



**Consumer Federation of America**

# **Auto Insurance Regulation What Works 2019**

**How States Could Save Consumers  
\$60 Billion a Year**

**J Robert Hunter**  
Director of Insurance

**Douglas Heller**  
Insurance Expert

**February 11, 2019**

## **Abstract**

Updating decades of research, the Consumer Federation of America reveals what data shows about the many different approaches to auto insurance market oversight and consumer protection in the United States and how some states have saved drivers billions, while others have allowed significantly increased costs for drivers.

## Table of Contents

<b>I. Introduction</b> .....	<b>4</b>
<b>II. Analysis of Auto Insurance Results from Every State</b> .....	<b>5</b>
A. Overview .....	5
B. Data .....	5
C. Analysis .....	6
1. <i>Auto Insurance Expenditures</i> .....	6
2. <i>Auto Insurance Liability-Only Expenditures</i> .....	9
3. <i>Differences By Regulatory System</i> .....	11
a) <i>Stronger Regulation Yields Better Results for Consumers Over Time</i> .....	12
b) <i>Regulatory Oversight Does Not Inhibit Profitability</i> .....	14
4. <i>Competition In The States</i> .....	15
a) <i>A Formal Measure of Market Concentration</i> .....	16
b) <i>Competition Enhancing Practices among the States</i> .....	17
<b>III. Findings</b> .....	<b>18</b>
A. Stronger Regulation Leads To Lower Rates For Automobile Insurance Consumers .....	18
B. The Effectiveness of Prior Approval Regulation In California and Hawaii Have Saved Drivers Billions .....	20
1. <i>\$154 Billion Saved In California and Other Benefits</i> .....	20
2. <i>Hawaiian Drivers Have Benefited From a Strong Prior Approval System</i> .....	23
C. Americans Have Overpaid For Auto Insurance By \$1 Trillion Since 1989. With Better Regulation They Could Be Saving \$60 Billion Per Year. ....	24
<b>IV. Recommendations and Conclusion</b> .....	<b>25</b>
<b>Appendix</b> .....	<b>27</b>
1. Average Expenditure and Liability Average Premium (1989, 2015) .....	27
2. Average Return On Net Worth (1989-2016) .....	28
3. Herfindahl-Hirschman Index (HHI) By State .....	29
4. Other Data Reviewed (Table 1) .....	29
5. Other Data Reviewed (Table 2) .....	31

## Table of Figures

Figure 1. Smallest and Largest Percentage Increases in Auto Insurance Expenditure (1989-2015)	7
Figure 2. Percentage Increase of Auto Insurance Expenditures (1989-2015)	7
Figure 3. Dollar Increase in Auto Insurance Expenditures (1989-2015)	8
Figure 4. Smallest and Largest Dollar Increases in Auto Insurance Expenditure (1989-2015)	9
Figure 5. Change in Liability Average Premium (1989-2015)	10
Figure 6. States With More Than 100% Increase in Liability Average Premium (1989-2015)	11
Figure 7. Regulatory System by State	12
Figure 8. Regulatory Systems of States with Lowest and Highest Rate Changes (1989-2015)	13
Figure 9. Auto Insurance Expenditure Change by Regulatory Rating System (1989-2015)	13
Figure 10. Auto Insurance Liability Average Premium Change by Regulatory Rating System (1989-2015)	14
Figure 11. Profitability by Regulatory System, Weighted by Market Size	14
Figure 12. Most and Least Profitable States (Average Annual Profitability) (1989-2016)	15
Figure 13. Least Concentrated Auto Insurance Markets	16
Figure 14. Average HHI by State Regulatory System	17
Figure 16. Percentage Change in Average Insurance Costs (1989-2015)	21
Figure 17. Auto Insurance Expenditure Increases in Hawaii at Various Intervals Compared With 1989 Expenditures	23
Figure 18. Theoretical Annual Consumer Savings (In Millions) if State Adopted California-Style Oversight	24

# I. Introduction

When Americans shop for auto insurance, as required by law in every state but New Hampshire, the premiums they find in the market depend upon a combination of insurance losses and expenses, driving and non-driving related characteristics of the individual driver, and a variety of management-level decisions reflecting the company's market objectives. However, there is also a macro-level influence on auto insurance premiums stemming from the regulatory framework in place in each state-based market. As insurance products are overseen exclusively by the states, each state market is different, and those differences can be assessed in terms of consumer outcomes.

In this report updating research conducted in 2008 and 2013 to now cover 30 years of results, Consumer Federation of America (CFA) looks at state consumers' auto insurance expenditures and other data in each state to determine what types of rules best serve American auto insurance policyholders. There are a variety of actuarial reasons why one state might expect higher auto insurance expenditures than another – including different coverage limits, different levels of traffic density, different mix of vehicle types – and these reasons are generally consistent over time. Those statewide characteristics are baked in to the differences in premiums between states, and we would expect drivers in a state with high traffic density and high coverage limits to pay more for auto insurance than those in a state with low traffic density and low coverage requirements. But, as this report illustrates, the *trajectory of rates* over time in different states are wildly different, and we have concluded that the level of consumer protection and regulatory oversight in the states plays an important role in determining that trajectory.

Since 1989, the average expenditure on auto insurance by Californians has increased by 12.5%, while the average increase across the country has been 61.1%, nearly five times that faced by California drivers. When it comes to the cost of liability insurance, the state-mandated portion of coverage, Californians paid 5.7% less in 2015 than they paid in 1989 (without any adjustment for inflation), while the nationwide average increased by 58.5%.

In addition to the savings achieved under California's consumer protection system, it is notable that the system of strong regulation of insurance companies has fostered a robust and extremely competitive market, helping California to become the second least concentrated auto insurance market in the nation.

The data show, and this is consistent with prior CFA analyses over the past decade, that strong "prior approval" oversight of auto insurance markets, in which insurance companies have to justify rate changes before imposing them on policyholders, leads to the best outcomes for consumers. Over the past 30 years, no set of state rules has been as beneficial to its resident drivers as the consumer protections put in place by California voters in November 1988 through

Proposition 103. We calculate that California drivers have saved \$154 billion in auto insurance premiums as a result of voters' decision to adopt the 1988 ballot initiative. Our research indicates that if every state market in the nation had been strengthened by California-style consumer protection, American drivers would have saved \$60 billion in 2015 and nearly a trillion dollars over the past 30 years.

In the following pages we first summarize the research and our findings with respect to the experience in all 50 states and Washington, DC. Thereafter we provide a detailed look into the experience in California, including why we believe that state has succeeded in protecting drivers better than any other.

## **II. Analysis of Auto Insurance Results from Every State**

### **A. Overview**

A primary purpose of this report is to assess the effectiveness of the various regulatory approaches to auto insurance across the country. Through our research we have identified the best practices that can serve as models for regulators and policymakers seeking to ensure a competitive and fair market that is first and foremost protective of consumers. In order to develop our findings, we have looked at data from 1989-2015 (the last year for which complete data were available when the research was conducted, except where noted)<sup>1</sup> and considered a variety of questions about state markets and the regulatory systems in each state. Among those questions are:

- How have auto insurance expenditures changed over time?
- How have liability-only expenditures changed over time?
- How have expenditure changes varied under different regulatory systems?
- How competitive is the auto insurance market in each state?
- How profitable has the industry been in each state?

### **B. Data**

The data in this report are public data published by the National Association of Insurance Commissioners (NAIC) over the past 30 years. Each year the NAIC publishes an “Auto Insurance Database Report” that is “compiled to make information about cost factors in each state readily available to insurance regulators monitoring the market, and to the public.”<sup>2</sup> These

---

<sup>1</sup> The sources of premium and expenditure data contained in this report, unless otherwise described, are the National Association of Insurance Commissioners Auto Insurance Database Reports (1990-2015), NAIC Report on Profitability by Line by State (1999-2016) and Best's Aggregates and Averages, various editions.

<sup>2</sup> NAIC, December 2017. Auto Insurance Database Report 2014/15. p.1.

reports break out data on premiums, expenditures, and exposures by coverage and, critically for this study, by state.

This report focuses primarily on the Average Expenditure in each state, which “is the total written premium for liability, collision, and comprehensive coverages divided by the liability written car-years (exposures). This assumes that all insured vehicles carry liability coverage but do not necessarily carry the physical damage coverages (i.e., collision and/or comprehensive). *The average expenditure is an estimate of what consumers in the state spent, on average, for auto insurance.*” [Emphasis added.]

Where we have used other data in the report, we have cited it and described our calculations. The data in the report are all publicly available and the calculations easily reproduced.

## **C. Analysis**

### **1. Auto Insurance Expenditures**

Average auto insurance expenditures grew by 61.1% countrywide between 1989 and 2015 (the last year for which data were available during the course of research). The average annual expenditure countrywide in 1989, in unadjusted dollars, was \$552; in 2015 it was \$889, or \$337 more spent on auto insurance. Among the states, California drivers faced the smallest increase, 12.5%, while Nebraskans encountered the sharpest increase, 139.3%, during this period.

