into transactions with certain sanctioned countries, governments, and specially designated organizations and individuals, including those appearing on an electronic list maintained by OFAC.

## ACCOUNTING

- **FTC Repossession Rule:** Requires formal accounting of money collected for repossessed vehicles.
- General Corporate and Payroll Tax Compliance: Transactional cost burden associated with the recordkeeping, calculation and filing of dealership Federal corporate and payroll taxes.
- **Federal child-support enforcement regulations:** Requires states to govern liens put on personal property—including vehicles—for overdue child support. Dealerships should

check that child-support liens don't exist on used cars, and must place liens on wages of employees who are delinquent on child-support payments.

- EMERGENCY PLANNING
  - OSHA Blood-Borne Pathogens Rule: Dealerships more than four minutes from an emergency health facility must have a program to respond to employees who suffer cuts. All dealerships should have proper first-aid kits.
  - **Emergency-response planning:** Federal, state and local laws require dealers to have emergency-response plans.

#### **SERVICE & BODY SHOP**

- ENVIRONMENTAL
  - Clean Air Act: Dealerships may not tamper with, replace, or remove emissions-control equipment, such as catalytic converters. CFC recycling regulations require dealership air-conditioning technicians to obtain certification and to use certified recycling and recovery equipment to capture spent refrigerant, including HFC-134a and other non-ozone-depleting refrigerants. The act also regulates any fuels dealers store and dispense, as well as the alternative fuels motorists use, including gasohol. It restricts emissions from solvents and chemicals.
  - Clean Water Act: Sets standards for regulation of waste-water and storm water at dealerships and also sets comprehensive rules governing above ground oil storage tanks.
  - Resource Conservation and Recovery Act (RCRA): Comprehensive environmental law regulating many dealership functions, including underground storage tanks and the storage, management, and disposal of used oil, antifreeze, mercury products, and hazardous wastes. Underground tanks must be monitored, tested, and insured against leaks; leaks and spills must be reported to federal and local authorities and cleaned up. The law also regulates new-tank installations. Dealers must obtain EPA ID numbers if they generate more than 220 lb. per month (about half of a 55-gallon drum) of certain substances and must use EPA-certified haulers to remove the waste from the site; dealers must keep records of the shipments. Used oil should be burned in space heaters or hauled off-site for recycling. Used oil filters must be punctured and drained for 24 hours before disposal.
  - Superfund (Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA]): As waste generators, dealerships may be subject to Superfund liability. Frequently, dealers contract with other companies to haul waste off-site. Dealers can deduct the cost of cleaning up contaminated soil and water in the year in which it is done. Dealers may qualify for an exemption from liability at sites involving used oil managed after 1993. The service station dealer exemption application (SSDE) requires dealers to properly manage their oil and to accept oil from do-it-yourselfers.

#### • EMPLOYEE HEALTH AND SAFETY

- Department of Transportation (DOT) hazardous-materials-handling procedures: Requires parts employees who load, unload, and package hazardous products, such as airbags, batteries, and brake fluid, to be trained in safe handling practices.
- OSHA (Occupational Safety and Health Administration) asbestos standards: Dealerships must use certain procedures during brake and clutch inspections and repairs to minimize workplace exposure. Water, aerosol cleaners, or brake washers may be used to comply with the standard.

- OSHA Hazard Communication Standard (right-to-know laws): Dealers must inform employees about chemical hazards they may be exposed to in the workplace, keep chemical product information sheets on-site and accessible, and train staffers to properly handle the hazardous materials they work with. Recent revisions require retraining employees by December 1, 2013. Also, EPA's community right-to-know rules require dealers to list annually with state and local authorities tanks holding more than 1,600 gallons.
- **OSHA lock-out/tag-out procedures:** Explains what service departments must do to ensure machines, including vehicles, are safely disengaged before being serviced.
- **OSHA Respiratory Protection Standard:** Requires written programs describing how to select, fit, and maintain respirators to protect body shop workers from hazardous chemicals.
- OSHA workplace health and safety standards: Extensive regulations cover a multitude of workplace issues and practices, from hydraulic lift operation to the number of toilets required. Example: Dealerships must determine if workplace hazards warrant personal protective equipment and, if so, to train employees on its use. Verbal reports must be made within eight hours of any incident involving hospitalization of three or more workers or any death.

#### • VEHICLE SAFETY

- National Highway Traffic Safety Administration (NHTSA) alteration and tire-placarding rules: Significantly altered new vehicles must have labels affixed identifying the alterations and stating that they meet federal safety and theft standards. Tireplacarding and relabeling rules require a new tire information placard/label whenever parts or equipment are added that may reduce a vehicle's cargo-carrying capacity, or when replacement tires differ in size or inflation pressure from those referred to on the original.
- **NHTSA tampering rules:** Prohibits dealerships from rendering inoperative safety equipment installed on vehicles in compliance with federal law.
- NHTSA tire regulations: Rule requires proper replacement or modification of the tireinformation label when replacing tires or adding weight before first sale or lease. Also, consumers must be given registration cards when buying new tires or tires must be registered electronically. Other rules govern handling and disposal of recalled new and used tires.
- NHTSA safety belt/airbag deactivation: Dealerships may install airbag switches for consumers with NHTSA authorization. Dealerships must be responsive to consumer requests for rear-seat lap/shoulder safety belt retrofits in older vehicles.

#### **VEHICLE FINANCING**

- ADMINISTRATIVE
  - Dodd-Frank Financial Reform Law: Comprehensive legislation enacted in July 2010 created a new, independent Consumer Financial Protection Bureau and granted it unprecedented authority to regulate financial products and services. Dealers engaged in three-party financing are excluded from the authority of the new bureau and remain subject to regulation by the Federal Reserve Board, the Federal Trade Commission (which has been given streamlined authority to declare dealer practices as unfair or deceptive), and state consumer protection agencies. Finance sources, including dealers who engage in "buy here, pay here" financing, are subject to the bureau's jurisdiction. The Dodd-Frank law also created several new obligations for creditors, including new

disclosure requirements for risk-based pricing and adverse-action notices under the Fair Credit Reporting Act (Section-1100F) that took effect July 21, 2011. It also contains a requirement to collect, report to the federal government, retain, and make available to the public upon request certain data collected in credit applications from small, womenowned, and minority-owned businesses. Dealers are temporarily exempt from this requirement pending promulgation of specific regulations.

