Uninsured and Underinsured Motorists:
Trends In Policy and Enforcement

FINAL REPORT 548

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16. Abstract

The Insurance Research Council (IRC, an industry research group) estimated Arizona's uninsured motorist rate at an average 16% for the years 1995 to 1997. The Arizona Department of Transportation (ADOT) puts the number today at half that figure.

Depending on the number used, the economic costs of motor vehicle accidents involving uninsured motorists in Arizona in 2002 were an estimated $240.45 million to $480.89 million.

Of equal concern, motorists with minimum motor vehicle liability insurance create, on average, an estimated $37,100 in economic costs for each person they injure who is incapacitated, plus an estimated $2,200 for each person they injure who is not incapacitated – after policy limits have been exhausted.

In fact, if every Arizona driver were insured, but had just $15,000 per person bodily injury liability limits, injured accident victims would have a one in ten chance that over 70% of the economic costs of their injuries would not be covered by insurance.

According to a 1994 study by the National Highway Traffic Safety Administration (NHTSA), an estimated 40.1% of the total economic costs of motor vehicle accidents in Arizona are passed on to the public and the state. Uninsured and underinsured motorists are major contributors to those costs.

This report examines what states have done and what different interest groups have put forth to ensure the availability of compensation to accident victims.

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SI (MODERN METRIC) CONVERSION FACTORS*

APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
	LENGTH			
in	inches	25.4	millimeters	mm
ft	feet	0.305	meters	m
yd	yards	0.914	meters	m
mi	miles	1.61	kilometers	km
	AREA			
in^2	square inches	645.2	square millimeters	mm^2
ft^2	square feet	0.093	square meters	m^2
yd^2	square yards	0.836	square meters	m^2
ac	acres	0.405	hectares	ha
mi^2	square miles	2.59	square kilometers	km^2
	VOLUME			m
fl oz	fluid ounces	29.57	milliliters	mL
gal	gallons	3.785	liters	L
ft^3	cubic feet	0.028	cubic meters	m^3
yd^3	cubic yards	0.765	cubic meters	m^3
	NOTE: Volumes greater than 1000L shall be shown in m^3.			
	MASS			
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000lb)	0.907	megagrams (or "metric ton")	mg (or "t")
	TEMPERATURE (exact)			
°F	Fahrenheit temperature	5(F-32)/9 or (F-32)/1.8	Celsius temperature	°C
	ILLUMINATION			
fc	foot candles	10.76	lux	lx
fl	foot-Lamberts	3.426	candela/m^2	cd/m^2
	FORCE AND PRESSURE OR STRESS			
lbf	poundforce	4.45	newtons	N cd/m
lbf/in^2	poundforce per square inch	6.89	kilopascals	kPa

APPROXIMATE CONVERSIONS FROM SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
	LENGTH			
mm	millimeters	0.039	inches	in
m	meters	3.28	feet	ft
m	meters	1.09	yards	yd
km	kilometers	0.621	miles	mi
	AREA			
mm^2	Square millimeters	0.0016	square inches	in^2
m^2	Square meters	10.764	square feet	ft^2
^{2}	Square meters	1.195	square yards	yd^2
ha	hectares	2.47	acres	ac
km^2	Square kilometers	0.386	square miles	mi^2
	VOLUME			
mL	milliliters	0.034	fluid ounces	fl oz
L	liters	0.264	gallons	gal
m^3	Cubic meters	35.315	cubic feet	ft^3
m^3	Cubic meters	1.308	cubic yards	yd^3
	MASS			
g	grams	0.035	ounces	oz
kg	kilograms	2.205	pounds	lb
Mg	megagrams (or "metric ton")	1.102	short tons (2000lb)	T
	TEMPERATURE (exact)			
°C	Celsius temperature	1.8C + 32	Fahrenheit temperature	°F
	ILLUMINATION			
lx	lux	0.0929	foot-candles	fc
^{2}	candela/m^2	0.2919	foot-Lamberts	fl
	FORCE AND PRESSURE OR STRESS			
N	newtons	0.225	poundforce	lbf
kPa	kilopascals	0.145	poundforce per square inch	lbf/in^2

SI is the symbol for the International System of Units. Appropriate rounding should be made to comply with Section 4 of ASTM E380

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

GLOSSARY OF ACCRONYMS

AAA	Automobile Association of America
AAMVA	American Association of Motor Vehicle Administrators
ACLU	American Civil Liberties Union
ADOI	Arizona Department of Insurance
ADOT	Arizona Department of Transportation
ARP	Assigned Risk Pool
ARS	Arizona Revised Statutes
ATRC	Arizona Transportation Research Center
BI	Bodily Injury
BTS	Bureau of Transportation Statistics
DES	Data Encryption Standard
DMV	Department of Motor Vehicles
DUI	Driving Under the Influence
FARS	Fatal Accident Reporting System
GTA	Georgia Technology Authority
IICMVA	Insurance Industry Committee on Motor Vehicle Administration
IIES	Insurance Information and Enforcement System
III	Insurance Information Institute
IRC	Insurance Research Council
IRS	Internal Revenue Service
ISO	International Organization for Standardization
JAKE	Jointly Administered Knowledge Environment
JSTOR	Journal Storage
JUA	Joint Underwriting Association
LCLB	Low-Cost/Low-Benifit
MVA	Motor Vehicle Administration
MVD	Motor Vehicle Division
NHTS	National Highway Transportation Safety Administration
NJ	New Jersey
OCR	Optical Character Recognition
PPA	Private Passenger Automobile
RF	Radio Frequency
RSA	Rivest, Shamir, Adleman
SPSS	Statistical Package for the Social Sciences
U.S. DOT	U.S. Department of Transportation
UIM	Underinsured Motorist
UM	Uninsured Motorist
VIN	Vehicle Identification Number

Executive summary

The Insurance Research Council (IRC), an industry research group, estimated Arizona's uninsured motorist (UM) rate at an average 16% for the years 1995 to 1997. The Arizona Department of Transportation (ADOT) puts the number today at half that figure.

Depending on the number used, the economic costs of motor vehicle accidents involving uninsured motorists in Arizona in 2002 were an estimated $240.45 million to $480.89 million.

Of equal concern, motorists with minimum motor vehicle liability insurance create, on average, an estimated $37,100 in economic costs for each person they injure who is incapacitated, plus an estimated $2,200 for each person they injure who is not incapacitated – after policy limits have been exhausted.

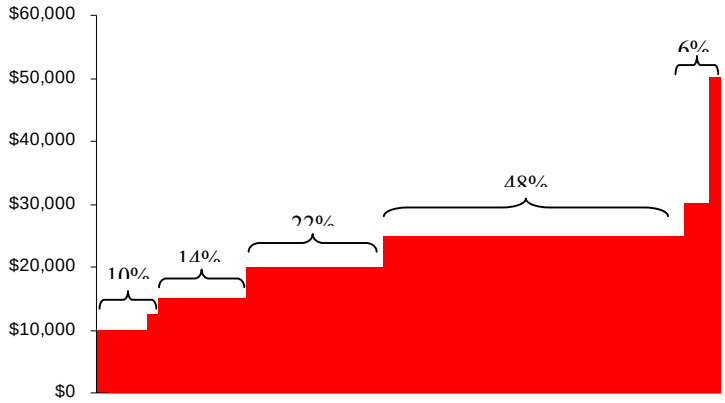

Figure 1. Minimum Per Person Liability Limits

In fact, if every Arizona driver were insured, but had just $15,000 per person bodily injury liability limits, injured accident victims would have a one in 10 chance that over 70% of the economic costs of their injuries would not be covered by insurance.[1]

According to a 1994 study by the National Highway Traffic Safety Administration (NHTSA), an estimated 40.1% of the total economic costs of motor vehicle accidents in Arizona are passed on to the public and the state.[2] Uninsured and underinsured motorists are major contributors to those costs.

This report examines what states have done and what different interest groups have put forth to ensure the availability of compensation to accident victims.

[1] Breakdown of injured persons was calculated from ADOT data.
[2] "The Economic Cost of Motor Vehicle Crashes, 1994," Blincoe, Lawrence J.; *National Highway Traffic Safety Administration, U.S. Dept. of Transportation*

KEY FINDINGS

- A study published in the *Journal of Insurance Regulation* found that compulsory insurance laws with higher minimum liability limits, higher fines and requirements that insurers notify states when policyholders cancel coverage are associated with lower uninsured motorist rates. Several other studies have found that as the cost of insurance goes up, so does the uninsured motorist rate. Figure 2 below shows the average uninsured motorist percentage as estimated by the IRC at different minimum bodily injury liability limits (i.e., $10,000/20,000, $15,000/30,000, etc.).

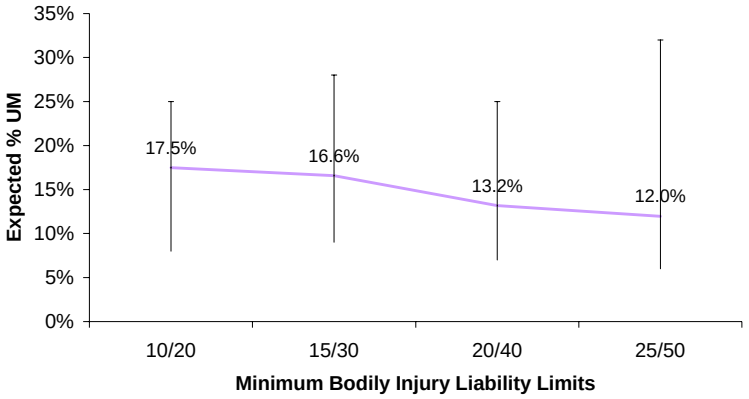

Figure 2. Average Uninsured Motorist Rate By Coverage Level

- The number of uninsured motorists has little effect on insurance rates. Even cutting the uninsured motorist rate in half – a significant accomplishment – would reduce overall premiums less than 10%.

- Arizona's average cost for private passenger automobile (PPA) liability insurance in 2000 was the 14th highest in the nation, yet its PPA loss ratio was much lower than the national average – making the state relatively more profitable for insurers. In 2000, Arizona's PPA liability loss ratio was 67.52%. The national average was. 75.2%.

- According to the Insurance Information Institute (III), an industry research group, property damage payments in general account for 50% of premium dollars, with property damage liability payments (i.e., damage to property owned by others caused by the policy holder) accounting for 19%. Insurers' largest expense is commissions and other selling costs, at 16%. Other select costs are:

  Claimants' lawyers fees: 6.7%
  Insurers' lawyers fees: 6.3%
  Payments for economic damages: 12%
  Payments for non-economic damages: 6%

- Number estimates of uninsured motorists are unreliable. The most reliable method, database matching of insurance with registration records, is not widely used.

- Of the many variables examined for this report, those that correlated with the IRC uninsured motorist rate are listed in Table 1 below in rank order from strongest to weakest. A plus (+) sign indicates that the two rise and fall together. A minus (–) sign indicates that an increase in one is accompanied by a decrease in the other (-). Significance is the level of statistical significance of the relationship. (For Statistical Package for the Social Sciences (SPSS) output, see Output 1, Appendix.)

Table 1. Correlation With IRC % Uninsured Motorist '95-'97 Average

Rank	Variable	Relationship	Significance
1	Uninsured Motorist Offer Language Specified	-	99%
2	2000 Census % of Population Minority	+	99%
3	Underinsured Motorist (UIM) Offer Language Specified	-	95%
4	Reinstate Registration Charge	+	95%
5	Reinstate License Charge	+	95%
6	Insurance Information Institute Per Person Minimum Insurance Information Institute Per Accident Minimum	- -	99% 99%
7	Insurance Information Institute 2000 Voluntary Insured Private Passenger Automobile	+	99%
8	2001 Bureau of Transportation Statistics (BTS) registered private truck	+	99%
9	2001 BTS registered private auto	+	95%
11	Insurance Information Institute Property Minimum	-	95%
12	Insurance Information Institute UM Compulsory	-	95%
13	2000 Census % of Population Urban	+	95%

- Uninsured motorists are more likely to be young men, Hispanic or African American, with more vehicles but less education, income or stability than insured motorists. They are also more likely than not to own at least one insured vehicle.

- At least one study found potential insurer discrimination against low-income and minority motorists. Motorists living in mostly minority zip codes were two to three times more likely to have been denied coverage and wind up in the nonstandard or involuntary markets than motorists living in mostly nonminority zip codes, even after controlling for income, and even though minority drivers were no more likely to have been in motor vehicle accidents than nonminority drivers.

- Both legal and illegal immigrants may be unable to buy insurance if they are unable to obtain a driver's license. Some states accept identification other than a Social Security Number, such as a tax ID number issued by the IRS. States also issue driver's licenses that identify the holder as a noncitizen. Noncitizen driver's licenses have been politically contentious in California, which has a large immigrant population and a vocal anti-immigration movement.

- Low-income residents are most affected by uninsured motorists because they are less likely to have collision coverage or uninsured motorist coverage; or disability, health or life insurance.

- Requirements to provide proof of insurance at registration can easily be thwarted by buying insurance, registering, then canceling insurance. Insurance verification databases, however, have cut short the time that motorists can get away with this. Properly designed and executed, database systems are overwhelmingly superior to other methods of catching uninsured motorists. (See Figure 3 below.)

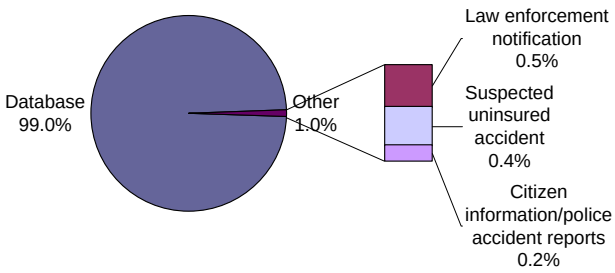

Figure 3. Percent of Uninsured Motorist Notices Issued By Method, Virginia 2002

- Some penalties prevent or deter uninsured motorists from becoming insured, such as insurer surcharges – which can be as high as 30%. Insurers may also decline coverage to those previously uninsured. Some states have banned these practices.

KEY RECOMMENDATIONS

Increase motor vehicle liability insurance requirements in one or more of the following ways:

- Raise per person and per accident minimum insurance requirements
- Double per person minimum insurance requirements
- Make uninsured motorist coverage compulsory
- Make underinsured motorist coverage compulsory

Work to improve the insurance verification database:

- Include data needed for matching, such as driver's license, named insureds, title and commercial motor carrier Vehicle Identification Number (VIN).
- Provide prior violation information to law enforcement agencies and courts.
- Notify owners who do not reregister their vehicles that they are responsible for registration and late fees until they turn in plates, transfer title, or provide proof the vehicle is registered in another state.

Remove obstacles to becoming insured:

- Prohibit insurers from declining coverage or imposing surcharges on previously uninsured motorists.

Introduction

BACKGROUND

This report was prepared for the Arizona Department of Transportation (ADOT), to explore options for dealing with the problems of uninsured and underinsured motorists.

Reducing the numbers of uninsured and underinsured motorists would shift costs:

- From the state and the public to insurers
- From health insurers to motor vehicle liability insurers
- From victims to at-fault drivers

It would also increase coverage available to victims of motor vehicle accidents.

All of these outcomes are considered desirable.

An additional, and potentially competing, goal is to have motor vehicle liability insurance be as inexpensive as possible. Although maybe not a position insurers would support, this would be a desirable outcome for the public and the state.

SCOPE

Funding for this research project was $15,000. Reviews of academic, government and industry literature as well as Arizona statutes and regulations were conducted. Three email surveys were developed: two to state motor vehicle departments and one to state departments of insurance. Final deliverables are this report and a separate PowerPoint presentation.

METHODOLOGY

The Project Manager was John Semmens of the ADOT Arizona Transportation Research Center (ATRC). The Project Researcher was Lisa Markkula of Marketing Intelligence, LLC.

Literature review included academic journals, business association and company websites, government reports, industry publications, newspapers and publicly available data. Principal sources of secondary data include the Arizona Department of Transportation, the Bureau of Transportation Statistics (BTS), the Insurance Information Institute (III), the Insurance Research Council (IRC), the National Highway Transportation Safety Administration (NHTSA) and the United States Census. A bibliography is attached.

Literature searches used the United States Department of Transportation's TRIS Online, the Library of Congress' Thomas system, the University of Arizona's Sabio information gateway, Lexis-Nexis (a law related database), JSTOR (an electronic journals database),

JAKE (a database index of other databases), Google, EBSCO (the Elton B. Stephens Company general journals database), ABI/Inform (an academic and business publications database), and other sources/search engines. Legal searches used Arizona's ALIS Online and the University of Arizona's law library.

From issues raised in the literature review, survey questions were developed and submitted for approval prior to distribution via email. The survey was distributed to various state agencies.

Survey results were analyzed alongside secondary data using descriptive statistics, frequencies, nonparametric testing methods and simple and multiple regression. Quantitative analysis had three goals:

- Provide a picture of what states are doing and have done.
- Look for variables that move with or counter to the uninsured motorist rate and for relationships between them.
- Look for variables that move with or counter to liability expenditures and for relationships between them.

OVERVIEW

This report has seven sections:

- Executive Summary
- Introduction
- Legal Review
- Literature Review
- Quantitative Analysis
- Conclusions and Recommendations
- Appendix

The literature review section contains the most in-depth discussions of issues, including:

- Compulsory insurance
- Uninsured motorists' cost to the state
- Characteristics of uninsured motorists
- Estimating the number of uninsured
- Immigration issues
- Factors affecting compliance with compulsory insurance laws
- Factors affecting the cost of motor vehicle liability insurance
- No-fault and choice vs. the tort system
- Equity issues
- Penalties
- Enforcement
- New technologies for use in enforcement
- Database tracking of insurance status for use in enforcement
- Alternative funding mechanisms

The conclusions and recommendations section makes suggestions for consideration and briefly discusses their costs and benefits.

The Appendix contains statistical output from Statistical Package for the Social Sciences (SPSS), a statistical software package, and other attachments too detailed to include in the body of the report.

Legal Review

MOTOR VEHICLE INSURANCE IN ARIZONA

In Arizona, drivers are financially responsible for accidents they cause. Motor vehicle liability insurance protects against this risk.

With few exceptions, state law requires owners of vehicles operated on Arizona highways to maintain liability insurance or deposit $40,000 with the Arizona Treasurer. To meet the requirements, a motor vehicle liability policy must provide coverage in the following amounts:

- $15,000 for bodily injury or death of one person
- $30,000 for bodily injury or death of two or more people (per accident).
- $10,000 for property damage

The remainder of this report will use the term "15/30/10" to refer to these coverage amounts. This report will describe other liability coverage rates in a similar fashion, e.g., "X/Y/Z" (or in some cases, simply "X/Y" to refer to the first two liability categories).

In policies with higher limits, only the first 15/30/10 is the “motor vehicle liability policy”; the rest is additional or excess coverage.

Commercial motor carriers are required to maintain higher motor vehicle liability limits, which vary according to weight, passenger capacity, and cargo.

Failure to comply with financial responsibility requirements exposes offenders to civil penalties.

Liability insurance protects the public. Other coverage protects the insured. Uninsured motorist coverage (UM) applies when an at-fault uninsured motorist injures occupants of a vehicle with uninsured motorist coverage. If the at-fault driver is insured, but coverage is insufficient to compensate for damages, then underinsured motorist coverage (UIM) applies.

In accidents where more than one policy provides coverage, the policy that covers the vehicle is considered primary and policies that cover the driver or passengers are secondary or excess. Primary coverage must pay its limits before secondary coverage can apply. uninsured motorist coverage is a primary coverage, but underinsured motorist coverage is a secondary coverage. In fact, underinsured motorist coverage pays only after all other available coverage – secondary as well as primary – has been exhausted. uninsured motorist and underinsured motorist coverage in the same policy cannot be “stacked.” One or the other may apply, but not both.

Liability insurance, uninsured motorist coverage and underinsured motorist coverage are all based on fault. They pay nothing to those 100% responsible for causing an accident.

No-fault insurance is not available in Arizona, but some types of coverage do provide compensation regardless of who caused the accident. Medical payments coverage ("med pay") pays medical bills for covered persons. Collision and comprehensive coverages pay repair or replacement costs for covered vehicles.

UNINSURED AND UNDERINSURED MOTORISTS

An uninsured motorist is a legal construct determined by statute, policy language, and case law. It varies state to state and even policy to policy. Because people don't always drive or ride in their own vehicles, motor vehicle liability insurance, uninsured motorist and underinsured motorist coverage can follow the insured, the vehicle or both. Drivers of uninsured vehicles may be insured under their own policies. Passengers in uninsured vehicles may be insured under the driver's policy or under their own policies.

Denial of coverage or insurer insolvency creates uninsured motorists. Another culprit is the hit-and-run driver. If an at-fault driver or vehicle cannot be identified, an uninsured motorist is considered to have caused the accident – although both driver and vehicle may have been insured.

Thus, uninsured motorists include:

- People without insurance driving vehicles that are not insured.
- People with insurance driving vehicles they own that are not insured.
- People driving vehicles where the person and/or the vehicle is insured, but coverage is denied.
- People driving vehicles where the person and/or the vehicle is insured, but the insurer is insolvent.
- People who cause an accident and whose identities are unknown, regardless of whether they or the vehicle are insured (hit-and-run drivers).

If state law determines who is uninsured, then settlement or award determines who is underinsured. Accident victims forego the right to recover underinsured motorist claims if they settle for less than policy limits with a negligent party. At that point, no matter how severe their injuries, they are no longer underinsured under the terms of the policy.

From a public policy standpoint, however, underinsured motorists include people with insurance insufficient to:

- Protect their assets.
- Compensate others for property damage, bodily injury, or death for which they are at fault.
- Compensate themselves, their passengers, or their heirs for property damage, bodily injury or death for which others are at fault.

REGULATORY AND ENFORCEMENT AGENCIES

In Arizona, the following agencies and entities are involved in ensuring that financial responsibility requirements are met:

- Arizona Department of Transportation (ADOT).
- Motor Vehicle Division (MVD, a division of ADOT).
- Arizona Department of Insurance (ADOI).
- Insurers.
- Law enforcement agencies.
- Courts.

MVD requires proof of insurance at vehicle registration and denies registration unless proof is presented. It also maintains a database of registration and insurance information and issues enforcement letters to registered owners of vehicles suspected of being uninsured, notifying them that their registrations and drivers' licenses will be suspended if proof of insurance is not provided within 15 days. If proof is not provided, MVD must suspend registration and plates, which cannot be reinstated until proof is presented.

Insurers are required to report to MVD within seven days of any changes to customers' insurance policies. This includes cancellation, new issue, nonrenewal or vehicle additions. ADOI enforces compliance with this requirement. After a hearing, it must fine insurers a maximum of $250 per day per violation and may suspend their authorization to do business in Arizona unless failure to comply was accidental or inadvertent.

ADOI also authorizes insurers to do business in Arizona, licenses insurance agents, performs financial examinations of insurers, reviews insurer product and rate applications, and surveys market conduct. It has investigative, enforcement, and regulatory powers. In addition to imposing fines, it can accept or reject applications for new products and rates, as well as deny, revoke or suspend an insurer's authorization to do business in Arizona or an insurance agent's license.

Law enforcement officers are required to check MVD's database for insurance and registration information and ask for proof of insurance at accident and violation investigations. Unless proof is presented, they must issue citations if the database does not show insurance or registration.

STATUTES AND REGULATIONS

Enforcement is governed by statute and regulation. Unfortunately, there are inconsistencies between the two. Inconsistent regulations are listed in the Conclusions and Recommendations section and described in the Appendix.

Literature Review

COMPULSORY INSURANCE LAWS

Liability insurance is compulsory in 47 states and the District of Columbia. In addition, 18 states require uninsured motorist coverage. Twelve states, including Arizona, have minimum liability limits less than or equal to $15,000 per person, $30,000 per accident. Figure 4 below shows the percent of states at different minimum per person liability limits. [3]

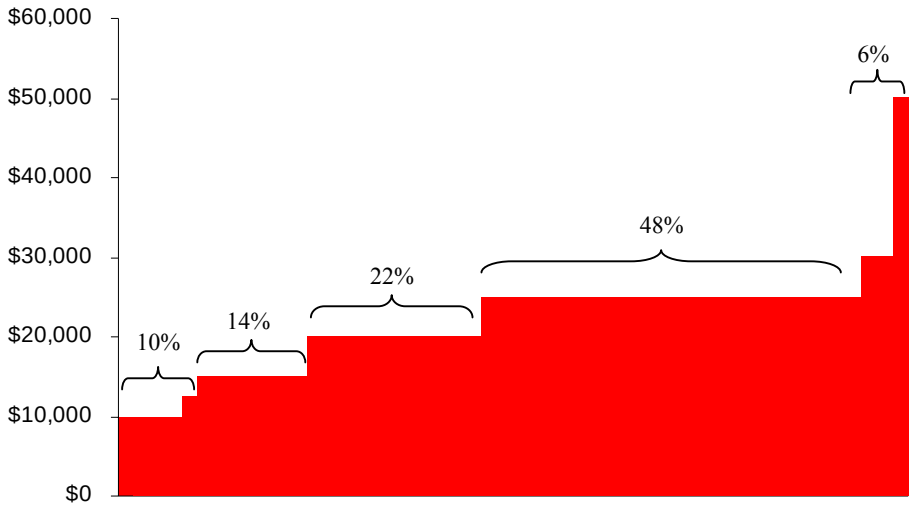

Figure 4. Minimum Per Person Liability Limits

Table 2 below shows the actual breakdown by state.

Table 2. Minimum Per Person Liability Limits By State

$10,000	$12,500	$15,000	$20,000	$25,000	$30,000	$50,000
FL, LA, MS, OK	OH	AZ, CA, DE, NJ*, NV, PA, SC*	AK, AL, CT*, HI, IA, IL*, MA*, MD*, MI, TX, WV	AR, CO, GA, ID, IN, KS*, KY, MO*, MT, ND*, NE, NH*, NM, NY*, OR*, RI*, SD*, TN, UT, VA*, VT*	MN*, NC	ME*

An asterisk (*) indicates states that require uninsured motorist coverage.

Included in both Figure 4 and Table 2 are the three states without compulsory insurance laws: New Hampshire, Tennessee, and Wisconsin. Although these states do not require insurance, they do require that motorists be able to pay minimum liability limits in the event of an accident.

[3] Source: Insurance Information Institute; March 2003

COSTS TO THE STATE OF UNINSURED AND UNDERINSURED MOTORISTS

Motor vehicle liability insurance protects the public from the economic consequences of motor vehicle accidents. To the extent that it is sufficient to compensate victims, it protects policyholders from losing their assets to the people they have harmed. Without insurance, or without enough insurance, substantial costs are passed along to the public and the state.

Total costs of motor vehicle accidents are very difficult to estimate, particularly non-economic costs, which may be the most devastating for victims and their families. For seriously injured victims, the sudden loss of function and independence and the family's new role as caretaker both create considerable stress. Alcoholism, depression, divorce, dropping out of school, drug dependence, and suicide all can result from the emotional consequences of a life-changing injury.

Injuries need not be life-threatening to be life changing. Disfigurement may not have serious medical consequences; yet have serious emotional and psychological consequences. Chronic pain can limit activities for years. Although pain and suffering are called non-economic costs, their effects can and do create economic costs for society. Policy makers should keep in mind that economic costs are not total costs. Both tangible and intangible costs should be considered when making policy.

Economic costs alone are significant. The National Highway Traffic Safety Administration of the United States Department of Transportation estimated that, in 1994, economic costs of motor vehicle accidents in Arizona were $2.5 billion, for a per capita cost of $623, the 12th highest in the nation. Of that, the report estimates that 40% of the cost was borne by the public; 46% by insurers; and 14% by other sources.[4] Forty percent would mean a $1 billion or $250 per capita burden on the public and the state.[5]

The Arizona Department of Transportation (ADOT) estimates that, in 2002, economic costs of motor vehicle accidents in Arizona were $3 billion (rounding), for a per capita cost of $549.[6] If costs were distributed as in the 1994, NHTSA analysis, this would mean a $1.2 billion or $220 per capita burden on the public and the state.

According to the Insurance Research Council, from 1995 to 1997, Arizona's estimated average uninsured motorist rate was 16%. This estimate (the IRC uninsured motorist rate) has been used throughout this report to enable comparative analysis with other states. Problems in estimating the uninsured motorist rate are described later.

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[4] Other sources include "costs absorbed by health care providers or charities."
[5] "The Economic Cost of Motor Vehicle Crashes, 1994," Blincoe, Lawrence J.; *National Highway Traffic Safety Administration, U.S. Dept. of Transportation*
[6] "2002 Motor Vehicle Crash Facts for Arizona," Motor Vehicle Crash Statistics Unit; *Arizona Dept. of Transportation*

Multiplying economic costs by 16% gives a crude estimate of the economic costs of motor vehicle accidents in Arizona involving uninsured motorists: $481 million. Alternatively, using ADOT's estimate of 8% gives us $240 million.

The importance of uninsured motorist coverage can be demonstrated by comparing two scenarios: one where no one carries uninsured motorist insurance and one where every insured motorist carries uninsured motorist insurance.

Without uninsured motorist coverage, there is a 16% chance that there will be no coverage for a motor vehicle accident. If this were the case, $88 of the $220 per capita figure would be caused by uninsured motorists. Sixteen percent of the driving public would create 40% of the burden on the public and the state.