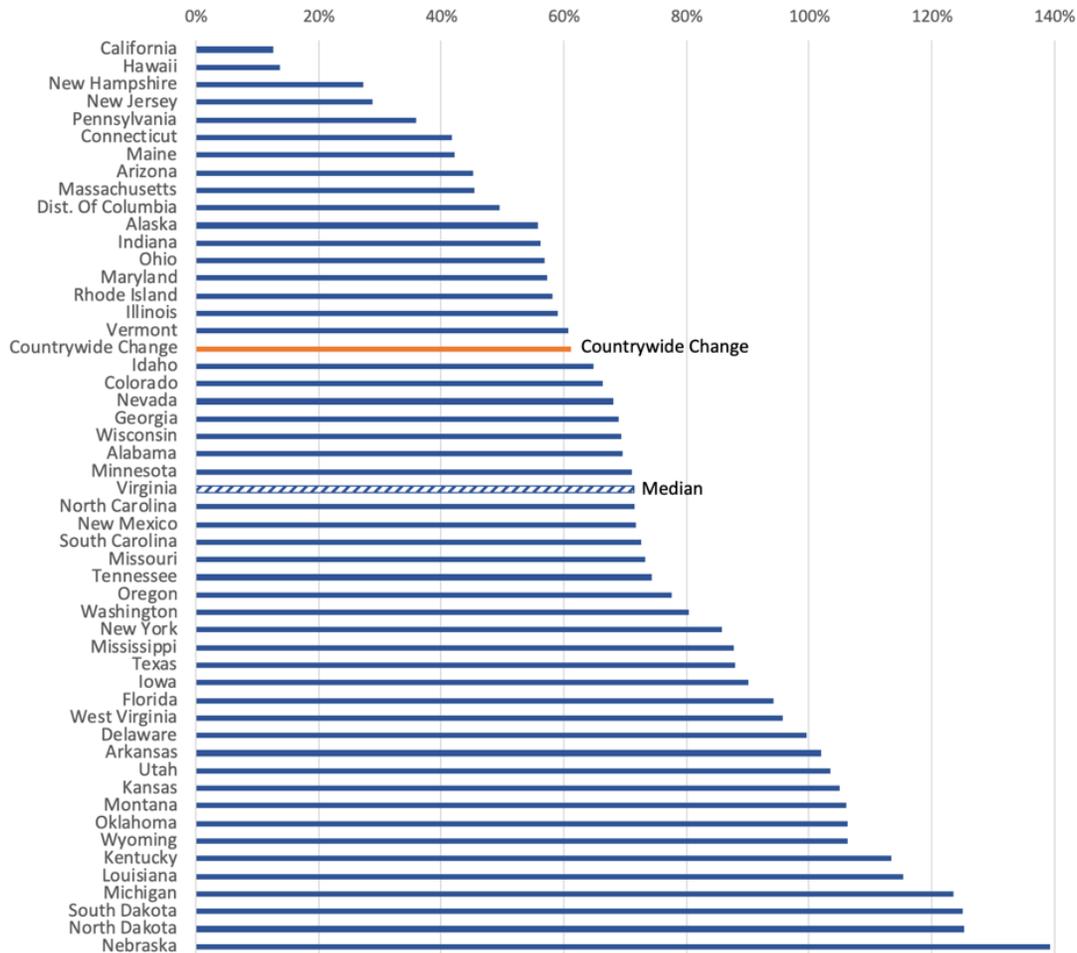
During this time period the average state increase was 75.1% and the median increase was 71.5%. These average and median increases are significantly higher than the rate of expenditure growth calculated on a countrywide basis (61.1%) largely because California’s disproportionate share of the national market (about 1 of every 8 insured vehicles is in the state) has an outsized impact when quantifying change for the nation as a whole.

Other than California, only Hawaii (+13.6%) experienced a rate increase less than 25% during the period, while 12 states experienced increases topping 100% since 1989. Figure 1 presents the states with the smallest and largest increases by percentage over the time period, and Figure 2 provides the increases for all states.

**Figure 1. Smallest and Largest Percentage Increases in Auto Insurance Expenditure (1989-2015)**

Smallest Increases		Largest Increases	
California	12.5%	Nebraska	139.3%
Hawaii	13.6%	North Dakota	125.2%
New Hampshire	27.2%	South Dakota	125.1%
New Jersey	28.8%	Michigan	123.5%
Pennsylvania	35.9%	Louisiana	115.4%
Connecticut	41.7%	Kentucky	113.5%
Maine	42.1%	Wyoming	106.3%
Arizona	45.1%	Oklahoma	106.3%
Massachusetts	45.3%	Montana	106.1%
District of Columbia	49.4%	Kansas	105.0%

**Figure 2. Percentage Increase of Auto Insurance Expenditures (1989-2015)**



During the period reviewed, the actual, unadjusted dollar impact of these changes on state consumers averaged \$348, and only Hawaii and California saw increases that were less than \$100 total. Hawaii, which had a lower average expenditure in 1989 than California, counted a \$91 increase during the period, while California experienced a \$93 increase. On the other end of the spectrum, Louisiana and Michigan expenditures rose the most, by \$660 and \$681, respectively. Florida, Delaware, and New York also faced steep increases, each with average expenditures rising by more than \$550. Figure 3 illustrates the dollar impact of increasing auto insurance expenditures over the 27-year period.

**Figure 3. Dollar Increase in Auto Insurance Expenditures (1989-2015)**

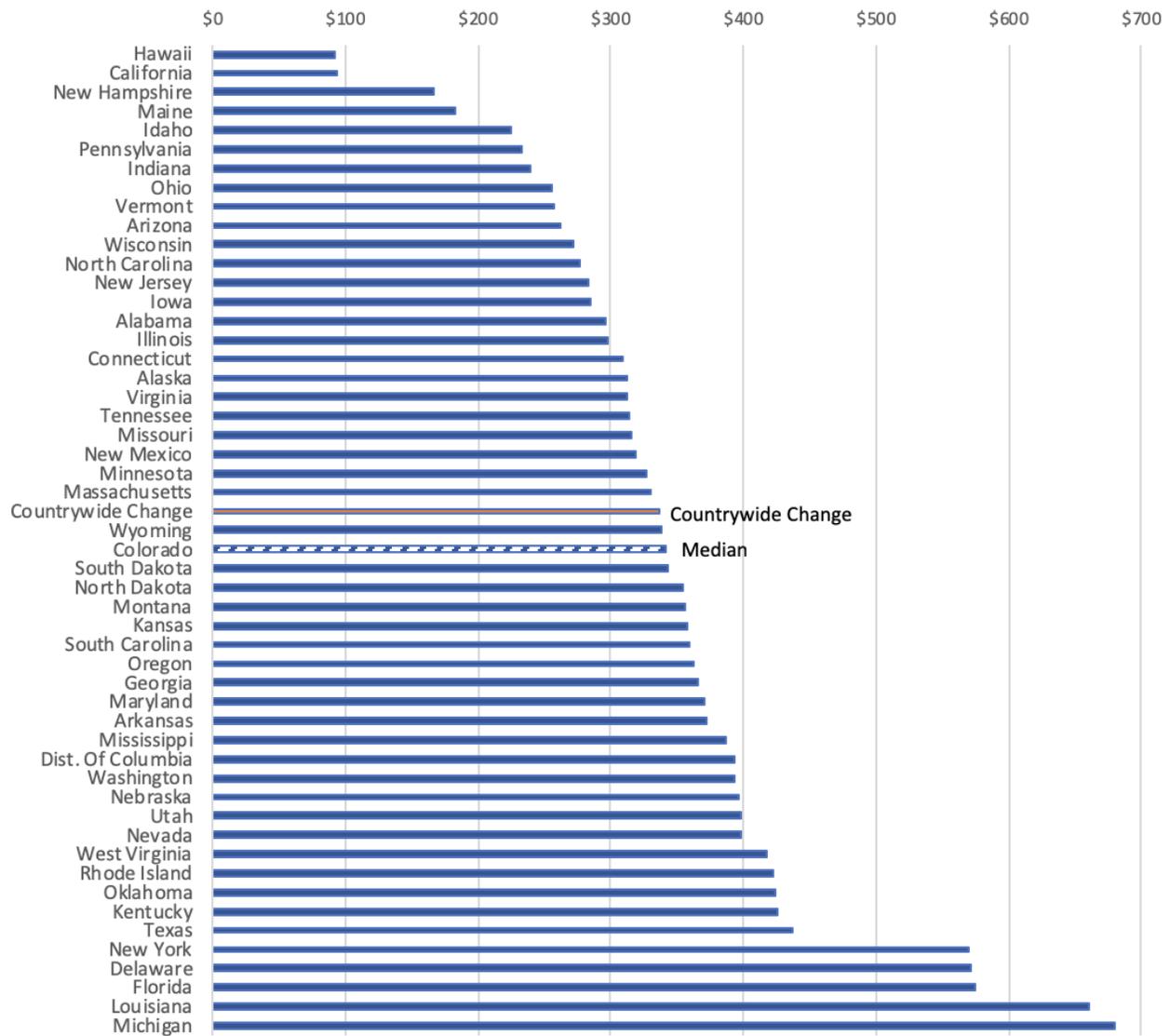


Figure 4 presents the smallest and largest dollar increases during the time period reviewed.