- Equal Credit Opportunity Act (ECOA): Regulation B prohibits discrimination in credit transactions based on race, sex, color, marital status, religion, national origin, age, and public-assistance status. The dealer/creditor is required both to notify applicants in a timely fashion of actions taken on—and reasons for denying—applications, and to retain certain records. (See also "Dodd-Frank Financial Reform Law" for a description of new small-business loan data collection requirements.)
- Fair Credit Reporting Act (FCRA): Dealers are restricted in their use of credit reports for consumers, job applicants, and employees. Credit reports generally may be obtained only pursuant to consumers' written instructions or if consumers initiate a business transaction (not if they merely talk with salespeople). Dealers must give job applicants and employees a separate document informing them that a credit report may be obtained and must obtain prior, written authorization to access the report. Dealers may not share credit information with affiliates unless they give consumers notice and the opportunity to opt out. If dealers take adverse action based on the report, they must notify consumers and follow additional procedures with job applicants and employees.

#### CUSTOMER NOTICES

- Equal Credit Opportunity Act (ECOA): Regulation B prohibits discrimination in credit transactions based on race, sex, color, marital status, religion, national origin, age, and public-assistance status. The dealer/creditor is required both to notify applicants in a timely fashion of actions taken on—and reasons for denying—applications, and to retain certain records. (See also "Dodd-Frank Financial Reform Law," for a description of new small-business loan data collection requirements.)
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- FTC (Federal Trade Commission) Credit Practices Rule: Dealers are required to provide a written disclosure statement to a cosigner before the cosigner signs an installment sales contract. Dealers cannot "pyramid" late charges (that is, add a late charge onto a payment made in full and on time when the only delinquency was a late charge on a previous installment).
- FTC Privacy Rule: Dealers must issue notices of their privacy policies to their finance and lease customers and, in some cases, when the dealer discloses nonpublic information about consumers to third parties. The rule also restricts disclosures of nonpublic personal information. Dealers who correctly use a FTC model privacy notice receive safe harbor protection for the language used to describe their privacy policy.

- FTC prohibition against deceptive and unfair trade practices: Prohibits unfair and deceptive trade practices. For example, the FTC has found certain advertising practices to be deceptive, including recent claims that the dealer will "pay off" what consumers owe on a trade-in vehicle.
- NHTSA (National Highway Traffic Safety Administration) odometer rule: Prohibits odometer removal or tampering and misrepresentation of odometer readings. Requires record keeping to create a "paper trail," and odometer disclosures on titles. Vehicles with a greater than 16,000-lb. gross vehicle weight rating and those 10 model years old or older are exempt.
- Truth in Lending and Consumer Leasing Acts: Regulations Z and M cover consumer credit and consumer leasing transactions, respectively, specifying information to be disclosed to a consumer before completing the transaction, and information to be disclosed when advertising consumer credit transactions or leases. For example, dealers who advertise a lease down payment or monthly payment amount must disclose in lease ads that the advertised deal is a lease; the total amount due at lease signing; number, amount, and period (for example, monthly) of payments; and whether a security deposit is required.

### **SALES**

- CUSTOMER NOTICES
  - DOE/EPA gas-mileage guide: Dealers must make this guide available to prospective new vehicle buyers upon request. The guide is available to download from www.fueleconomy.gov, as is the NADA brochure Green Checkup: Maintenance Tips to Help You Save Gas from www.nada.org.
  - **EPA emissions certification:** Dealers must provide a form to new-vehicle customers certifying a vehicle's compliance with emissions standards.
  - FTC Used Car Rule: "Buyer's Guides" are required on used vehicle side windows, disclosing make, model, year, vehicle identification number (VIN), whether offered "as is" or with a warranty (and, if so, what kind of warranty), and service contract availability. Guides must warn that all promises should be in writing. For sales conducted in Spanish, the "Buyer's Guide" and the required cross-reference in the sales contract must be in Spanish.
  - FTC Written Warranty Rule: Dealers must display warranties near products or post signs in prominent places telling consumers that copies of the warranties are available for review.
  - **Magnuson-Moss Act:** Dealers must give consumers certain required information on warranties and limited warranties.

#### MARKETING

- ADVERTISING
  - **FTC prohibition against deceptive and unfair trade practices:** Prohibits unfair and deceptive trade practices. For example, the FTC has found certain advertising practices to be deceptive, including recent claims that the dealer will "pay off" what consumers owe on a trade-in vehicle.
  - FTC guidelines for fuel-mileage advertising and alternative-fuel-vehicle advertising and labeling: Dealer and manufacturer fuel-economy advertisements must state that the numbers are estimates and come from EPA; alternative-fuel vehicles must be properly labeled.

Truth in Lending and Consumer Leasing Acts: Regulations Z and M cover consumer credit and consumer leasing transactions, respectively, specifying information to be disclosed to a consumer before completing the transaction, and information to be disclosed when advertising consumer credit transactions or leases. For example, dealers who advertise a lease down payment or monthly payment amount must disclose in lease ads that the advertised deal is a lease; the total amount due at lease signing; number, amount, and period (for example, monthly) of payments; and whether a security deposit is required.

#### CUSTOMER COMMUNICATION

**CAN-SPAM (Controlling the Assault of Non-Solicited Pornography and Marketing) Act:** E-mailers must identify a commercial message as an advertisement or solicitation and provide their postal addresses and a mechanism to opt out of future commercial emails. If recipients opt out, senders must stop sending them commercial e-mail within 10 business days. The disclosure requirements don't apply to e-mails that relate to transactions or relationships, such as for warranty or recall-repair issues or the completion of transactions requested by the consumer. No one may send commercial emails to wireless devices unless recipients provide express prior authorization to receive them. So that senders can recognize wireless addresses, the FCC maintains a list of wireless domain names at

http://transition.fcc.gov/cgb/policy/DomainNameDownload.html. Commercial e-mailers must check the list monthly. (Additional provisions prohibit deceptive headers, misleading subject lines, and other spam tactics). A text message may also be considered an e-mail and therefore subject to the CAN-SPAM Act if it is sent to an e-mail address—that is, if it has an Internet domain name after the "@" symbol (whether the e-mail address is displayed or not). This means that no commercial text message (deemed to be an e-mail), may be sent to a wireless device without "express prior authorization." Merely having an "established business relationship" with the recipient is not enough.