With compulsory uninsured motorist coverage, the chance that there will be no coverage drops to 2.6%. If this were the case, $14 of the $220 per capita figure would be due to uninsured motorists. Sixteen percent of the driving public would create 6.4% of the burden on the public and the state.[7]

These simple scenarios prove another point. Uninsured motorists cannot have caused the entire $220 per capita burden.

In Arizona, minimum per person liability limits are not sufficient to cover estimated average economic costs for more than half of all people injured in motor vehicle accidents in the state. According to ADOT, the estimated average economic cost of a motor vehicle accident in Arizona in 2002 was $22,391. Table 3 shows per unit estimates for different losses. Figure 5 shows injury severity and frequency.

Table 3. Estimated Average Economic Costs of Arizona Motor Vehicle Accidents

Fatality	$1,090,000
Incapacitating Injury	$52,100
Non-incapacitating Injury	$17,200
Possible Injury	$9,800
Property Damage Only	$6,200

[7] For Bayesian probability diagrams, see Exhibit 1 in the Appendix.

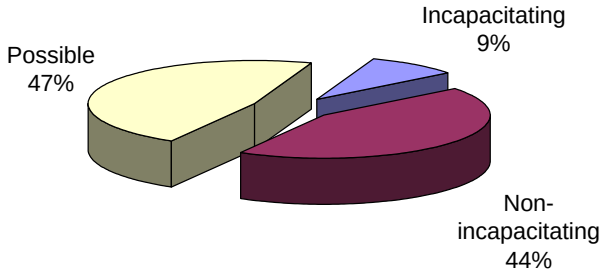

Figure 5. Percent of Injured Persons By Injury Severity

Fatalities, incapacitating injuries and non-incapacitating injuries all have estimated average costs higher than minimum per person limits. This is before compensating family members for lost loved ones and before compensating injured accident victims for lost quality of life.

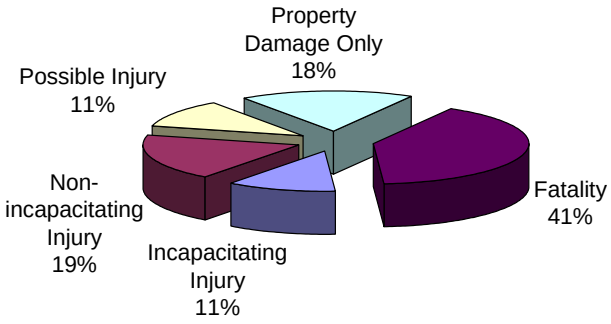

Figure 6. Percent of Total Economic Cost By Crash Severity

If every Arizona driver were insured, but had just $15,000 per person bodily injury liability limits, injured accident victims would have a one in 10 chance that over 70% of the economic costs of their injuries would not be covered by insurance. (See Figure 6)[8]

Clearly, the public and the state benefit when motorists carry uninsured motorist and underinsured motorist insurance, and excess coverage.

INSURER PROFITABILITY, COMPULSORY INSURANCE AND UNINSURED MOTORISTS

Traditionally, insurers have opposed compulsory insurance laws, claiming they do nothing to reduce the number of uninsured drivers. Typically, they do not raise the issue of profitability. While requiring liability insurance means insurers will sell more policies, it does not mean they will make more profit.

[8] Breakdown of injured persons was calculated from ADOT data.

Insurers maximize profit from operations by raising rates, lowering loss costs, or lowering administrative costs. Competition, compulsory insurance laws, and regulation exert a downward pressure on premium price. Compulsory insurance laws do so by increasing pressure for rate regulation – what government mandates, it tries to make affordable. The effects of competition and regulation on price are discussed later.

Requiring liability insurance raises loss costs because even high-risk motorists must be insured. A 1990 *New York Times* article cited industry surveys indicating that most uninsured are young, unmarried men – the group with the highest accident rate.[9]

Administrative costs also go up because more policyholders mean more customer service and transaction costs. In the same *Times* article, Delaware's Commissioner of Insurance, David N. Levinson, accused the insurance industry of blocking more stringent enforcement measures against uninsured motorists. Along with consumer groups, he complained that:

> "…the industry is content to collect the total cost of the nation's automobile insurance from a decreasing pool of customers as a way to keep administrative costs down and profits up. 'The industry would rather collect $750 from you, $750 from me and nothing from a deadbeat who doesn't want to carry insurance,' said Mr. Levinson. 'The industry doesn't gain anything by collecting $500 from you, $500 from me and $500 from the other guy'; it's $1,500 either way.'[10]

The article went on to say that insurance industry spokesmen acknowledged that insurers oppose compulsory insurance laws and some enforcement measures. But, rather than citing profitability as the reason, Shirley M. Nagelschmidt, spokeswoman for the Alliance of American Insurers, said:

> "The industry does not want to be in the position of saying somebody must buy insurance before he feeds his children."[11]

Limited by market and regulatory forces in how much they can charge for liability insurance, insurers have sought to lower loss costs through legislation that allows denial of coverage and elimination of non-economic damages. By targeting uninsured motorists, they have found legislative and public support. Several states have passed laws limiting or prohibiting recovery for uninsured drivers – even for insured drivers under their uninsured motorist coverage.

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[9] "Uninsured Drivers Create Other Kinds of Wreckage," deCourcy Hinds, Michael; *The New York Times;* 9/3/1990
[10] *Ibid.*
[11] *Ibid.*

WHO IS UNINSURED? CHARACTERISTICS OF UNINSURED MOTORISTS

A 1999 study by the California Department of Insurance found that uninsured motorists were more likely than insured motorists to have the characteristics shown in Table 4 below.

Table 4. Characteristics of Uninsured Motorists[12]

Home Ownership:	Renter
Income:	Less Than $20,000
Age:	18 to 24
Education:	High School or Less
Sex:	Male
Ethnicity:	Hispanic or Black
Stability:	Less Time in Present Home

Findings were taken from a 1997 random telephone survey of 1,008 California vehicle owners, of whom 10% reported owning an uninsured vehicle. The survey's error margin was +/- 3% at the 95% confidence level. The author cautioned, however, that the sample may not have been representative or the results accurate, and that for these reasons, the survey was "likely to create an incomplete picture of the uninsured."[13]

An earlier survey of 400 households in Maricopa County, Arizona, showed predominantly female ownership of uninsured vehicles among all ethnic groups. Findings were based on just 38 households, however, and the survey did not provide a breakdown of respondents by gender – so it may be that more women responded than men.[14]

In the California survey, the number one reason for not insuring, given by 49% of uninsured respondents, was that the vehicle was not used or did not run. Another 30% chose "Costs too much/can't afford" as the primary reason they did not have insurance.[15]

Of uninsured respondents, 58% owned a vehicle that was insured.[16] The study calls these vehicle owners "hybrid" uninsured, while those without insured vehicles it calls "pure" uninsured. Hybrids' primary reason for not buying insurance was that the vehicle was

[12] "Characteristics of Uninsured Motorist," Hunstad, Lyn; *California Department of Insurance;* February 1999; p.2
[13] *Ibid.;* p. 4
[14] "What We Know About Uninsured Motorists And How Well We Know What We Know," Khazzoom, J. Daniel; *Journal of Insurance Regulation;* Kansas City; Fall 1999; Vol. 18, Iss. 1; p. 82
[15] "Characteristics of Uninsured Motorist," Hunstad, Lyn; *California Department of Insurance;* February 1999; pp. 17-18
[16] *Ibid.;* p. 1

not used or did not run (71%).[17] Despite this, 14% reported their uninsured vehicles were in daily use. Just 43% said their uninsured vehicles were never used.[18]

The primary reason cited by the pure uninsureds for not buying insurance was due to the high cost of insurance (63%). They were also more likely than hybrids to agree that: "auto insurance costs more money than I have" (73% vs. 48%). Compared to hybrid uninsured, pure uninsured were more likely to be "female, not employed, single, and speak a language other than English at home."[19] They reported concern about "being able to find a *place* to buy auto insurance."[20]

Dividing respondents into "vehicle-not-used" uninsured and "costs-too-much" uninsured, the costs-too-much uninsured were more likely to be single vehicle owners (72% vs. 6%).[21]

A majority of uninsured and those who purchased minimum mandatory coverage "had a high level of interest in a lower cost alternative" policy that provided less coverage[22] and said they would probably purchase such a policy even if it cost just 10% less.[23] "Costs-too-much" uninsured were more likely to buy a low cost, low coverage policy (57% v 41%).[24] Yet when California offered a low cost, low coverage policy in June 2000, response was low. Today, just over 2,500 such policies are active.[25]

Uninsured tended to own more vehicles than insured and were more likely not to have health or life insurance. They seemed to have less trust of insurance companies and saw themselves as "the type of person who does not have insurance."

An earlier New Jersey study found more affluent uninsured:[26]

Table 5. New Jersey (NJ) Uninsured Motorists By Income

Household income	Percent of NJ's uninsured
Over $30,000	Almost 70%
$40,000-$50,000	20%
Over $50,000	16%

[17] Just 11% of all uninsured respondents said that their vehicle did not run and gave that as a reason it was not insured.
[18] "Characteristics of Uninsured Motorist," Hunstad, Lyn; *California Department of Insurance;* February 1999; pp. 18, 29
[19] *Ibid.;* pp. 15, 17
[20] *Ibid.;* p. 3
[21] *Ibid.;* p. 21
[22] The policy would offer 10/20 limits as opposed to 15/30 limits.
[23] "Characteristics of Uninsured Motorist," Hunstad, Lyn; *California Department of Insurance;* February 1999; p. 3
[24] *Ibid.;* p. 20
[25] Survey results
[26] "Uninsured drivers warned to pay up," Donnelly, Joe; *The Record;* 2/5/1992

ESTIMATING THE NUMBER OF UNINSURED MOTORISTS

When estimates are given of the number of uninsured motorists in a state, the bases for the estimates usually are not reported. Where more than one estimate is available, they often conflict. For any estimate, reliability is unknown.

Insurers and states define uninsured motorists differently, based on different interests. Insurers need to determine when a claim is eligible for uninsured motorist coverage. States, on the other hand, need to determine when a person is subject to penalties for driving or owning an uninsured vehicle. These different "head counts" introduce noise into the data. For example, uninsured motorist claims include victims of hit-and-run drivers, who may have been insured at the time. Likewise, where both driver and owner are subject to penalties, states may count one vehicle without insurance as two uninsured motorists.

An estimate popular with researchers is the UM/BI ratio, which is:

$$\text{UM/BI ratio} = \frac{\textit{Uninsured motorist claims}}{\textit{All bodily injury claims}}$$

Yet industry sources of UM/BI are silent as to how, exactly, UM/BI ratios are calculated – for example, whether attempts are made to compensate for inherent bias (such as removing hit-and-run drivers from the count) and, if so, what those efforts are. An economist for the Insurance Information Institute was quoted as saying that because "about half" of California's uninsured motorist claims involved hit-and-run drivers, it was impossible to say if the uninsured motorist rate taken from claims data was accurate.[27]

In taking UM/BI as the uninsured motorist rate, the following assumptions are made:

- Insured and uninsured motorists are equally likely to be in an accident and are equally likely to be at fault.
- Claims arising in a state involve only residents of that state.
- Victims are equally likely to file uninsured motorist claims as they are to file BI claims.[28]
- If UM/BI is based on claims accepted rather than claims filed, then another assumption is that insurers are equally likely to accept UM claims as BI claims. Since UM claims are made under the policyholders' own coverage, this may not be the case.
- Insured motorists carry UM coverage (not mandatory in Arizona).
- Insured and uninsured motorists are likely to be in accidents with each other in proportion to their representation in the population.

[27] "Pay at the pump isn't the solution," Richardson, Diane; *National Underwriter;* Chicago; Jun 8, 1998
[28] "What We Know About Uninsured Motorists And How Well We Know What We Know," Khazzoom, J. Daniel, *Journal of Insurance Regulation;* Kansas City; Fall 1999; Vol. 18, Iss. 1; p. 71

Evidence suggests that, at least in some states, UM/BI produces a higher percentage of uninsured drivers than any other estimate.

A representative of the trade association Personal Insurance Federation of California, claimed that, "… uninsured drivers are at greater risk for being in accidents and causing accidents than those who have insurance."[29] Without knowing what data this is based on, it is impossible to assess this claim. If based on UM/BI, which includes hit-and-run drivers who may or may not be insured, the conclusion is suspect.

The American Association of Motor Vehicle Administrators (AAMVA) lists four methods of estimating the number of uninsured motorists in a jurisdiction: database, random sampling, law enforcement or crash statistics.[30] All focus on vehicles, not motorists. Each has drawbacks and none definitively establishes the number of uninsured in an area.

The database method can only be used by states that require electronic reporting of insurance information and maintain a database that matches insurance information with vehicle registration information. In its simplest form, this method divides the number of vehicles insured by the number of vehicles that should be insured, then subtracts that number from 1 and multiplies by 100, to come up with an estimate of the percent of vehicles that are uninsured. Adjustments can be made to add in vehicles that are insured but do not show up as insured, due to erroneous or missing data.

Because the database method relies on registration records for the number of vehicles that should be insured, it is subject to error from unregistered vehicles.

Nonetheless, a study that looked at different methods of estimating the number of uninsured motorists concluded that of the major methods, "only one, database matching, appears to offer the potential of yielding defensible results," provided the matching is done "on an ongoing basis." The author recommended supplementing this method with "a reliable method" to estimate the number of unregistered vehicles driven without insurance.[31]

Of the other AAMVA methods, the random sampling method consists of drawing a random sample of registered vehicles that should be insured and mailing a notice requesting insurance verification. Once information is received, it is sent to the carrier for verification. This method also depends on registration records and is subject to the same error. It is also subject to nonresponse error – inflating the number of uninsured.

The law enforcement method divides the number of driver records with convictions for lack of insurance by the number of driver records with all convictions, then multiplies

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[29] "Calif. Commissioner blocks auto ins. surcharges," Anonymous; *National Underwriter;* Chicago; Feb 24, 1997; p. 5

[30] "Standardizing the Way We Measure the Uninsured Motor Vehicle Rate," AAMVA Uninsured Motor Vehicle Rate Working Group; *American Association of Motor Vehicle Administrators;* July, 2001

[31] "What We Know About Uninsured Motorists And How Well We Know What We Know," Khazzoom, J. Daniel; *Journal of Insurance Regulation;* Kansas City; Fall 1999; Vol. 18, Iss. 1; p. 89

that number by 100. The crash statistics method divides the number of vehicles identified as uninsured in crashes during the crash investigation by the number of vehicles involved in crashes. Neither of these methods use samples that are random or complete. They do not look at the entire population of drivers. They look only at those stopped for a violation or involved in an accident.

An example of different methods yielding different results comes from analysis of California Highway Patrol data, which showed different rates for the percent of uninsured motorists involved in bodily injury accidents and the percent of uninsured motorists given traffic citations: 44.6% vs. 34.2%.[32]

Perhaps the least defensible method, used by one state, was to base its estimate on a survey that "required respondents to admit to the secretary of state they were uninsured."[33] Uninsured respondents who answered truthfully would have to admit to authorities they were breaking the law. This method would almost certainly underestimate the number of uninsured. In fact, although the survey reported 4.5% of vehicles were uninsured, claims data showed a number closer to 12%.[34]

IMMIGRATION ISSUES

States with large immigrant populations face additional challenges. In 1999, over 9.9 million vehicles carrying over 25.2 million passengers crossed the Mexico-United States border into Arizona.[35] The number of illegal border crossings is unknown.

Insurers require driver's licenses to issue policies. Having a driver's license means one has passed a road test and a written test. But driver's licenses are also used as proof of identity, to access social services – even as *de facto* proof of lawful immigrant status or citizenship. In a country with no national identification card, driver's licenses are now part of the war on terror: Seven of the 19 hijackers on September 11th had Virginia driver's licenses.[36]

After September 11th, Indiana's Counter-Terrorism and Security Council changed the documentation required in order to issue a driver's license. Applicants now had to present:

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[32] "Review of Non-Insurance Data in the NAIC's 1999 Automobile Insurance Database Report," NAIC Staff; *NAIC Research Quarterly;* July 1999; Volume V, Issue 3; p. 4

[33] "Uninsured – and still driving; 6 years after law passed, suspensions soaring," Novak, Tim; Schmid, Jon; *Chicago Sun-Times;* 6/9/1996

[34] "What We Know About Uninsured Motorists And How Well We Know What We Know," Khazzoom, J. Daniel; *Journal of Insurance Regulation;* Fall 2000; Vol. 19, Iss. 1; p. 76

[35] "Border Crossing Database," TranStats The Intermodal Transportation Database; *Bureau of Transportation Statistics*

[36] "Illegal Immigrants, or Legal Drivers?; Bills Would Tighten Virginia License Rules," Martz, Michael; *Richmond Times-Dispatch;* 1/29/2002

> "… a Social Security card, another primary document such as a passport or birth certificate, two secondary documents and two proofs of Indiana residency. A secondary document could include a marriage license, military discharge paper, a divorce decree or a current loan statement. … The license bureaus are requiring original, unaltered documents, such as a stamped birth certificate. A Social Security card laminated in plastic, though common, is considered, at least at one area branch, to have been altered."[37]

Because only citizens and lawfully admitted permanent residents are eligible for Social Security cards, requiring a Social Security card in order to issue a driver's license makes it impossible for undocumented immigrants – as well as foreign citizens lawfully in this country on temporary or student visas – to obtain driver's licenses.

Indiana may have created this barrier intentionally. Other states have done so unintentionally. California's Department of Motor Vehicles began requiring Social Security cards in 1993, to help state agencies "track down fathers delinquent in their family support payments."[38]

Yet other states have tried to remove barriers to immigrants obtaining drivers' licenses.

In 1999, North Carolina, which has one of the lowest rates of uninsured motorists, allowed undocumented immigrants to apply for drivers' licenses. In addition to passing a safety test, applicants must show proof of insurance. Jon Parks of the Division of Motor Vehicles explained:

> "We look at it as these people are going to drive on the roads regardless, and our goal as a licensing agency is to make sure that the roads are as safe as they possibly can be. … We see a driver's license as exactly that: a license to drive, not proof of citizenship."[39]

Discussions in Georgia and New Mexico reveal more of the rationale behind North Carolina's decision.

A 2002 Atlanta newspaper editorial argued that:

> "A driver's license assures the community that undocumented immigrants, like other drivers on the state's roads, have passed a test of their driving skills and the rules of the road. A driver's license also may allow its bearer to obtain auto insurance, a particular problem in Georgia, where 13% of motorists are uninsured. … Those who oppose issuing driver's licenses to illegal immigrants often cite the fear that immigrants could use

[37] "BMV changes are confusing, unfair," *South Bend Tribune;* 7/24/2002
[38] "Immigration Bar Concerned About New DMV Policy," Peters, Alexander; *The Recorder;* 3/24/1993
[39] "Driver's licenses for illegal aliens?; Backers say change would reduce wrecks, lower insurance costs; opponents fear fraud," Bixler, Mark; *The Atlanta Journal and Constitution;* 12/5/1999

> the license to vote and exercise other rights reserved for citizens. That worry could be eliminated with a system that issues one type of license to citizens and another to all noncitizens, legal or illegal."[40]

The editorial went on to note that eight states link the expiration date on immigrants' drivers' licenses to the expiration of their immigration documents and that Pennsylvania puts "noncitizen" labels on drivers' licenses.

A separate news story pointed out that undocumented immigrants fill jobs others shun – "jobs in the poultry, agricultural and construction sectors." According to Atlanta's Mexican consul general, 99% of the undocumented immigrants in Georgia are employed "but few can get to their workplaces via public transportation."[41]

In 2003, New Mexico introduced legislation to allow the Motor Vehicle Department to accept an individual tax ID number issued by the Internal Revenue Service (IRS), rather than requiring a Social Security card in order to issue a driver's license. Tax ID numbers are available to those who are ineligible for Social Security cards and the IRS will accept foreign proof of identity. States that accept tax ID numbers include Kentucky, North Carolina, Pennsylvania, Rhode Island, and Utah.[42]

Three years earlier, New Mexico had resumed Spanish-language driver's license tests.[43]

Texas took a different approach. In 2001, it passed a law requiring foreigners without insurance to buy temporary policies – costing as little as $2 or $3 – when they drive across the border. The Associated Press reported that in the Rio Grande Valley the uninsured motorist rate was as high as 40% to 45%, and that more Mexican truck drivers coming into the United States were being found with fake insurance documents.[44]

Arizona exempts trucks carrying agricultural products within 25 miles of the border from commercial motor carrier financial responsibility requirements. In 1999, over 348,000 trucks of all kinds crossed into the state from Mexico.[45]

COMPLIANCE FACTORS

A 2001 study by Cole, Dumm and McCullough on penalties for driving without insurance found that the most important factor associated with a reduction in the uninsured motorist rate was the presence of a compulsory insurance law, especially one that required liability limits over 15/30 – findings statistically significant at the 99%

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[40] "'Noncitizen' licenses make sense," *The Atlanta Journal and Constitution;* 12/23/2002
[41] "Allow licenses for illegal immigrants," *The Atlanta Journal and Constitution;* 2/1/2001
[42] "House approves bill to help immigrants obtain driver's license," *The Associated Press State & Local Wire;* 2/18/2003
[43] "MVD wants vehicle-registration hike," Hummels, Mark; *Santa Fe New Mexican;* 12/23/2000
[44] "New law requires Mexican visitors to purchase car insurance," Brozosky, Lynn; *The Associated Press State & Local Wire;* 5/31/2001
[45] "Border Crossing Database," TranStats The Intermodal Transportation Database; *Bureau of Transportation Statistics*

level.[46] Higher potential fines for driving uninsured were also correlated with reduced noncompliance and were significant at the 99% level.

The study compared three different types of motor vehicle liability laws: financial responsibility, compulsory insurance and notice laws. Financial responsibility laws, "where evidence of insurance or other assets is not required until an accident has occurred," were the weakest. Compulsory insurance laws require purchase of insurance, production of evidence of insurance at or shortly after an accident and at registration and/or in ones vehicle at all times. Notice laws require insurers to notify authorities of cancellations and/or nonrenewals. The authors found that each progressively stricter law was correlated with a lower uninsured motorist rate.[47]

These findings, that stricter compulsory insurance laws with higher minimum liability limits, higher fines and requirements that insurers notify states when policyholders cancel coverage are associated with a reduction in the uninsured motorist rate, are striking in light of often-repeated industry claims that compulsory insurance laws do nothing to reduce the number of uninsured drivers.

The most important factor associated with an increase in uninsured motorists, however, was the cost of insurance.[48]

A 2000 study by Ma and Schmit mentions earlier research supporting this finding.

> "Through simulation, Dahlby (1983) demonstrates that as the price of coverage increases, the percentage of drivers who purchase insurance decreases. Smith and Wright (1992) add to the discussion by providing evidence of a strong relationship between the price of automobile insurance and the relative size of the uninsured motorist population, both in terms of price affecting the percentage of uninsured motorist and in terms of the number of uninsured motorist affecting price."[49]

Ma and Schmit, however, found no significant relationship between price of coverage and the uninsured motorist rate. The fact that the authors used unit price as a substitute for price may account for this surprising result. Unit price is the average cost per dollar of benefits received by policy holders. As such, it measures consumer value rather than household cost.

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[46] "The uninsured motorist problem: An investigation of the impact of enforcement and penalty severity on compliance," Cole, Cassandra R.; Dumm, Randy E.; McCullough, Kathleen A.; *Journal of Insurance Regulation;* Kansas City; Summer 2001; pp. 630-632

[47] The relationship between financial responsibility laws and uninsured motorists was significant at the 99% level. The relationship between compulsory insurance, notice laws and uninsured motorists was significant at the 95% level.

[48] Significant at the 99% level. "The uninsured motorist problem: An investigation of the impact of enforcement and penalty severity on compliance," Cole, Cassandra R.; Dumm, Randy E.; McCullough, Kathleen A.; *Journal of Insurance Regulation;* Kansas City; Summer 2001; p. 632

[49] "Factors affecting the relative incidence of uninsured motorists claims," Ma, Yu-Luen; Schmit, Joan T.; *Journal of Risk and Insurance;* Malvern; Jun 2000; p. 282

Looking at available data for this report, no statistically significant relationship was found between average amounts paid for liability damages and the uninsured motorist rate. Data used were less than optimal, however, as they came from different time frames. Average amount paid out for damages covered by liability insurance was taken from Insurance Information Institute figures for 2000; whereas the uninsured motorist rate came from Insurance Research Council average estimates for the years 1995 to 1997. A change in average rates since that time would introduce error.

Another surprising result of the Ma and Schmit study was that potential jail time was associated with a slight *increase* in noncompliance.[50] This finding may be endogenous (i.e. states that know they have an uninsured motorist problem pass stronger penalties) or it may reflect the belief that the penalty won't be enforced.[51]

COST FACTORS

Since several studies have found cost to be a factor in the decision to purchase automobile insurance, one way to increase compliance with compulsory insurance laws may be to look for ways to cut administrative or loss costs.

The Insurance Information Institute (III) provides the following breakdown of how premium dollars are spent.

Table 6. Industry Financial Data on Private Passenger Auto Insurance

Where the Premium Dollar Goes, Private Passenger Auto Insurance, 2001[52]		
Premiums Earned		$100
Claims		
Payments to injured person:		
Medical	$10	
Wage loss and other economic payments	$2	
Pain and suffering and other non-economic awards	$6	
Lawyers' fees	$13	
Other costs of settling claims	$3	
Subtotal		$34
Payments for damage to cars (1):		
Property damage liability	$19	
Collision claims	$19	

[50] Significant at the 99% level.
[51] "The uninsured motorist problem: An investigation of the impact of enforcement and penalty severity on compliance," Cole, Cassandra R.; Dumm, Randy E.; McCullough, Kathleen A.; *Journal of Insurance Regulation;* Kansas City; Summer 2001; pp. 632-633
[52] Source: Insurance Information Institute; March 2003

Where the Premium Dollar Goes, Private Passenger Auto Insurance, 2001		
Premiums Earned		$100
Comprehensive claims	$9	
Other costs of settling claims	$3	
Subtotal		$50
Total claims		$84
Expenses		
Commissions and other selling expenses	$16	
General expenses (costs of company operations)	$5	
State premium taxes, licenses and fees	$2	
Dividends to policyholders	$1	
Total expenses		$24
Claims and expense total		$108
Bottom line		
Insurance company investment gain (2)	$8	
Pretax income ($100 - $108 + $8)	$0	

(1) Includes theft and damage to other property, e.g., road signs.
(2) Includes interest, dividends, and realized capital gains.
Source: Insurance Information Institute based on data from A.M. Best Company, Inc.; Insurance Services Office, Inc. (ISO); National Association of Insurance Commissioners; Insurance Research Council.

The Insurance Information Institute (III) also provides a breakdown of litigation costs for 2000:

Claimants' attorneys' fees:	17%
Insurers' (defense) attorneys' fees:	16%
Insurers' administration costs:	25%
Economic loss:	20%
Non-economic loss (pain and suffering, punitive damages):	22%[53]

According to III estimates, the average cost of an automobile policy rose 8% in 2002 and 9% in 2003. One reason cited for the increase is that insurance costs from September 11th are being passed on to consumers. Other major factors are the rising cost of health care and hospitalizations. Auto parts costs have also gone up.[54] Reduced investment income can also cause insurers to raise rates.[55]

[53] Source: Insurance Information Institute; Tillinghast-Towers, Perrin; March 2003
[54] Source: Insurance Information Institute; March 2003
[55] "Market Structure and Performance in Personal Auto and Homeowners Insurance," Klein, Robert; *NAIC Research Quarterly;* April 1995; Volume I, Issue 2

Information costs impact price. Comparison-shopping for insurance is difficult and time consuming. Consumers may end up paying higher rates as a result. The Arizona Department of Insurance provides rate-comparison information to the public on its website with a number of hypothetical scenarios. Other states provide similar information, but the effect of these efforts is not known.

Insurers also have information problems: They do not know, ultimately, what coverage may cost them. One research article stated that:

> "Pooled industry loss data at a refined geographic level (e.g. zip code) are not available. This confers a competitive advantage to insurers entrenched in certain markets."[56]

Insurers with proprietary market data can better estimate risk and better price product. Insurers without that information may err on the side of caution and charge too much or act aggressively and charge too little.