**Figure 4. Smallest and Largest Dollar Increases in Auto Insurance Expenditure (1989-2015)**

Smallest Increases		Largest Increases	
Hawaii	\$91.36	Michigan	\$680.55
California	\$93.48	Louisiana	\$659.81
New Hampshire	\$165.90	Florida	\$575.04
Maine	\$182.89	Delaware	\$571.62
Idaho	\$225.52	New York	\$569.77
Pennsylvania	\$232.15	Texas	\$436.87
Indiana	\$239.95	Kentucky	\$426.26
Ohio	\$254.86	Oklahoma	\$424.32
Vermont	\$256.75	Rhode Island	\$422.13
Arizona	\$262.50	West Virginia	\$418.16

As is obvious from these tables, and as will be discussed in the analysis section below, California and Hawaii stand out among the states.

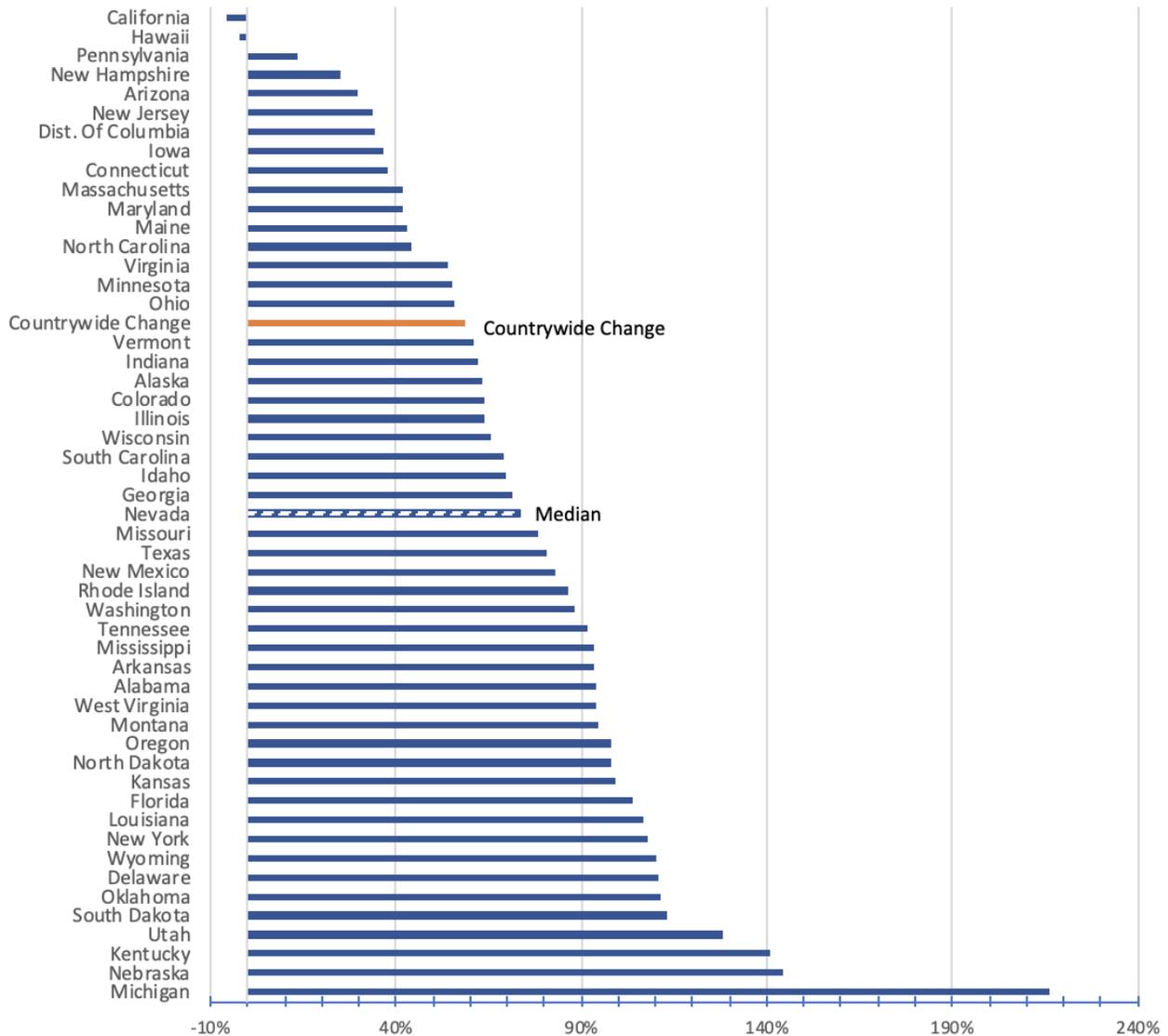
## 2. Auto Insurance Liability-Only Expenditures

In every state but New Hampshire, drivers are required to purchase a basic liability policy as a condition for driving. This mandate includes Personal Injury Protection (no-fault) coverage in some states, while in many states it is limited to third-party liability (injuries and damage to others), and in some states Uninsured Motorist coverage is also required. In its Auto Insurance Database Report, NAIC combines these coverages, along with Medical Payments coverage, to form the data series “Liability Average Premium,” which we assess below.

By excluding the amount spent on comprehensive and collision coverage, Liability Average Premium offers a closer approximation of the cost of coverage that is required of drivers. These data, when considered in light of the whole report, help assess how states have done in protecting lower-income drivers and others who purchase a state’s minimum-limits policy in order to comply with the state mandate.

Since 1989, the countrywide liability average premium has increased by 58.5%. Only two states have seen reductions in the premium paid for liability coverage. In California and Hawaii, premiums for liability insurance *dropped* by 5.7% and 2.0%, respectively. Figure 5 below shows the change in liability average premium, ranked from smallest to largest change.

**Figure 5. Change in Liability Average Premium (1989-2015)**



While it costs drivers in California and Hawaii less to buy liability coverage in 2015 than it did three decades ago, eleven states faced premiums that had doubled or, in the case of Michigan, tripled between 1989 and 2015, as shown in Figure 6. For lower-income drivers who do not lease or make payments on their vehicle (and, thereby, may forego comprehensive and collision coverages), these significant price hikes on a product they are required to purchase has led to considerable discussion among policymakers, regulators, and consumer advocates about the affordability of state mandated auto insurance policies.

**Figure 6. States with More Than 100% Increase in Liability Average Premium (1989-2015)**

State	Increase
Michigan	215.9%
Nebraska	144.1%
Kentucky	141.0%
Utah	128.3%
South Dakota	113.3%
Oklahoma	111.4%
Delaware	111.1%
Wyoming	110.0%
New York	107.7%
Louisiana	106.8%
Florida	103.9%

### 3. Differences by Regulatory System

In the United States, auto insurance is regulated at the state level. Each state has its own unique set of laws and no two states' insurance regulation regimes are precisely the same. However, the states can be grouped, generally, among six different regulatory structures, ranging from the more vigorous “prior approval” approach to rates in California to the virtual deregulation of rates in Wyoming. The six structures, as illustrated in Figure 7, are:

- Prior Approval
- File and Use
- Use and File
- Limited Flex
- Flex
- Deregulated

For this report, we have generally followed the National Association of Insurance Commissioners (NAIC) report on state rate filing laws<sup>3</sup> except as follows:

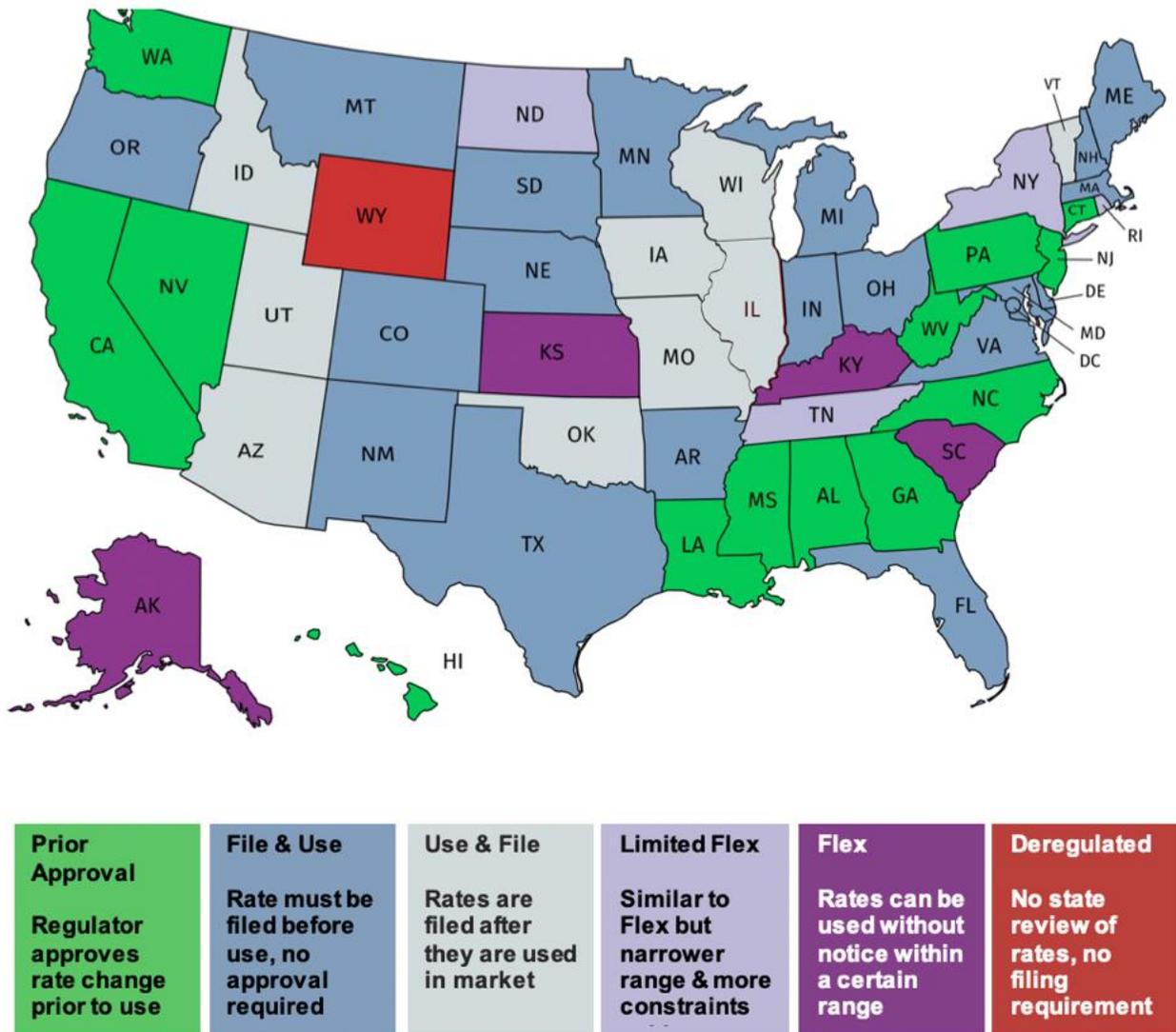
- a) We have added a category – Limited Flex – that reflects four states’ laws that allow insurers to make (largely) unregulated changes to rates in certain instances, but under constraints that are more limiting than the states identified by the NAIC as Flex Rating states. The eight states that are identified as Flex or Limited Flex might reasonably be treated as Flex Rating systems, but we have decided to distinguish between those named as Flex by NAIC and those identified otherwise but having a significant Flex component.