- **FTC Door-to-Door Sales Rule:** Gives consumers a three-day "cooling off" period for sales not consummated at the dealership. Does not apply to auctions, tent sales, or other temporary places of business if the seller has a permanent place of business.
- FTC Privacy Rule (Gramm-Leach-Bliley Act): Dealers must issue notices of their privacy policies to their finance and lease customers and, in some cases, when the dealer discloses nonpublic information about consumers to third parties. The rule also restricts disclosures of nonpublic personal information. Dealers who correctly use a FTC model privacy notice receive safe harbor protection for the language used to describe their privacy policy.
- **FTC prohibition against deceptive and unfair trade practices:** Prohibits unfair and deceptive trade practices. For example, the FTC has found certain advertising practices to be deceptive, including recent claims that the dealer will "pay off" what consumers owe on a trade-in vehicle.
- FTC Telemarketing Sales Rule (TSR): Imposes many of the Telephone Consumer Protection Act (TCPA) restrictions (see below) on dealers who telemarket across state lines. Requires dealers who sell, or obtain payment authorization for, goods or services during interstate phone calls to abide by the prohibition against numerous deceptive and abusive acts and to maintain certain records for 24 months. An amendment to the rule prohibits prerecorded telemarketing calls without a consumer's express written agreement, requires such calls to provide a key-press or voice-activated opt-out

mechanism at the outset of the calls, and requires the calls to ring for 15 seconds or four rings before disconnecting.

- Junk Fax Prevention Act: Makes revisions to the TCPA by requiring the fax sender to have an established business relationship (EBR) with a fax recipient and must have the recipient provide the fax number voluntarily. These revisions make it illegal to send unsolicited advertisements via fax without the recipient's consent but allows for fax advertisements to be sent to a recipient under an EBR as long the fax number is voluntarily provided by the recipient.
- Telephone Consumer Protection Act (TCPA): Imposes numerous restrictions on telemarketing, including the national and company-specific do-not-call (DNC) rules, calling-time restrictions, caller ID requirements, fax advertising rules, and restrictions on the use of auto-dialers and prerecorded messages. Fax ads may be sent only to authorized recipients and must include a phone number, fax number, and toll-free opt-out mechanism (each available 24/7) on the first page of the fax ad. The FCC considers text messages to be "phone calls" under the TCPA. This means a text message "solicitation" cannot be sent to a phone number on either the national DNC list (subject to the "established business relationship" and "prior express permission" exemptions to the national DNC rules) or a company-specific DNC list (to which there are no exemptions); and no text message whatsoever can be sent to a cellular telephone number—solicitation or not, whether the number is on a DNC list or not—using an "automated dialer system" unless the called consumer's "prior express written consent" has been given.

## **Appendix B: Interview Framework Document**

NADA INTERVIEW FR	AMEWORK			
Profile				
Dealership Name				
Full Time Employee Equivalent (2012)				
Annual Total Gross Sales (2012)				
No. of Franchises/Makes At Location				
Other rooftops/franchises owned?				
No. of New and Used Units Sold (2012)				
Regulatory Category	General Description	Cost Category Description	Cost Estimate	Specific Mandates Falling Within Each Category
General - HR Manager,	General Manager, Owne	r/Principal		
Employee Relations	Rules on relationship between dealership and employees (e.g., proper hiring, non- discrimination policies and procedures, employment eligibility (I-9 form), minimum- wage, overtime, and equal pay compliance, posting of Federal notices (Wage-Hour, ADA, EEOC, FLSA, etc.) unionizing activities, and disabled employee accommodations.	Compensation -Human resources, departmental and business office time devoted to compliance. -Manager and employee compliance training. -Drafting/maintenance of compliance policies and procedures. -Record-keeping for payroll, training, and other required documents and for obtaining and maintaining postings. Contractors -Payments to third-party trainers, fees paid for off-site classes, etc. -Payments made to lawyers and consultants to understand and comply with mandates. Capital Asset Investments -Equipment purchased to accommodate employees with physical disabilities or limitations (e.g., ergonomic chairs, desks, and office equipment, amplified telephones, etc.)		Americans with Disability Act: protections and accommodations for employees with disabilities. Employee Discrimination: protections against discrimination based on age, sex, race, ethnicity and other protected classes. Employment Eligibility Verification: Pre-hiring determination of employment eligibility of candidates. Wage/Hour: rules governing minimum wage, overtime, equal pay, recordkeeping, employment of minors, Worker classification. National Labor Relations Act: Rules governing unionization.

Regulatory Category	General Description	Cost Category Description	Cost Estimate	Specific Mandates Falling Within Each Category
General - HR Manager	, General Manager, Owne	r/Principal		
Employee Benefits	Rules on employee benefits, such as family, medical, and military service leave, health insurance, and retirement.	Compensation -Human resources, departmental, and business office time devoted to determining eligibility for mandated benefits and for compliance. -Manager and employee compliance training. -Drafting/maintenance of compliance policies and procedures. -Record-keeping activities -Obtaining/displaying informational posters Contractors -Payments to consultants, lawyers, etc. to assist in determining/meeting compliance.		Consolidated Omnibus Budget Reconciliation Act (COBRA): Health coverage continuation for certain terminated workers. Family and Medical Leave Act (FMLA): Up to 12 weeks unpaid, job-protected family, medical or military-related leave. Employee Retirement Income Security Act (ERISA): Must provide employees with certain information about retirement plans, keep records, and follow policies and procedures. Health Insurance Portability and Accountability Act (HIPAA): May not discriminate based on pre-existing conditions. Uniformed Services Employment and Reemployment Rights Act (USERRA): Service member leave and reemployment rights.
Facilities	Americans with Disabilities Act rules on public-accessibility and employee accommodation.	Contractors -Payments to consultants, lawyers, etc. to assist in determining/meeting compliance. Capital Equipment -Building, modifying and maintaining workplace accessibility (e.g., ramps, restrooms, etc.)		Americans with Disability Act: Rules on public-accessibility and employee accommodation.