In 2000, the most recent year for which figures are available, the average cost of an automobile policy was $792 in Arizona and $687 nationally. Arizona ranked 10th highest overall. Looking just at liability coverage, the average cost was $450 in Arizona and $398 nationally, making Arizona the 14th most expensive jurisdiction in which to obtain liability insurance.[57] Yet Arizona's private passenger automobile (PPA) liability incurred loss ratio (the ratio of losses paid and reserved to premiums earned) is much lower than the national average – making it relatively more profitable for insurers. In 2000, Arizona's PPA liability loss ratio was 67.5%, vs. 75.2% nationally. In 2001, that ratio increased to 68.3%, still less than the national average of 76.9%.[58]

Automobile insurance rates are set taking into account administrative and loss costs – particularly the expectation of loss costs. Insurers establish rating territories based on similar loss histories in a geographic area. Both the likely occurrence of loss and the potential size of loss differ by territory. According to III, territory is "the most predictive of risk" while driving record is "among the least."[59]

Driving record, which includes at-fault accidents, miles driven per year, number of years driving and traffic violations, might become a better predictor of risk if motor vehicle records were more accurate, or shared freely between states. A 2002 Insurance Research Council study found that motor vehicle records were "typically inaccurate" and that "one in five" convictions could be missing. An earlier study found that, on average, three in five reportable accidents were missing. Records of infractions that occur out of state are not automatically provided to the home state. And driving records do not automatically move to a new state when drivers do.[60]

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[56] *Ibid.*
[57] Source: Insurance Information Institute, National Association of Insurance Commissioners; March 2003
[58] "2002 Motor Vehicle Liability Insurance Report of the Director of Insurance," *Arizona Department of Insurance*
[59] Source: Insurance Information Institute; March 2003
[60] *Ibid.*

Even accurate driving records, however, would probably be less predictive than territory. Loss costs and premiums are higher in urban than in rural areas. More vehicles make accidents more likely. Urban residents are also more likely to file bodily injury claims. A 1993 study found that drivers in areas with the highest concentration of vehicles were almost 25% more likely to file a personal injury claim than those in areas with the lowest concentration of vehicles. In Ohio in 1996, there were nearly twice as many auto-related injuries in urban areas as in rural areas. Although rural accidents are more likely to result in fatalities, "frequency, rather than severity, governs the rate."[61]

Pennsylvania provides an example of how widely loss costs and claims behavior can differ, even between urban areas. According to the Insurance Research Council, 56% of all accidents in Philadelphia result in bodily-injury claims being filed. But in Pittsburgh, just 16% result in personal-injury claims.[62]

More claims do not necessarily mean more fraud, however. According to Dennis Jay, executive director of the Washington-based Coalition Against Insurance Fraud, "There does tend to be a certain amount of higher bodily-injury rate claims in areas that have well-educated citizens. Someone gets hurt; they are aware of how the system works and how you get compensated for that."[63]

In addition to location and driving record, rates differ based on age, gender, marital status, other licensed drivers in the household and vehicle make and model.

In recent years, public policy initiatives credited with reducing auto insurance costs have included: license programs that limit when teenagers can drive; improvements in auto and highway safety; driving under the influence (DUI) laws and seatbelt enforcement; and greater market competition.[64]

Other initiatives have been less successful in reducing rates. New Jersey Governor Christie Todd Whitman set up a special insurance fraud prosecutor; but three years later, the result was just 86 indictments and 75 prosecutions.[65] Requiring safety inspections at vehicle registration may not affect rates, since (according to regulators and insurance underwriters) failing to do so did not contribute to New Mexico's rising rates. New Mexico's number one ranking in alcohol-related highway deaths, however, could have masked any effect safety inspections may have had.[66]

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[61] "Pay at the pump isn't the solution," Richardson, Diane; *National Underwriter;* Chicago; Jun 8, 1998
[62] "Analysts: Crackdown on uninsured cars won't fuel big rate drop," *The Associated Press State & Local Wire;* 8/11/2002
[63] *Ibid.*
[64] "United States: Uninsured motorists study shows need for improvements," Anonymous; *International Insurance Monitor;* New York; Fourth Quarter 1999
[65] "McGreevey vows crackdown on uninsured drivers," Siegel, Ralph; *The Associated Press State & Local Wire;* 10/8/2001
[66] "N.M. Auto Insurance Rates Soar 58% in 6 Years," O'Neill, Peggy Lee; *Albuquerque Journal;* 6/11/1995

Impoundment, while perhaps getting uninsured motorists off the road, is not expected to have much impact on rates. A Philadelphia program called "Live Stop" impounded 5,000 unregistered and uninsured cars in seven weeks. But Temple University professor and city auto insurance task force member Michael Powers speculated that the crackdown would have an impact of "less than 10 percent" on insurance rates.[67]

Its actual effect may be even less. A New Jersey news story said a plan to impound uninsured vehicles there would have little effect on rates "because less than 7% of the cost of an insurance policy goes to cover uninsured or underinsured motorists."[68] If correct, that would mean that a 50% drop in the uninsured motorist rate would produce, at best, a 3.5% drop in insurance rates.

Some legislative and regulatory acts may even have the unintended consequence of raising rates. Interrelationships between various cost-drivers are not always immediately apparent. State Farm lobbyist Jim Walker was critical of Oklahoma's low minimum mandatory coverage of $10,000 per person and $20,000 per accident, saying it created a problem with underinsured motorists, "since the minimal liability levels often fail to cover actual costs in an accident." According to Mr. Walker, "That leads to more litigation and drives up the cost of auto insurance."[69]

If true, this seems somewhat counterintuitive, as legislators might expect that lower limits would lower costs. But underinsured claims mean that two policies, two adjusters – and often two insurers and two lawyers – are involved in covering the loss. Clearly, there is some duplication of effort. Furthermore, where underinsured coverage exists, there is less incentive to settle within primary limits, as doing so bars collection of underinsured benefits. Thus, lower limits can drive up administrative *and* loss costs.

In some states, insurers impose rate surcharges on previously uninsured drivers who opt to become legal, saying they pose a greater risk. Other states have banned this practice, believing it complicates efforts to increase compliance with compulsory insurance laws. A 1998 newspaper article said that when Texas "tightened up" its compulsory insurance law, "State Farm found that previously uninsured drivers had 130% higher losses than insured drivers with clean records did."[70] Another newspaper article reported that California's Insurance Commissioner was warning insurers he would not approve proposed rate schedules "if they intended surcharges for previously uninsured drivers." In fact, insurers had planned surcharges of about 30%.[71]

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[67] "Analysts: Crackdown on uninsured cars won't fuel big rate drop," *The Associated Press State & Local Wire;* 8/11/2002

[68] "New Jersey Governor Proposes Seizing Vehicles of Uninsured Drivers," Diamond, Randy; *The Record;* 7/9/2002

[69] "Oklahoma lawmaker aims legislation at uninsured drivers," Carter, Ray; *Oklahoma Business News;* 2/10/2003

[70] "Pay at the pump isn't the solution," Richardson, Diane; *National Underwriter;* Chicago; Jun 8, 1998

[71] "Calif. Commissioner blocks auto ins. surcharges," Anonymous; *National Underwriter;* Chicago; Feb 24, 1997; p. 5

References to studies 10 and 20 years old mention findings that uninsured drivers had worse accident records and "much worse" traffic conviction records.[72] It is difficult to know what this means, however. It may reflect the fact that uninsured drivers tend to be young males – and young males, uninsured or not, have more, and more serious, accidents. In 2000, drivers age 15 through 20 made up just 6.8% of licensed drivers in the United States, but were involved in 14% of fatal crashes. Of those, young males were responsible for 10%.[73] The other difference – in traffic conviction records – may be the courts' way of penalizing for lack of insurance, by dismissing fewer charges when a driver is uninsured.

According to a 1993 report from the Insurance Services Office, in most states, uninsured motorist and underinsured motorist coverages account for less than 20% of bodily injury liability loss costs. Where laws allowed policyholders to "stack" uninsured motorist or underinsured motorist limits on other vehicles or policies, however, uninsured motorist and underinsured motorist loss costs rose as high as 56% of bodily injury liability loss costs.[74] Arizona prohibits this kind of stacking.

Prices for uninsured motorist and underinsured motorist coverage are set differently than for liability coverage. Both are affected by some, but not all, of the same variables. Mainly, they differ in how risk factors in to rates. Kelly Dunkerley, public affairs specialist for State Farm, described the process as follows:

> "With State Farm, the price for uninsured motorist is not determined by the age of the driver, tickets received, type of vehicle, etc., because the company thinks these factors have nothing to do with what some uninsured motorist is likely to do – there is no good predictive indicator for it. The rating is based on the company's claims experience – how many claims it had and how much it paid out over a period of years … That's why uninsured motorist is a unique coverage – it's harder to pinpoint individual indicators. The person who's 18 and sitting in a hot rod has no more risk of being hit by an uninsured motorist than a person who's 45 and cruising Memorial Drive in a station wagon."[75]

For this report, state-level data, including uninsured motorist rate, were compared for their ability to predict the average amount spent on liability damages. Multiple regression analyses were run on the uninsured motorist rate, urban and minority population, median household income, minimum liability limits, and size of voluntary and involuntary markets. (See Output 2 in the Appendix.) Analysis showed that urban population, size of voluntary market and minimum property damage limits were predictive of average amount paid out for damages covered by liability insurance and

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[72] "What We Know About Uninsured Motorists And How Well We Know What We Know," Khazzoom, J. Daniel; *Journal of Insurance Regulation;* Kansas City; Fall 1999; Vol. 18, Iss. 1; p. 83

[73] "Traffic Safety Facts 2001: Young Drivers," *National Center for Statistics & Analysis, National Highway Traffic Safety Administration*

[74] "Uninsured motorist coverage cost driver for auto insurance," Anonymous; *National Underwriter;* Erlanger; May 24, 1993

[75] "Uninsured motorist cost based on experience," Mulkins, Phil; *Tulsa World;* 9/23/2002

were statistically significant at the 99% level, explaining 58.1% of the variation between states.

Urban population was strongly associated with higher liability premiums – not a surprising result. More vehicles insured in the voluntary market were associated with lower liability premiums. This may reflect rate competition for larger, more desirable markets. Surprisingly, higher minimum property damage limits were also associated with lower liability premiums.

IMPACT OF COMPETITION AND RATE REGULATION ON PRICE

Studies have shown that both competition and rate regulation can affect price.

In its 2002 report on motor vehicle liability insurance, the Arizona Department of Insurance found that Arizona's private passenger automobile (PPA) insurance market was competitive. It based this conclusion on the number of active and latent (authorized, but not actively soliciting new business) insurers, the number of insurers applying to transact PPA, the availability of PPA in both standard and nonstandard voluntary markets and an absence of market concentration in any one insurer.[76]

The department also cited the presence of rate differentials as evidence of competition. For example, premium quotes for "a hypothetical married couple, ages 78 and 78, living in Phoenix and driving a 2002 Ford Taurus LX for limited use ranged from $375 to $3,352 for the same coverage."[77]

In efficient markets, competition tends to beat prices down to the same level. The side-by-side existence of two such drastically different rates for the same product with the same risk indicates the extent to which consumer information problems (the difficulty of comparison shopping) or insurer information problems (lack of market information on which to rate risk) can affect prices.

Regulation of the insurance industry arose to prevent underpricing and insolvency. Later, there was concern over whether regulation promoted noncompetitive pricing and above-normal industry profits. Most studies have found that "at least since the 1970s, regulation lowers the average price per dollar of benefits received by policyholders (the unit price) and lowers insurer profitability …" although the effect varies across states.[78] Generally, it looks like consumers have benefited more from regulation than insurers have.

A 2001 study by Cummins, Phillips and Tennyson estimated that Arizona's rate regulation reduced the unit price of automobile insurance by $.095 – a finding statistically significant at the 95% level. Unit price provides a measure of consumer value: it is "the average price paid by consumers per dollar of benefits … received, in

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[76] "2002 Motor Vehicle Liability Insurance Report of the Director of Insurance," *Arizona Department of Insurance;* pp. 1-4

[77] *Ibid.;* pp. 2-3

[78] "Regulation, political influence and the price of automobile insurance," Cummins, J. David; Phillips, Richard D.; Tennyson, Sharon; *Journal of Insurance Regulation;* Kansas City; Fall 2001; pp. 10-11

effect measuring the average markup of premiums over benefits in a state." A ratio, unit price is calculated as follows:

$$Unit\ price = \frac{statewide\ net\ premiums}{statewide\ net\ losses\ incurred + policyholder\ dividends\ paid}$$

It is perhaps important to note that the authors are not just saying that premiums were reduced by nine and a half cents on the dollar. The unit price measure says that premiums were reduced by almost 10% – *without* similarly reducing benefits received. The authors found their results "strongly" suggestive "that regulation has the effect of reducing the unit price of automobile insurance in states that were consistently regulated during our sample period [1980-1996] …."[79]

Arizona's regulation is less stringent than some. The state follows an "open competition" rating system and has since 1980. Insurers may sell insurance products before filing them with the Department of Insurance for rate approval. They must file for approval, however, within 30 days after rates become effective. The director has the authority to revert to a "prior-approval" system if, after a hearing on the matter, he finds the market noncompetitive.

The ADOI believes the threat of more stringent regulation acts "to ensure that unreasonably high prices do not exist in PPA liability."[80]

This belief receives support in another study in *The Journal of Risk and Insurance.* Researching all threats of regulation in every state in "close to 130 newspapers and business journals" from 1984 to 1993, the author found that that the threat of regulation "had a significant effect on the pricing behavior of insurance companies in the personal automobile liability insurance industry." The author concluded that "the insurance industry reduced premium inflation as a result of regulatory threats reported by the news media," finding that, on average, regulatory threats reduced automobile liability insurance premiums by 9.6%. Because the average premium increase for the period was 1.7%, threats of regulation actually led premiums to decline by 7.9%.[81]

NO-FAULT AND CHOICE

No-fault and "choice" are mentioned here because it has been claimed that these systems reduce costs, speed payment of benefits, and increase compliance with compulsory insurance laws. Several studies have explored these assumptions.

Unlike liability insurance, which is third-party coverage, no-fault insurance is first-party coverage. Liability insurance pays the person you harm, if the accident was your fault. No-fault pays you, regardless of who was at fault.

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[79] *Ibid.;* p. 36

[80] "2002 Motor Vehicle Liability Insurance Report of the Director of Insurance," *Arizona Department of Insurance;* Appendix A (Open Competition Law)

[81] "Media attention, insurance regulation, and liability insurance pricing," Boyer, M. Martin; *The Journal of Risk and Insurance;* v 67 no1 (Mar. 2000)

No-fault may reimburse economic damages only, or it may allow recovery for pain and suffering once a monetary or verbal threshold is reached. Verbal thresholds describe the severity and type of injury eligible for additional compensation. Monetary thresholds set a dollar amount for economic loss. Once that is reached, victims become eligible for additional reimbursement.

In reviewing prior research, a 2001 study commented:

> "The evidence suggests that pure no-fault plans that eliminate payment for pain and suffering and verbal or high monetary threshold plans reduce costs. On the other hand, low monetary thresholds increase costs because of the propensity of claimants to inflate damages to exceed the threshold (Carroll, 1995; Browne and Puelz, 1996)."

The author reviewed the database of the Insurance Corporation of British Columbia, a government-owned monopoly insurance company, and found that threshold no-fault reduced insurance premiums by 22.8% and pure no-fault reduced premiums by 39.2%, but that only about one-third of the reduction was due to lower transaction costs, while two-thirds was due to the reduction of payments for non-economic loss.[82] Thus, lower costs came mainly at the expense of the accident victims. Whether the United States insurance industry would reduce premiums to the same extent as a Canadian government-owned monopoly is unknown.

High-risk drivers may face higher premiums under no-fault. A 1985 article in *The Washington Post* reported that Dairyland and other companies specializing in high-risk drivers were losing money under Washington's no-fault system. According to Dairyland's CEO, its difficulties came "from having to base initial no-fault premiums on premiums it charged under the previous liability system; it is expensive to insure high-risk drivers under a no-fault system."[83]

No-fault makes many more people eligible for benefits. Under a tort system, those found to be 100% responsible for causing an accident are unable to recover from the other driver's liability policy. The at-fault driver is only able to collect for her own injuries if she has medical pay coverage (not required by Arizona law and usually a low amount) or health insurance. She is able to collect for damage to her vehicle if she has collision coverage. Under no-fault, both drivers collect from their own policies.

No-fault thresholds provide incentive for victims to inflate claims. According to testimony given to a United States Senate subcommittee, the average total bodily injury damages per victim are higher in no-fault than in tort states.[84]

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[82] "Policy options for automobile insurance: an estimate of costs and benefits of no-fault insurance plans," Gunton, Thomas; *Journal of Insurance Regulation; vs.* 20 no 2 (Winter 2001)
[83] "Mandatory Insurance Enforced," Rowe, James L. Jr.; *The Washington Post;* 3/11/1985
[84] "Testimony September 24, 1996 Kathleen M. O'Donnell Attorney Marcott Law Firm," *Senate Commerce, Science and Transportation Consumer Affairs, Foreign Commerce and Tourism Consumer Rights & Auto Sales*

It has been said that no-fault reduces attorney involvement, but it has been reported that attorney involvement is higher in no-fault states.[85] Supporting this, a 1986 article in *Insurance Counsel Journal* reported that no-fault did not appear to have reduced court cases.[86]

This is related to the argument that no-fault speeds payment of benefits. To receive benefits under tort, three things must be established by evidence: liability (fault), damage (the amount of loss incurred) and causation (that the damages were caused by the accident). To receive benefits under no-fault, claimants must still prove damages and causation. Often, this involves more than just presenting medical bills and records to an insurer. Medical testimony may be required. Injuries are not always clear-cut. People with underlying medical conditions have motor vehicle accidents, too. Claims become a matter of sorting out how bad things were before the collision and how bad they have been since. Under tort or under no-fault, insurers remain in an adversarial relationship with claimants: It is in insurers' interests to pay less and it is in claimants' interests to receive more. Under these circumstances it is difficult to see how a no-fault system would speed payment of benefits.

Furthermore, under no-fault, as under tort, it is in insurers' interest to blame others for the accident – such as those responsible for highway or vehicle design. No-fault does not absolve these entities from potential liability. In fact, by limiting other options, it may make them more attractive targets for litigation.

Unlike tort, which insures the risk you and your vehicle pose to others, no-fault insures the risk you and your vehicle pose to yourself. A 1999 article in the *Journal of Insurance Regulation* pointed out that no-fault systems may reward drivers of heavier, more "aggressive" vehicles with lower premiums, because "the weight differential between vehicles is by far the best predictor of whether two-vehicle accidents will result in serious injury or death." The study cites 1997 Fatal Accident Reporting System (FARS) data for two and multi-vehicle accidents:

> "Almost half of all highway deaths occurred to occupants of vehicles that were 500 lbs. or more lighter than the other vehicle, compared to only 12% of deaths in vehicles that weighed over 500 lbs. more than the other vehicle. … there is little doubt that no-fault imposes a premium charge on drivers of lighter vehicles based on cost produced by drivers of heavier vehicles."[87]

Finally, no-fault proponents have argued that a no-fault system increases compliance with compulsory insurance laws. A 2001 study found just the opposite: that no-fault laws

[85] *Ibid.*
[86] "Does No-Fault Reduce Litigation?" Risjord, Norman K.; *Insurance Counsel Journal;* Chicago; Jul 1986
[87] "The case against auto choice," Kabler, Brent; *Journal of Insurance Regulation; vs.* 18 no 1 (Fall 1999)

were associated with higher levels of uninsured motorist claims, and that this was statistically significant at the 95% level.[88]

Recently, "choice" systems have been proposed, in which consumers would be able to choose to be in tort or no-fault systems. There is some evidence that consumers may not understand what they are choosing between. For example, according to Senate testimony,

> "The Insurance Commissioner from Michigan, testifying before the Massachusetts Joint Insurance Committee, stated he would not advocate a choice proposal because such a system is incomprehensible to consumers."[89]

That same testimony summarized two states' experiments with choice. In Pennsylvania, where consumers were assigned the tort system unless they opted out, 76% were in the tort system in the year following adoption. In New Jersey, where consumers were assigned the no-fault system unless they opted out, over 80% were in the no-fault system one year post adoption.[90]

If consumers did understand the difference between the two systems, the economic principle of adverse selection might come into play, with safe drivers tending to choose tort and risky drivers tending to choose no-fault. Also, tort choosers would lose in accidents with at-fault drivers who were no-fault choosers, because the tort chooser's policy would step in and indemnify the no-fault chooser.[91]

THE INVOLUNTARY MARKET

Assigned risk pools (ARPs), joint underwriting associations (JUAs) and reinsurance facilities are different systems for the involuntary or residual market – the market of last resort for drivers who cannot obtain insurance elsewhere.

Typically, assigned risk pools assign high-risk drivers to insurers based on some measure of market share. The greater a company's share of the voluntary market, the more high-risk drivers will be assigned to it. Often, insurers are required to charge predetermined rates for predetermined coverage and limits. Insurers are responsible for administrative and loss costs. [92]

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[88] "The uninsured motorist problem: An investigation of the impact of enforcement and penalty severity on compliance," Cole, Cassandra R.; Dumm, Randy E.; McCullough, Kathleen A.; *Journal of Insurance Regulation;* Kansas City; Summer 2001

[89] "Testimony September 24, 1996 Kathleen M. O'Donnell Attorney Marcott Law Firm," *Senate Commerce, Science and Transportation Consumer Affairs, Foreign Commerce and Tourism Consumer Rights & Auto Sales*

[90] *Ibid.*

[91] "The case against auto choice," Kabler, Brent; *Journal of Insurance Regulation; vs.* 18 no 1 (Fall 1999)

[92] "Claims adjudication in the personal automobile insurance residual market," Browne, Mark J.; Wells, Brenda P.; *Journal of Risk and Insurance;* Mt. Vernon; Jun 1999; pp. 276-277

Most states, including Arizona, have assigned risk pools (ARPs), but a few have joint underwriting associations (JUAs). These differ from assigned risk pools in that the insurer providing administrative services (and bearing administrative costs) shares loss costs with all other insurers in the state.[93] A 1999 study in the *Journal of Risk and Insurance* found that JUA insurers make higher loss payments than ARP insurers.[94] The study explains this finding by pointing out that JUA insurers' "primary incentive" is "to pay claims as quickly as possible to save on claims-processing expenses, including possible litigation."[95] Regulatory oversight or large market share (hence larger loss costs) can temper, but cannot remove, this incentive.[96]

Before moving from a JUA to an ARP system, New Jersey provided additional incentive to settle claims generously, by compensating its JUA servicing insurer based on the dollar value of claims paid. "After only four years in existence, the New Jersey JUA had a $2.9 billion deficit and one of the highest automobile insurance rates in the country. (Barnes 1989)."[97] News stories reported some of the state's reactions to this crisis. By 1987, the insurance commissioner proposed having assigned-risk drivers pay a $250 surcharge for new insurance unless they could prove they had made all payments on their previous year's insurance.[98] As New Jersey drivers "seeking to reinsure their car after a … lapse in payment" could usually only get insurance in the involuntary market, the proposed surcharge would have affected many in the involuntary market.[99]

Difficulty affording insurance is one reason payments lapse. In Maryland, a news story noted that although many motorists in the involuntary market were "among Maryland's poorest residents," they often had to borrow money to buy policies "at interest rates of up to 40%."[100]

South Carolina's Reinsurance Facility (similar to a JUA) insured more drivers in its high-risk pool "than 43 other states combined": nearly 42% of the state's drivers, or one million motorists.[101] A 2000 news story gave the reason: Insurers were "locked into rating categories and … required to write coverage to anyone who asked. Their main safety valve was to turn over 35% of their portfolio to the high-risk market." One year after changing to a free market system, South Carolina's high-risk pool had shrunk from 503,000 policies to 57,930, going from a $24 million net loss to a profit of $169,000.[102]

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[93] *Ibid.;* p. 277
[94] *Ibid.;* p. 285
[95] *Ibid.;* pp. 277-278
[96] *Ibid.;* pp. 278-279
[97] *Ibid.;* p. 277
[98] "Uninsured drivers face new kind of policy: Get tough surcharge awaits those who play the ID card shuffle," Light, Elli; *The Record;* 6/22/1987
[99] "State gives uninsured drivers 'last chance'; Coverage offered before proposed crackdown," Diamond, Randy; *The Record;* 9/20/2002
[100] "Auto Insurance Program Backfires in Md.," Heath, Thomas; *The Washington Post;* 11/28/1993
[101] "Audit: Insurance Pool Mismanaged; Investigation Claims Liability Fund Covers too Many Drivers, Restricts Market Competition," Bray, Chad; *The Augusta Chronicle;* 2/5/1997
[102] "Auto insurers applaud reform," Parker; Jim; *The Post and Courier;* 2/27/2000

Price has an effect on the size of a state's involuntary market. For example, in California "many drivers, high-risk or not, flocked to CAARP (California's assigned risk pool) to take advantage of the lower rates." A mandated 85% rate increase, said to be needed to make the program "actuarially sound," dropped enrollment to "its lowest point since the system was set up more than 50 years ago."[103]

It is unclear whether the size of a state's involuntary market has any effect on the size of its uninsured motorist population. As of 2000, North Carolina had 1.2 million vehicles insured in its involuntary market – the highest of any state in the nation – yet its estimated uninsured motorist rate is quite low: 6%. That same year, South Carolina had just under 75,000 vehicles insured in its involuntary market – but had one of the highest uninsured motorist rates: 28%.[104]

Secondary data analyzed for this report found no significant relationship between the size of the involuntary market, or the percent insured in the involuntary market, and the uninsured motorist rate.

Arizona's Assigned Risk Pool is administered by the Western Association of Automobile Insurance Plans. In 2000, it insured 217 vehicles. In Arizona, many drivers with poor driving records or loss histories are able to find coverage in the nonstandard market – a segment of the voluntary market that accepts higher-risk drivers, usually for a higher price. While Arizona's involuntary market is shrinking, its nonstandard market is growing.

LOW COST, LOW BENEFIT POLICIES

Intended for low-income residents, low cost, low benefit policies offer benefits lower than state-mandated minimums. By doing so, they create underinsured motorists while seeking to reduce uninsured motorists.

In 1990, the American Insurance Association, an insurance-industry group, proposed a "no-frills" policy in New Jersey that would provide $250,000 personal injury coverage for the policyholder, no coverage for anyone else, and no protection against lawsuits.[105] By 2003, New Jersey allowed a "bare-bones" policy that provided $15,000 medical pay coverage for the driver and no protection against lawsuits, including no duty to defend against lawsuits.[106] Even offering amnesty to previously uninsured drivers through a "Last Chance" program, New Jersey was unable to entice many into taking out bare-

[103] "Calif. Assigned risk pool hits new low," Howard, J.C.; *National Underwriter;* Chicago; Jul 13, 1998
[104] "Private Passenger Cars Insured in the Shared and Voluntary Markets, 2000," *Insurance Information Institute;* ""IRC Study Estimates 14% of Drivers Are Uninsured," 2/1/2001 news release; *Insurance Research Council*
[105] "Insurance group offers cut-rate plan; Florio wary of no-frills car policies," Magyar, Mark J.; *The Record;* 3/1/1990
[106] "New Jersey's Uninsured Drivers Slow to Respond to Amnesty-Style Program," Diamond, Randy; *The Record;* 1/2/2003; "Tiers of Justice; 'Basic' auto policies will exacerbate the inherent unfairness of our insurance law," Chazen, Bernard; *New Jersey Law Journal;* 4/20/1998

bones policies. Over 16,000 motorists took advantage of the amnesty, escaping penalties as high as $1,035 per policy, but just 1,747 purchased no-frills policies.

Officials commented that some agents were reluctant to sell the policy because its commission was smaller; "They also say some agents have been concerned that a motorist who buys the policy could later sue an agent, maintaining they had inferior coverage."[107] Apparently, the New Jersey bare-bones policy failed to provide legal defense in the event of a lawsuit, which a law journal article pointed out would "compound the risk" of a judgment.[108] Consumers with assets to protect would be more likely to lose them.

California is another state that has experimented with low cost, low benefit auto insurance. Beginning in June 2000, drivers with clean driving records who met "numerous" other requirements, including earning less than 150% of the federal poverty level,[109] were eligible for California's four-year pilot program. The annual cost is $450 in Los Angeles County and $410 in the San Francisco area. Unmarried, male drivers ages 19-25 pay an additional 25%.[110] The policies offer $5,000/$10,000/$3,000 coverage, yet satisfy the state's $15,000/$30,000/$5,000 minimum coverage requirements.[111] One inducement to participate is that, if another driver is at fault in an accident, policyholders will be able to collect for pain and suffering. In California, state law prohibits uninsured motorists from recovering non-economic damages.[112]

As of early September 2000, "fewer than 300 motorists had signed up." Officials hoped to see that number increase with a billboard campaign and "streamlined registration";[113] yet five months later, hardly anyone had signed up. Targeting low-income inner-city areas, where the uninsured rate exceeded 80%, billboards asked, "Need low-cost auto insurance? Call this number." The billboards did not say it was a state program. According to Doug Heller of the Santa Monica-based Foundation for Taxpayer and Consumer Rights, "People think it's some private agent." Another reason given for the program's low enrollment was, "insurers note customers can get better coverage for the same amount spent on the low-income plans."[114]

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[107] "New Jersey's Uninsured Drivers Slow to Respond to Amnesty-Style Program," Diamond, Randy; *The Record;* 1/2/2003

[108] "Tiers of Justice; 'Basic' auto policies will exacerbate the inherent unfairness of our insurance law," Chazen, Bernard; *New Jersey Law Journal;* 4/20/1998

[109] "Few taking advantage of new low-cost auto insurance program," Howard, John; *The Associated Press State & Local Wire;* 11/30/2000

[110] "Low-income car insurance program tested for widespread use," Breznican, Anthony; *The Associated Press State & Local Wire;* 6/29/2000

[111] $5,000 per person and $10,000 per accident personal injury coverage and $3,000 property damage coverage; $15,000 per person and $30,000 per accident personal injury coverage and $5,000 property damage coverage

[112] "Low-income car insurance program tested for widespread use," Breznican, Anthony; *The Associated Press State & Local Wire;* 6/29/2000

[113] "Signing up uninsured drivers," *Consumer Reports;* November 2000

[114] "Few taking advantage of new low-cost auto insurance program," Howard, John; *The Associated Press State & Local Wire;* 11/30/2000

In 2001, New Mexico introduced legislation to reduce minimum liability limits for people earning less than 150% of the federal poverty level. By reducing benefits almost 60%, premiums would be reduced about 25%. The bill was supported by insurers.[115]

EQUITY ISSUES

The problems of uninsured and underinsured motorists challenge policymakers to balance complex equity issues, namely:

- Who should pay for motor vehicle accidents? The person at fault? The person injured? Or should the state pick up the cost?
- How should insurance rates be determined?
- What assistance, if any, should be provided to low-income motorists?
- When do enforcement measures infringe on civil rights?