<sup>3</sup> NAIC, December 2017. Auto Insurance Database Report 2014/15. p.234.

- b) NAIC lists Florida as a Prior Approval state with the following caveat: “Companies may Use and File at the risk of having to refund any excessive charge. Actual text of the Law says ‘File and Use.’” Because companies are not required to seek prior approval, we treat it as a File and Use state per the text of state law.

Countrywide, there are 13 prior approval states, 20 file and use states, nine use and file states, eight flex- or limited flex-rating states, and one deregulated state.

**Figure 7. Regulatory System by State**



- a) *Stronger Regulation Yields Better Results for Consumers Over Time*

Our findings show that states with stronger regulatory systems - that is, states that require prior approval of rates before they can take effect - have had the most success in slowing the rate of increases over time. Figure 8 shows the regulatory system of the five states with the smallest auto insurance expenditure changes and the five states with the largest increases.

**Figure 8. Regulatory Systems of States with Lowest and Highest Rate Changes (1989-2015)**

Lowest Rate Changes			Highest Rate Changes		
State	Regulatory Structure	Change	State	Regulatory Structure	Change
California	Prior Approval	12.5%	Nebraska	File and Use	139.3%
Hawaii	Prior Approval	13.6%	North Dakota	Limited Flex	125.2%
New Hampshire	File and Use	27.2%	South Dakota	File and Use	125.1%
New Jersey	Prior Approval	28.8%	Michigan	File and Use	123.5%
Pennsylvania	Prior Approval	35.9%	Louisiana	Prior Approval	115.4%

Although each state’s application of their regulatory system is different – particularly among the group of prior approval states – the data show that prior approval states taken as a group provide significantly better results for consumers than other regulatory approaches. This is the case whether we evaluate the systems using a simple or weighted average, as is detailed in Figure 9. The simple average demonstrates the systemic pull of the regulatory approach rather than the particular rate trajectory of a single large state like California or Texas. The weighted average allows us to adjust our assessment of the rating system’s efficacy to account for some small state outliers on either end of the data set, such as Hawaii and the Dakotas.

**Figure 9. Auto Insurance Expenditure Change by Regulatory Rating System (1989-2015)**

Rating System	Percent Change	
	Simple Average	Weighted Average
Prior Approval	63.2%	45.0%
Use and File	74.7%	70.0%
File and Use	78.5%	82.3%
Limited Flex	85.8%	82.9%
Flex Rating	86.7%	91.7%
Deregulation	106.3%	106.3%

It is not surprising that Prior Approval states, in which insurance companies are subject to up-front scrutiny of their rate hikes, have yielded the best results for consumers over time. Similarly, it is not surprising that the deregulation approach in Wyoming and the partial deregulation of the flex states have offered the least protection. In those states, insurers have the ability (in varying degrees) to raise rates without any scrutiny whatsoever. Clearly, they have taken advantage of that. The fact that the use and file states have seen more constrained premium

increases than file and use states suggests that it is not the timing of the paperwork, but scrutiny by the regulator that makes a difference. In both cases the likelihood of regulatory review and rejection of rate increases is low but not quite as low as the statutory lack of accountability given insurers in the flex-rating and deregulated states.

Similar, though more pronounced, results are apparent when assessing the change in liability premiums among the different regulatory systems. As Figure 10 illustrates, drivers in prior approval states faced the least severe premium increases on the coverages that are required by state law. Less regulated systems provided significantly less protection from rate increases for the mandatory coverage during this period.

**Figure 10. Auto Insurance Liability Average Premium Change by Regulatory Rating System (1989-2015)**

Rating System	Weighted Average Change
Prior Approval	36.1%
Use and File	67.9%
File and Use	89.5%
Flex Rating	98.5%
Limited Flex	103.0%
Deregulation	110.05%

*b) Regulatory Oversight Does Not Inhibit Profitability*

We considered the question of whether the regulatory system in a state tends to support more or less profitability for the industry. Presumably, insurers would prefer a system that supports higher profits. As Figure 11 indicates, however, profits are relatively unaffected by regulatory systems, except that Flex Rating systems seem to trend toward lower profitability.

**Figure 11. Profitability by Regulatory System, Weighted by Market Size**

Regulatory System	Total Premium (in billions)	Average Annual Profitability
Prior Approval	\$72.8	7.99%
File and Use	\$85.4	7.24%
Use and File	\$24.5	8.87%
Limited Flex	\$17.4	8.33%
Flex	\$8.3	4.79%
Deregulated	\$0.4	9.60%
<b>Total</b>	<b>\$209.0</b>	<b>7.69%</b>

Perhaps most notable is the clear evidence that the stronger regulatory oversight associated with Prior Approval systems does not inhibit insurer profitability as some opponents of regulation might suggest. Figure 12 illustrates the five most profitable states since 1989 and the five least profitable states. This, along with the full list of states, reveals that, for this period, those with prior approval systems are distributed throughout the profitability range, with Hawaii as the most profitable, and Nevada and Louisiana as the least profitable. Another prior approval state, Alabama, had an 8.4% average annual profit, the median figure for the dataset. See Appendix 1-D.

**Figure 12. Most and Least Profitable States (Average Annual Profitability) (1989-2016)**

Most Profitable			Least Profitable		
State	Regulatory Structure	Profitability	State	Regulatory Structure	Profitability
Hawaii	Prior Approval	16.6%	Louisiana	Prior Approval	2.6%
Maine	File and Use	13.0%	Nevada	Prior Approval	3.1%
District of Columbia	File and Use	12.8%	South Carolina	Flex	3.1%
New Hampshire	File and Use	12.5%	Michigan	File and Use	3.5%
Vermont	Use and File	12.1%	Kentucky	Flex	4.5%

It is common to assume that regulation limits profitability, but that is a mischaracterization of both the public policy goal underlying regulation and, as shown in this data, not borne out by the facts. The public policy orientation of insurance regulation, and price regulation generally, is to eliminate *excessive* profits from overcharging customers and to prevent insolvency from underpricing the product. There is no reason to believe that a rigorous prior approval system, when built on that public policy rationale, should make it more unlikely for a law-abiding insurer to earn a reasonable profit. Indeed, virtually every state requires insurers to price insurance within the parameters of the inadequate–excessive construct, so prior approval of rates is a law enforcement tool, not an additional standard. That prior approval states do not clump together in one area of the profitability range affirms this point and should be recognized as a key finding that dispels some of the anti-regulation rhetoric that is used to challenge prior approval systems.

#### **4. Competition in the States**

In many markets, competition can be a force for lower prices. In the auto insurance market, where prices are meant to hew closely to the risk of loss, competition can help improve efficiency, incentivize safety and loss mitigation efforts, and improve service quality. But, because the insurance market is different than most markets, special attention is needed to foster competition.

Unlike most products and services sold in the American marketplace, auto insurance is a government-mandated purchase for motorists in all states, save New Hampshire. This removes the demand-side power of consumers to say “no” to the market as a whole if it is overpriced or non-competitive. Additionally, insurance is a complex financial instrument that, for most people, is purchased but rarely used, and studies show that consumers do not shop for coverage frequently. Finally, the insurance industry has a rare exemption from federal antitrust laws, and around the country, where state authority over collusive behavior exists, it is rarely enforced. The interaction of these unique qualities makes the role and relevance of a competitive marketplace a complicated concern.