Regulatory Category	General Description	Cost Category Description	Cost Estimate	Specific Mandates Falling Within Each Category
General - HR Manager,	, General Manager, Owne	r/Principal		
Business Administration	Rules related to record-retention, workplace posters, customer information protection, cash reporting, and OFAC sales prohibitions.	Compensation-Business office time devoted to record retention and related costs (i.e., digitizing., record query, etc.), establishing procedures, training, complying with identify theft prevention, cash transaction reporting, and OFAC customer eligibility. Contractors Payments to: -Third-party trainers or class fees. -Third-party record retainer or destruction firms. -Consultants advise on proper procedures -Third-party vendors to verify customer eligibility to purchase goods and services. Capital Equipment -Investments in equipment for in-house record retention (hard drives, computers).		Mandatory Workplace Posters: Array of federal regulations mandating posters in the workplace. Miscellaneous record-keeping requirements: Variety of mandates to create, retain, and sometimes report records.Electronic Records Retention: Specific federal procedures for keeping records electronically. FTC Safeguards Rule (Gramm- Leach-Bliley Act): Must develop, implement, maintain, and regularly audit a comprehensive customer information security program. IRS Cash Reporting Rule: Use of form 8300 to report receipt of cash and equivalents in excess of \$10,000 per transaction or in two or more related transactions. Office of Foreign Assets Control (OFAC) restrictions: Monitor list of specially designated organizations and individuals to avoid entering into prohibited transactions.
Accounting Emergency Planning	Rules related to account for corporate and payroll taxes, and for other mandates such as for repossessions and child support liens. Rules on emergency planning and responding to employee injuries and other emergencies.	Compensation -Primarily controller and general business office time spent on accounting. Contractors -Payments to external accounting services for assistance on compliance with corporate and payroll tax mandates and other accounting issues. Compensation Time Spent: -Developing an emergency response plan. -Training employee(s) on first aid. Contractors -Payments to third-party trainers, for outside class fees, and for consultants used to develop an emergency		General Corporate and Payroll Tax Compliance: Rules governing corporate taxes and collection and remittance of payroll taxes. Federal child-support: Monitor and comply with child support liens. FTC Repo Rule: Accounting fo proceeds from repossession dispositions. OSHA Blood-Borne Pathogen Rule: Preparation/distributior of exposure control plan if more than four minutes from emergency care. Training of employees on first aid rule. Emergency-Response Planning: Develop plan to address response strategies during emergency situations.

Regulatory Category	General Description	Cost Category Description	Cost Estimate	Specific Mandates Falling Within Each Category
Service & Body Shop: S	ervice/Body Shop Mana	ger, General Manager, Owner/Pri	ncipal	
Service & Body Shop: S Environmental	Rules governing management of emissions and wastes to protect air, land and water resources.	<ul> <li>General Manager, Owner/Pri</li> <li>Compensation</li> <li>Time spent: <ul> <li>Training and certifying use of environmentally-safer</li> <li>products and procedures.</li> <li>-Acquiring necessary permits.</li> <li>-Establishing proper</li> <li>environmental management</li> <li>policies and procedures.</li> </ul> </li> <li>Contractors <ul> <li>Payments to:</li> <li>Third-party trainers or class fees</li> <li>Off site waste management</li> <li>companies.</li> <li>On site environmental services companies.</li> </ul> </li> <li>Capital Equipment: <ul> <li>Investments in:</li> <li>Environmental compliance</li> <li>equipment (e.g., HVLP guns, enclosed gun cleaners, used oil space heaters, enhanced paint booths, oil water</li> <li>separators, refrigerant</li> <li>recyclers, storage tank</li> <li>improvements, etc.).</li> </ul> </li> <li>Supplies <ul> <li>Spill and leak clean up</li> <li>materials</li> <li>Storage drums</li> <li>Shipping Papers</li> <li>Labels</li> <li>Environmentally friendly</li> </ul></li></ul>		Clean Air Act: Rules on fueling, auto refinishing, solvent cleaning, vehicle emissions inspection and maintenance, fuels and fuel additives, mobile air conditioning, and emissions tampering. Clean Water Act: Rules on waste water storage and disposal (e.g., floor drain management, sewage discharge pre-treatment, storm water management, possible class V well permits). Resource Conservation and Recovery Act (RCRA): Rules on proper management of hazardous and non-hazardous wastes (e.g., used oils, antifreeze, spray booth filters, solvents, wipes and rags, oil water separator sludge, anti- freeze, tires, batteries). Proper management of underground and above- ground storages tanks and containers. Superfund: Rules governing liability for wastes sent off site. Possible community right-to-know reporting.

Regulatory Category	General Description	Cost Category Description	Cost Estimate	Specific Mandates Falling Within Each Category
Service & Body Shop: S	Service/Body Shop Manag	ger, General Manager, Owner/Pri	ncipal	, <u> </u>
Employee Health and Safety	Rules to promote employee health and safety and proper hazardous materials management.	Compensation: -Management and employee time spent training on health and safety policies and procedures. -Employee time spent implementing health and safety compliance strategies. -Management time spent compiling necessary OSHA records. Contractors Payments for: -Third-party trainers or class fees. -Health and safety consultants. Capital Equipment -Health and safety equipment including: eye-washes, fireproof cabinets, non-slip surfaces, railings, body/service department ventilation, adequate lighting, fire suppression, dust control. Supplies -Personal and respiratory protective equipment. -Lock out tag out supplies. -Filters. -Anti-sparking drop lights. -Compliant packaging of hazardous materials. - Etc.		DOT Hazardous Materials Handling: Educate employees on proper packaging, handling, storage, and shipping of hazardous materials. Asbestos Standards: Procedures to minimize employee exposure to asbestos and other air borne dusts. Hazard Communications Standard: Develop written hazardous communication plan, inventory chemicals, collect/maintain safety data sheets, ensure proper labeling, and train employees on hazardous chemicals. Lock-out/Tag-out procedures: Develop/implement LOTO plan, train employees, inspect machinery for possible LOTO risks. Respiratory Protection Standard: Develop/implement written program on how to select, use and maintain appropriate respiratory protection. Other workplace health and safety standards: Vast array of other employee health and safety standards.
Vehicle Safety	Restrictions on safety system alterations and tampering and labeling/reporting mandates.	Compensation Time spent: -Training service employees to recognize signs of tampering. -Ensuring compliance with labeling requirements -Properly managing recalled parts Supplies: -Obtain and use labels as necessary.		NHTSA Alteration Rule: Affix labels upon installation of non-readily attachable components on new vehicles. NHTSA Safety Belt/Air Bag Deactivation: Rules governing air bag deactivation/switch installation and seat belt replacement. NHTSA Tampering Rules: Vehicle service and repair should be conducted so as to preserve the performance of applicable federal motor vehicle safety standards. NHTSA Tire Regulations: Rules governing sales of defective tires, recalled tires management, tire placards, etc.