Who Should Pay For Motor Vehicle Accidents?

States tackle the question of who should pay in two ways: choice of compensation system and choice of minimum mandatory coverage requirements.

In the United States, the choice of compensation system is between tort and no-fault. Defenders of the tort system argue that it is more equitable because the wrongdoer pays for the harm he causes.

> "It is basic to tort law that a tortfeasor should pay a victim, to the extent money can reflect the damage done, for the harm inflicted by his or her negligence."[116]

This belief, that people should be held responsible for their actions, underlies support for compulsory insurance laws as well. According to Dave Snyder, assistant general counsel for the American Insurance Association in Washington, an organization that does not support mandatory insurance laws but admits they are "here to stay":

> "We concluded the concept of compulsory liability [insurance] continues to enjoy support in public opinion surveys. People are impressed with the concept of other people being financially responsible."[117]

While it is human nature to err, evidence indicates that serious accidents result from serious errors.

> "Roughly a third of all fatal accidents during 1997 involved alcohol or other controlled substances. An additional 27.7% of accidents were speed

[115] "New policy aims to insure more drivers," Hummels, Mark; *Santa Fe New Mexican;* 2/9/2001
[116] "Tiers of Justice; 'Basic' auto policies will exacerbate the inherent unfairness of our insurance law," Chazen, Bernard; *New Jersey Law Journal;* 4/20/1998
[117] "Compulsory auto laws blasted," Attrino, Tony; *National Underwriter;* Chicago; Sep 7, 1998; p. 65

> related, or involved a major traffic violation such as improper tailing, improper passing, driving on the wrong side of the road, or 'erratic/reckless' driving. Less than a quarter of accidents did not involve a fairly serious driver error. The National Highway Transportation Safety Administration … has concluded that the vast majority of injury producing accidents are also the result of human error…."[118]

The public's desire to hold people financially responsible for their actions – through the tort system – becomes stronger as those actions become more egregious.

A less convincing argument for the tort system is that:

> "'No fault' … substitutes a marketplace principle – that the victim will obtain the measure of justice he or she can pay for in the insurance he or she buys."[119]

Defenders of no-fault would be quick to point out that, under no-fault, victims can ensure that sufficient compensation will be available to meet their needs. Under tort, victims "obtain the measure of justice" the other driver – not they – can pay for. Either way, under tort or no-fault, "marketplace principles" are at work.

Uninsured and underinsured motorist coverages bring some of the benefit of no-fault – the ability to ensure one's own economic well-being in case of an accident – to the tort system. However, that benefit is available only if another driver is at fault.

Social welfare-minded proponents of no-fault might characterize the tort system as harsh for failing to compensate drivers who cause accidents. But proponents of tort might answer that:

> "The principle of deterrence is the philosophic foundation for the tort liability system. … deterrence is probably more central to the theory of torts than is the principle of restitution, since preventing harm altogether is preferable to compensating for harm."[120]

In fact, there is some evidence that no-fault systems increase accident rates and negligent driving behavior – a phenomenon known in economics literature as "moral hazard." According to a 1999 *Journal of Insurance Regulation* article:

> "Two studies from 1982 concluded that no-fault systems significantly increase fatality rates, one of which estimated that no-fault systems increase fatalities by as much as 10% (Landes, 1982; Medoff and Magaddino, 1982). Sloan ***et. al.*** (1994) have estimated that no-fault

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[118] "The case against auto choice," Kabler, Brent; *Journal of Insurance Regulation; vs.* 18 no 1 (Fall 1999)
[119] "Tiers of Justice; 'Basic' auto policies will exacerbate the inherent unfairness of our insurance law," Chazen, Bernard; *New Jersey Law Journal;* 4/20/1998
[120] ***Ibid.***

> systems which eliminate at least 25% of tort claims are associated with an 18% increase in the automobile fatality rate. More recently, Cummins and Weiss (1999) found a statistically significant association between no-fault systems and fatality rates, and Devlin (1999), using micro-level data, found a significant association between no-fault systems and injury severity. Two studies of no-fault systems in New Zealand and the Northern Territory of Australia found increases in auto fatalities of 16% and 20% respectively (Swan, 1984; McEwin, 1989). Sloan *et. al.* (1995) found an increase in driver intoxication associated with no-fault, controlling for such factors as the price of alcohol as well as premium surcharges for DUIs."[121]

On the other hand, the article mentions that "at least two studies have found no association between no-fault and fatality rates (Kochanowksi and Young, 1985; Zador and Lund, 1986)."[122]

Finally, implicit in any discussion of compensation systems is the fact that, to some extent, the state will have to pick up the tab for those not compensated by insurance. Accident victims will be given emergency medical treatment whether or not insurance exists to pay for it. Those who can no longer work may become dependent on state aid. Insurance, therefore, benefits the state as well as the individual beneficiary.

In making their second choice – where to set minimum mandatory limits and what types of coverage to require – states should consider the likely effects on uninsured motorist rates, accident victims, low-income residents and the state. One study, cited above, has found that uninsured motorist rates go down as minimum liability limits go up, especially as they cross the 15/30 threshold.[123] Accident victims benefit from higher minimum liability limits, as more compensation becomes available to them. Victims also benefit from requiring uninsured motorist and underinsured motorist coverages. These supplemental coverages cost little for the benefits they provide – benefits that, unlike liability insurance, are available to insureds for their own injuries. The state benefits from requiring higher limits and uninsured motorist and underinsured motorist coverages, because the more insurance available to victims, the less the state has to cover.

Whatever they mandate, compulsory insurance laws disproportionately affect low income residents. Often, policymakers focus exclusively on the cost of compulsory insurance. It is regrettable that people who have difficulty making ends meet must find a way to pay for auto insurance. When Missouri experienced a boom in 1997, with unemployment going down to 4% statewide and less than 1% in some counties, uninsured vehicles "rose from 7.2% in 1996 to 9.2% in 1997." The Missouri Department of Insurance explained

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[121] *Ibid.*
[122] *Ibid.*
[123] "The uninsured motorist problem: An investigation of the impact of enforcement and penalty severity on compliance," Cole, Cassandra R.; Dumm, Randy E.; McCullough, Kathleen A.; *Journal of Insurance Regulation;* Kansas City; Summer 2001; pp. 630-632

the increase by saying that as the unemployed and welfare recipients got jobs, they bought cars to drive to work, but skipped on insurance.[124]

More coverage costs more, and higher costs are more difficult for low income residents to pay. But more coverage also provides more benefits, and benefits are more important for low-income residents.

One reason to purchase liability insurance is to protect one's assets. Since low-income residents have fewer assets to protect, they have less reason to buy liability insurance. However, when struck by an at-fault driver, low-income residents have a greater need for adequate compensation, since they are less likely to have health insurance to pay for medical care and less likely to have savings to fall back on if they cannot work. Low-income residents are also less likely to have purchased collision coverage. They may be unable to repair or replace vehicles damaged by uninsured motorists.

Cost-cutting measures that limit recovery for non-economic loss take away more from low-income residents than from those with higher incomes. States that limit or prohibit recovery for pain and suffering guarantee that a neurosurgeon paralyzed in a motor vehicle accident will recover far more than a maintenance worker with the same injuries. Limiting recovery for non-economic loss also disproportionately affects children, who do not work, and young adults, who have not established careers. In our democratic society, most people agree that human life and health are precious regardless of earning capacity. Compensation for pain and suffering recognizes this belief.

In 1997, Louisiana allowed a new form of uninsured motorist coverage: "economic loss only." Under that coverage, drivers injured by uninsured motorists could sue their company for "actual physical injuries, vehicle damage and lost wages," but not for pain and suffering.[125] The law "allows motorists who give up their right to sue for pain and suffering … to take a 20% reduction on their uninsured motorist coverage."[126]

Uninsured motorist coverage makes up a small part of the cost of an auto insurance policy. In Louisiana in 2000, the average annual expenditure on liability coverage was $467.29. Louisiana's minimum mandatory liability limits are $10,000 per person and $20,000 per accident. If uninsured motorist coverage cost as much as 20% of liability coverage, then people who choose economic loss only uninsured motorist coverage would give up at least $10,000 coverage for themselves and $20,000 for their families for about $19 a year. Many people do not understand the difference between liability coverage and uninsured motorist coverage, nor do they understand the difference in cost between the two. It is reasonable to assume that many people would not understand what they were giving up, or what they were getting in return.

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[124] "Mo. economic boom hikes auto uninsured," Maurice, Alex; *National Underwriter;* Chicago; Dec 14, 1998; p. 8

[125] "More insurers to cut rates in LA.; Savings depend on area of state," Anderson, Ed; *Times-Picayune;* 6/18/1998

[126] "Senate bill has 10% cut for auto policies; Rollback called meaningless," Cooper, Christopher; *Times-Picayune;* 6/17/1997

Buyer confusion can be exploited by sellers. A 1996 article in *American Agent & Broker* quotes a call center insurer sales agent speaking to a prospect:

> "Well, uninsured motorists insurance basically pays your medical bills when someone without insurance causes your injuries. If you have good health insurance to cover those bills, you don't need as much uninsured motorists coverage."[127]

Of course, this is horribly misleading, because uninsured motorist pays far more than medical bills – lost wages, disability, pain and suffering, benefits to family or estate upon death, and even punitive damages in some cases. Typically, call center sales scripts and tactics are carefully developed by the client, and not the invention of an individual agent. The author of this report received similar, unsolicited advice when calling 800 numbers for insurance quotes. Because uninsured motorist and underinsured motorist coverages are cheap for the benefits they provide, it makes sense that insurers would not want to promote them.

How Should Insurance Rates Be Determined?

States have an interest in keeping insurers solvent as well as in making insurance affordable and available. But states differ in how they balance actuarial and equity issues. Even factors associated with risk may be considered unfair when used to set rates. Legislative or regulatory attempts at prohibiting or restricting the use of certain rating factors have targeted age, gender and marital status. States that have prohibitions or restrictions are shown in Table 7 below.

Table 7. Prohibited Rating Factors By State

Age	Prohibited in California, Hawaii, Massachusetts, North Carolina
Gender	Prohibited in Hawaii, Massachusetts, Michigan, Montana, North Carolina, Pennsylvania Restricted in California
Marital status	Prohibited in Michigan, Montana[128]

More recently, credit and territory have come under attack. In 2002, 10 states passed laws restricting the use of credit as a rating factor. Many states have laws requiring notice to consumers of the use of credit history, or prohibiting its use as the sole determining factor in rating or underwriting. Credit history can have a major influence on consumers' rates: "Under some insurers' guidelines, credit information can change the rates policyholders pay by up to 50%." For a while, the use of territory as a rating factor was prohibited in California. An appeals court in 2000 reversed that ban, however.[129]

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[127] "So close, yet so far," Amrhein, Chris; *American Agent & Broker;* St. Louis; Nov 1996; p. 8
[128] Source: Insurance Information Institute; March 2003
[129] *Ibid.*

From consumers' point of view, the use of any factor other than driving record may seem unfair. Age and gender are beyond their control, and people do not decide to get married or move based on how it will affect their insurance rates.

People with poor credit find themselves paying more for a number of goods and services – making precarious financial situations worse. Credit history is used in employment and rental housing applications, as well as lending and leasing practices. Charging higher premiums to people with poor credit may not be that different from charging higher premiums to people with low incomes.

There are also those with poor credit "through no fault of their own," as well as those who do not use credit for religious reasons or as a lifestyle choice. In 2002, the National Conference of Insurance Legislators (NCOIL) took the former into account when it approved a model law on the use of credit scoring in underwriting and rating.

> "Among other things, the model legislation requires insurers to disclose to consumers that a credit report may be used and to notify the policyholder in compliance with the federal Fair Credit Reporting Act when credit is the basis for an adverse action. It prohibits the use of credit information as the sole basis for refusal to insure or to nonrenew or cancel. It also bars the use of disputed information or information identified as medical collection accounts in the credit report and encourages insurers to take into account extraordinary life events, such as catastrophic illness or the death of a spouse."[130]

Colorado's Division of Insurance recently issued a regulation protecting those with no credit as well as those with poor credit. The regulation prohibits insurers from using poor credit history "related to a divorce or debts of a former spouse" or "associated with medical debt collection accounts"; and from using lack of a recent credit history against "people 65 and older." According to the Insurance Information Institute, like those with poor credit, those with no credit (called "no-hits") have "greater than average insurance losses."[131]

From insurers' point of view, age, gender, marital status, territory, and credit history are predictive of risk; therefore, not using them to set rates would be unfair. Actuarially-based rating factors allow insurers to assess risk and set rates more accurately. Some consumers pay lower premiums as a result. Limiting or prohibiting the use of actuarially-based rating factors amounts to a subsidy of higher-risk consumers by lower-risk consumers. Insurers argue that this is unfair.

No study was found that examined public acceptance of various rating factors as legitimate, but it may be that time and longstanding use increase acceptance. Having a plausible explanation for why the correlation occurs may also increase acceptance. News

[130] *Ibid.*
[131] *Ibid.*

stories of accidents involving male teenage drivers and people's own beliefs about driving, teenage boys, and risky behavior may be enough to convince them that auto insurance rates should be higher for this segment of the population. On the other hand, people may have no beliefs about how poor credit or the neighborhood one lives in relate to driving behavior. And news stories do not report credit histories or zip codes of drivers involved in accidents.

Credit history and especially zip code are linked to another important policy consideration: discrimination.

A 1995 study of the availability of auto insurance in Texas found "a dramatic relationship between insurance availability and minority population as well as between insurance availability and median household income."[132] Authored by the chief economist for the Texas Department of Insurance, the study used a ratio of the number of insureds in the state's three insurance markets as a measure of availability.

$$\frac{\text{nonstandard market + involuntary market}}{\text{standard/preferred market + nonstandard market + involuntary market}}$$

Consumers denied coverage by standard/preferred insurers wound up in the nonstandard or involuntary markets. The study found "tremendous variation" in availability by zip code. Insurance availability decreased as minority population increased and as household income decreased. In some zip codes, just 5% of insureds were in the nonstandard or involuntary markets. In others, more than 50% were in these higher-priced markets. According to the study, "This variation cannot be the result of random variation, bad drivers deciding to live together or the minority population being worse drivers, on average."[133]

> "The Department (of Insurance) compared composition of the population in Texas by race to the composition of involvement in accidents as reported to the Texas Department of Public Safety (DPS) and found that minorities were no more likely to have been involved in traffic accidents than the minority share of the population. In 1992, the DPS reported that of drivers involved in accidents in Texas, 61% were white, 20% were Hispanic, 12% were African American and 7% were unknown or of another background. The state's population in 1992 was 61% white, 25% Hispanic, 12% African American and 2% other."[134]

Minority drivers were no more likely to have been involved in accidents than white drivers.

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[132] "Private Passenger Automobile Availability in Texas: An Analysis of the NAIC/Texas Special Data Call," Birnbaum, Birney; *NAIC Research Quarterly;* April 1995; Volume I, Issue 2
[133] *Ibid.*
[134] *Ibid.*

Despite this, regression analysis showed that drivers living in zip codes with high minority populations were two to three times more likely to have been denied coverage in the standard/preferred market, even after holding median household income constant – a finding statistically significant at the 99% confidence level.[135]

Other studies, cited above, have already shown that uninsured motorists are more likely to be Hispanic or African American and low-income and that as the cost of insurance goes up, so does the uninsured motorist rate.[136] If coverage in the standard/preferred market is less available to minority and low-income drivers, this may be a contributing factor to the uninsured motorist rate, as coverage in the nonstandard and involuntary markets is more expensive.

The Texas study looked at zip code level data. Looking at state level data, as minority population increases relative to the population as a whole, so does the uninsured motorist rate. Comparing figures for urban population, median household income, average amount paid out for damages covered by liability insurance and minority population, minority population was the only variable significantly predictive of the uninsured motorist rate. For every 1% increase in minority population rate, we would expect to see a .2% increase in the uninsured motorist rate – a finding statistically significant at the 99% level. Minority population rate explains 14.7% of the variation in the uninsured motorist rate. (See Figure 7 below and Output 3 in the Appendix.)

[135] *Ibid.*

[136] "Characteristics of Uninsured Motorist," Hunstad, Lyn; *California Department of Insurance;* February 1999; "The uninsured motorist problem: An investigation of the impact of enforcement and penalty severity on compliance," Cole, Cassandra R.; Dumm, Randy E.; McCullough, Kathleen A.; *Journal of Insurance Regulation;* Kansas City; Summer 2001

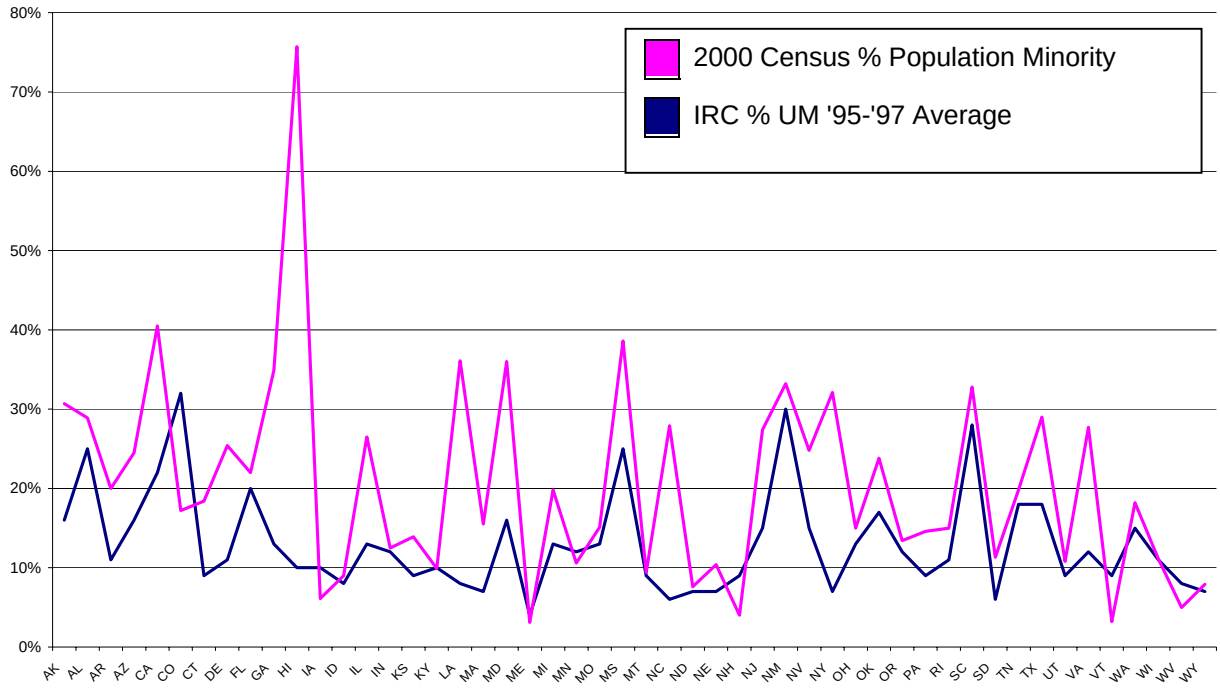

Figure 7. Correlation Between Percent Minority Population and Uninsured Motorist Rate

What Assistance, If Any, Should Be Provided to Low-Income Motorists?

Few states have offered programs to help low-income residents afford auto insurance. In responding to surveys for this report, a number of state insurance departments admitted they did not know if their state had offered such a program – but if it had, the state welfare department would have managed it. In 1990, a story in *The New York Times* reported that Hawaii subsidized free auto insurance to over 7,000 welfare recipients.[137] Today that program might cost in the neighborhood of $3.5 million.

Other than outright subsidies, a number of policy initiatives might benefit low-income motorists, such as low interest loans to pay premiums or requiring insurers to accept more frequent, smaller payments from low-income insureds. Obstacles to becoming legal, such as surcharges, could be eliminated or reduced. Tax incentives to insurers and/or motorists might also be considered.

When Do Enforcement Measures Infringe on Civil Rights?

Finally, states must look at whether enforcement of mandatory insurance laws violate civil rights.

[137] "Uninsured Drivers Create Other Kinds of Wreckage," deCourcy Hinds, Michael; *The New York Times;* 9/3/1990

In 1998, the American Civil Liberties Union (ACLU) objected to the use of "administrative roadblocks" – asking drivers for "driver's licenses, registration and insurance" – in Nevada. In 1990, the United States Supreme Court ruled that DUI checkpoints were constitutional. But police at DUI checkpoints "are prevented without cause from intruding further than the purpose they are there for, such as asking for identification." According to the ACLU, "the case law nationwide is really all over the map."[138]

In addition to issues of probable cause and right to privacy, there is also the issue of equal treatment. Concerned about racial profiling, Texas has not used DUI checkpoints since 1994, "when the Court of Criminal Appeals ruled that they were unconstitutional until the Legislature established uniform standards." Despite three attempts, the Texas Legislature has yet to do so.[139]

SUSPENSIONS, SURCHARGES AND AMNESTY

Many states have barriers to uninsured motorists becoming legal – namely, penalties that must be paid or served before insurance can be obtained. Government-imposed barriers include driver's license suspensions and reinstatement fees. Fines and jail time do not fall into this category, unless they must be paid or served before insurance can be obtained. Insurer-imposed barriers include surcharges and declining coverage.

Looking first at government-imposed barriers, driver's license suspensions and reinstatement fees may have any or all of the following effects:

- Deter people from driving without insurance.
- Encourage compliance with the law in order to be reinstated.
- Make it impossible to get insurance until reinstatement.
- Make it difficult to get insurance after reinstatement.
- Make it difficult for a spouse or other household member to get insurance.
- Have a disproportionate effect on low-income offenders.

Although the 2001 Cole, *et al.* study found that higher potential fines were associated with lower uninsured motorist rates, it did not look at the relationship between actual fines and compliance, nor did it look at the relationship between fees – potential or actual – and compliance.[140] Fines may be more readily waived by a judge than fees may be waived by an agency. Therefore, fees may provide a truer picture of costs incurred to become legal.

Uninsured motorists may continue to drive – illegally – with a suspended license. In 2001, reporters for the *Chicago Sun-Times* followed Illinois defendants whose licenses

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[138] "Bump in the Road," Bates, Warren; *Las Vegas Review-Journal;* 8/27/1998
[139] "Proposals Aim to Curb Dangers on Texas Roads," McCann, Ian; *The Dallas Morning News;* 3/2/2003
[140] "The uninsured motorist problem: An investigation of the impact of enforcement and penalty severity on compliance," Cole, Cassandra R.; Dumm, Randy E.; McCullough, Kathleen A.; *Journal of Insurance Regulation;* Kansas City; Summer 2001; pp. 630-632

had just been suspended out of the courthouse. All got into their cars and drove away.[141] Some states, for example Ohio, have mandatory license suspensions for driving without insurance: 90 days for the first offense and one year for the second offense in five years. Insurers are unlikely to provide insurance during the suspension period, and are likely to impose surcharges, or decline coverage, after the suspension. In 1995, Ohio suspended over 100,000 licenses for failure to comply with compulsory insurance laws.[142] If all were first-time offenders, and just half continued to drive during the suspension period, that would amount to as many as 4.5 million days of motorists driving without insurance.

In a 1996 news story in the *Columbus Dispatch,* opponents of Ohio's mandatory suspension law cited a variety of reasons for their opposition. Judge Anne Taylor of Franklin County Municipal Court said that "traffic laws should be designed to help drivers become legal as quickly as possible." Defense attorneys noted that divorced and separated people were "falling victim to" compulsory insurance laws for "unwittingly" driving without insurance their partner failed to pay for – an observation supported by a group for victims of domestic violence and the Legal Aid Society of Columbus. Doing its own analysis of the over 37,000 Franklin County residents charged between 1993 and 1995 with not having insurance, the *Dispatch* found that, "Nearly 75% … live in the city's poorest or most transient neighborhoods."[143]

License suspensions are intended as punishment and deterrence. No study was found examining their effectiveness as either. But suspensions that must be served for a minimum period before insurance may be obtained postpone the day when motorists can become insured, and legal. High reinstatement fees can have the same effect on low income residents.

There is reason for concern that drivers with suspended licenses pose a high risk to the public. According to a national study by the Automobile Association of America (AAA) Foundation for Traffic Safety,

> "… one in five drivers in fatal crashes is improperly licensed. The study, 'Unlicensed to Kill,' looked at 183,749 accidents from 1993 to 1997. … Other sobering numbers: More than 73,000 people were arrested for driving on suspended and revoked licenses in 1999 in Illinois. One in 10 drivers in a fatal accident in 1999 in Illinois didn't have a valid license. One in three had their licenses suspended or revoked in the past, the latest statistics from the National Highway Traffic Safety Administration show. In a United States Transportation Department survey of people arrested for driving under the influence, 38% said they were likely to drive without a

[141] "Judges take licenses – and drivers take off," Main, Frank; Guerrero, Lucio; Warmbir, Steve; *Chicago Sun-Times;* 6/17/2001
[142] "Guilt By Association Crackdown On Uninsured Drivers Snagging Insured Relatives, Friends," Berens, Michael; *Columbus Dispatch;* 11/17/1996
[143] *Ibid.*

> license. 'Driving while unlicensed is likely to be encouraged by the belief that there is little danger of being caught,' the 1996 study concluded."[144]

A driver's license is a privilege, and meant to show fitness, knowledge and responsibility to be entrusted with that privilege. There is no question but that some drivers should not be on the road, and should have their driving privileges revoked – regardless of the difficulty of enforcement.

Applying that penalty to those who drive without insurance, however, punishes those who fail to get insurance by making it impossible for them to get insurance. Per a telephone call to the Arizona Department of Insurance, insurers in Arizona will not issue policies to drivers while their licenses are suspended. This is logical, in that they are not supposed to be driving. But some will drive, and the risk they present is borne by the public, and by the state, and not by insurers (except through uninsured motorist coverage, which is not mandatory in Arizona).

On the other hand, states that allow license suspensions to be lifted upon presentation of proof of insurance may expedite, not delay, purchase of insurance. This may not be the case, however, if insurers are allowed to decline coverage or impose surcharges.

Insurer penalties apply to those who let their policies lapse and then try to reinsure, as well as those convicted of driving without insurance. In 2002, New Jersey motorists whose policies lapsed more than 30 days were forced into the state's involuntary market, which imposed surcharges of $1,035 on liability insurance plus an additional $351 on full coverage. To encourage compliance, the state announced an amnesty program in September of 2002 that would waive surcharges for those who purchased insurance before the end of the year. Those convicted of driving without insurance would still have to pay a separate $1,275 surcharge over three years and could not apply for insurance until a one-year license suspension was over.[145] Over 16,000 motorists took advantage of the amnesty.[146]

Surcharges and declining coverage may apply even to those who have not broken the law – for example, those who went without a car for a period of time and cancelled their insurance. Included in this group are people struggling to replace a car that "died" as well as United States soldiers sent overseas. Insurers justify surcharges by saying that previously uninsured motorists pose a higher risk. When Texas changed its compulsory insurance law, State Farm claimed that "previously uninsured drivers had 130% higher losses than insured drivers with clean records."[147] According to the chair of the State Board of Insurance, however, insurers did not provide the board with information

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[144] "Judges take licenses – and drivers take off," Main, Frank; Guerrero, Lucio; Warmbir, Steve; *Chicago Sun-Times;* 6/17/2001

[145] "State gives uninsured drivers 'last chance'; Coverage offered before proposed crackdown," Diamond, Randy; *The Record;* 9/20/2002

[146] "New Jersey's Uninsured Drivers Slow to Respond to Amnesty-Style Program," Diamond, Randy; *The Record;* 1/2/2003

[147] "Pay at the pump isn't the solution," *National Underwriter;* Richardson, Diane; Chicago; Jun 8, 1998

showing this group posed a higher risk.[148] Banned in some states, surcharges on previously uninsured motorists may add as much as 30% to the cost of a policy.[149]

FINES AND JAIL

Once again, a 2001 study has shown that higher potential fines are associated with lower uninsured motorist rates, but has left unanswered the question of what relationship, if any, exists between higher actual (imposed or collected) fines and uninsured motorist rates.[150] No studies were found examining this issue.

Generally, agencies do not exercise discretion in imposing administrative penalties such as suspensions and reinstatement fees. One reason for this is government's mandate to impartially enforce the law. Unlike administrative penalties imposed by an agency, however, civil or criminal penalties imposed by a court are subject to judicial discretion. Dismissal, reduction or suspension of nonmandatory penalties can be common. A 2002 Associated Press news story reported that, in 2001, Iowa judges dismissed or acquitted 25,426 out of 47,651 tickets for failure to prove insurance. "Rather than issue fines," the story read, "judges let defendants off if they agreed to buy auto coverage."[151] It is unclear what follow-up, if any, was done to ensure that they did so.