We consider two indicators of competitiveness, a standard measure and an analysis of state policy regarding market participation.

*a) A Formal Measure of Market Concentration*

To identify the level of competition in the auto insurance market, we used the test commonly employed by the United States Department of Justice (DOJ) to measure market concentration, the Herfindahl-Hirschman Index (HHI).<sup>4</sup> The closer a market is to being a monopoly, the higher the HHI index. The DOJ considers a market with a score of less than 1,000 to be a competitive marketplace, a score of 1,000-1,800 to be a moderately concentrated marketplace and 1,800 or greater to indicate a highly concentrated marketplace. Figure 13 provides the list of the ten states with the lowest HHI.

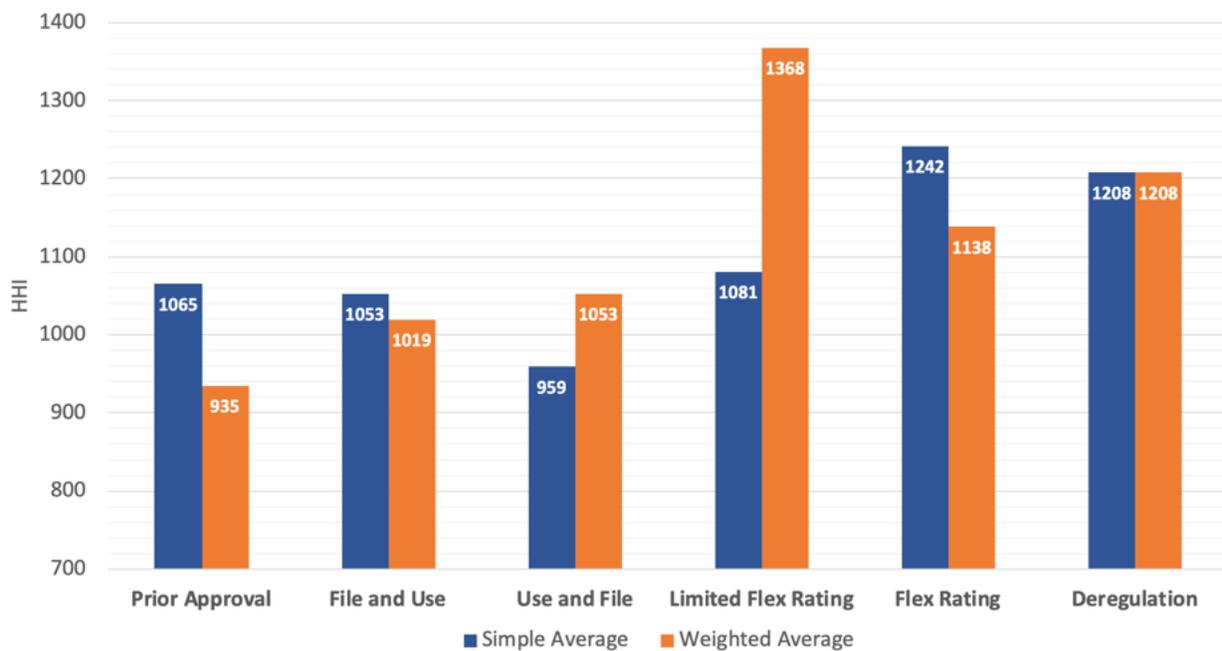
**Figure 13. Least Concentrated Auto Insurance Markets**

State	HHI
Maine	703
California	723
North Dakota	741
Vermont	760
Connecticut	770
New Hampshire	786
Utah	786
South Dakota	819
Idaho	822
Washington	825

<sup>4</sup> The HHI is calculated by squaring the market share of each firm competing in a market and totaling the resulting figures.

As Figure 14 illustrates, when market concentration is reviewed in the context of state regulatory systems, we find that the deregulated and flex-rating states have higher levels of market concentration. Measured on a premium volume-weighted basis, prior approval states are the most competitive but using a simple average the use and file states are more competitive. Taken together, the data show that the nexus between regulatory oversight and the robustness of the auto insurance market does not support a conclusion that regulation limits competition and deregulation encourages it. Just the opposite appears to be the case, with states that allow greater amounts of unregulated activity in the auto insurance market finding their markets most likely to be dominated by a small number of insurers.

**Figure 14. Average HHI by State Regulatory System**



*b) Competition Enhancing Practices among the States*

Given the unique market power held by insurance companies *vis à vis* consumers – who have to purchase their product – states can play an important role in ensuring that motorists can access a competitive market for auto insurance. Below we describe several competition enhancing rules and practices we found amongst the states:

- 1. Take All Good Drivers.** Four states – California, Massachusetts, New Hampshire, and North Carolina – require insurers to take all good drivers who apply for insurance. In these states, a good driving record gives a consumer the right to obtain insurance from any licensed insurance company. This is a pro-competitive requirement, since all states but New Hampshire require that consumers purchase

auto insurance as a condition of driving their own car. Because of these mandatory insurance laws, auto insurance demand is inelastic. A mandate on insurers requiring that coverage be made available to good drivers balances this supply-demand situation.

- 2. Prohibit Shifting Good Drivers to Non-Preferred, Higher Rate Subsidiaries.** California is also the only state to require that an insurer group place good drivers into the lowest priced policy available from any of its affiliated companies when an insurance applicant asks for a quote. This blocks insurance companies from shifting drivers with good records into the expensive insurance policies written by an insurer's non-preferred subsidiary, which has been one of several techniques that insurers use to avoid selling policies to good drivers who do not fit into a company's target demographic.
- 3. Enact and Enforce Antitrust Laws.** The insurance industry has historically engaged in extensive price fixing, relying in many instances on shared pricing tools developed by industry-controlled rating and advisory organizations. Collusive data sharing tends to result in inflated prices and unfair rating practices, which antitrust enforcement would tend to diminish. However, all states, except Illinois and California, which have exercised some antitrust authority, continue to authorize insurers to engage in conduct that application of antitrust laws would otherwise prohibit.

### III. Findings

#### A. Stronger Regulation Leads to Lower Rates for Automobile Insurance Consumers

In order to assess the efficacy of the regulatory regimes in place around the country, we evaluated four significant factors in each state and for each of the six regulatory systems in use across the nation. By evaluating data related to changes in consumers' cost of insurance, profitability of companies, and overall competitiveness of the state insurance markets, we are able to draw conclusions about the various state markets and the systems that govern them.

The first two tests examined the ability of a state and rating system to hold down rate increases. The first of these tests considered the change in Average Expenditures over time – that is how much more or less people pay for all their auto insurance coverage – and the second test examined how much more or less people pay for the portion of auto insurance – liability coverage – that is typically required under state laws. It is very clear in the results that lower price increases were associated with more stringent regulatory regimes, while less oversight led to higher price increases over time. This fact is brought into stark relief when reviewing the

liability premiums only, where the nation's most rigorous regulatory system – in California – saw premiums that are lower than they were in 1989, even as the nation's premiums rose by nearly 60 percent. In both tests of rates, Prior Approval states taken together saw the smallest increases and while the more weakly overseen flex and deregulated states allowed for the largest rate increase during the nearly three decades reviewed.

Next, we examined insurer profitability as a function of regulatory system. Although premium increases were significantly below average in prior approval states, profits were not. The experience of insurers across the country suggests that the role of consumer protection rules was to improve efficiency rather than draw down company profits. Prior approval regulation, it appears, serves as a stabilizing force that allows companies to succeed even as it protects consumers from excessive pricing. At the very least, the profitability results demonstrate that prior approval oversight of insurance companies cannot be seen as an inhibitor of insurance company success. Further, it is evident that in all cases and under any regulatory system, insurers have generally thrived over the decades, enjoying reasonable profitability in virtually every state.

Finally, we tested the competitiveness of markets under each system of regulation and found that prior approval regulation yielded, on a weighted average, the most competitive insurance markets. The less regulated states, including the various flex systems and deregulated Wyoming, exhibited much weaker levels of competition. There is some irony that deregulated insurance markets are sometimes described as “Competitive States,” when, in fact, weak regulation more closely correlates with highly concentrated markets than with competition.

Overall, the Prior Approval system of regulation works best for consumers. This system is superior at holding prices down while allowing reasonable insurer profits and maintaining a competitive market. It is also clear that the worst regulatory regimes for consumers are the Deregulated and Flexible Rating systems, which do not hold down prices, foster less competitive markets and often allow higher than average profits to insurers.

We also analyzed data on several other key factors that could affect insurance rates, including seatbelt laws, bad faith claims settlement laws, uninsured motorist population, size of the residual market, the legal regime in use for auto claims, thefts, traffic density, disposable income, repair costs and other factors, as shown in the appendices. These data do not appear to be confounding variables and instead help us affirm the first general finding that Prior Approval regulation is the best system for consumers. Additionally, as discussed below, the data shed light on the second significant finding of this analysis, that California's active prior approval system has consistently proven itself the strongest in the nation in ensuring access to reasonably priced auto insurance rates.

## **B. The Effectiveness of Prior Approval Regulation in California and Hawaii Have Saved Drivers Billions**

The degree to which California and, in recent years, Hawaii have set themselves apart from the rest of the country is astounding and reflects the efficacy of prior approval regulation in conjunction with a strong consumer orientation in its implementation. The data reviewed in this study begin in 1989, immediately after California voters enacted Proposition 103, which converted California from a deregulated state to a strongly regulated state incorporating several consumer protection rules, and marked the beginning of the transformation from one of the most expensive places in America to insure a vehicle to a state in which premiums are below the national average.