Regulatory Category	General Description	Cost Category Description	Cost Estimate	Specific Mandates Falling Within Each Category
Sales: Sales Manager,	General Manager, Owner	/Principal		
Customer Notices	Vehicle sales rules governing customer notices, written warranties, mileage guides, emissions certifications, used vehicle buyer's guides, etc.	Compensation Time spent: -Affixing used car buyers' guides. -Providing fuel economy guides on request. -Posting warranty availability notice and providing warranty information upon request. -Training employees on compliance strategies -Providing the EPA emissions certification. Supplies -Printing or purchasing used car buyer guides and copies of written warranties -Print or purchase copies of EPA emissions certification.		DOE/EPA Fuel Economy Guide: Download, print, and provide fuel economy guide upon request. EPA emissions certification: Provide EPA emissions certification with each light- duty sale. FTC Used Car Rule (Buyer Guides): Post buyers guides on all light-duty used vehicles and include warranty terms in sales contracts. Magnuson-Moss Act and Written Warranty Rule: Governs terms of warranties and service contracts given and the availability of warranty information prior to purchase.
Regulatory Category	General Description	Cost Category Description	Cost Estimate	Specific Mandates Falling Within Each Category
Vehicle Financing: Fina	ince Manager, General M	anager, Owner/Principal		
Administrative	Protections against credit discrimination, identity theft, and credit report misuse.	Compensation Time spent: -Training employees on proper finance related policies and procedures. -Ensuring compliance with retention and disposal of credit applications and reports. -Developing, implementing and maintaining a program to protect customer information security. Contractors Payments to: -Vendors for accessing credit reports. -Third-parties for training or classes. -Vendors for physical or electronic record storage and destruction. -Vendors for assistance with customer information security program.		Equal Credit Opportunity Act: Prohibitions against credit applicant discrimination and rules on gathering, evaluating and retaining credit information. Fair Credit Reporting Act: Restricts the use of credit reports, the furnishing of information to consumer reporting agencies, and the sharing of information with affiliates. Red Flags Rule: Requires dealers to develop and implement a written identity theft prevention program containing procedures to identify, detect, and respond to identity theft "red flags." Other FACT Act: Consumer fraud alerts, address discrepancy notices, credit card truncation, etc. Safeguards Rule (Gramm- Leach-Billey): Must develop, implement, and maintain a program to protect the security of customer information.

Regulatory Category	General Description	Cost Category Description	Cost Estimate	Specific Mandates Falling Within Each Category
Vehicle Financing: Fina	ance Manager, General Ma	anager, Owner/Principal	Estimate	within Each Category
Customer Notices	Vehicle financing rules mandating customer notices for a variety of information on transactions, credit reports, odometer readings, and privacy.	Compensation Time spent: -Issuing Adverse Action Notices. -Explaining to customers why credit applications are denied. -Issuing credit score disclosure exception notices. -Providing point-of-sale lending disclosures. -Completing/providing required privacy notices. -Obtaining and providing used vehicle odometer disclosures using federally compliant forms and time spent retaining disclosure documents. -Ensuring proper language in credit/lease documents and advertisements. Contractors Payments to: -Vendors for adverse action notices. -Third parties for training class fees. Supplies -Printing or purchasing required customer notices.		Equal Credit Opportunity Act: Requirement that written notices be provided to credit applicants explaining credit denials. Fair Credit Reporting Act: Notices to consumers, job applicants, and employees for adverse actions based on credit reports. FTC Credit Practices Rule: Written disclosures to co- signers and prohibitions on unfair credit/co-signer practices and the pyramiding of late charges. FTC Privacy Rule (Gramm- Leach-Bliley): Must issue privacy notices to finance and lease customers if disclosures of non-public consumer information to third parties. Rules encourage use of model FTC privacy notice. FTC Prohibition against deceptive/unfair trade practices: Wide array of restrictions on unfair and/or deceptive activities. NHTSA Odometer Rules: Requirement that most vehicle transfers be accompanied by an odometer disclosure. Truth in Lending and Consumer Leasing Act: Regulations Z and M specify information to be disclosed to consumers prior to completing credit or lease transactions. Dodd-Frank Financial Reform: Disclosure rules for risk-based pricing and adverse actions notices.

Regulatory Category	General Description	Cost Category Description	Cost Estimate	Specific Mandates Falling Within Each Category
Marketing: Sales Man	ager, General Manager, C	Dwner/Principal	Estimate	Within Each Category
Advertising	Rules prohibiting advertising and marketing of deceptive information.	Compensation Time spent: -Ensuring advertisements contain required disclosures and meet federal Unfair and Deceptive Acts and Practice (UDAP) standards. Contractors Payments to: -Consultants to vet ads for "trigger terms" and other compliance concerns.		FTC prohibition against deceptive/unfair trade practices: Restrictions on a wide array of unfair and deception advertising practices. FTC Guidelines for Fuel Economy Advertising: Fuel economy ads must state that mileage numbers are EPA- based estimates. Truth in Lending and Consumer Leasing Act: Mandatory guidelines for ensuring proper lease and credit sales disclosure guidelines.
Customer Communication	Restricted dealer- customer communications.	Compensation Time spent: -Providing consumers with communication opt-out opportunities. -Verifying wireless devices receive communications only after obtaining express written consents. -Training employees on various communications and marketing restrictions. -Maintaining company-specific Do Not Call lists and complying with the national list. Contractors Payments to: -IT consultants and vendors to set up and track opt- outs and firewalls between business units and third- parties. -Third-parties for accessing Do Not Call lists and verifying potential contacts not on the list. -Third-parties for scrubbing phone contact lists of mobile phones.		CAN-SPAM: Restrictions on commercial email messages to wireless and non-wireless devices. FTC Privacy Rule (Gramm- Leach-Billey Act): Must issue privacy notices to finance and lease customers if dealer discloses non-public consumer information to third parties (rules encourage use of model FTC privacy notice). FTC Telemarketing Sales Rule: Rules govern array of deceptive and abusive acts involving interstate marketing phone calls. Prohibits pre- recorded telemarketing phone calls without consent. Junk Fax Prevention Act: Preserves established business relationship basis for sending faxes to businesses and consumers, imposes opt- out notice requirement, and requires that faxes only be sent to numbers voluntarily provided. Telephone Consumer Protection Act: Numerous telemarketing (calls and texts) rules including national do- not-call rules, calling time restrictions, caller ID requirements, and restrictions on use of auto-dialers and