In Florida in 1990, over 140,000 citations were issued for failure to prove insurance. Statewide, 55% were dismissed, while in Palm Beach County, 70% were dismissed. Judge David Demers, president-elect of the Conference of County Court Judges of Florida explained:

> "What happens in a lot of these cases is that it's often a companion charge to DUI or driving on a suspended license …. It's common to merge and dismiss the infractions in exchange for a guilty plea on the greater charge."[152]

Another possible explanation is that Florida's database was "cluttered with mistakes." Hundreds of cases were dismissed because motorists had insurance when the database said they did not.[153]

Whatever the cause, high dismissal rates can undermine enforcement. In 1997, Orange County, California judges "waived so many fines that at least eight police departments stopped ticketing motorists without proof of insurance." Cities were losing money on

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[148] "Rule shielding new insurance buyers to die," Yip, Pamela; *The Houston Chronicle;* 8/6/1992
[149] "Calif. Commissioner blocks auto ins. surcharges," Anonymous; *National Underwriter;* Chicago; Feb 24, 1997; p. 5
[150] "The uninsured motorist problem: An investigation of the impact of enforcement and penalty severity on compliance," Cole, Cassandra R.; Dumm, Randy E.; McCullough, Kathleen A.; *Journal of Insurance Regulation;* Kansas City; Summer 2001; pp. 630-632
[151] "Many uninsured drivers often let off," *The Associated Press State & Local Wire;* 6/16/2002
[152] "Drivers, don't be alarmed; Motorists are mistakenly told they have no injury insurance," Koff, Stephen; *St. Petersburg Times;* 6/7/1989
[153] "Uninsured drivers may play tag with the repo man," Wiggins, Chani; *The Tampa Tribune;* 9/2/1995

court processing fees for insurance tickets. Although a change in the law waived processing fees when fines were waived, enforcement agencies incur other costs in issuing tickets, including officer time in court.[154] In addition to cost, there may be a negative effect on morale: If officers believe it is a waste of time to enforce a particular law, they are less likely to do so.

The exercise of judicial discretion, by dismissal, reduction or suspension of penalties, also makes it more difficult to assess the law's effectiveness.

The argument for discretion is that, with adequate information available about a defendant's past history and current circumstances, a judge can tailor punishment to fit the crime, taking into account aggravating and mitigating factors. Judges can, and do, exercise discretion even in the presence of mandatory penalties – by dismissing or reducing charges or suspending sentence.

Although the 2001 study found higher potential fines associated with lower uninsured motorist rates, jail time was the opposite: as potential jail days increased, so did uninsured motorist rates. The study's authors suggested that the result – uninsured motorist rates increasing with potential jail days – was "spurious, endogenous (states with problems react by passing tougher penalties)," penalties weren't being enforced or people didn't believe penalties would be enforced. Again, no studies were found on actual jail days (sentenced or served) and uninsured motorist rates. Even as a potential penalty, jail time for failing to comply with compulsory insurance laws is by no means universal – less than half the states had that penalty in 2001.[155]

NO- PAY/NO-PLAY

Insurers have promoted, and some states have adopted, "no-pay/no-play" provisions.

California's Prop 213, passed in 1997, barred uninsured motorists from collecting non-economic damages, including pain and suffering.[156] Oklahoma's Insurance Commissioner Carroll Fisher proposed forcing uninsured motorists to exhaust their health insurance before allowing them to collect minimum liability limits from at-fault, insured drivers.[157]

Sometimes insurers offer rate rollbacks in exchange for no-pay/no-play legislation.

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[154] "Judges hit car insurance fines; Riverside County jurists lead the call in California to spike the law," Smith, Erik; *The Press Enterprise;* 12/15/1997

[155] "The uninsured motorist problem: An investigation of the impact of enforcement and penalty severity on compliance," Cole, Cassandra R.; Dumm, Randy E.; McCullough, Kathleen A.; *Journal of Insurance Regulation;* Kansas City; Summer 2001; pp. 630-632

[156] "Taking the initiative," Reuben, Richard C.; *ABA Journal;* Chicago; Jan 1997; p. 40

[157] "Study finds high rate of uninsured motorists in Oklahoma," *The Associated Press State & Local Wire;* 8/19/1999

In 1999, State Farm offered a rate cut of 4.5% if New Mexico passed a no-pay/no-play bill that allowed uninsured motorists to collect for economic loss only – not pain and suffering and not punitive damages.[158]

Two years earlier, Louisiana demanded, and got, rate rollbacks of 10% on liability coverage for 75% of the state's motorists – about a 5% discount on total premiums for the average full-coverage policy. In exchange, the legislature passed a bill barring uninsured motorists from collecting the first $10,000 in medical bills or property loss after an accident. Louisiana's minimum per person liability limits are $10,000, so uninsured motorists injured by drivers with minimum liability coverage would collect nothing.

The bill also allowed "economic loss only" uninsured motorist coverage. To receive a 20% discount on uninsured motorist coverage (less than a 4% discount on total premiums, typically) policyholders would give up the right – for themselves and their passengers – to recover non-economic damages if injured by an uninsured motorist.[159]

At the same time, Louisiana passed a bill allowing towing and impoundment of uninsured vehicles, but implementation was delayed by a challenge in the courts. One year later, the uninsured motorist rate had fallen from 30% to 22%, according to state Department of Insurance estimates, and from 12% to 8%, according to Insurance Research Council estimates. (The Department of Insurance compared registered vehicles to policies issued; the Insurance Research Council took the ratio of uninsured motorist bodily injury claims to all bodily injury claims.)[160]

Michigan and New Jersey also have no-pay/no-play legislation, but New Jersey's law has been challenged for violating due process and equal protection rights. An appeal is before the state supreme court. A majority of states, however, that have considered no-pay/no-play legislation have rejected it. Nonetheless, the idea has strong public support. According to a 1997 public opinion survey by the Insurance Research Council, 77% of respondents "thought it was a good idea to limit uninsured drivers' rights to collect damages from insured drivers."[161]

Arizona's Constitution would prohibit no pay, no play legislation. Article 2, Section 31 states:

> "No law shall be enacted in this state limiting the amount of damages to be recovered for causing the death or injury of any person."

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[158] "Uninsured Motorists Bill OK'd," Coleman, Michael; *Albuquerque Journal;* 3/15/1999
[159] "Senate bill has 10% cut for auto policies; Rollback called meaningless," Cooper, Christopher; *Times-Picayune;* 6/17/1997
[160] "Ensuring compliance," *Times-Picayune;* 11/13/2001
[161] Source: Insurance Information Institute; March 2003

PROOF OF INSURANCE, LICENSE PLATE SEIZURE AND IMPOUNDMENT

Proof of Insurance

States have come up with different requirements for proof of insurance. Mainly, states require motorists to provide proof on one or more of the following occasions:

- After an accident
- At the scene of an accident
- Upon officer request
- After registration
- At registration
- At renewal of registration
- When randomly selected

In their 2001 study, Cole, *et al.* found that, of states with compulsory insurance laws, 45% require proof of insurance "whenever there has been an accident," 29% require proof "in the event of an accident or a moving violation" and 25% require proof "upon the request of a police officer." Random checks are also used, but "infrequently." Testing the most stringent requirement, requiring proof upon officer request, the authors found no statistically significant relationship with the uninsured motorist rate.[162]

The authors explained their findings by noting the ease with which insurance can be obtained and then cancelled once a vehicle is registered and the prevalence of counterfeit or stolen insurance cards in some states.

In 1999 in New Mexico, insurers were writing policies for 30-day coverage – a practice especially suited for those who want coverage just long enough to register their vehicles.[163] With little follow up (except in states that require electronic reporting from insurers), there is little chance of being caught. Missouri closed this loophole by banning the sale of auto liability insurance policies of less than three months.[164] The *Insurance Journal* article reporting this does not say if policies were non-cancelable for three months, or if three months' premium was required up front.

Although Cole, *et al.* found no relationship between requiring proof upon officer request and uninsured motorist rates, there is anecdotal evidence of a relationship between requiring proof at registration and uninsured motorist rates.

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[162] "The uninsured motorist problem: An investigation of the impact of enforcement and penalty severity on compliance," Cole, Cassandra R.; Dumm, Randy E.; McCullough, Kathleen A.; *Journal of Insurance Regulation;* Kansas City; Summer 2001

[163] "Land of the uninsured," Robinson, Sherry; *Albuquerque Tribune;* 11/15/1999

[164] "Missouri Uninsured Driver Rate Down 18 Percent in 1999," *Insurance Journal;* 11/22/2000

The year after Missouri began requiring proof of insurance to obtain new or renew license plates, the state's uninsured motorist rate dropped from 9.1% to 7.3%, according to an annual comparison of registration and insurer records.[165]

When California began requiring proof at registration in 1997, a "flourishing" industry in counterfeit insurance cards developed, in which licensed insurance agents participated.[166] By 1998, state insurance regulators were "typically" suspending 15 agents' licenses a month for selling fake insurance cards.[167] California initiated other auto insurance reforms as well in 1997, which could account for some of its reported drop in uninsured motorist rates from 1996 to 1997: 24.1% to 11.2%.[168] It is also possible that some of the insured in those statistics were actually uninsured, with counterfeit insurance cards.

Or, perhaps requiring proof at registration did increase compliance. People may think it unlikely that they will be in an accident, or pulled over for a moving violation, and have to show proof to an officer. But if they drive a vehicle without tags, they visibly break the law – an uncomfortable position to be in.

Arizona has tried to make such lawbreaking more visible and uncomfortable by allowing sellers to retain license plates and the balance on their registration fees. Buyers would have to re-register (and provide proof of insurance) or risk driving without license plates.[169]

Many comply with proof at registration laws. Others find a way around them. While fake insurance cards are used to get real registration tags, some opt for counterfeit or stolen tags instead.

A 1992 news story reported that in Houston, Texas:

> "The fake stickers are so popular that 9,600 citations were issued …for the month of November. … Worse still is the fact that the illegal activity is looked upon by the public as a legitimate service. It can cost hundreds of dollars to get an older vehicle in shape to pass inspection. Fake stickers cost $20 to $75. Counterfeiting has soared in the last two years, after new laws made it harder to get a sticker. State law now requires drivers to show proof of liability insurance before a sticker is issued."[170]

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[165] *Ibid.*
[166] "Crackdown Works; Rates Fall as More Drivers Get Insured," Barrett, Beth; *The Daily News of Los Angeles;* 8/4/1998
[167] "Insurance Regulators Go After Phony Proof Scam," Dietz, David; *The San Francisco Chronicle;* 5/20/1998
[168] "Crackdown Works; Rates Fall as More Drivers Get Insured," Barrett, Beth; *The Daily News of Los Angeles;* 8/4/1998
[169] "Vehicle buyer complains about new license plate law," *The Associated Press State & Local Wire;* 1/24/2002
[170] "Phony inspection tags a hit with auto owners; Counterfeiting soars in past 2 years," *The Houston Chronicle;* 12/7/1992

In 2001, Philadelphia, Pennsylvania experienced "an epidemic of 'license clipping'" – stealing tags from registered vehicles. In response, it replaced license plate stickers with larger rear window stickers, after which "sticker theft declined by 10% and license-plate theft by 24%." Residents didn't like the window stickers, however, so they became optional.[171]

Requiring proof of insurance at registration may have another unintended effect: increased unregistered vehicle rates. California is a case in point. The first year it required proof at registration, over a million vehicles dropped off the registration roles or were declared nonoperational.[172]

To recap, owners can thwart proof at registration requirements in several ways. They can:

- Not register their vehicle
- Purchase insurance, register their vehicle, then cancel insurance
- Obtain false proof of insurance, then register their vehicle
- Obtain false registration tags
- Obtain stolen registration tags

Except in states that require electronic reporting from insurers, the likelihood of being caught is low. To be caught by law enforcement at an accident, a traffic stop or an administrative checkpoint, the officer must ask for proof of insurance and, if presented with a counterfeit, must recognize it as such. At registration, agency personnel would also have to recognize counterfeit insurance cards.

States that use random sampling increase the odds of being caught, but only slightly. This method mails requests for proof of insurance to randomly selected owners of registered vehicles. The owners have a certain number of days within which to respond. At one time, Arizona mailed 12,000 such requests a year, according to Charles Ramsey, former manager of the Arizona Department of Transportation's Insurance Unit. With 3 million motorists, this gave owners a 0.4% chance of being selected. According to Ramsey, "Most people didn't even know we were doing it."[173]

South Carolina sampled much more extensively, sending out 500 requests a day, or about 125,000 a year – giving owners a 4-5% chance of being selected.[174] But violators were less likely to be selected. If the uninsured motorist rate was 25% – a high figure – violators would have a 0.1% chance of being caught. Still, random sampling was more effective in catching uninsured motorists than traffic stops. In 2001, traffic stops resulted

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[171] "PennDOT again makes exceptions for Philadelphians who disobey the law," *Intelligencer Journal;* 12/8/2001

[172] "Crackdown Works; Rates Fall as More Drivers Get Insured," Barrett, Beth; *The Daily News of Los Angeles;* 8/4/1998

[173] "Revised Arizona Law Too Soft on Uninsured Driver, Critics Say," Anderson, Craig; *The Arizona Republic;* 8/3/1998

[174] "New computer database will trace motorists without insurance," *The Associated Press State & Local Wire;* 5/6/2001

in 2,648 citations for driving without insurance. Random sampling resulted in 7,788 suspensions for failure to provide proof of insurance.[175]

On the other hand, random sampling contacted over 115,000 owners who had insurance, giving them 45 days to get their insurers to sign forms confirming coverage.[176] Eleanor Kitzman of Drivers Choice described South Carolina's program as not being "overly successful" in reducing the number of uninsured motorists, "But it was very successful in annoying law-abiding citizens…."[177] A separate news story reported that legislators and insurers agreed, saying, "random sampling is cumbersome, doesn't target uninsured motorists and irritates policyholders who are forced to fill out paperwork to prove they have coverage."[178] South Carolina began moving to a database insurance verification system in 2001.[179]

States require insurers, as well as owners, to provide information. Insurers must provide confirmation or denial of coverage upon request, which may be on an as-needed or ongoing basis, or when some triggering event occurs, such as cancellation or nonrenewal.

Ma and Schmit found that requiring proof from insurers – not owners – was related to lower uninsured motorist rates. In their 2000 study, they found that requiring insurers to notify state agencies when policies were cancelled or not renewed was related to lower uninsured motorist rates, and that the relationship was statistically significant at the 99% level.[180]

License Plate Seizure

Some states have experimented with seizing license plates of uninsured motorists. This got the attention of those driving without insurance, but raised the ire of those wrongly identified as uninsured.

A pioneer in requiring electronic reporting from insurers (starting in 1989), Florida struggled with inaccuracies that did not allow matching of policy records with registration records. Initially, Florida's database had a 60% accuracy rate (now 98%).[181] Its license plate seizure program ran into difficulties, prompting a caustic article in *Business Week* about "what happens when you cross the inefficiencies of state government with those of the insurance industry."

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[175] "State moves to catch uninsured motorists; Computer database will trace insurance, DMV information," Parker, Jim; *The Post and Courier;* 5/6/2001

[176] "DMV developing computer to track, target uninsured drivers**,"** *The Associated Press State & Local Wire;* 3/12/2000

[177] "State Plans Crackdown, Hopes Effort Will Cut Liability Rates," Graham, Rex; *Albuquerque Journal;* 6/21/1995

[178] "New computer database will trace motorists without insurance," *The Associated Press State & Local Wire;* 5/6/2001

[179] "The trick of driving without insurance in South Carolina may not be much of a treat anymore," Parker, Jim; *The Post and Courier;* 5/25/2002

[180] "Factors affecting the relative incidence of uninsured motorists claims," Ma, Yu-Luen; Schmit; Joan T.; *Journal of Risk and Insurance;* Malvern; Jun 2000

[181] Source: Florida Dept. of Highway Safety and Motor Vehicles

> "… a recent survey found that a third of the plates snatched by the repo men – who turned in nearly 7,000 plates over a recent 13-month period, earning a princely $25 each – were from fully insured motorists who had simply switched insurers. … Florida officials blame insurance companies that drag their feet on filing mandatory lists of motorists without coverage."[182]

Still, an earlier article in *The Washington Post* credited Florida's license plate seizure program with a "a 2% increase in the number of Florida's insured vehicles." Stated this way, it is unclear whether a decrease in the uninsured motorist rate or an increase in the motorist population was responsible. Nonetheless, State Farm, the state's largest automobile insurer "reduced its rates for the first time in more than a decade," citing "the reduction in the number of uninsured motorists as a primary reason."[183]

Maryland ran a pilot program using outside enforcement agents in 1997, but it targeted uninsured motorists who had received at least four notices from the Motor Vehicle Administration (MVA), had multiple insurance violations, or had defaulted on MVA penalties.[184] Agents had to meet state criteria for private detectives.[185]

Targeting the worst offenders is one way to reduce the number of license plates seized by mistake. Requiring insurers to provide policy change information within a certain number of days or face fines is another.

Impoundment

States and municipalities both use towing and impoundment to enforce compulsory insurance laws. Few use impoundment extensively. Costs include officer time waiting for tow trucks to arrive, towing and storage fees and, in many cases, disposal costs.

Louisiana began towing and impounding uninsured vehicles in May 1999. Officers made exceptions if there were children, elderly or handicapped in the vehicle or if it was in a high crime or remote area.[186]

Almost immediately, tow lots began to fill up. Within the first six months, two of New Orleans' 21 approved operators withdrew from the program "because their lots were jammed with uninsured vehicles." Others rented storage lots "to handle the overflow." The state reported roughly 40% of vehicles were unclaimed, but city operators said their

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[182] "Hey – Who stole my license plates?" Prasso, Sheridan; Patel, Ushma; *Business Week;* Issue 3730; 4/30/2001
[183] "Cracking Down On Drivers Who Lack Insurance; Hoping to Reduce Rates, State Starts Tag Seizures," Pierre, Robert E.; *The Washington Post;* 11/20/1997
[184] "MVA cracks down on uninsured drivers," Marsh, Sara; *The Capital;* 10/28/1997
[185] "Uninsured Drivers May Lose Licenses; New Law Allows Officers to Confiscate Them On the Spot If Computer Shows Violation," Sanko, John; *Rocky Mountain News;* 12/15/1998
[186] "Impoundment law not cutting insurance rates," Courreges, Patrick; *The Advocate;* 4/10/2002

rates were much higher.[187] By 2002, 60% were unclaimed, according to Fred Burkett with the state Towing and Recovery Association. Other municipalities that use impoundment have had similar experiences. In Gresham, Oregon, a town near Portland, about 50% of vehicles were unclaimed.[188]

Many were in poor condition.[189] It would be cheaper for owners to replace them rather than pay fees, fines and insurance to redeem them. In Louisiana, operators could apply for title, but in 1999, they said that process took six months to a year. The state said it took 60 to 90 days, but that it was "working to streamline the process."[190] Three years later, Molly Quirk, Director of the Louisiana Property Casualty Insurance Commission, told a reporter that Louisiana law did not allow quick disposition of unclaimed vehicles, and that vehicles worth less than a thousand dollars usually sat for years before they could be sold.[191]

In Connecticut, law enforcement could sell unclaimed vehicles at auction, but the process took up to six months. New Jersey's governor proposed an impoundment statute that would allow 30 days for motorists to provide proof of insurance or their vehicles would be sold. Still, a Patterson, New Jersey police official said that whether enforcement would be a top priority would depend on the value of the vehicle.[192]

New Orleans police were the most frequent users of the Louisiana statute, towing over 18,000 vehicles from May 1999 to November 2001. In that same period, state police towed over 7,800 vehicles and sheriffs over 6,000 vehicles.[193] Overall, 38,000 vehicles were impounded between 1998 and 2000. In 1999, Louisiana's uninsured motorist rate was 30%. By 2002, it was 22%. According to Quirk, the law was credited in part for the decline. She also said that some sheriffs refused to enforce the law, afraid voters would retaliate when they came up for reelection.[194]

In some states, courts can order impoundment. The advantage to this is that fewer insured motorists will have their vehicles impounded. However, just as agency fees are more likely to be collected than court fines, officers may be more likely to impound vehicles than courts. In Arkansas, courts can order vehicles impounded until proof of insurance is provided. But as of 1999, penalties were rarely applied, according to the *Arkansas Democrat-Gazette.*[195]

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[187] "Uninsured tows top 2,600 in N.O. metropolitan area," *The Advocate;* 11/10/1999
[188] "Portland Measure On Uninsured Drivers," *The San Francisco Chronicle;* 10/31/1992
[189] "Impoundment law not cutting insurance rates," Courreges, Patrick; *The Advocate;* 4/10/2002
[190] "Uninsured tows top 2,600 in N.O. metropolitan area," *The Advocate;* 11/10/1999
[191] "New Jersey Governor Proposes Seizing Vehicles of Uninsured Drivers," Diamond, Randy; *The Record;* 7/9/2002
[192] *Ibid.*
[193] "Fewer uninsured on state's roads," *State-Times/Morning Advocate;* 11/10/2001
[194] "New Jersey Governor Proposes Seizing Vehicles of Uninsured Drivers," Diamond, Randy; *The Record;* 7/9/2002
[195] "Few owners punished for driving uninsured," O'Neal, Rachel; *Arkansas Democrat-Gazette;* 9/12/1999

NEW TECHNOLOGIES

Several new technologies could be adapted to the problem of uninsured motorists. Among these are license plate readers, radio frequency identification devices (RFID), and smart cards.

License Plate Readers

Basically, a license plate reader system consists of cameras, illumination, optical character recognition (OCR) software, and database software. Systems are already in use at international border crossings, including Arizona's'.[196] In 2001, *National Underwriter* reported that United States Customs spent $63,000 per lane for four cameras installed in bulletproof enclosures, but that costs typically were $20,000 to $50,000 per lane for a camera, an infrared strobe, and an image processor.[197]

Government and insurers hoped that Arizona's Border Auto Theft Information Center (BATIC) license plate reader system would help recover stolen vehicles crossing into Mexico or the United States[198] A pilot program found that, in 28 days, 202 vehicles were stolen – but at the time they crossed the border, only two had been reported stolen.[199]

The Arizona Department of Transportation used a license plate reader system developed by Computer Recognition Systems in pilot programs on State Route 68. That system was "optimally designed" to read license plates at 45 to 55 mph, using lights that were kept on 24 hours a day. Motorists found the lights distracting. The programs were intended to measure construction delay, not provide law enforcement, so the system's 11% matching rate was found to be adequate.[200]

Only states that require electronic reporting from insurers could use license plate reader technology in compulsory insurance law enforcement. Cameras would record images of license plates. The images would then be run through Optical Character Recognition (OCR) software, which would translate the images into license plate numbers. The license plate numbers would then be run through the state's database, which would match license plate numbers with vehicle identification numbers (VINs) and insurance status. At this point, one of two things could happen. A citation could be issued and mailed to the registered owner or a waiting law enforcement officer could issue a citation personally.

Perceptics Corp. in Knoxville, Tennessee claims its license plate reader systems have been used in automatic toll enforcement, border control, commercial vehicle operations,

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[196] "Passenger Processing," *FY 2000 Accountability Report;* United States Customs Service
[197] "Hi-Tech Helps Stop Cross-Border Theft," Hays, Daniel; *National Underwriter;* 4/2/2001
[198] "BATIC (Border Auto Theft Information Center) and License Plate Reader (LPR) Development in Progress," *Arizona Automobile Theft Authority;* October 2002 Newsletter
[199] "Minutes of Sunset Review Hearing: Arizona Automobile Theft Authority," *Senate Committee on Transportation; House Committee on Transportation; Arizona State Legislature;* December 5, 2001
[200] "Arizona Tackles Work Zone Delays," Hansen, Alan; *Public Roads;* June 2002; Federal Highway Administration

emissions testing and security and access control. It claims its systems can identify a vehicle's license plate registration number, state, province, and country of origin within milliseconds in most weather conditions at highway speeds. For emissions testing, the system "interfaces" with Department of Motor Vehicle (DMV) records to send violators a warning. For toll enforcement, the system "provides real-time identification" of violators.[201] If citations were mailed, "real-time" would not matter. If a waiting officer issued citations, real-time interfacing as well as real-time identification would be needed.

Mobile license plate reader systems have been used in parking enforcement. The City of North Vancouver used a $75,000 system manufactured by a Canadian Company, Autovu Technologies. A vehicle with four cameras takes photos of parked cars' license plates. A computer in the vehicle matches photos with GPS input. The system reminds the officer to return and a buzzer sounds if a car has been parked longer than permitted.[202]

Using license plate reader systems to enforce compulsory insurance laws could raise legal issues whether systems were stationary or mobile. Most automated red light or speed limit enforcement systems record information only when the law is broken. An automated insurance enforcement system would need to record information continuously. Although records for insured motorists could be deleted, continuous surveillance might raise privacy and probable cause issues.

As happened with police radar, products have sprung up that promise to thwart license plate cameras – mainly by creating glare. The effectiveness of these license plate covers and sprays is unknown, particularly against systems that use infrared strobe illumination. Some states prohibit license plate covers. It would be difficult, however, to enforce prohibition of spray-on products.

Source: www.PHANTOMPLATE.com

Figure 8. License Plate Cover Advertisement

[201] Source: Perceptics

[202] "The City of North Vancouver's Parking Enforcement Goes High-Tech," *City of North Vancouver*

RFID or radio frequency identification is used extensively in automated container identification. It is also used in electronic toll collection. RF tags store information much as bar codes do. They may have an antenna only (passive), or an antenna and a power source (active). They may also have a chip – allowing information to be rewritten on the tag.

An advantage of RFID over bar codes is that tags only have to be near readers – they don't have to be "seen" by them.

Generally, passive tags can be read at distances up to one meter. Active tags can be read from much farther away – until their batteries die.[203] The faster tags are moving, or the more information they are carrying, the more bandwidth they require.[204] Different materials – particularly metal – affect performance differently. The signal can be reduced at lower frequencies and shift at higher frequencies.[205] Speaking in 2002, Edward Rensi, senior analyst with Allied Business Intelligence, said, "RFID still comes with a high price tag and no real standards in place yet."[206]

Still, commuters in the Northeast Corridor are familiar with RFID. As of 1998, an estimated four million RFID tags were in use in electronic toll collection. Seven toll authorities and the states of New York, New Jersey and Pennsylvania solved the problem of lack of standardization by agreeing to buy interoperable equipment.[207] Electronic toll collection uses transponders – active RF tags with chips to which deposits and withdrawals are written – mounted inside the windshield. Transponders cost about $25 each and can be read at speeds up to 25 mph.

A separate application has been developed using RFID with a chip that stores registration and insurance information: the "iltag" or intelligent license tag. A joint venture of Infineon Technologies of Munich, Erich Utsch, and Schreiner ProSecure, the iltag can be read from a little over two feet away[208] on vehicles that are parked or moving slowly.[209] Police can scan parked cars using a handheld device equipped with a mobile phone. Some information on the chip can be encrypted.[210]

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[203] "Machine-readable data carriers – a brief introduction to automatic identification and data capture," Furness, Anthony; *Assembly Automation;* Bedford; 2000
[204] "Current Applications and Future Needs," *Intermodal Freight Identification Technology Workshop;* 1998 at the University of Texas at Austin
[205] "RFID may yet prove its mettle on metal," Moore, Brent; *Frontline Solutions;* April 2001
[206] "'Eye' spy: Is RFID the answer to finding your assets wherever they are?" Albright, Brian; *www.frontlinetoday.com;* October 2002
[207] "Current Applications and Future Needs," *Intermodal Freight Identification Technology Workshop;* 1998 at the University of Texas at Austin
[208] "Intelligent License Could Cut Car Theft," *RFID Journal;* October 11, 2002
[209] "'Intelligent License Plate' Offers Greater Deterrence Against Car Theft," *Joint news release of Infineon, Schreiner Prosecure and Utsch;* September 17, 2002
[210] "Intelligent License Could Cut Car Theft," *RFID Journal;* October 11, 2002

The iltag (a label) is "about the size of an identity card." If someone tries to remove the label, the connection between the antenna and the chip breaks, and it becomes useless. The price per label is "around 10 Euros."[211]

It is unclear what benefit transponders of the type used in electronic toll collection would bring to compulsory insurance law enforcement, particularly if they cannot be read at highway speeds. Somewhat bulky and conspicuous, transponders received widespread acceptance in toll collection because of the clear advantages they offer consumers. There would be no obvious consumer benefit, however, to their use in insurance enforcement – making their size, location, and appearance problematic.

It is also unclear what benefit the iltag would offer. It might enable law enforcement to check for stolen vehicles more easily than by checking license plates. But insurance information stored on the tags would not be current. It would not be practical to require insurers to update tags – for example, at cancellation. The tags would have to be driven to insurers or peeled off and mailed and new ones issued. Insurers, law enforcement and motor vehicle agencies would have to have equipment that could write to tags – a major investment in equipment and training. Even if they did all this, the iltag could be foiled by those who want to evade compulsory insurance laws in the same way proof at registration requirements can be foiled – buy insurance, obtain an iltag, cancel insurance.

Furthermore, RFID would be likely to encounter opposition from the public for "broadcasting" information about owners. Although information stored could be limited and/or encrypted, a public education process would be required. Some would remain skeptical.

To be useful in compulsory insurance law enforcement, RFID would need:

- Encryption.
- Inconspicuous size and placement, like the iltag.
- Low manufacturing costs.
- Real-time integration with the state's database.
- Receivers that could match RFID location with vehicle location, so that they could detect when RFID was disabled or missing.
- Transmission that could be read at a distance and speed that would allow law enforcement officers to drive past parked cars and receive a signal when insurance or registration has expired.
- Theft prevention, like the iltag.