### **1. \$154 Billion Saved in California and Other Benefits**

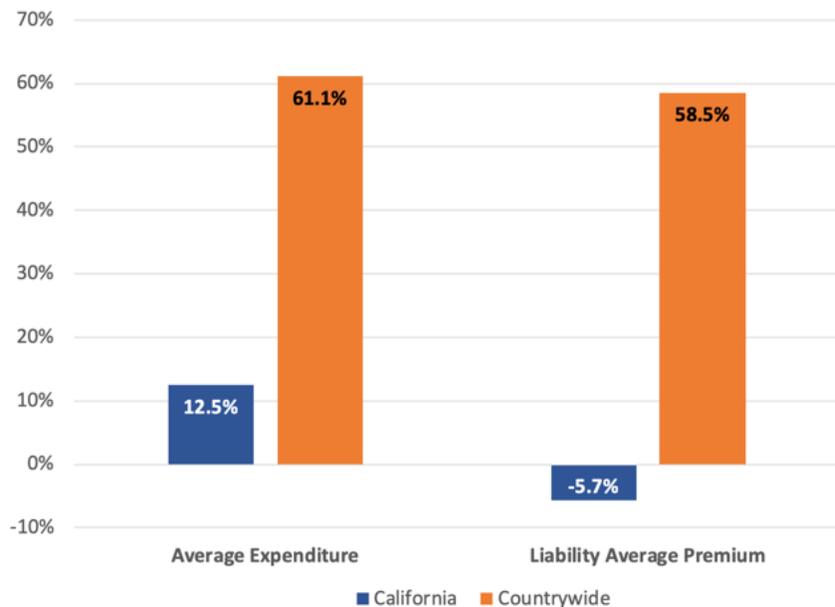
By comparing California premiums in 2015, after 27 years of Prop 103, to what they would have been if, instead, these premiums simply followed the national average growth, CFA calculates that Californians have saved \$154 billion on their auto insurance premiums, or an average savings of nearly \$6 billion each year. Put differently, using an estimate of 22 million insured vehicles in California, there is an annual \$275 Prop 103 auto insurance savings for every insured car on the road.

In order to reach this figure, we calculated the change in auto insurance expenditures between 1989 and 2015 for the country as a whole and for California only. We then calculated the savings California enjoyed compared to the savings if California had prices change at the national averages, a conservative choice since prior to the passage of Proposition 103, the price increases in California greatly exceeded the national price changes. Because the countrywide data include California data, this trajectory is also conservative in that the national price changes were restrained by the savings actually experienced in California.

A review of California's auto insurance consumer protections illustrates that the savings California drivers have accrued over the years are not the only benefit of having the nation's strongest auto insurance protections in the nation. California passed virtually every test for good performance, with the exception of a high-uninsured motorist population (which we expect is changing as discussed below) and profit levels for insurers that are higher than necessary. We found the following results for California:

- Ranked first among all states in holding down overall rate increase;
- Ranked first among all states in holding down the cost of mandatory liability coverage;
- Ranked second in market competitiveness as measured by the HHI;
- Has totally repealed its antitrust exemption for automobile insurers;
- Has a low residual market population (i.e., low level of participation in higher cost assigned risk plans);
- One of only four states to guarantee insurance to a good driver from any insurer the driver chooses;
- The only state to require that a person's driving record be the most important factor in determining insurance rates;
- One of only three states to ban the use of credit scoring;
- The only state that funds consumer participation in the ratemaking process when consumers or consumer organizations make a substantial contribution to the process;
- The state with the most regulatory transparency, with all rate and rule filing data and information supplied by insurance companies made available to the public;
- The only state that bars insurance companies from considering whether a motorist was previously insured, or had a gap in coverage (such as a short drop of insurance during a time with no car) when pricing applicants for auto insurance; and
- One of only two states (along with New Jersey) with a special low-cost auto insurance policy for low-income drivers.
- The only state with a suite of ratemaking innovations to keep rates down including the removal from rates of the cost of fines and bad faith judgments the insurer received for bad behavior, removal of political contributions and lobbying expenditures, limits on the amount of executive compensation that can be included in the rates, and exclusion of certain types of advertising costs from rates.

**Figure 16. Percentage Change in Average Insurance Costs 1989-2015**



On the negative side, California has the twelfth highest uninsured motorist population in the nation according to the industry organization, the Insurance Research Council (IRC). While still too high, the population has decreased sharply from the 1980s when California had one of

the highest rates of uninsured motorists. As of 2015, California has an uninsured motorist rate of 15 percent, according to the IRC study, compared to a 13 percent rate nationally.<sup>5</sup> California's unique situation as home to the most undocumented residents in the nation may explain some of the uninsured population. However, we expect that estimates of uninsured motorists in California will be lower in coming years when the data catch up to the growing population of undocumented immigrants who have obtained driver's licenses under a law that took effect in 2015, making it easier for those drivers to purchase insurance. According to the California Department of Motor Vehicles, as of April 2018 more than one million licenses have been issued to previously undocumented immigrants since 2015,<sup>6</sup> which is also the last year for which uninsured motorist estimates are available. Indeed, researchers at Stanford University found that hit and run accidents decreased by 7 - 10% after undocumented drivers were allowed to get a driver's license even though overall accident rates did not change, strongly suggesting a significant increase in insured drivers.<sup>7</sup> If the implication of this finding bears out, California's uninsured motorist population might already be significantly lower than the national average.

A second area where California's results are on the wrong side of the national average is in auto insurance company profitability. While effective regulation will allow for reasonable profits, insurers in California have enjoyed an average annual Return on Net Worth of 10.5 percent compared with an 8.5 percent annual average nationally. This raises the question as to whether insurers should be required to further reduce their rates in California. The fact that California has seen both below average rate changes and above average profits also suggests that the nation's less well-regulated markets are much less efficient than they could be, which, as discussed below, is likely costing consumers around the country billions of dollars annually.

A third area in which California could improve the auto insurance market for consumers has to do with a loophole that insurers have exploited in recent years at the expense of California drivers. Under California's auto insurance rules, consumers are allowed to buy auto insurance, usually at discounted rates, as part of a group plan. Historically, this has provided benefits to members of groups such as teacher organizations and senior citizen associations. Over the last several years, however, insurers have expanded the use of this group insurance provision to group drivers by occupation – irrespective of their membership in any particular association – and differentiate premiums based on drivers' job titles. This “group pricing” has unfairly harmed people with lower wage occupations as well as the unemployed in California. Consumer advocates have sought clarifications of the rules to prohibit this expansive and discriminatory interpretation of state law, but consideration of this problem has languished under the administrations of the prior two Insurance Commissioners.

---

<sup>5</sup> Uninsured Motorists, 2017 Edition, Insurance Research Council.

<sup>6</sup> [https://www.dmv.ca.gov/portal/dmv/detail/pubs/newsrel/2018/2018\\_30](https://www.dmv.ca.gov/portal/dmv/detail/pubs/newsrel/2018/2018_30)

<sup>7</sup> Lueders, H., Hainmueller, J., & Lawrence, D. (2017). Providing driver's licenses to unauthorized immigrants in California improves traffic safety. *Proceedings of the National Academy of Sciences*, 201618991.

These few weaknesses do not, however, alter the very clear finding of our research that California’s strong prior approval system of auto insurance regulation has been the best in the nation for consumers. In prior studies, CFA has provided significant detail about the laws and regulations that have guided California to such extraordinary success.

A complete review of the history and structure of California’s auto insurance regulatory system is available in Part 2 of CFA’s 2013 “What Works” report on auto insurance, which is available at [https://consumerfed.org/pdfs/whatworks-report\\_nov2013\\_hunter-feltner-heller.pdf](https://consumerfed.org/pdfs/whatworks-report_nov2013_hunter-feltner-heller.pdf).

## 2. Hawaiian Drivers Have Benefited From a Strong Prior Approval System

While California has consistently stood out from the rest of the nation in CFA’s rate change analyses over the past 20 years, Hawaii has produced significant savings for consumers relative to the nation in recent years. Since 2010, Hawaii has seen average auto insurance expenditures decline, joined only by Alaska as states to see costs drop during the post-financial crisis period, when higher premiums were predicted as high rates of joblessness began their return toward historical norms. Though not as strikingly as in the past few years, as Figure 17 shows, Hawaiian auto insurance premiums have grown much less than the national average for a long time.

**Figure 17. Auto Insurance Expenditure Increases in Hawaii at Various Intervals Compared With 1989 Expenditures**

	1989-1998	1989-2005	1989-2010	1989-2015
<b>Percentage Change</b>	18.4%	25.2%	13.7%	13.6%
<b>Rank</b>	8 <sup>th</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>	2 <sup>nd</sup>
<b>Least Change During Interval</b>	-4.0% (California)	12.9% (California)	-0.3% (California)	12.5% (California)

Hawaii, which uses a prior approval system, has overseen its auto insurance market with a consumer protection orientation for many years. We believe that the consistent implementation of the state’s rate regulation rules has contributed to this success. We will further investigate Hawaii’s effective consumer protection in future research.