## **Appendix C: Model Output**

## **Regression Output**

Dependent Variable: REV/REV(-1)

Method: Least Squares

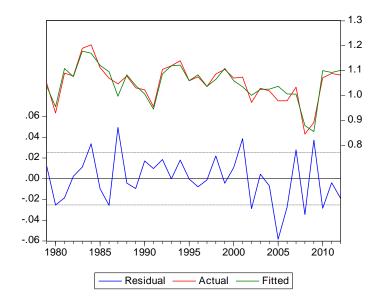
Sample (adjusted): 1979 2012

Included observations: 34 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
VPRICE/VPRICE(-1)	0.605652	0.158460	3.822118	0.0006
(DPRICE)/DPRICE(-1)	0.469819	0.233027	2.016158	0.0531
(VEH)/VEH(-1)	0.715271	0.049068	14.57701	0.0000
UNEMP	-0.006698	0.003075	-2.178370	0.0377
С	-0.740157	0.190004	-3.895469	0.0005
		Mean dependent var		
R-squared	0.900085	Mean deper	ndent var	1.050480
R-squared Adjusted R-squared	0.900085 0.886303	Mean depei S.D. depend		1.050480 0.074949
		·	lent var	
Adjusted R-squared	0.886303	S.D. depend	ent var criterion	0.074949
Adjusted R-squared S.E. of regression	0.886303 0.025272	S.D. depend Akaike info	lent var criterion cerion	0.074949 -4.383195
Adjusted R-squared S.E. of regression Sum squared resid	0.886303 0.025272 0.018521	S.D. depend Akaike info Schwarz crit	lent var criterion cerion inn criter.	0.074949 -4.383195 -4.158730
Adjusted R-squared S.E. of regression Sum squared resid Log likelihood	0.886303 0.025272 0.018521 79.51432	S.D. depend Akaike info Schwarz crit Hannan-Qui	lent var criterion cerion inn criter.	0.074949 -4.383195 -4.158730 -4.306646

The variables the research team tested but did not include in the final model due to multi-collinearity and autocorrelation include: real motor vehicle output, BAA corporate bond yield, CPI-all item, dealership expenses, real GDP growth rate, personal income excluding transfer receipts, dealership net profit, household net worth, and average new vehicles sold per dealership. Figure 2 shows the actual and fitted data, as well as the residuals.





## **Appendix D: Government Studies Summary**

Regulation	Description of Regulation Applicable to Automobile Dealers	Regulatory Evaluation Cost Estimate	Cost Estimate in 2009 Dollars <sup>1</sup>	Cost Estimate Specification
Affordable Care Act	Extensive health-care reforms enacted in 2010 affect dealerships and their health- care plans. For example, large dealerships (with more than 50 full-time employees) must decide by January 1, 2014, whether they will offer health coverage that meets the federal requirements or pay a penalty. Many other reporting, record keeping, and other duties will apply to dealerships and other business. For more information, visit www.healthreform.gov.			
Air Contaminant Standards	Provide protective permissible exposure limits regulated by OSHA.	✓	\$21	Estimated annual incremental costs of 1989 amendments to automotive dealers and service stations industries.
Americans With Disabilities Act <sup>2</sup>	Title III Prohibits discrimination against the physically handicapped in areas of public accommodation. Must make reasonable accommodations to facilities, such as installing ramps and accessible parking spaces, drinking fountains, public toilets and doors. Dealerships with 15 or more employees must reasonably accommodate disabled workers and job applicants.	~	\$411.3	Estimated net present value (negative) from cost/benefit analysis of incremental costs of 2008 amendments, using 1991 rules as a baseline, to single level stores. Single level stores category includes retail establishments assumed to be inclusive of automobile dealerships.
CAN-SPAM Act	E-mailers must identify a commercial message as an advertisement or solicitation and provide their postal addresses and a mechanism to opt out of future commercial e-mails. If recipients opt out, senders must stop sending them commercial e-mail within 10 business days. No one may send commercial e-mails to wireless devices unless recipients provide express prior authorization to receive them.			

Regulation	Description of Regulation Applicable to Automobile Dealers	Regulatory Evaluation Cost Estimate	Cost Estimate in 2009 Dollars <sup>1</sup>	Cost Estimate Specification
Clean Air Act	National paint and hazardous air-pollution rules require reformulated, environmentally safer paints and finishes, special handling procedures, and record keeping.	~	\$5,473	Estimated annual cost in 2010. Inclusive of laws in place as of 2005. 1/5 emission source categories estimated in study - non-electricity generating units, industrial point sources. This category includes sources such as boilers, cement kilns, process heaters, and turbines.
Clean Water Act	Sets standards for regulation of wastewater and storm water at dealerships and comprehensive rules governing aboveground oil storage tanks.	~	\$18,063	Estimated total annual costs to economy as of 1994, projected to 1997 using a 3% discount rate.
COBRA (Consolidated Omnibus Budget Reconciliation Act )	Requires dealerships with 20 or more employees to continue health-care coverage for ex-employees and their families for 18 to 36 months, depending on circumstances.			
Comprehensive Environmental Response, Compensation, and Liability Act	Dealers must closely monitor waste disposal to avoid liability, requirement to accept waste oil from do-it- yourselfers.			
Dodd-Frank Financial Reform Law	Dealers who engage in BHPH financing, are subject to the newly created Consumer Financial Protection Bureau. The Dodd-Frank law also created several new obligations for creditors, including new disclosure requirements for risk-based pricing and adverse-action notices under the Fair Credit Reporting Act.			
DOE/EPA gas-mileage guide	Dealers must make this guide available to prospective new vehicle buyers upon request free of charge in either electronic or paper form.			
DOT hazardous-materials- handling procedures	Require parts employees who load, unload, and package hazardous products, such as airbags, batteries, and brake fluid, to be trained in safe handling practices.			
Electronic records retention	Revenue Procedure 98-25 explains the IRS requirements for retaining computerized accounting records			