Smart Cards

To be "smart," a card must have a chip that can do calculations – a microprocessor. The American Association of Motor Vehicle Administrators (AAMVA) formed a working group to study smart card technology. In 1999, it found "no strong business case" to use

[211] "'Intelligent License Plate' Offers Greater Deterrence Against Car Theft," *Joint news release of Infineon, Schreiner Prosecure and Utsch;* September 17, 2002

smart cards in either driver licensing or vehicle registration. Out of 35 jurisdictions that responded to its survey, 25 had not considered using smart cards in a motor vehicle environment. Nine had considered their use, but had not used them.[212]

On the other hand, many states are converting to technology-based driver's license/identification cards. Tech-based cards, or tech cards, can be read by a machine. A magnetic (mag) stripe or bar code stores information.

Smart cards can store more information than tech-based cards – between 2K and 8K, vs. 1K for D2 bar code or 204 bytes for mag stripe. They are also more secure. Smart cards can support different passwords for different operations, as well as encryption, to prevent unauthorized access. According to the American Association of Motor Vehicle Administrators (AAMVA), the most common encryption algorithm is Data Encryption Standard (DES), used by the federal government, but RSA (Rivest, Shamir, Adleman)is also becoming popular and some cards support both. Smart cards can also support electronic purse functions.[213]

Contact smart cards have contact pads that must touch contact pads in a reader. Contactless smart cards have radio frequency (RF) with a range of one millimeter to several meters. Power can come from the reader or from a battery in the card. Smart cards cost more to manufacture: between $2 and $8. They may not be as durable as tech-based cards, though. Driver's licenses, many of which have mag stripe, have a life expectancy of five to seven years.[214]

According to AAMVA:

> "The basic criteria for the selection of a smart card are that it must be ISO (International Organization for Standardization) 7816-1/2/3 compliant, and it must implement the T=0 asynchronous communications protocol as part of the ISO 7816-3 standard."[215]

ISO is the International Organization for Standardization. These standards have to do with physical characteristics and electronic signal and transmission protocols for chip cards with contacts.[216]

In its report, the AAMVA addressed driver privacy and public record issues. They believed smart cards would not be affected by the Driver Privacy Protection Act, because "the card, and thus release of the data, would be under the control of the driver."[217] For

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[212] "Smart Card Usage in Motor Vehicle Administration," Smart Card Working Group; *American Association of Motor Vehicle Administrators;* January 1999.
[213] *Ibid.* Electronic Purse is a secure E-Purse using s-Choice™ OS or Java.
[214] *Ibid.*
[215] *Ibid.*
[216] Source: International Organization for Standardization
[217] "Smart Card Usage in Motor Vehicle Administration," Smart Card Working Group; *American Association of Motor Vehicle Administrators;* January 1999

the same reason, they believed the data would be exempt from public records requests in most states and could therefore be encrypted.

In Utah, the one state that announced plans to use smart cards, opponents objected on privacy and religious freedom grounds. Some believed smart cards were "the mark of the beast."[218] But the main hurdle to acceptance and adoption, according to AAMVA, would be the lack of other transactions the card could complete – with government or the private sector. To have interoperability with government, other agencies would have to adapt their processes to use the cards. In the private sector, cards would need to be compatible with existing infrastructure, most of which is mag stripe – not chip – based.

One potential use mentioned is medical records storage, particularly for emergency medical treatment. It would be helpful to have information about allergies, medications, and underlying medical conditions available in an emergency. But it is difficult to see any medical use beyond that.

The report also mentions using smart cards to store driving records, including convictions, points, and even warnings.

Two states, Ohio and Wyoming, are using smart cards to deliver food stamps. In May 2003, ABC affiliate WCPO in Cincinnati began its news story:

> "The 'smart card' system Ohio uses to issue food stamps is the most expensive in the country, but the state apparently is stuck with it."[219]

The story noted that smart cards need special readers in the checkout line. It did not mention whether all lines, or all groceries, had them. To run Ohio's program, Citicorp would be paid $78 million over seven years.

None of these uses seems to offer compelling benefits that make smart cards superior to alternatives. Healthy individuals not allergic to medications do not need to have medical information available in an emergency. Individuals who do need that information available can wear a MedicAlert bracelet or pendant. Emergency medical treatment providers can call MedicAlert 24 hours a day, seven days a week, to retrieve the information. Furthermore, MedicAlert calls your family, which a smart card cannot do.

Recording driving record information on cards would encourage rejection, rather than acceptance. No one wants to carry around a "bad report card." It is easy to imagine people taking a hammer to the chip or simply running the card through the washing machine to make it unreadable at traffic stops. Food stamp recipients using mag stripe cards (as they do in other states) can go to any grocery with debit or credit card equipment. To use smart cards, the grocery needs a special reader.

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[218] *Ibid.*
[219] "Ohio Likely to Continue Expensive Food Stamp System," Associated Press; *WCPO.COM;* 5/16/03

Although being able to complete a variety of transactions might increase acceptance, more users add more complexity. If one card has multiple uses, the report asks questions such as, if the card is lost or stolen:

> "Whose responsibility is it to notify various businesses or government agencies that have information stored on the card? … Who 'rebuilds' the information …?"[220]

Or, more generally:

> "Who decides what to store and where to store it? … Who decides data field access and how?"[221]

Finally, it is difficult to see what benefit smart cards or even tech cards would bring to compulsory insurance law enforcement. To use smart cards, insurers would need special readers. If they accept credit cards, they may already have readers for mag stripe, but they would need to be able to write to cards as well.

Law enforcement officers and motor vehicle agencies would also need readers. In states that do not require electronic reporting from insurers, if counterfeiting is a problem, it may be helpful to require insurers to issue insurance cards with bar codes. In states that do require reporting, however, if law enforcement and agencies can access that database, then that is the best source of current information. Smart cards can easily be outwitted. All owners have to do is buy insurance, obtain or update their smart cards, then cancel insurance.

New York State has embraced tech cards, issuing bar-coded windshield registration stickers[222] and requiring insurers to issue bar-coded insurance cards. Information is encrypted. Law enforcement officers equipped with hand-held scanners can check insurance and registration information against the state's database. New York does require electronic reporting from insurers.[223]

But if New York did not require bar codes, law enforcement officers could still check insurance and registration information against the state's database. They could do so with the motorist present, by looking at the insurance card, or with the motorist absent, by looking at the license plate. Officers would still need a way to communicate with the database, but the in-vehicle computers many departments now have would seem to be the cheapest way for them to do so. The additional value of bar codes is that officers do not have to go to their vehicles and type information. Whether this adds safety as well as convenience should be considered in any cost/benefit analysis.

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[220] "Smart Card Usage in Motor Vehicle Administration," Smart Card Working Group; *American Association of Motor Vehicle Administrators;* January 1999
[221] *Ibid.*
[222] "Technology Targets Uninsured Drivers," Sorensen, Jon; *Daily News;* 10/15/1997
[223] "New insurance cards, database to target uninsured motorists," *The Associated Press State & Local Wire;* 3/13/2000

DATABASE ISSUES

Despite insurer opposition, more and more states are moving to database systems of compulsory insurance law enforcement. Insurers claim the systems do nothing to reduce uninsured motorist rates. In fact, there is anecdotal evidence that database systems may reduce uninsured motorist rates. But states differ greatly in how they use the systems. And actual experience does not neatly illustrate the effects of changing one variable at a time. Still, inferences can be drawn from comparing different states' different approaches.

When Colorado launched its database in 1999, it announced that officers could seize drivers' licenses of uninsured motorists on the spot. Motorists would have to show proof of insurance to get their licenses back.[224] Law enforcement also announced administrative roadblocks to check proof of insurance.[225] Over a six-month period that included three months before the database went into effect, the Colorado State Patrol issued 23% fewer citations for driving without proof of insurance than the same period the year before.[226]

Immediately after New Mexico rolled out its database in December 2002, insurers reported a spike in premium writings – "up 70% year-over-year" for the quarter, according to Erv Pfeifer, spokesperson for the Association of Autoagents Alliance of New Mexico.[227]

Neither of these examples proves that uninsured motorist rates were reduced. But if they were, what caused the decline?

The decision to comply with compulsory insurance laws can be looked at based on the expected costs of compliance vs. noncompliance. Expected cost is cost multiplied by the likelihood of incurring that cost. The likelihood of incurring premium cost for buying insurance is 100%. The likelihood of being caught and incurring premium cost plus penalty cost for not buying insurance is less than 100%. Traditionally, that likelihood has been quite low – less than 1%.

Assuming that:

- The premium for liability insurance is $500.
- There is a 10% chance of being caught driving uninsured.
- If caught, there is a 100% chance of having to pay the $500 premium and there is a 50% chance of having to pay a $5,000 penalty.

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[224] "A new system to nab uninsured drivers that starts next month will net innocent people, too," Weber, Brian; *Rocky Mountain News;* 3/20/1999

[225] "Uninsured Aurora Drivers May Feel Sting of $100 Ticket," Lindsay, Sue; *Denver Rocky Mountain News;* 6/6/2000; "Police Target Uninsured Drivers," *Denver Rocky Mountain News;* 6/29/2000

[226] "State efforts putting brakes on uninsured; New restrictions on motorists reduce insurance-related tickets," Cox, Jack; *The Denver Post;* 7/30/1999

[227] "State targets uninsured drivers," Torres, Ailene; *Albuquerque Tribune;* 3/23/2003

Then:

- The expected cost of compliance is 100% * $500, or $500.
- The expected cost of noncompliance is 10% * $500 + 10% * 50% * $5,000, or $300.

Even assuming higher than average chances of being caught and paying penalties, plus higher than average penalties, the expected cost of noncompliance is less than the expected cost of compliance.

If the likelihood of being caught can be increased to 95%, however, penalties can be reduced to $100: 95% * $500 + 95% * 50% * $100 = $523

No doubt motorists do not sit down and write this out. But it does show the importance of the likelihood of being caught. The contribution database systems can make to insurance enforcement is to dramatically increase the likelihood of being caught. As long as being caught is followed by having to buy insurance, and keep insurance, penalties can be small and still outweigh expected gains from not buying insurance.

The effectiveness of a database system is may be measured by:

- How much the likelihood of being caught increases
- Whether being caught is followed by having to buy, and keep, insurance
- How effectively penalties are imposed

The 2002 annual report for Virginia's Insurance Verification Program shows the relative numbers of uninsured motorists caught by the state's database versus those caught by all other means, shown in Figure 9 and Table 8 below.

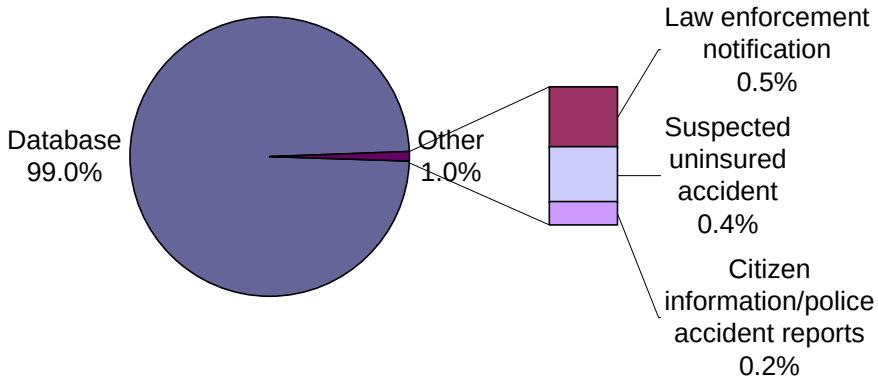

Figure 9. Percent of Uninsured Motorist Notices Issued By Method, Virginia 2002

Table 8. Uninsured Motorist Enforcement By Method, Virginia 2002

	Number of notices issued	Percent contribution	Number of suspension orders	Percent contribution
Insurance companies reporting	403,402	98.98%	69,383	96.43%
Suspected uninsured accident	1,646	0.40%	955	1.33%
Law enforcement notification	1,854	0.45%	1,224	1.70%
Citizen information/police accident reports	669	0.16%	388	0.54%
Total	407,571	100%	71,950	100%[228]

In 2002, over 43,471 uninsured motorists paid $500 penalties after being caught by Virginia's database. They were also required to file certificates of insurance for three years. Of the $22,700,563 deposited into Virginia's Uninsured Motorist Fund, $21,735,500 came from the database. Twelve million dollars were distributed to insurers to help offset the cost of uninsured motorist coverage, required on all liability policies in Virginia.[229]

Fees and fines from compulsory insurance law enforcement are not the only ways a database can pay for itself. Arizona calculated that it cost the state $6.60 to renew registration at a motor vehicle office, but $1.60 to renew registration on the Internet.[230] California and Kansas use their databases only to renew registration by Internet or telephone. Insurer reporting is voluntary.[231] When California started its database in 2000, three insurers participated. In Arizona, where insurer reporting is required, Internet renewals save the state an estimated $1.25 million a year.[232]

Insurance verification database systems require electronic reporting from insurers, from vehicle registration agencies, and, optionally, from driver's license issuing agencies. The state prescribes the format, deciding on:

- Data fields.
- Reporting frequency.
- Transmission media.
- Transmission standards.

[228] "Insurance Verification Annual Report, Fiscal Year 2002," *Virginia Department of Motor Vehicles*
[229] *Ibid.*
[230] "California Latest State to Offer Online Registrations," Rosen, Jill; *Federal Computer Week;* Jan. 20, 2000
[231] "Kansas Insurance Reporting Guide," *Kansas Department of Revenue;* April 2002
[232] "California Latest State to Offer Online Registrations," Rosen, Jill; *Federal Computer Week;* Jan. 20, 2000

Ideally, a database can tell the entire history of when a vehicle was insured, when it was not insured, and who owned it. To do this, every transaction that changes whether or not a vehicle is insured, or who owns it, must be reported. Otherwise, enforcement will be inefficient.

In 1999, Kentucky was still operating under a 1975 law that required insurers to notify the Transportation Cabinet when coverage was cancelled, but not when policies were issued. The agency responded to the 12,000 to 18,000 cancellation notices received each month with letters telling owners they had 30 days to show their county clerk proof of insurance or their registration would be cancelled. Many owners had just switched insurers. One county clerk noted, "The system is particularly scary for senior citizens who are sensitive to any perceived threat to their right to drive." Spokesmen for the state's number one and two insurers Kentucky Farm Bureau Mutual Insurance and State Farm Insurance, recommended that the state do away with compulsory insurance and switch to a no-fault system.[233]

As more states passed electronic reporting laws, insurers hoped to standardize the transfer of data. Working in the American Standards Insurance Group – a subcommittee of the American National Standards Institute – they helped develop the X12[234] reporting standard. The problem according to Bill Hinds, former chairman of the Insurance Industry Committee on Motor Vehicle Administration (IICMVA), is that states "tweak" the format so that it is "no longer a standard format."[235] In 1998, the American Association of Motor Vehicle Administrators and the IICMVA published "Requirements for Model Motor Vehicle Liability Reporting," which identified file-transfer protocols and defined required data fields. It has become a "starting point" when states develop their programs. "The result is no true standardized reporting."[236] Examples of differences include:

- "Some states require reporting for personally owned vehicles but not commercially owned vehicles.
- In some states, vehicles are to be reported under the named insured on the policy. In others, they are to be reported under the individual or business name that appears on the vehicle registration.
- Some states require reporting of information on drivers as well. Others focus solely on vehicles.
- In some states, reports are assumed to be continuous until canceled; meaning reports are sent only when coverage begins and when coverage terminates. In other states, reports are required annually for each vehicle."[237]

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[233] "State's mandatory insurance law draws criticism for lack of compliance," *The Associated Press State & Local Wire;* 11/15/1999

[234] X12 is a ANSI standard that supplies structure to the application-to-application exchange of structured business data between companies.

[235] "Growing DMV reporting headache," O'Donnell, Anthony; *Insurance & Technology;* New York; Sep 2001

[236] "Proof positive," Fagin, Mike; *Best's Review;* Oldwick; Jul 2002; p. 60

[237] *Ibid.;* p. 60

Some required information may not be collected at policy submission, such as detailed information on each vehicle in a fleet.[238]

Even reporting frequency can be complicated. In 1999, New York State had five different deadlines for insurers to report 12 different events.

Table 9. New York State (NYS) Insurer Reporting Deadlines By Event, 1999

Business Event	Notification is Due
One time transfer of insurer's book of business for all vehicles registered in NYS by the policy-holder	Initial loading of Insurance Information and Enforcement System (IIES)
New policy issuance	7 days after effective date
Vehicles added to in force policy	7 days after effective date
Different vehicle replacing vehicle on in force policy	7 days after effective date
Policyholder (all vehicles) moved to different company within insurer group)	7 days after effective date
Policy reinstated (all vehicles)	7 days after reinstatement
Rescind erroneous cancellation transaction	7 days after action (only if erroneous cancellation transaction reported and matched by NYS DMV)
Policy cancelled (all vehicles)	After grace period and 30 days after effective date
Vehicles dropped without replacement from in force policy	30 days after effective date
For-hire policy cancelled (all vehicles)	45 days BEFORE effective date
For-hire vehicles dropped without replacement from in force policy	45 days BEFORE effective date
Repudiate coverage in response to Department of Motor Vehicles (DMV) initiated transaction	(mandatory verification) 7 days after DMV initiated transaction when DMV does not receive confirmation of insurance ID card used to register vehicle
Repudiate coverage in response to DMV initiated transaction	(negative verification) 30 days after DMV annual batch process initiated transaction[239]

In planning what data to require, and with what frequency, states should have an idea how they will use the information in enforcement. Considerations here include:

- How motorists are selected for enforcement – census, random sampling or record change.

[238] *Ibid.;* p. 60
[239] "Motor Vehicle Liability Insurance Reporting Implementation Guide, Version 1.0," *New York State Department of Motor Vehicles;* April 1, 1999

- Frequency and number of motorists selected for enforcement.
- Who will have access – law enforcement, driver's license agencies, vehicle registration agencies, courts.
- Enforcement contacts – number and timing.
- Penalty actions – form and timing.
- Public education.
- Becoming insured options – delayed or immediate, monitoring.

With one of the lowest uninsured motorist rates in the country, North Carolina has a long history of following up on insurer reporting with aggressive enforcement. Starting in 1986, the state sent law enforcement officers to seize license plates after receiving cancellation notices from insurers. Penalties also included loss of driver's license and fines. Motorists who let their policies lapse but reinsured before the deadline to show proof were monitored for three years to make sure insurance was current.[240]

In addition to requiring proof of insurance annually at license plate renewal, North Carolina requires proof of insurance to obtain a driver's license. Motorists who don't own vehicles have to sign a form saying so and promising not to drive anything other than a fleet vehicle. If caught driving anything other than a fleet vehicle, they are ticketed.[241] In 1996, the state proposed letting insurers check newly issued drivers' licenses to find potentially uninsured motorists – focusing on teenagers whose parents did not notify their insurers when their children became licensed drivers. [242]

North Carolina's approach can be compared to Utah's.

When Utah launched its database in 1995, the estimated uninsured motorist rate was about 23%. Utah's outside vendor, Insure-Rite, did not keep data from that period, so that number could not be confirmed. One year later, the estimated uninsured motorist rate was about 12%. Each day, Insure-Rite received 6,000 to 8,000 requests from law enforcement officers to verify insurance.[243] "Yes," "no" or "exempt" would pop up in the insurance field on the traffic computer screen.[244] Officers would cite "no" motorists for driving without insurance. Other than officer citations, enforcement consisted of Insure-Rite sending letters to owners of vehicles identified as being uninsured, asking them to contact Insure-Rite with proof of insurance. In March 1997, it sent 16,214 letters. Fifteen percent, or 2,432, contacted Insure-Rite. Of those, 4%, or 97, obtained insurance. Sixteen percent, or 2,594, had moved out of state or sold their vehicles – title information was not part of the database. Noting that "officials from states with aggressive enforcement programs believe punitive measures have a significant impact on

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[240] "State Plans Crackdown, Hopes Effort Will Cut Liability Rates," Graham, Rex; *Albuquerque Journal;* 6/21/1995
[241] "State, insurers share data in N.C.," Novak, Tim; *Chicago Sun-Times;* 6/9/1996
[242] "State Plans Crackdown, Hopes Effort Will Cut Liability Rates," Graham, Rex; *Albuquerque Journal;* 6/21/1995
[243] Letter to Senator L. Steven Poulton, Utah State Senate, from Wayne L. Welsh, Auditor General, State of Utah; 10/1/97
[244] "Utah's Uninsured Motorist Identification Database," Hunter, Vanna, CPCU; *NAIC Research Quarterly;* July 1997, Volume III, Issue 3

reducing the number of uninsured motorists," Utah's Auditor General recommended that identification of uninsured motorists be followed up by enforcement action.[245]

Utah law allowed penalties for driving without insurance, but not for owning an uninsured vehicle. Three years later, Utah had changed its laws to allow penalties for owners of uninsured vehicles whether or not they were caught driving without insurance. Under the new system, 10,000 uninsured motorists would be randomly selected each month and sent two letters.[246] Failure to respond with proof of insurance would result in revoked registration, a $100 reinstatement fee, and a $400 fine. Unregistered vehicles could be impounded and officers could stop vehicles for revoked registration.[247] For Utah's estimated 75,000 uninsured motorists,[248] the likelihood of being caught would go up month after month.

Insurance verification database systems are complex managerially, politically and technically.

Managerial Challenges

Georgia experienced delay implementing its database due to communication and coordination problems – the result of a lack of leadership encouraged by the enabling legislation itself. Senate Bill 69 mandated that the Georgia Department of Public Safety create a database from which officers could verify insurance, but provided no funding to accomplish this task. The Georgia Department of Public Safety managed driver's license suspensions of uninsured motorists, but vehicle registration was managed by the Department of Revenue, which was not mentioned in the bill. Neither the Georgia Department of Public Safety nor the Department of Revenue contacted the Georgia Technology Authority, the agency "created for the expressed purpose of bringing agencies together when it comes to data sharing," although Georgia Technology Authority (GTA) was working on the database, developing programming to accept insurer reporting. Eventually, a fourth agency, the Department of Motor Vehicle Safety DMVS), was created. The tag and title database, driver's license suspensions and the insurance verification database were given to the Department of Motor Vehicle's safety section.[249]

Still there were problems. DMVS' Commissioner complained that the information required by law was not enough – that more than VINs and expiration dates were

[245] Letter to Senator L. Steven Poulton, Utah State Senate, from Wayne L. Welsh, Auditor General, State of Utah; 10/1/97
[246] "Campaign tries to convince drivers to get insurance," *The Associated Press State & Local Wire;* 7/19/2000
[247] "State to Lower Boom on Uninsured Drivers; Violators face revocation of their vehicle registration; New Law Provides Active Enforcement," Curreri, Frank; *The Salt Lake Tribune;* 7/19/2000
[248] "Campaign tries to convince drivers to get insurance," *The Associated Press State & Local Wire;* 7/19/2000
[249] "Proof of auto insurance not in pudding," Stanford, Duane D.; *The Atlanta Journal-Constitution;* 1/14/02

necessary. Additional information "would allow better cross-referencing to ensure accuracy."[250]

Lack of accuracy can do more than irritate insured motorists. It can discourage enforcement. According to Georgia's state Insurance Commissioner, officers need confidence in the system or they won't do anything – they need to know the person has broken the law.[251] Six years later, it seemed that confidence had not yet been won. According to its spokesperson, "The Georgia State Patrol won't force troopers to stick to the database. It will be up to each individual trooper whether they take insurance cards."[252]

Political Challenges

Utah provides an example of political difficulties involved in creating an insurance verification database.

Passed in 1994, Utah's Uninsured Motorist Identification Database bill required insurers to report their entire book of business – all active motor vehicle liability policies – each month.[253] Insurers claimed the database "wouldn't work, was too expensive, invaded the privacy of policyholders, and that the problem of uninsured motorists was exaggerated."[254] There was a shouting match on the House floor before the bill passed.[255] In an article for the *NAIC Research Quarterly,* Utah Insurance Department Property & Casualty Analyst Vanna Hunter commented,

> "The program has met with intense opposition from insurance companies and their lobbyists who have tried to derail the legislation and its implementation at every turn. Insurers have maintained from the beginning that such a database cannot work. In spite of such claims, no insurer has ever fully explained why it objects to the concept of an uninsured motorist identification database."[256]

Insurers filed a lawsuit to stop the database and refused to provide data, delaying preliminary testing one and a half years.[257] In their lawsuit, they argued that client information was proprietary and a valuable trade secret, that not compensating insurers

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[250] *Ibid.*
[251] "Uninsured drivers warned," Salzer, James; *Florida Times-Union;* 10/26/1997
[252] "Insurance cards still valid," *The Associated Press State & Local Wire;* 1/12/2003
[253] "Utah's Uninsured Motorist Identification Database," Hunter, Vanna, CPCU; *NAIC Research Quarterly;* July 1997, Volume III, Issue 3
[254] "Number of Uninsured Drivers Nose-Dives Uninsured Driver Program Shows Success," Semerad, Tony; *Salt Lake Tribune;* 6/7/1996
[255] "Nation-Word," Harrie, Dan; *The Salt Lake Tribune;* 2/12/1994
[256] "Utah's Uninsured Motorist Identification Database," Hunter, Vanna, CPCU; *NAIC Research Quarterly;* July 1997, Volume III, Issue 3
[257] "Legislature Should Extend Uninsured Motorist Plan," *Deseret News;* 1/29/1996

for providing data would be an unconstitutional "taking," and that the database would violate due process.[258]

After the lawsuit was dismissed, insurers continued to attack the program. A lobbyist for the American Insurance Association said the industry's uninsured motorist rate was much lower than the database's uninsured motorist rate. The two figures are arrived at by different methods. Brushing aside insurers' stated objections to the program, Utah House Minority Whip Kelly Atkinson said that insurers worried the database would force them to cover high-risk motorists and lower premiums. According to Atkinson,

> "I'm convinced that the insurance industry doesn't want to solve this problem. Why would they want to insure these bad drivers when you and I are already paying for them?"[259]

In some states, insurer opposition has defeated attempts to create an insurance verification database. A California bill raising penalties for uninsured motorists would have required insurers to report cancellations electronically. But that was dropped "because of heavy pressure from the insurance companies themselves."[260] Today California has voluntary insurer reporting. Its database is not used for enforcement.

Technical Challenges

Probably every state encounters technical difficulties with its database system. Accuracy rates are a problem. Wrongly identifying motorists as uninsured annoys law-abiding citizens and wastes enforcement resources.

Records of policies from insurers are matched with records of vehicle registrations (and sometimes drivers' licenses) from state agencies. If there is no match between a vehicle and a current insurance policy, the vehicle is presumed uninsured.

Before starting operations in April 1999, the Colorado Department of Motor Vehicles announced that its database erroneously identified up to 18% of vehicles as uninsured – a result of the VIN, owner's name, or other information not matching.[261]

If matching is done on just one field – the 17 character VIN, for example – a single typo in that field will result in no match. Florida's database used VIN this way. Seven years after starting operations, one in four vehicles matched. This would mean 75% of Florida motorists were uninsured. But in a three-month crackdown, stopping 236,000 cars, the

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[258] "Texas Auto Insurer Sues Utah Over List Doubts Security of Clients in State-Used Database," McCann, Sheila R.; *The Salt Lake Tribune;* 2/1/1995

[259] "Number of Uninsured Drivers Nose-Dives Uninsured Driver Program Shows Success," Semerad, Tony; *Salt Lake Tribune;* 6/7/1996

[260] "Got Insurance? Now Prove It; Drivers without coverage face hefty fines," Louis, Arthur M.; *The San Francisco Chronicle;* 4/21/1997

[261] "Database glitch causes insured motorists to get notices," *The Associated Press State & Local Wire;* 3/25/1999

Florida Highway Patrol issued 5,777 citations for driving without insurance – a 2.5% uninsured motorist rate.[262]

Florida blamed insurers for failure to notify the state promptly upon gaining or losing a policyholder and for failure to provide correct VINs.[263] Today, 14 years after launching its database, Florida's accuracy rate is 98%.[264]

Two years into operations, Utah's database vendor, Insure-Rite, had a 96% accuracy rate. Verified by independent audit, 1.6% was the result of matching error. Another 1.6% was the result of insurers failing to report. Unlike Florida's early system, which could be thrown off by a single VIN typo, Insure-Rite used "about two dozen criteria" to match policy and registration records.[265] According to the company's president, most errors were the result of "different spellings on registration and insurance forms, recent car sales, and vehicles being out of service."[266]

Factors that affect accuracy include:

- How matching is done. The more fields the database checks for a match, the more likely it is that no match with a current policy means the vehicle is uninsured.
- How reporting is done. The simplest way to ensure that information is provided is to require reporting of the full book of business. Some states require reporting on an exception basis – only when there is a change in coverage. This adds complexity, especially when there are different reporting deadlines for different changes. Complexity increases opportunities for error.
- How often reporting is done. The more time that elapses between reports, the more inaccurate the system.
- How reporting is enforced. If there are no penalties for inaccurate or late reporting, reports will be inaccurate and late. Arkansas began requiring insurers to report their full book of business each month in January 1999. Penalties for failure to report were $250 a day. By September, six insurers had been fined approximately $60,000 – eight months' worth of late penalties in a nine-month period.[267]
- How vehicles are registered and insured. Commercial policies may not list the vehicles insured. Or the registered owner of a vehicle may not be the named insured on the policy for the vehicle.[268] Sometimes the registered owner can be matched with the named insured – but not always. Arkansas addressed this with a law requiring insurers to report "the vehicles they insure, the people who own them and their

[262] "Poor state records slow license tag seizures," *The Tampa Tribune;* 1/29/1996
[263] "Uninsured drivers may play tag with the repo man," Wiggins, Chani; *The Tampa Tribune;* 9/2/1995
[264] Source: Florida Dept. of Highway Safety and Motor Vehicles
[265] Letter to Senator L. Steven Poulton, Utah State Senate, from Wayne L. Welsh, Auditor General, State of Utah; 10/1/97
[266] "Number of Uninsured Drivers Nose-Dives Uninsured Driver Program Shows Success," Semerad, Tony; *Salt Lake Tribune;* 6/7/1996
[267] "Few owners punished for driving uninsured," O'Neal, Rachel; *Arkansas Democrat-Gazette;* 9/12/1999
[268] "Cards will help to bar uninsured drivers; Police on the road will be able to match operator, car and insurance," Gittler, Juliana, *The Post-Standard;* 3/17/2000

addresses."[269] Nevada took a different approach, telling motorists that if they changed the name on the policy, they had to change the name on the registration and title as well.[270]

A problem with database systems or random sampling is that they catch uninsured vehicles whether or not they are being driven. When an officer pulls someone over for driving without insurance, there is no question – the vehicle is being driven. But a registered vehicle may be uninsured because it is in storage, being sold, used seasonally or nonoperational.