### C. Americans Have Overpaid for Auto Insurance by \$1 Trillion Since 1989. With Better Regulation They Could be Saving \$60 Billion per Year.

In this report we calculate the amount of money that Californians have saved since 1989 when voters imposed a prior approval regulation system on its auto insurance market. To do that, we calculate how much more drivers would pay for coverage had California voters not veered off the highway to high prices that California and the nation was on. If California premiums simply followed the rate increases endured by the country as a whole since 1989, that would have cost Californians \$154 billion more. But what if we invert that calculation and imagine how much would be saved by drivers if all other states had also adopted the California approach back in 1989?

As Figure 18 shows, we calculate that in 2015 premiums across the country would have been \$59.8 billion lower had other states employed a regulatory system that provides results that followed California’s consumer protection trajectory.

**Figure 18. Theoretical Annual Consumer Savings (in Millions) if State Adopted California-Style Oversight**

States	Savings	State	Savings	State	Savings
Alabama	\$909	Kentucky	\$1,230	North Dakota	\$200
Alaska	\$139	Louisiana	\$1,768	Ohio	\$1,670
Arizona	\$876	Maine	\$125	Oklahoma	\$1,091
Arkansas	\$753	Maryland	\$1,198	Oregon	\$880
California	N/A	Massachusetts	\$1,038	Pennsylvania	\$1,326
Colorado	\$1,134	Michigan	\$3,973	Rhode Island	\$231
Connecticut	\$536	Minnesota	\$1,096	South Carolina	\$1,115
Delaware	\$349	Mississippi	\$641	South Dakota	\$250
Dist. Of Columbia	\$74	Missouri	\$1,157	Tennessee	\$1,241
Florida	\$6,437	Montana	\$272	Texas	\$6,856
Georgia	\$2,235	Nebraska	\$583	Utah	\$670
Hawaii	\$7	Nevada	\$628	Vermont	\$90
Idaho	\$254	New Hampshire	\$92	Virginia	\$1,651
Illinois	\$1,901	New Jersey	\$886	Washington	\$1,617
Indiana	\$897	New Mexico	\$414	West Virginia	\$510
Iowa	\$613	New York	\$4,651	Wisconsin	\$907
Kansas	\$722	North Carolina	\$1,755	Wyoming	\$182

When we extend that hypothetical further and capture the total savings that would have accrued over the 27-year period since 1989, we reach a total of \$940 billion in savings across the country. Put differently, American drivers have overpaid for auto insurance for the past three decades to the tune of nearly one trillion dollars simply because their state has not been regulating in a strong and effective manner.

## IV. Recommendations and Conclusion

Americans spend nearly two hundred billion dollars on auto insurance each year, a significant portion of which is spent on liability coverage that state laws require drivers to purchase. Given the size of this market, and the unique circumstances stemming from the government mandate to buy insurance, policymakers and regulators should carefully and regularly assess the efficacy of the laws and regulations that govern auto insurance.

In this report, as we have in prior reports, we track the changes in auto insurance rates, competitiveness, and profits in each state in order to evaluate approaches to regulation and identify best practices. The data show that states requiring insurance companies to receive approval for rate changes prior to implementing them get better results for consumers – a slower pace of increases – than states with looser rules regarding hiking rates on customers. Further, prior approval states rank, on average, as generally more competitive than states operating under less regulatory scrutiny. Insurance company profits in prior approval states are marginally higher than the national average, which makes it difficult for insurers to argue that regulation is bad for business.

In particular, California’s robust consumer protection rules, which are built on a rigorous prior approval system, has consistently yielded the best results for consumers. Complementing California’s prior approval rate structure are a series of laws and regulations that incentivize safe driving and reduce discrimination. We note, as well, that California’s Department of Insurance has generally taken a pro-active approach to its responsibilities under the law, which sets California apart from many other states, including many with prior approval systems but less consumer-friendly results.

As policymakers and regulators look for ways to ensure the most protection for their own constituents, the California experience offers significant support for adopting a strong consumer protection approach to the insurance market. This approach includes,

- a prior approval approach to rate setting;
- incentivizing safe driving and loss reduction by requiring that customer premiums rely primarily on driving-related factors such as driving record and miles driven annually;
- preventing the pass through to consumers of inefficient company costs, such as bloated executive salaries, fines and penalties, and lobbying expenses;

- support for consumer involvement in the rate setting process; and
- full transparency in the ratemaking process.

As states around the country have long-maintained the policy of mandating the purchase of auto insurance, it is incumbent upon states to adopt best practices to ensure that coverage is priced in a fair and reasonable manner. This and prior research confirm that the question of how to best keep auto insurance rates down has been answered, and it is up to policymakers and regulators to implement these lessons.

## APPENDIX

### 1. Average Expenditure and Liability Average Premium (1989, 2015)

State	Average Expenditure		Liability Average Premium	
	1989	2015	1989	2015
Alabama	\$426.30	\$722.89	\$203.37	\$394.21
Alaska	\$560.27	\$872.39	\$330.64	\$539.68
Arizona	\$581.42	\$843.92	\$393.06	\$508.76
Arkansas	\$364.68	\$736.43	\$203.53	\$394.13
California	\$747.97	\$841.45	\$519.39	\$489.86
Colorado	\$515.31	\$857.44	\$317.43	\$520.04
Connecticut	\$740.02	\$1,048.56	\$473.31	\$650.94
Delaware	\$574.04	\$1,145.66	\$378.71	\$799.30
Dist. Of Columbia	\$796.72	\$1,190.39	\$465.93	\$626.82
Florida	\$610.21	\$1,185.25	\$420.61	\$857.64
Georgia	\$531.01	\$896.50	\$324.93	\$557.38
Hawaii	\$673.36	\$764.72	\$467.87	\$458.54
Idaho	\$348.31	\$573.83	\$203.02	\$344.29
Illinois	\$505.32	\$803.64	\$272.18	\$446.72
Indiana	\$426.29	\$666.24	\$236.17	\$382.68
Iowa	\$315.02	\$599.03	\$167.39	\$229.18
Kansas	\$340.76	\$698.45	\$179.90	\$358.24
Kentucky	\$375.71	\$801.97	\$219.63	\$529.21
Louisiana	\$571.96	\$1,231.77	\$375.19	\$775.83
Maine	\$434.84	\$617.73	\$237.00	\$338.87
Maryland	\$646.18	\$1,016.81	\$429.18	\$609.74
Massachusetts	\$728.39	\$1,058.50	\$426.77	\$606.04
Michigan	\$550.84	\$1,231.39	\$251.73	\$795.32
Minnesota	\$460.41	\$787.74	\$294.95	\$456.82
Mississippi	\$440.80	\$827.31	\$237.92	\$460.50
Missouri	\$430.05	\$745.04	\$233.33	\$415.88
Montana	\$336.04	\$692.50	\$198.36	\$386.29
Nebraska	\$284.86	\$681.54	\$148.96	\$363.63
Nevada	\$586.60	\$985.39	\$393.56	\$681.56
New Hampshire	\$609.13	\$775.03	\$320.65	\$400.56
New Jersey	\$982.93	\$1,265.69	\$649.73	\$869.57
New Mexico	\$443.76	\$762.56	\$266.51	\$488.03
New York	\$665.07	\$1,234.84	\$387.42	\$804.51

North Carolina	\$388.00	\$665.37	\$248.85	\$359.42
North Dakota	\$283.11	\$637.54	\$150.45	\$298.18
Ohio	\$447.73	\$702.59	\$255.37	\$397.11
Oklahoma	\$399.19	\$823.51	\$218.04	\$461.01
Oregon	\$466.29	\$828.03	\$295.33	\$584.13
Pennsylvania	\$646.03	\$878.18	\$438.89	\$499.06
Rhode Island	\$725.82	\$1,147.95	\$407.83	\$759.80
South Carolina	\$494.25	\$853.53	\$311.49	\$527.09
South Dakota	\$273.51	\$615.78	\$140.77	\$300.22
Tennessee	\$423.26	\$737.59	\$215.93	\$413.91
Texas	\$497.35	\$934.22	\$292.92	\$528.53
Utah	\$385.44	\$784.10	\$217.89	\$497.53
Vermont	\$423.43	\$680.18	\$212.99	\$343.12
Virginia	\$437.87	\$750.85	\$276.57	\$425.61
Washington	\$490.50	\$884.24	\$316.86	\$596.67
West Virginia	\$437.09	\$855.25	\$253.49	\$491.83
Wisconsin	\$392.46	\$664.81	\$225.83	\$374.37
Wyoming	\$318.28	\$656.64	\$152.84	\$321.04
<b>Countrywide</b>	<b>\$551.95</b>	<b>\$889.01</b>	<b>\$339.82</b>	<b>\$538.73</b>