Regulation	Description of Regulation Applicable to Automobile Dealers	Regulatory Evaluation Cost Estimate	Cost Estimate in 2009 Dollars <sup>1</sup>	Cost Estimate Specification
Emergency-response planning	Federal laws require dealers to have emergency-response plans.			
Employee Discrimination Rules	Bars employment discrimination on the basis of race, sex, color, religion, or national origin. Prevents employers from asking job applicants certain questions (such as age, marital status, or childbearing plans). Prohibits workplace sexual harassment, including behavior that creates a hostile work environment.			
Employee Verification Rules	Dealerships must verify the employment eligibility of prospective new employees using I-9 form and proper support documentation.			
Employment Retirement Income Security Act	Dealers offering retirement or health plans must, among other things, provide employees with plan information, keep records, abide by fiduciary responsibilities, and establish a grievance and appeals process.			
EPA emissions certification	Dealers must provide a form to new vehicle customers certifying a vehicle's compliance with emissions standards.			
EPA hazardous-waste rules, Resource Conservation and Recovery Act (RCRA)	Comprehensive environmental law regulating many dealership functions, including underground storage tanks and the storage, management, and disposal of used oil, antifreeze, mercury products, and hazardous wastes.	~	\$5,362	Estimated annual costs to economy. Not inclusive of Clean Water Act, initial capital costs, and considers rules promulgated between 1986 and 2003.

Regulation	Description of Regulation Applicable to Automobile Dealers	Regulatory Evaluation Cost Estimate	Cost Estimate in 2009 Dollars <sup>1</sup>	Cost Estimate Specification
Equal Credit Opportunity Act	Regulation B prohibits discrimination in credit transactions based on race, gender, color, marital status, religion, national origin, age, and public-assistance status. The dealer/creditor is required both to notify applicants in a timely fashion of actions taken on, and reasons for, denying applications, and to retain certain records.			
FACT Act of 2003	Amendment to the Fair Credit Reporting Act. Significantly increased dealer responsibilities to customers engaging in credit transactions. Also increased dealer responsibilities to help combat identity theft.			
Fair Credit Reporting Act	Restrictions on credit report access and information sharing. Dealer requirements if adverse action is taken based on customer credit.			
Family and Medical Leave Act	Dealerships must post a notice informing employees of their right to take up to 12 weeks of unpaid, job protected leave per year for personal and family related medical emergencies, and must comply with appropriate requests for such leave. Special provisions apply to leave related to military service.			
Federal child-support enforcement regulations	Requires states to govern liens on personal property - including vehicles - for overdue child support. Dealerships should check that child-support liens don't exist on used cars, and must place liens on wages of employees who are delinquent on child support programs.			

Regulation	Description of Regulation Applicable to Automobile Dealers	Regulatory Evaluation Cost Estimate	Cost Estimate in 2009 Dollars <sup>1</sup>	Cost Estimate Specification
Federal wage-hour and child labor laws	Addresses minimum wage and overtime pay standards and exemptions, as well as standards for employing minors, including teen driving restrictions.			
FTC Credit Practices Rule	Dealers are required to provide a written disclosure statement to a cosigner before the cosigner signs an installment sales contract. Dealers cannot "pyramid" late charges (that is, add a late charge onto a payment made in full and on time when the only delinquency was a late charge on a previous installment).			
FTC Door-to-Door Sales Rule	Gives Consumers a three day "cooling off" period for sales not consummated at the dealership. Does not apply to auctions, tent sales, or other temporary places of business if the seller has a permanent place of business.			
FTC guidelines for fuel- mileage advertising and alternative- fueled vehicle advertising and labeling	Dealer and manufacturer fuel-economy advertisements must state that the numbers are estimates and come from EPA; alternative-fueled vehicles must be properly labeled.			
FTC Privacy Rule <sup>3</sup>	Dealers must issue notices of their privacy policies to their finance and lease customers and, in some cases, when the dealer discloses nonpublic information about consumers to third parties. The rule also restricts disclosures of nonpublic personal information.	✓	\$106.6	Estimated annual costs to all financial institutions subject to the Federal Trade Commission's jurisdiction. Financial institutions defined uniquely to include various entities with access to customer information.
FTC prohibition against deceptive and unfair trade practices	Prohibits dealers from engaging in deceptive and unfair trade practices.			
FTC Repossession Rule	Requires formal accounting of money collected for repossessed vehicles.			

Regulation	Description of Regulation Applicable to Automobile Dealers	Regulatory Evaluation Cost Estimate	Cost Estimate in 2009 Dollars <sup>1</sup>	Cost Estimate Specification
FTC Safeguards Rule	Dealers must develop, implement, maintain, and regularly audit, a comprehensive, written security program to protect			
	customer information.			
FTC Telemarketing Sales Rule	Requires dealers who sell, or obtain payment authorization for, goods or services during interstate phone calls to abide by the prohibition against numerous deceptive			
	and abusive acts and to maintain certain records for 24 months. Prohibits prerecorded telemarketing			
	calls without a consumer's express written agreement, requires such calls to provide opt-out mechanism at the			
	outset of the calls, and requires minimum call length before hang up.			
FTC Used Car Rule	"Buyer's Guides" are required on used-vehicle side windows, disclosing make,			
	model, year, VIN, whether offered "as is" or with a warranty (and, if so, what			
	kind of warranty), and service contract availability. Guides must warn all promises			
	should be in writing. For sales conducted in Spanish, the			
	"Buyer's Guide and the required cross-references in the sales contract must be in Spanish.			
FTC Used Parts Guide	Prohibits misrepresentation that a part is new or about the condition, extent of			
	previous use, reconstruction, or repair of a part. Previously used parts must be clearly and conspicuously identified			
	as such in advertising and packaging, and, if the part appears new, on the part			
	itself.			

Regulation	Description of Regulation Applicable to Automobile Dealers	Regulatory Evaluation Cost Estimate	Cost Estimate in 2009 Dollars <sup>1</sup>	Cost Estimate Specification
FTC Written Warranty Rule	Dealers must display warranties near products or post signs in prominent places telling consumers that copies of the warranties are available for review.			
General Corporate and Payroll Tax Compliance	Transactional cost burden associated with the recordkeeping, calculation, and filing of dealership Federal corporate and payroll taxes			
Gramm-Leach-Bliley Act	Protects customer information from foreseeable threats in security and data integrity. Governs the collection, disclosure, and protection of customers nonpublic personal information.			
Health Insurance Portability and Accountability Act	Generally prohibits health insurers from denying coverage to workers who lose or change jobs and bars insurers from excluding coverage for preexisting conditions for more than a year. Dealerships cannot discriminate based on pre- existing conditions or current health status and must allow employees to enroll in new plans, given they meet certain requirements.	¥	\$797	Estimated annual cost to health care insurers.
IRS Cash-Reporting Rule	Dealers receiving more than \$10,000 in cash in one transaction or in two or more related transactions must file IRS/FinCEN Form 8300 with the IRS within 15 calendar days and must provide written notice that the report was filed to the person named on the report by January 31 of the following year. "Cash" includes certain cashier's checks, traveler's checks, money orders, and bank drafts.			