Nevada allowed owners who could prove a vehicle was inoperable when insurance lapsed to pay a $50 reinstatement fee rather than a $250 administrative fee.[271] No other articles were found detailing how states deal with such special cases.

How enforcement is done does not affect accuracy, but it can aggravate or mitigate the results of inaccuracy. If wrongly identified motorists have a chance to correct the record but do not do so, they have less grounds to complain when enforcement action is taken.

Some inaccuracy is inevitable. The year after starting operations, New York State's Insurance Department had "taken action against" 30 insurers for providing incorrect information. Already the database had an accuracy rate of 93% to 98%.[272] But some motorists, incorrectly identified as uninsured, were being taken to jail – resulting in the headline, "DMV Computer May Help Drive N.Y.ers Crazy."[273] Motorists complained that their insurance cards (now bar coded) were not proof of insurance. They also complained that they could not check the database to see if their information was correct.[274]

Incarcerating motorists by mistake may be more likely to lead to litigation than towing and impounding vehicles by mistake. States may want to set criteria for incarceration, so that database inaccuracies do not result in insured motorists being taken to jail. Possible criteria include:

- Commercial motor carrier.
- Length of time without insurance.
- Number of enforcement letters sent.
- Number of vehicles without insurance.
- Pattern of evading compulsory insurance laws.
- Prior accidents.

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[269] "Committee backs bill to find, fine uninsured drivers; Proposal would let state utilize databases," Oman, Noel E.; *Arkansas Democrat-Gazette;* 3/21/2001
[270] "Insurance Verification Program," *Nevada Department of Motor Vehicles;* http://nevadadmv.state.nv.us/ivp.htm
[271] "DMV computer helps track down uninsured drivers," Squires, Michael; *Las Vegas Review-Journal;* 2/6/2002
[272] "Auto Insurance System Bugs Can Cause Problems," Gittler, Juliana; *The Post-Standard;* 6/23/2001
[273] "DMV Computer May Help Drive N.Y.ers Crazy," Singleton, Don; *Daily News;* 5/27/2001
[274] "Auto Insurance System Bugs Can Cause Problems," Gittler, Juliana; *The Post-Standard;* 6/23/2001

- Prior insurance violations.
- Prior traffic citations.
- Required to file SR-22 (certificate of insurance, usually for three years).
- Return receipt received from enforcement letter sent by certified mail.

Arizona changed its law to require insurers to report weekly rather than monthly out of concerns about "ping-pongers" – owners evading compulsory insurance laws by buying insurance, registering their vehicles, then canceling insurance. Because the state often took 60 days to contact owners of vehicles identified as uninsured, these people could escape notice for three months.[275] It makes sense to wait one reporting cycle before contacting owners. If they are switching insurers, they may show up as cancelled with the old insurer one week but as insured with the new one the next.

Besides verifying insurance, another database application with enforcement implications is tracking citations and convictions – within and between jurisdictions. Wisconsin changed its laws in 1992 to have "any alcohol-related driving offenses" on United States property, tribal land or in a Canadian province count as a prior offense in Wisconsin. It also changed the time driving records must be kept from five to 10 years, so that judges would have more information at sentencing.[276]

Such a database might increase the incidence of repeat offenders being sentenced to jail, thus preventing some tragedies. In Rhode Island in 1995, Bernard Coleman drove a pickup truck into a haywagon, killing a woman and injuring 19 people. It was the 31st time he was caught driving with a suspended license. According to District Court Judge Robert Pirraglia, "A centralized computer system is desperately needed." He explained that judges usually did not know the full driving history of defendants coming before them.[277]

ALTERNATIVE FUNDING/RATE MECHANISMS

Two proposals for auto insurance reform have targeted how premiums are charged or collected. One, called "pay at the pump," is directed specifically at the problem of uninsured motorists. The other, called "pay as you go," is designed to allow motorists to reduce their rates by reducing the number of miles they drive.

Pay At the Pump

Pay at the pump – essentially a gas tax – has been proposed as a financing mechanism for liability insurance or, alternatively, for uninsured motorist coverage. Funding liability insurance through gas taxes, which is more expensive, would require a higher surcharge –

[275] "Revised Arizona Law Too Soft on Uninsured Driver, Critics Say," Anderson, Craig; *The Arizona Republic;* 8/3/1998
[276] "Law Gets Tough Tonight, Haas, Joanne M.; *Capital Times;* 12/31/1992
[277] "Fatality driver: No license since '90; Steven Brown's driver's license has been suspended seven times in eight years. The truck that killed a woman in South County was unregistered and uninsured," Graney, Jon; *Providence Journal-Bulletin;* 11/25/1995

one proposal was for $0.30 to $0.50 a gallon, plus fees on registrations and drivers' licenses. Fees on registrations would be linked to driving records.[278] Financing uninsured motorist coverage through gas taxes would be less expensive. A 1995 study in the *Journal of Insurance Regulation* estimated that the surcharge for California in 1991 would have been $0.059 per gallon. For Virginia in 1992, the estimated surcharge would have been $0.03 per gallon.[279]

Funding either liability insurance or uninsured motorist coverage through gas taxes would require setting up a government bureaucracy. Funding Liability insurance through gas taxes would involve accepting bids and awarding contracts to private insurers. Funding uninsured motorist coverage through gas taxes would involve collecting and distributing funds to private insurers. Either way, government would play a greater role in setting rates than it does now.

Whether used for financing liability insurance or uninsured motorist coverage, pay at the pump seeks to remedy the problem of uninsured motorists by making premium payments unavoidable. Its other benefit is to reward those who consume less fuel with lower premium payments, although the surcharge to fund uninsured motorist coverage would be too small to encourage conservation.

An unintended consequence of this benefit, however, is that rural drivers (who tend to drive more miles) would pay more than urban drivers, although urban drivers have more accidents.[280]

Pay at the pump would pay for basic coverage. Motorists wanting higher limits would pay extra.

In at least some states, uninsured motorist premiums are uniform throughout the state, regardless of territory or individual rating factors.[281] Liability premiums, however, are entirely determined by rating factors. Pay at the pump would eliminate actuarially based distinctions between groups.

Allowing territory to be used as a determinant of premium would involve setting different surcharges in different geographic areas. This would solve the problem of rural drivers paying more, but it would create the problem of people driving out of area to get cheaper gas.[282] Using individual rating factors would involve setting different registration and driver's license fees. The process of setting surcharges or fees would be public, lengthy and costly.

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[278] "This California Dream Is All About Auto Insurance," Passell, Peter; *The New York Times;* 2/28/1993
[279] "Financing uninsured motorists: Premiums at the pump – A California simulation," Sommer, David W.; Hoffer, George E.; Miller, Elbert G.; *Journal of Insurance Regulation;* Kansas City; Spring 1995
[280] *Ibid.*
[281] Source: Survey responses
[282] "Financing uninsured motorists: Premiums at the pump – A California simulation," Sommer, David W.; Hoffer, George E.; Miller, Elbert G.; *Journal of Insurance Regulation;* Kansas City; Spring 1995

Finally, another problem that would arise is accidents between residents of a state with pay at the pump and nonresidents.

Pay As You Go

Under pay as you go, premiums would be based on a set mileage. When that was exceeded, the policy would expire. Pay as you go has several advantages over pay at the pump. It would encourage conservation without creating new inequities. It would allow insurers to continue using territory and individual rating factors, making one factor – miles driven – more accurate. It would avoid setting up new government bureaucracies, or increasing government's role in rate setting. It would make insurance more affordable for some, which might reduce the number of uninsured motorists. But it would not directly address the problem of uninsured motorists.

Problems include fraud and higher administrative costs in auditing mileage – by visually checking the odometer or through tracking technology.[283] Another problem is expiration. Without tracking technology, insurers would not know when a policy had expired. Policyholders would not receive renewal notices, and could drive without insurance for some time without realizing it.

Pay as you go is allowed in several states, but as yet no insurer is offering pay as you go policies. Progressive Casualty Insurance Company ran a pilot program in Texas using global positioning satellite technology. Other insurers are studying demand and feasibility.[284]

OTHER ALTERNATIVES

No Compulsory Insurance

Insurers and some others have proposed rescinding compulsory insurance laws because they do not reduce the number of uninsured motorists, are difficult to enforce and give the public the false sense of security that others have insurance. Evidence indicates, however, that compulsory insurance laws requiring insurer reporting are associated with lower uninsured motorist rates – per the Cole, Dumm and McCullough study cited above. Evidence also indicates that requiring electronic insurer reporting has made those laws far easier to enforce – or Virginia would not have been able to collect $21.7 million from uninsured motorists in 2002 through its insurance verification database. No study was found examining whether the public has a false sense of security and, if so, whether it is the result of compulsory insurance laws or something else. Whatever the case, requiring uninsured and underinsured motorist coverage would better protect the public than rescinding compulsory insurance laws.

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[283] "Texas Insurers to Be Able to Offer Coverage By the Mile," Stutz, Terrence; *The Dallas Morning News;* 1/23/2002

[284] Source: Insurance Information Institute

Virginia is an interesting case in that technically it is not a compulsory insurance state. Motorists can buy insurance, which comes with mandatory uninsured motorist coverage, or they can drive without insurance and pay the state $500 a year, which buys them nothing. The state pays insurers from the fees it collects to offset the cost of uninsured motorist coverage for those who buy insurance – creating an alternative funding mechanism for uninsured motorist coverage. This sends a somewhat confusing message however – like having motorists pay a fine when they have not committed an offense – and provides no protection to motorists passing through Virginia.

It is difficult to see any advantage in following Virginia's system, in that it would be just as easy to have uninsured motorists pay a fine and get insurance as it is to have them pay a fine and not get insurance. Fines could still be used to subsidize uninsured motorist coverage, but requiring insurance expands available benefits. Rather than collect on their own uninsured motorist coverage, severely injured accident victims could collect on the at-fault driver's liability insurance and on their own underinsured motorist coverage – potentially doubling available benefits. Keeping in mind that government pays much of the costs not covered by insurance, it is in states' interests to follow policies that increase, rather than decrease, coverage.

Privatization

John Semmens, of ADOT, has proposed the more radical approach of forcing insurers to bear unlimited liability for those they insure and having them issue license plates to insureds identifying them as, for example, a State Farm insured. The theory behind this proposal is that if insurers were forced to bear unlimited liability for those they insure, they would carefully screen drivers. Only good drivers would get license plates. Bad drivers would not have license plates and would be easy to spot and ticket.[285]

Right now, insurers oppose compulsory insurance and electronic reporting, both of which are far less disruptive or costly to implement than licensing vehicles and screening drivers. There is no indication that the insurance industry wants to take over vehicle registration and driver licensing functions.

In fact, it is difficult to imagine a proposal the insurance industry would oppose more vigorously than this one, which would dramatically increase the responsibility of insurers for the safety of vehicles and drivers. If it became law, some insurers would likely pull out of the market. Many high-risk drivers would not be able to get insurance at any price. The potential reduction in losses from crashes avoided by keeping these drivers off the roads is unknown.

Motorists do not always drive their own vehicles. Insurers deal with this risk now by excluding household members with unacceptable driving records and by limiting exposure. Under this proposal, they could not do either. Efforts to exclude bad or high-

[285] John Semmens, "Privatizing Vehicle Registrations, Driver's Licenses and Auto Insurance," *Transportation Quarterly* (Volume 49, Number 4, Fall 1995), pp. 125-135.

risk drivers by declining to cover vehicles owned by such drivers could end up denying coverage to good and low-risk drivers in the same household.

Problems encountered by states introducing proof of insurance at registration requirements, such as tag and insurance card theft and forgery, would likely occur, as well. Vehicles would drop off registration rolls. If one state attempted such a scheme, adjacent states could see a sharp rise in vehicle registrations as motorists registered their vehicles out of state. Illicit businesses offering this service would spring up.

If such a law were to pass, it might have to be accompanied by a curtailment of benefits, such as the elimination of punitive and non-economic damages. Even that might not be enough. Possibly economic damages would be limited as well, by requiring co-pays for medical care and treatment, capping benefits for lost wages and lost earning capacity, or both.

Quantitative Research

METHODOLOGY

Responses to three surveys were analyzed, along with published secondary data from the Bureau of Transportation Statistics (BTS), the Insurance Information Institute (III), the Insurance Research Council (IRC), and the United States Census. Surveys and summary response data are attached in the Appendix.

Two surveys were sent to state motor vehicle authorities: one to general managers and one to database managers. States that did not use an insurance verification database did not need to respond to the database survey. The response rate for the general survey was 56%. All states that said they used a database in the general survey responded to the database survey.

A third survey was sent to state insurance authorities. Thirty-two states responded, for a response rate of 64%.

Table 10 below shows respondents by survey.

Table 10. Survey Respondents

General Survey	Database Manager Survey	Insurance Survey	Did Not Respond to Any Survey
AL, AR, AZ, CA, DE, FL, GA, IA, ID, IL, KS, KY, LA, MO, MN, ND, NJ, NE, NY, OH, OK, OR, SC, SD, VA, VT, WA, WI, WV	AL, AR, AZ, CO, FL, GA, KY, MO, MN, NJ, NY, OR, VA	AK, AR, AZ, CA, CO, CT, DE, FL, GA, ID, IL, IN, KS, MD, ME, MI, MN, MT, NC, ND, NE, OH, OR, SD, TN, TX, UT, VA, VT, WA, WI, WV	HI, MA, MS, NH, NM, NV, PA, RI, WY

Repeated emails and phone calls obtained contact information for appropriate respondents at each agency. These were:

- General survey → The person most knowledgeable about enforcement of compulsory insurance laws.
- Database survey → In-house database manager or outside vendor.
- Insurance survey → Private passenger auto manager.

Survey analysis is subject to nonresponse error, from surveys that were not returned and from questions that were not answered. Also, respondents may have given incorrect answers to questions asking for factual information, such as fees, fines, jail time and suspensions – another potential source of error.

Although secondary data used was the most recent available, it is not contemporaneous with survey data. This too can introduce error. Potentially the most troublesome is the IRC uninsured motorist coverage rate, which is an average of estimates from 1995 to 1997. For all of these reasons, findings should be interpreted with caution.

Finally, it should be noted that statistically significant relationships are not necessarily causal relationships. Statistical significance is the degree of certainty that the relationship is not the result of random chance. It does not prove that changing one variable will change the other. Both could be driven by another factor not captured in the data.

RESPONSES: MOTOR VEHICLE DEPARTMENT GENERAL SURVEY

Different states organize financial responsibility or mandatory insurance sections under different departments and divisions, including Highway Safety, Revenue, the Secretary of State's Office and Transportation.

Questions were designed to elicit information on respondents' perceptions as well as agency performance and practices. The survey was organized into different sections: General, Database, Driver's License, Enforcement, Penalties, Research, and Technology.

General

Respondents' estimates of uninsured motorist rates for their states were often different from uninsured motorist estimates from the IRC. This is not surprising when estimates are arrived at in different ways. Respondents reported using accident reports, database records, insurance industry figures, unspecified internal records or questionnaire sampling. Of the five respondents basing their estimates on insurance industry figures, three vary from Insurance Research Council estimates.

Table 11. Comparison of Respondent and IRC Uninsured Motorist Estimates

	IRC % UM '95-'97 Avg	State % UM Est	IRC Est. – State Est.
AL	25.0%	15.0%	10%
AR	11.0%	11.0%	0.0%
AZ	16.0%	8.0%	8.0%
CA	22.0%	15.0%	7.0%
AR	11.0%	11.0%	0.0%
FL	20.0%	6.1%	13.9%
GA	13.0%	11.0%	2.0%
ID	8.0%	8.0%	0.0%
IL	13.0%	4.9%	8.1%
KY	10.0%	20.0%	-10.0%
LA	8.0%	13.3%	-5.3%
MO	13.0%	9.0%	4.0%

	IRC % UM '95-'97 Avg	State % UM Est	IRC Est. – State Est.
ND	7.0%	8.0%	-1.0%
NE	7.0%	15.0%	-8.0%
NJ	15.0%	5.5%	9.5%
OH	13.0%	11.0%	2.0%
OK	17.0%	17.4%	-0.4%
OR	12.0%	10.0%	2.0%
SC	28.0%	28.0%	0.0%
VA	12.0%	12.0%	0.0%
VT	9.0%	10.0%	-1.0%
WA	15.0%	14.9%	1.0%
WI	11.0%	11.5%	-0.5%

Table 12. Source of Respondent Uninsured Motorist Estimates

Source of UM estimate	States							Frequency	Valid Percent	Cumulative Percent
Accident reports	CA	ND	NE	NJ	OR	VT	WI	7	31.8%	31.8%
Database	AR	AZ	FL	MO				4	18.2%	50.0%
Insurance industry	ID	GA	KY	OK	VA	WA		6	27.3%	77.3%
Internal records	LA	SC						2	9.1%	86.4%
Questionnaire sampling	AL	IL	OH					3	14.3%	100.0%

Just 54.5% of respondents knew whether or not their uninsured motorist estimates excluded hit-and-run drivers. Of those, one-third exclude hit and run drivers; two-thirds do not.

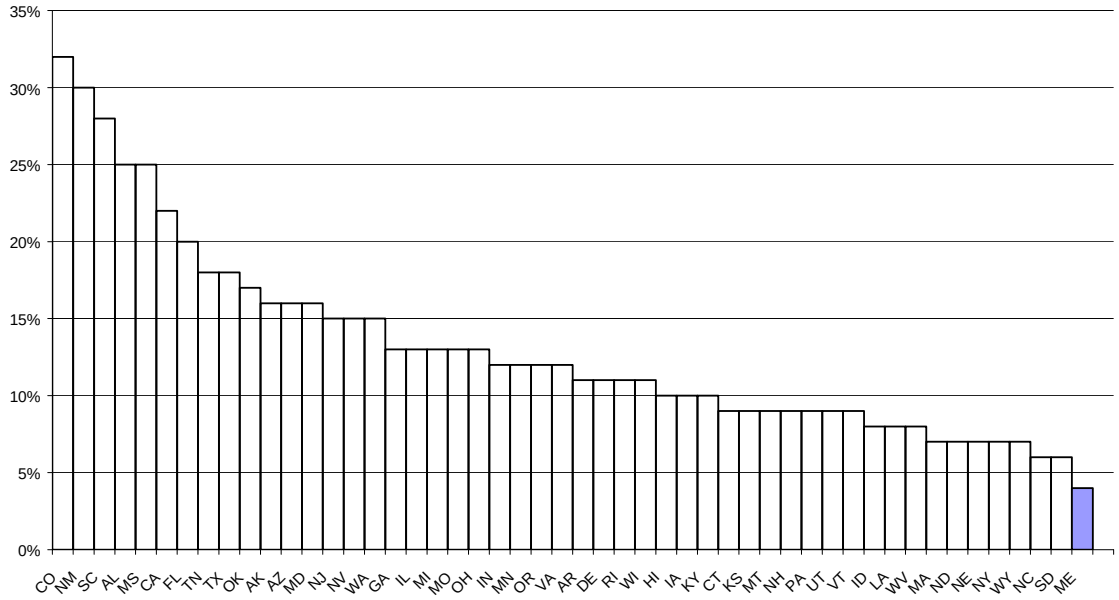


Figure 10. IRC Estimated Uninsured Motorist Rate '95-'97 Average by State

To be consistent, IRC estimates were used in statistical analyses for this study rather than state estimates, although in some cases, state estimates may be more accurate. For the same reason, secondary data from the Bureau of Transportation Statistics was used rather than registered vehicle data from respondents. For a comparison of uninsured motorist rates and what they might mean in terms of actual numbers of uninsured motorists, see Figures 10 above and 11 below.

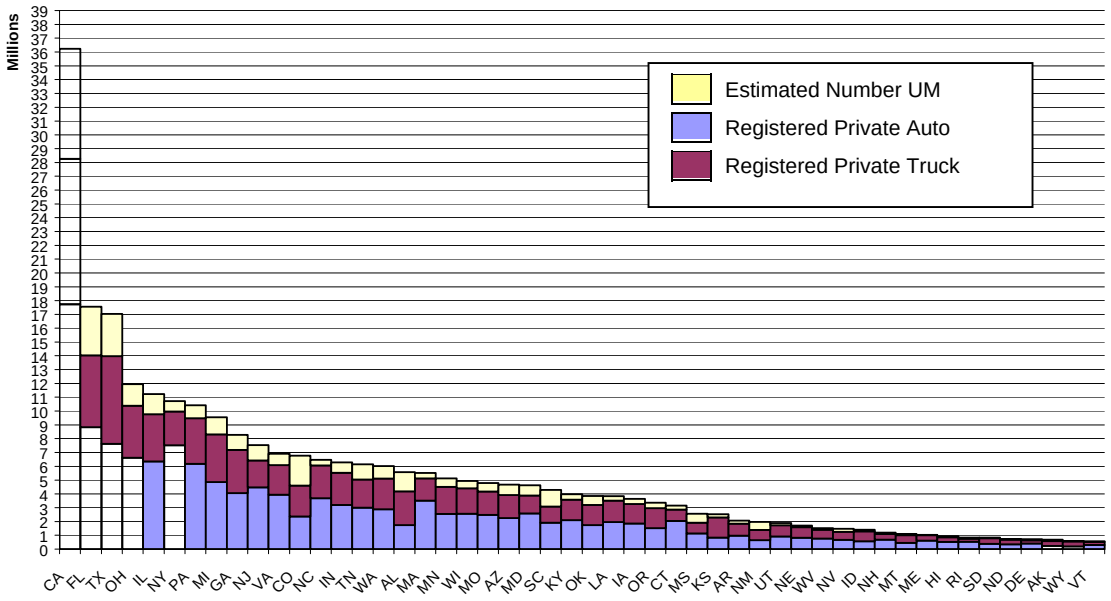


Figure 11. Estimated Number of Uninsured Private Vehicles by State

Number estimates are rough, and are based on Bureau of Transportation Statistics figures for registered private automobiles and trucks and applying IRC estimates of uninsured motorist rates as if all registered vehicles were insured – an assumption likely to overstate the problem. No studies were found, however, examining the overlap between failure to register and failure to insure. With no basis for allocating uninsured motorists between registered and unregistered vehicles, for simplicity's sake, they have been treated as unregistered.

Database

Of the 28 states responding to the general survey, 17 indicated that their state does not use a database and one did not answer the question. Thirteen states responded to the database manager survey, including one that did not respond to the general survey. Two states said in the general survey that they do not use a database, but in the database manager survey, they said that they do.

Two respondents outsource database services: Alabama, which is "neither satisfied nor dissatisfied" with its vendor's performance; and Colorado, which did not respond to the general survey.

Two respondents reported verifying database accuracy rates by audit for two years each: Florida (reported as 98% accurate) and New York (reported as 95% accurate).

Four respondents gave cost per registered vehicle data. Many factors, including different cost-accounting practices, experience, expertise, and number of registered vehicles could explain the difference.

Table 13. Database Cost Per Registered Vehicle

Variable	N	Range	Minimum	Maximum	Mean
Database Cost Per Reg Vehicle	4	$1.26	$0.02	$1.28	$0.38

Driver's License

Eighty-five percent of respondents allow noncitizens to obtain driver's licenses. Just four states – Arizona, Illinois, Kansas and Kentucky – reported that they do not.

Of respondents that do issue driver's licenses to noncitizens, just two states – Oregon and Wisconsin – reported doing so without requiring proof of lawful alien status.

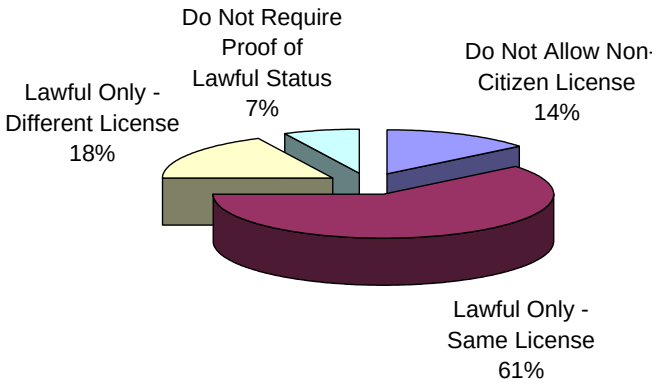


Figure 12. Non-Citizen Driver's License Issued

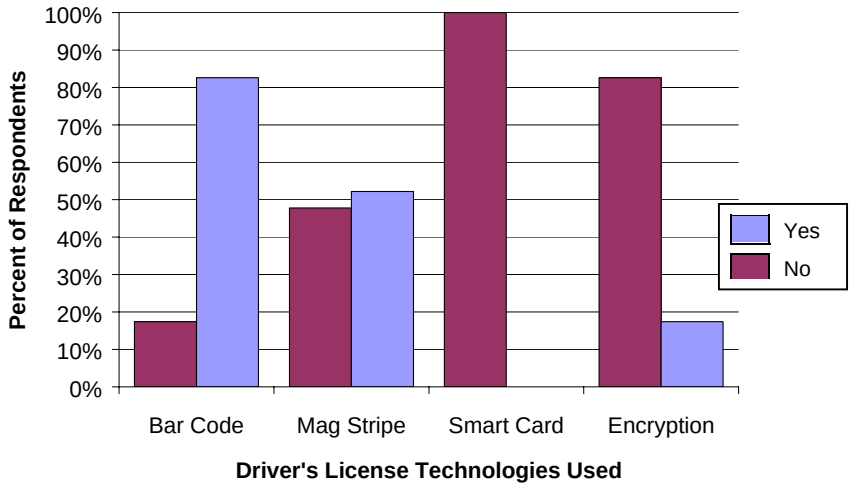


Figure 13. Driver's License Technologies Used

Eighteen percent of respondents issue different driver's licenses to noncitizens. Those specifying how they were different said that licenses expire when immigration documents do.

Whether or not a state issues driver's licenses or different driver's licenses to noncitizens was not significantly predictive of the IRC uninsured motorist rate.

No respondents use smart card technology on driver's licenses. A few require encryption. About half use mag stripe and over 80% require bar code. See Figure 13 above for a breakdown of driver's license technologies used.

Enforcement

Questions in this section measured perceptions of enforcement, not actual enforcement. Respondents were asked to estimate how often methods were used to check proof of insurance and how often penalties were imposed. Most respondents believe that proof of insurance is being checked "almost always" for all methods, with 100% believing that to be the case at accidents vs. 60% at traffic checkpoints.

Responses were less homogeneous for penalties. The only penalties the majority believes are applied "almost always" or "often" are fines (87.5%) and registration and license suspension (68.0% and 73.1%).