## 2. Average Return on Net Worth (1989-2016)

State	RONW	State	RONW	State	RONW
Alabama	8.39%	Kentucky	4.52%	North Dakota	9.21%
Alaska	9.80%	Louisiana	2.63%	Ohio	10.83%
Arizona	8.86%	Maine	13.04%	Oklahoma	6.24%
Arkansas	6.25%	Maryland	9.61%	Oregon	10.83%
California	10.46%	Massachusetts	7.50%	Pennsylvania	7.89%
Colorado	6.29%	Michigan	3.45%	Rhode Island	10.44%
Connecticut	10.86%	Minnesota	9.88%	South Carolina	3.11%
Delaware	6.29%	Mississippi	5.06%	South Dakota	6.67%
Dist. Of Columbia	12.79%	Missouri	8.04%	Tennessee	7.46%
Florida	5.47%	Montana	6.82%	Texas	6.26%
Georgia	5.25%	Nebraska	7.10%	Utah	10.11%
Hawaii	16.63%	Nevada	3.09%	Vermont	12.13%
Idaho	11.74%	New Hampshire	12.54%	Virginia	10.11%
Illinois	8.97%	New Jersey	6.71%	Washington	7.98%
Indiana	8.93%	New Mexico	9.80%	West Virginia	6.75%
Iowa	9.62%	New York	8.40%	Wisconsin	9.48%
Kansas	7.42%	North Carolina	6.46%	Wyoming	9.58%

### 3. Herfindahl-Hirschman Index (HHI) by State

State	HHI	State	HHI	State	HHI
Alabama	1183	Kentucky	1164	North Dakota	741
Alaska	1749	Louisiana	1667	Ohio	854
Arizona	863	Maine	703	Oklahoma	1067
Arkansas	1085	Maryland	1322	Oregon	976
California	723	Massachusetts	1092	Pennsylvania	1008
Colorado	940	Michigan	1006	Rhode Island	1012
Connecticut	770	Minnesota	1116	South Carolina	1153
Delaware	1299	Mississippi	1153	South Dakota	819
Dist. Of Columbia	1928	Missouri	1038	Tennessee	1066
Florida	1191	Montana	1085	Texas	839
Georgia	1003	Nebraska	999	Utah	786
Hawaii	1393	Nevada	900	Vermont	760
Idaho	822	New Hampshire	786	Virginia	1038
Illinois	1335	New Jersey	1016	Washington	825
Indiana	938	New Mexico	1038	West Virginia	1319
Iowa	1011	New York	1504	Wisconsin	946
Kansas	902	North Carolina	887	Wyoming	1208

### 4. Other Data Reviewed (Table 1)

State	% in Residual Market (2015)	% Uninsured (2015)	Average Auto Repair Costs (2013)	Liability Regime	Seat Belt Law	Maximum Speed Limit
Alabama	0.00%	18.4	\$2,671	tort	Primary (P)	70
Alaska	0.00%	15.4	\$3,049	tort	P	65
Arizona	0.00%	12.0	\$2,368	tort	Secondary (S)	75
Arkansas	0.00%	16.6	\$3,100	add-on	P	70
California	0.04%	15.2	\$2,289	tort	P	70
Colorado	0.00%	13.3	\$2,658	tort	P	75
Connecticut	0.01%	9.4	\$3,046	tort	P	65
Delaware	0.00%	11.4	\$2,436	no fault	P	65
Dist. Of Columbia	0.12%	15.6	\$1,747	no fault	P	55
Florida	0.00%	26.7	\$2,452	no fault	P	70
Georgia	0.00%	12.0	\$2,364	tort	P	70
Hawaii	0.69%	10.6	\$1,951	no fault	P	60
Idaho	0.00%	8.2	\$2,883	tort	S	80
Illinois	0.01%	13.7	\$2,600	tort	P	65

Indiana	0.00%	16.7	\$2,611	tort	P	70
Iowa	0.00%	8.7	\$2,736	tort	P	70
Kansas	0.13%	7.2	\$2,871	no fault	P	70
Kentucky	0.03%	11.5	\$2,498	no fault	P	70
Louisiana	0.00%	13.0	\$2,838	tort	P	70
Maine	0.00%	4.5	\$2,378	tort	P	75
Maryland	2.25%	12.4	\$2,272	add-on	P	65
Massachusetts	2.63%	6.2	\$2,297	no fault	S	65
Michigan	0.20%	20.3	\$2,474	no fault	P	70
Minnesota	0.00%	11.5	\$2,646	no fault	P	70
Mississippi	0.00%	23.7	\$2,526	tort	P	70
Missouri	0.00%	14.0	\$2,565	tort	S	70
Montana	0.00%	0.1	\$3,218	tort	P	75
Nebraska	0.00%	6.8	\$3,145	tort	S	75
Nevada	0.00%	10.6	\$2,291	tort	S	75
New Hampshire	0.04%	9.9	\$2,236	tort	P	65
New Jersey	1.00%	14.9	\$2,783	no fault	P	65
New Mexico	0.00%	20.8	\$2,539	tort	P	75
New York	0.91%	6.1	\$3,278	no fault	P	65
North Carolina	31.04%*	6.5	\$2,243	tort	P	70
North Dakota	0.00%	6.8	\$2,797	no fault	P	75
Ohio	0.00%	12.4	\$2,514	tort	S	70
Oklahoma	0.00%	10.5	\$2,971	tort	P	75
Oregon	0.00%	12.7	\$2,251	tort	P	65
Pennsylvania	0.08%	7.6	\$2,542	no fault	S	70
Rhode Island	3.33%	15.2	\$3,325	tort	P	65
South Carolina	0.00%	9.4	\$2,261	tort	P	70
South Dakota	0.00%	7.7	\$3,187	add-on	P	75
Tennessee	0.00%	20.0	\$2,665	tort	S	70
Texas	0.02%	14.1	\$2,595	tort	P	70
Utah	0.00%	8.2	\$2,502	no fault	P	75
Vermont	0.04%	6.8	\$2,500	tort	S	65
Virginia	0.02%	9.9	\$1,927	tort	S	70
Washington	0.00%	17.4	\$2,394	add-on	P	70
West Virginia	0.00%	10.1	\$2,834	tort	S	70
Wisconsin	0.00%	14.3	\$2,601	add-on	P	65
Wyoming	0.00%	7.8	\$3,356	tort	S	75

\* NC data reflect state's reinsurance facility, which is not a traditional residual market.

Source: NAIC Auto Insurance Database Report 2014/15, except Residual Market Data uses NAIC and AIPSO data, and uninsured data are from Insurance Research Council *Uninsured Motorists, 2017 Edition*

## 5. Other Data Reviewed (Table 2)

State	Traffic Density (2015)*	Urban Residents as % of Population (2010)**	Disposable per Capita Income (000s) (2014)^	Car Thefts per 1,000 Vehicles (2014)^
Alabama	0.64	71.5%	\$34	1.93
Alaska	0.31	67.4%	\$50	2.26
Arizona	0.95	92.5%	\$34	3.25
Arkansas	0.33	60.3%	\$34	2.09
California	1.48	97.7%	\$44	5.45
Colorado	0.55	86.3%	\$44	2.71
Connecticut	1.45	91.4%	\$56	2.2
Delaware	1.50	78.0%	\$40	1.37
Dist. Of Columbia	2.35	100.0%	\$60	11.47
Florida	1.64	91.4%	\$38	2.85
Georgia	0.87	81.0%	\$35	3.38
Hawaii	2.29	70.1%	\$42	2.87
Idaho	0.33	65.6%	\$34	0.98
Illinois	0.72	87.0%	\$42	1.74
Indiana	0.82	78.3%	\$36	2.39
Iowa	0.28	56.5%	\$40	1.22
Kansas	0.22	68.3%	\$42	2.82
Kentucky	0.60	58.2%	\$33	1.56
Louisiana	0.79	74.6%	\$38	2.62
Maine	0.62	58.4%	\$37	0.7
Maryland	1.76	94.6%	\$47	3.34
Massachusetts	1.58	99.6%	\$50	1.7
Michigan	0.80	81.3%	\$36	2.69
Minnesota	0.41	74.9%	\$43	1.68
Mississippi	0.52	81.3%	\$36	2.22
Missouri	0.54	74.5%	\$37	3.16
Montana	0.16	35.2%	\$36	1.46
Nebraska	0.21	58.7%	\$43	2.35
Nevada	0.21	90.1%	\$36	4.7
New Hampshire	0.80	62.2%	\$48	0.69
New Jersey	1.92	100.0%	\$50	1.74
New Mexico	0.37	66.6%	\$33	3.37
New York	1.13	91.9%	\$47	1.49
North Carolina	1.02	70.3%	\$35	1.77
North Dakota	0.12	48.4%	\$51	1.82
Ohio	0.92	80.6%	\$37	1.79

Oklahoma	1.00	64.2%	\$41	3.12
Oregon	0.47	77.7%	\$36	2.87
Pennsylvania	0.83	84.1%	\$42	1.29
Rhode Island	1.27	100.0%	\$43	2.2
South Carolina	0.65	76.5%	\$33	3.31
South Dakota	0.11	45.3%	\$42	1.07
Tennessee	0.76	73.4%	\$37	2.36
Texas	0.23	87.8%	\$41	3.35
Utah	0.60	88.6%	\$34	3.51
Vermont	0.50	33.8%	\$42	0.42
Virginia	1.08	86.1%	\$44	1.1
Washington	0.71	87.7%	\$45	4.96
West Virginia	0.49	55.7%	\$32	1.27
Wisconsin	0.52	72.8%	\$39	1.96
Wyoming	0.33	29.7%	\$50	0.76

\* Density = Millions of Miles Driven Per Mile of Road, Source: Federal Highway Administration

\*\*Source: U.S. Census Bureau

^ Source: NAIC Auto Insurance Database Report 2014/15