Regulation	Description of Regulation Applicable to Automobile Dealers	Regulatory Evaluation Cost Estimate	Cost Estimate in 2009 Dollars <sup>1</sup>	Cost Estimate Specification
IRS/DOL worker classification	When making decisions about worker classification dealers must carefully assess whether the worker is an employee or independent contractor.			
Magnuson-Moss Act	Dealers must give consumers certain required information on warranties and limited warranties.			
Mandatory workplace posters	Requirement to inform employees of certain employment-related rights.			
Miscellaneous record- keeping requirements	A multitude of requirements govern the length of time records must be maintained.			
NHTSA alteration and tire- placarding rules	Labeling and registration rules. Rules for handling and disposal of recalled new and used tires.			
NHTSA odometer rule	Prohibits odometer removal or tampering and misrepresentation of odometer readings. Requires record keeping to create a "paper trail", and odometer disclosures on titles. Vehicles with a greater than 16,000-lb. gross vehicle weight rating and those 10 model years old or older are exempt.			
NHTSA safety belt/airbag deactivation	Dealerships may install airbag switches for consumers with NHTSA authorization. Dealerships must be responsive to consumer requests for rear-seat lap/shoulder safety belt retrofits in older vehicles.			
NHTSA tampering rules	Prohibits dealerships from rendering inoperative safety equipment installed on vehicles in compliance with federal law.			

Regulation	Description of Regulation Applicable to Automobile Dealers	Regulatory Evaluation Cost Estimate	Cost Estimate in 2009 Dollars <sup>1</sup>	Cost Estimate Specification
NHTSA tire regulations	Rule requires proper replacement or modification of the tire-information label when replacing tires or adding weight before first sale or lease. Also, consumers must be given registration cards when buying new tires or tires must be registered electronically. Other rules govern handling and disposal.			
NLRB Regulations	National Labor Relations Board rules governing unionization activities, including employee rights, election rules, postings, unfair labor practices, and others.			
OFAC restrictions	Dealerships may not enter into transactions with certain sanctioned countries, governments, and specially designated organizations and individuals, including those appearing on and electronic list maintained by OFAC.			
OSHA asbestos standards	Dealerships must use certain procedures during brake and clutch inspections and repairs to minimize workplace exposure. Water, aerosol cleaners, or brake washers may be used to comply with the standard.	~	\$23.6	\$8,212,701 in estimated annual incremental costs to automotive remanufacturing and auto repair industry for 1986 amendments to revise standards, \$15,437,858 in estimated annual incremental costs to automotive repair industry for 1994 amendments to revise 1986 standards.
OSHA Blood-Borne Pathogens Rule	Dealerships more than four minutes from an emergency health facility must have a program to respond to employees who suffer cuts. All dealerships should have proper first-aid kits.	~	\$1,190	\$1,150,421,211 total costs for 1991 rule and \$40,461,109 incremental annual costs for 2001 standards revision. Costs applicable to healthcare, education, correctional and waste management industries.

Regulation	Description of Regulation Applicable to Automobile Dealers	Regulatory Evaluation Cost Estimate	Cost Estimate in 2009 Dollars <sup>1</sup>	Cost Estimate Specification
OSHA Hazard Communication Standard	Dealers must inform employees about chemical hazards they may be exposed to in the workplace, keep chemical product information sheets on-site and accessible, and train staffers to properly handle the hazardous materials they work with. Recent revisions require retraining employees by December 1, 2013.	V	\$32.6	Incremental costs of 2012 amendments. \$8,307,813 in annual costs and \$24,339,072 annually during 4 year phase in ending 6/1/16. Costs applicable to vehicle and parts dealers, repair and maintenance, automotive body, paint, and interior repair and maintenance industries.
OSHA lock-out/tag-out procedures	Procedures for service departments to ensure machines, including vehicles, are safely disengaged before being serviced.			
OSHA Respiratory Protection Standard	Development and implementation of a written program addressing how to select, properly apply, and maintain respirators, to protect body shop workers from hazardous chemicals.			
OSHA workplace health and safety standards	Extensive regulations covers multitude of workplace issues and practices, from hydraulic lift operation to the number of toilets required.	~	\$45,627	Total cost estimate for economy.
Powered Industrial Truck Operator Training	Regulation intended to reduce the number of injuries and deaths that occur as a result of inadequate operator training. Applies to all industries in which the trucks are being used, except agricultural operations.	V	\$0.07	Annual incremental costs of 1998 amendments. Automotive dealers and service stations industries.
Resource Conservation and Recovery Act (RCRA)	Comprehensive environmental law regulating many dealership functions, including underground storage tanks and the storage, management, and disposal of used oil, antifreeze, mercury products, and hazardous wastes.	~	\$100.80	Annual incremental costs to economy of 1984 amendments.

Regulation	Description of Regulation Applicable to Automobile Dealers	Regulatory Evaluation Cost Estimate	Cost Estimate in 2009 Dollars <sup>1</sup>	Cost Estimate Specification
Telephone Consumer Protection Act	Imposes numerous restrictions on telemarketing, including the national and company-specific do-not-call (DNC) rules, calling-time restrictions, caller ID requirements, fax advertising rules, and restrictions on the use of auto dialers and			
Truth in Lending and Consumer Leasing Acts	prerecorded messages. Regulations Z and M cover consumer credit and consumer leasing transactions, respectively, specifying information to be disclosed to a consumer before completing the transaction, and information to be disclosed when advertising consumer credit transactions or leases.			
Uniformed Services Employment and Reemployment Rights Act (USERRA)	Protects service members' reemployment rights when returning from a period of service in the uniformed services, including those called up from the reserves or National Guard, and prohibits employer discrimination based on military service or obligation.			

1. Cost estimates converted to 2009 dollars using Bureau of Economic Analysis implicit price deflator for gross domestic product. In millions of dollars.

2. Employee discrimination rules applicable in this category, but not included costs.

3. Gramm-Leach-Bliley applicable in this category, but not included in costs.

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