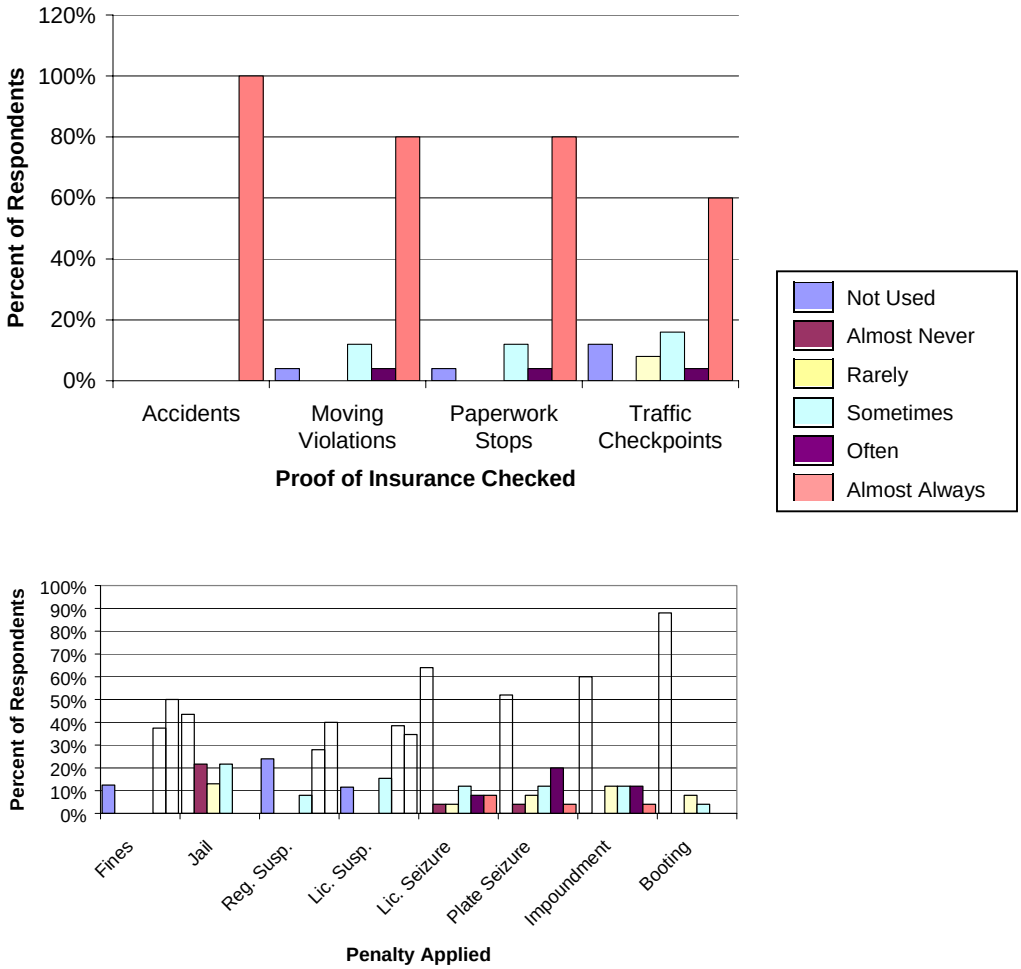


Figure 14. Respondent Perceptions of Frequency: Checking Proof of Insurance and Applying Penalties

Penalties

Respondents were asked what penalties were for first, second and third offenses of violating compulsory insurance laws. Insurance Information Institute information was also analyzed. Simple regressions were run using III and respondent fine data and multiple regressions were run using respondent fines for first, second and third offenses together. Fines were not significantly predictive of the IRC uninsured motorist rate.

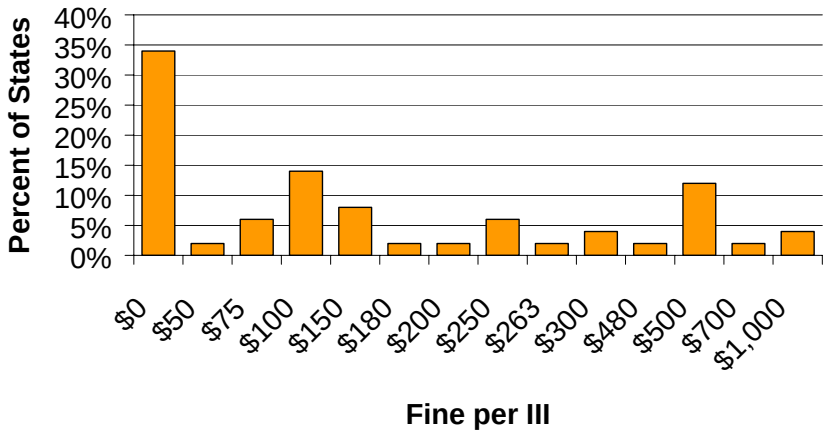


Figure 15. Fines for Driving Without Insurance Per III

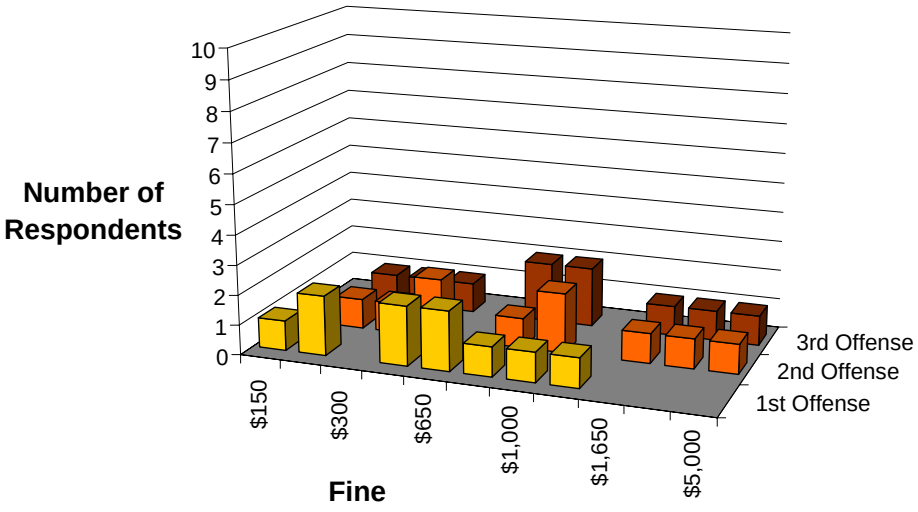


Figure 16. Fines for Driving Without Insurance Per Respondents: 1st, 2nd and 3rd Offenses

Similar analysis was carried out for jail days. Jail was not significantly predictive of the IRC uninsured motorist rate.

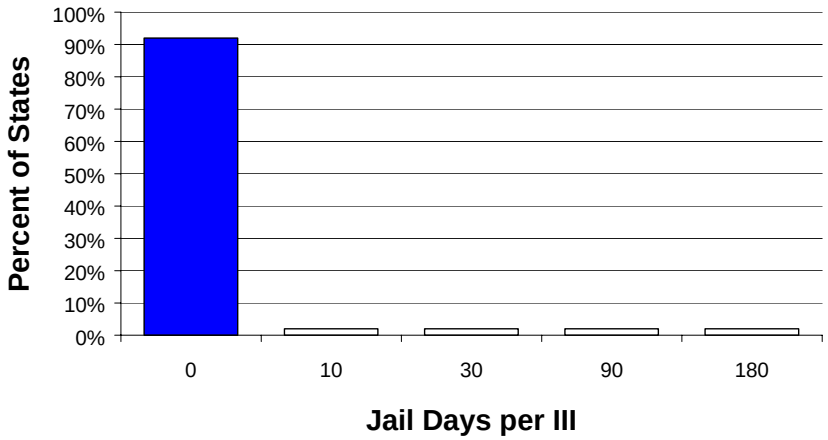


Figure 17. Jail Days Per III

Other penalties include suspension of license and registration. Simple and multiple regressions were run on license suspension and III registration suspension figures. Suspension was not significantly predictive of the IRC uninsured motorist rate. There were too few data points to run regression analysis on respondent registration suspension. There, Spearman correlation analysis showed no statistically significant correlation between respondent registration suspension and the IRC uninsured motorist rate.

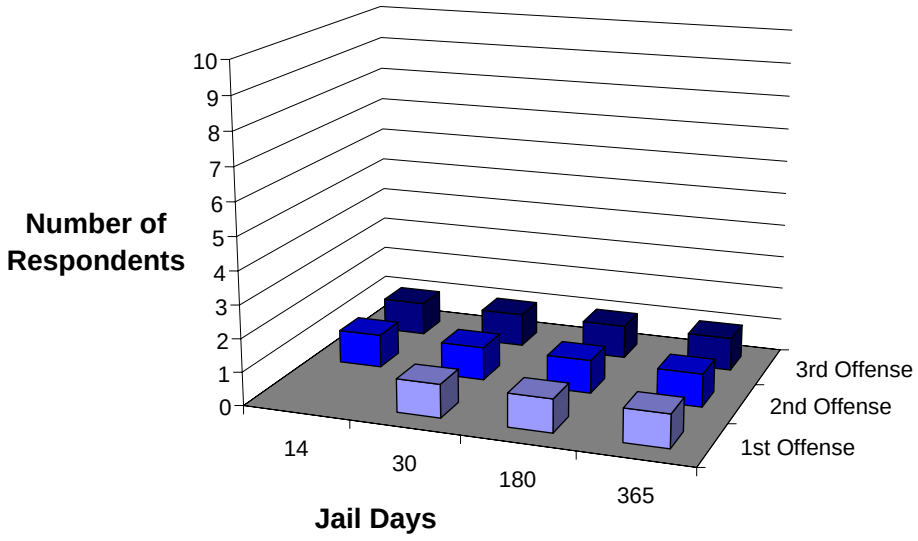


Figure 18. Jail Days Per Respondents: 1st, 2nd and 3rd Offenses

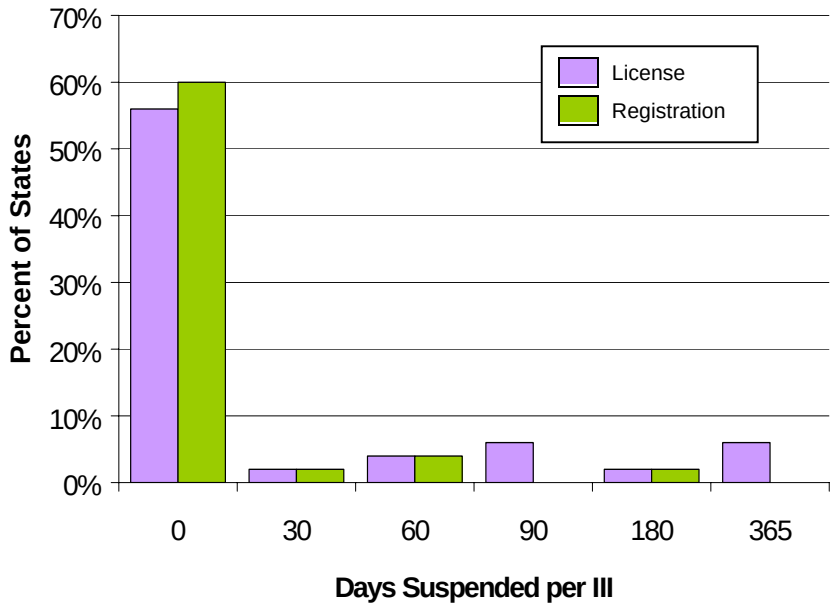


Figure 19. Days License Or Registration Suspended Per III

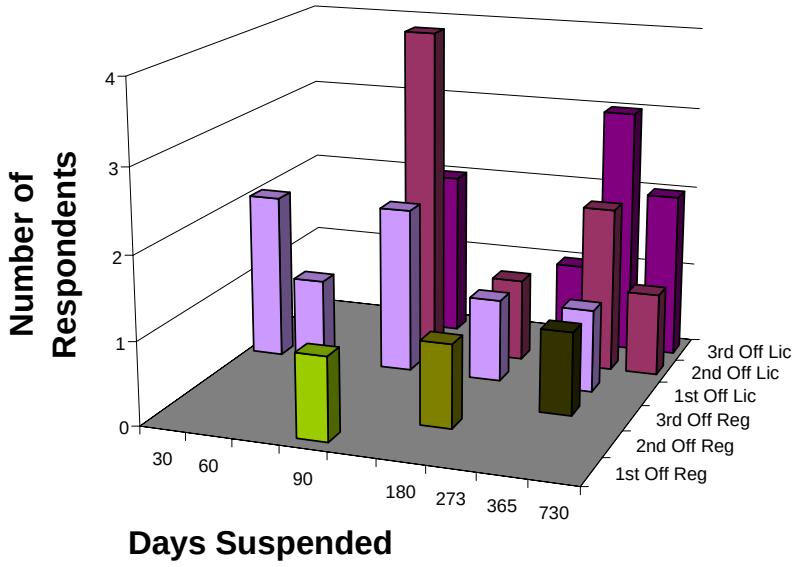


Figure 20. Days License Or Registration Suspended Per Respondents: 1st, 2nd and 3rd Offenses

Regression analysis carried out on fees to reinstate, however, was significantly predictive at the 99% level for both license and registration fees. According to simple regression models for each, for every $100 increase in license reinstatement fees, we would expect to see a .027% increase in the uninsured motorist rate. For every $100 increase in

registration reinstatement fees, we would expect to see a .025% increase in the IRC uninsured motorist rate. (For SPSS output, see Output 4 in the Appendix.)

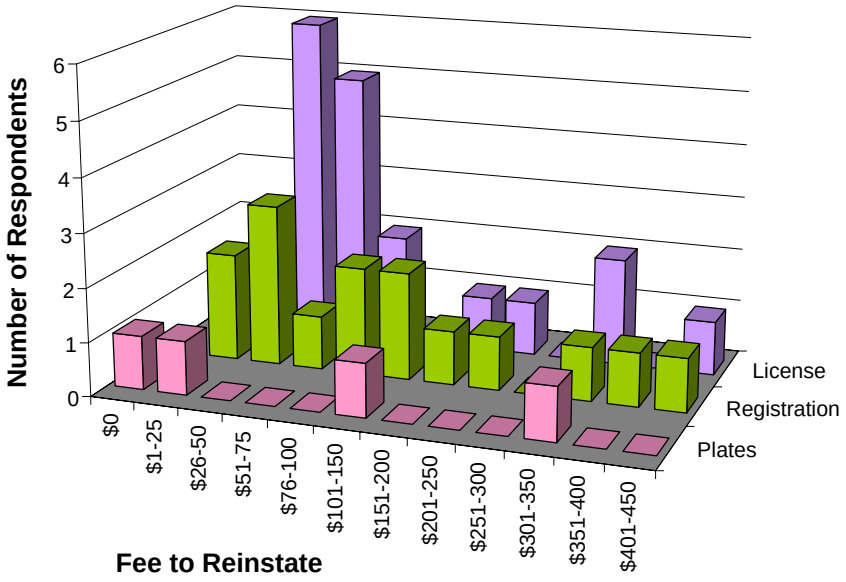


Figure 21. Fees to Reinstate License, Registration and Plates Per Respondents

There were too few data points to run regression analysis on the fee to redeem plates. Spearman correlation analysis, however, showed no statistically significant correlation with the IRC uninsured motorist rate.

No respondent knew the percent of plates or vehicles redeemed. One respondent knew that the percent of plates seized from vehicles wrongly identified as uninsured was 5%. Another estimated that 5% was the error rate for both plates seized and vehicles impounded.

Sixty-five percent of respondents answered that their states have penalties for allowing coverage to lapse even if the vehicle is insured at the time the lapse is discovered. This variable was not significantly predictive of the IRC uninsured motorist rate.

Asked whether penalties were different for younger drivers, no respondent answered that they were.

A majority of respondents (60%) said that judges in their state have access to information on defendants' prior insurance law violations available in a database at sentencing. Whether or not states have this capability was not significantly predictive of the IRC uninsured motorist rate.

Another variable not significantly predictive was whether or not motorists convicted of DUI are required to maintain insurance even if their driving privileges are suspended. Sixty-two percent of respondents reported that they are required to do so. While 24 states answered that question, just four said how long they are required to maintain insurance. For three of those four, the time period is three years.

Research

At least eight states have done studies on the issue of uninsured motorists some time in the past 10 years: Arkansas, Delaware, Florida, Louisiana, Missouri, New York, Ohio, and Wisconsin. At least one (Florida) has examined privatization in compulsory insurance enforcement and another (New York) has looked at motor vehicle insurance and discrimination.

MOTOR VEHICLE DEPARTMENT DATABASE SURVEY

Thirteen states responded to the database manager survey, which was organized into two sections: Database and Enforcement.

Database

The first respondent to use a database in compulsory insurance law enforcement was Minnesota in 1985. Georgia was the latest, using its database for the first time in 2003.

Table 14. Database History and Performance

State	1st Year of database	% UM	% Correctly Identified as UM 1st Year	% Correctly Identified as UM Currently
MN	1985			
KY	1986	30%		
FL	1989	30%	60%	98%
NJ	1991	8%	96%	
VA	1997			
AR	1999	19%		
CO	1999	33%		
AZ	2000	15%		
NY	2000			
AL	2001	15%		
OR	2001			
MO	2002	9%		
GA	2003			

Adoption of this technology is increasing, but slowly, as Figure 22 below shows.

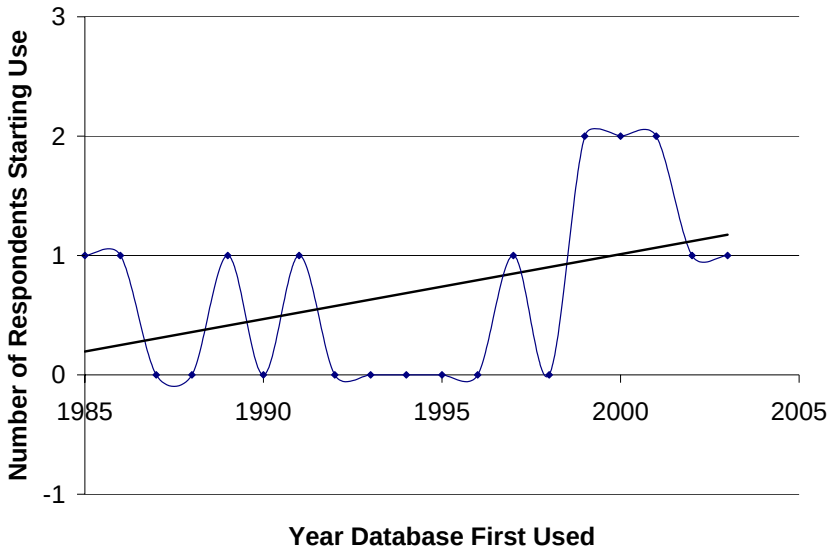


Figure 22. Adoption of Database Technology

Respondents require insurers to report policy changes anywhere from immediately to within 44 days. The period most commonly used is monthly. Arizona is the only respondent with a seven day reporting cycle. Spearman correlation analysis showed no significant correlation between reporting requirement and the IRC uninsured motorist rate.

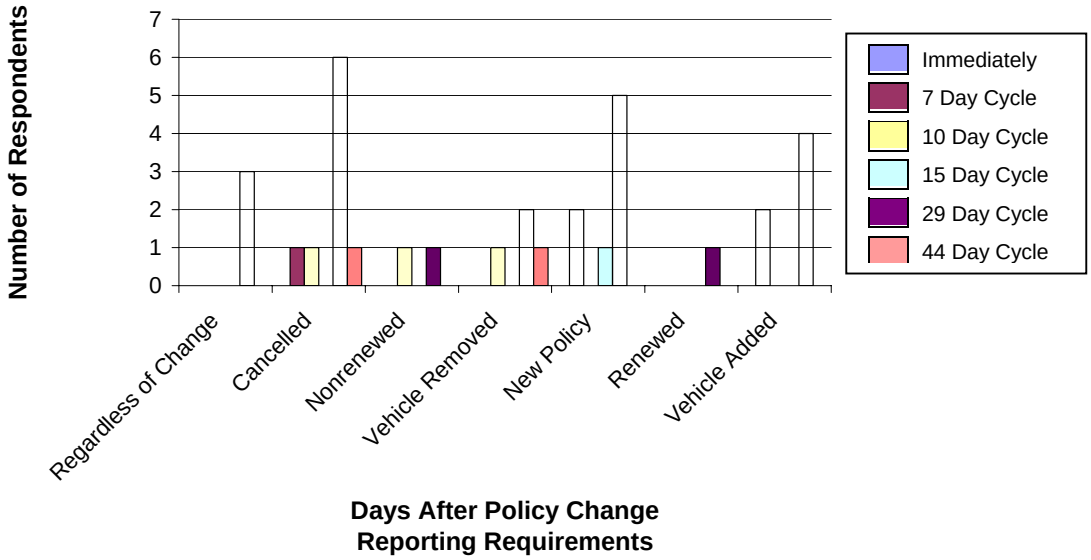


Figure 23. Insurer Reporting Requirements

States receive and compare records in different cycles. Some are required by law to compare insurer with registration records every so many days; others are not. "Unspecified" comparison cycles reflect respondents who did not enter a number of days or whose comparison requirements are tied to verbal criteria, such as "at renewal" or "upon receipt of information."

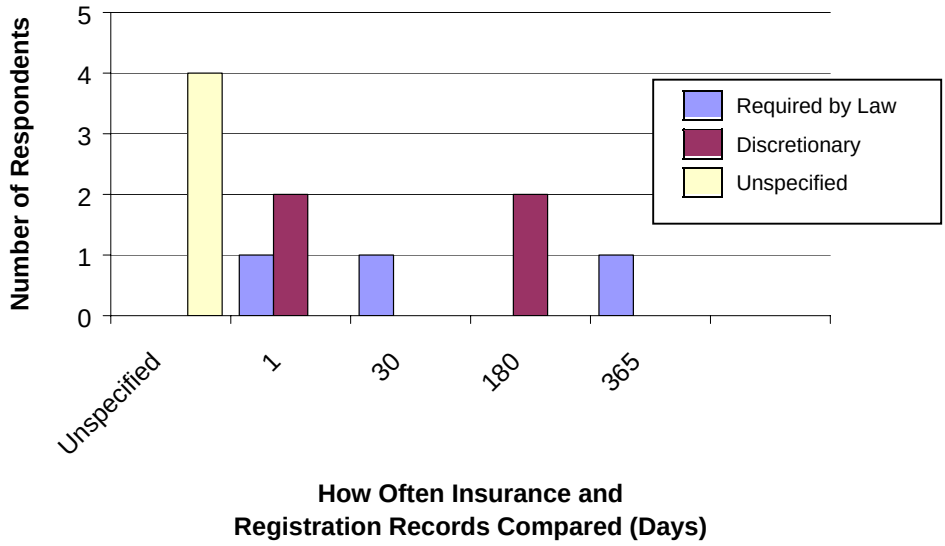


Figure 24. Comparison Cycles

Law enforcement agencies in five respondent states do not have access to the insurance database. Two states that do give access, Florida and Georgia, estimated that their officers accessed the database 5,500 and 20,000 times a day, respectively.

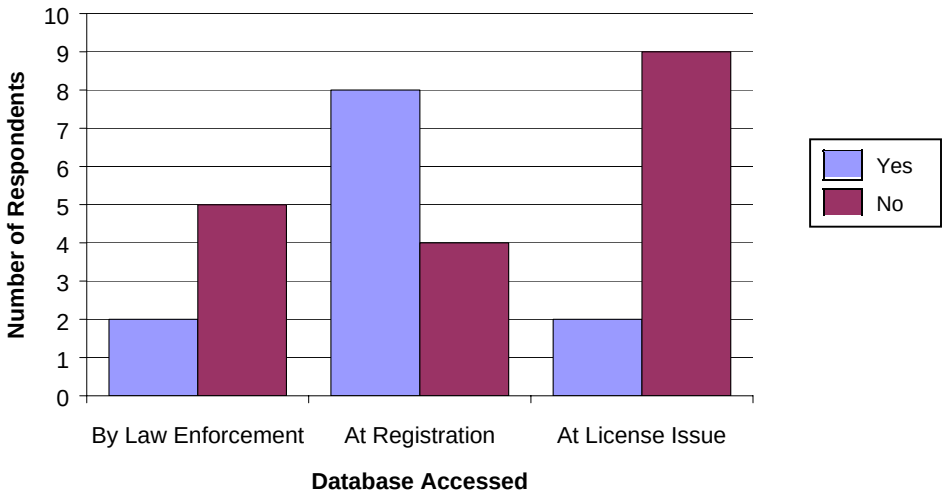


Figure 25. Law Enforcement and Regulatory Access

While a majority of respondents (80%) access the database at registration, few (less than 20%) do so at licensing. None offer access for motorists to verify that their information is correct, although Colorado motorists will be able to do so some time this year.

Some include information on insurance or traffic violations in their database as well as information on current insurance status.

Figure 26. Violation Info In Database

Whether or not it contains insurance or traffic violation information, almost 70% of respondents use their database for purposes other than enforcing compulsory insurance laws, including registration renewal and enforcement.

Enforcement

Most respondents send enforcement letters only to registered owners. Two send letters to both registered owners and named insureds.

Just one respondent sends enforcement letters on outside vendor letterhead (as opposed to state agency letterhead). Half the letters from state agencies are on motor vehicle department letterhead; 30% are on highway or public safety department letterhead and 20% are on revenue department letterhead.

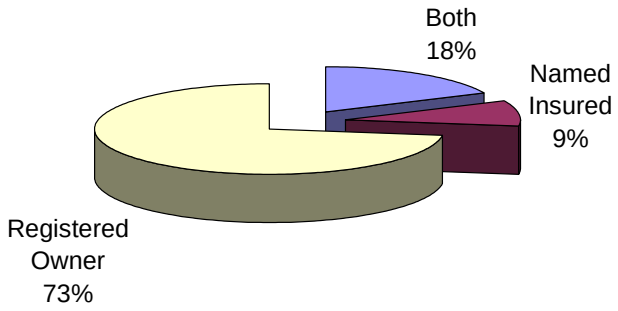
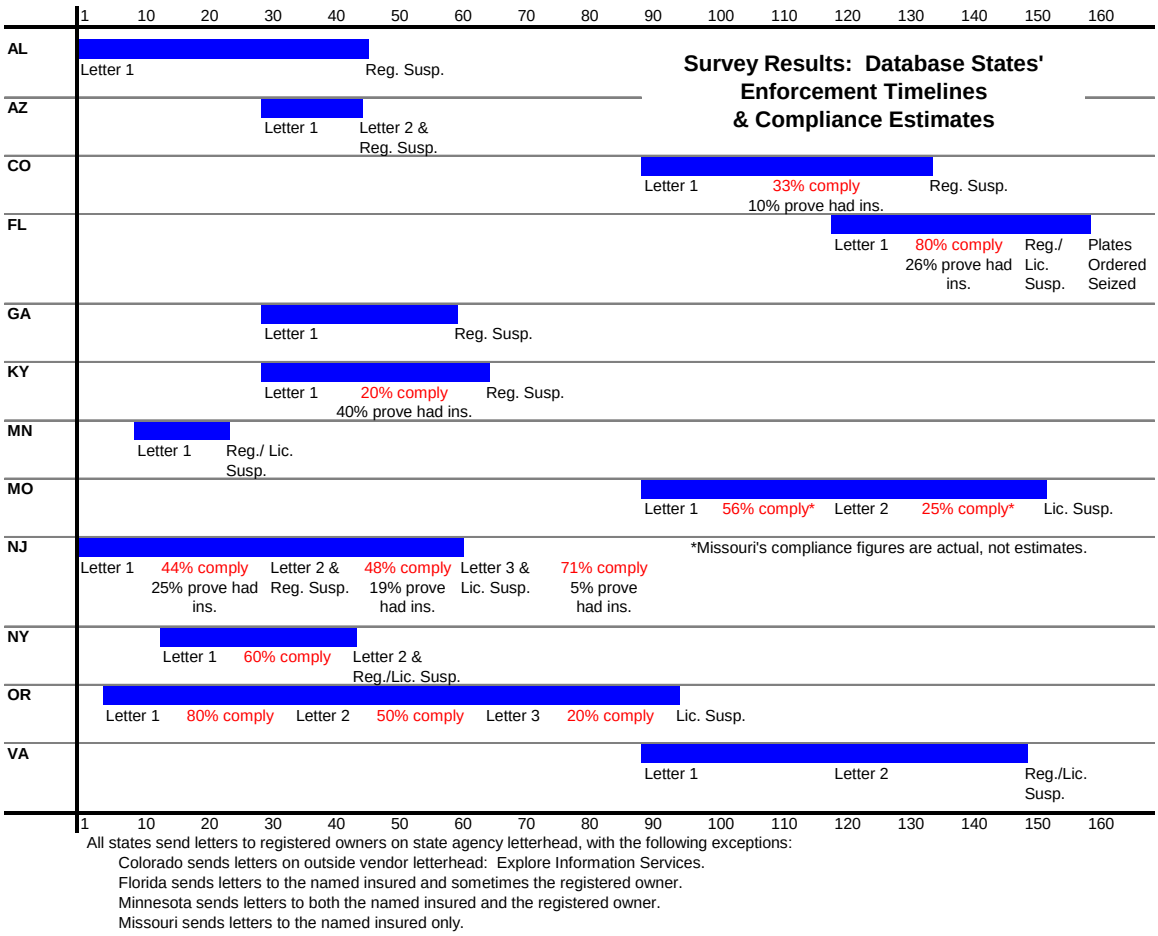


Figure 27. Enforcement Letters Sent To

States differ as to when they send enforcement letters, how many enforcement letters they send, how long they wait for a response before taking enforcement action and what enforcement action they take. After each enforcement letter, some motorists comply, some do not, and some prove they were in compliance all along. Figure 28 below shows enforcement timelines and compliance estimates for respondents.



All states send letters to registered owners on state agency letterhead, with the following exceptions:
Colorado sends letters on outside vendor letterhead: Explore Information Services.
Florida sends letters to the named insured and sometimes the registered owner.
Minnesota sends letters to both the named insured and the registered owner.
Missouri sends letters to the named insured only.

Figure 28. Enforcement Timelines and Compliance Estimates

INSURANCE DEPARTMENT SURVEY

Thirty-two states responded to the insurance department survey, which was organized into eight sections: Uninsured Motorist Coverage, Underinsured Motorist Coverage, Involuntary Market, Low Cost Coverage, Public Assistance, Database, "Pay As You Go" Policies, and Penalties.

Uninsured and Underinsured Motorist Coverage

A majority of respondent states have not made uninsured or underinsured motorist coverage compulsory. However, most that require uninsured motorist coverage also require underinsured motorist coverage.

Again, III data differs from respondent data, perhaps because in some states, uninsured and underinsured motorist coverages are inseparable. According to III, 60% of states do not require uninsured motorist coverage; 32% do require uninsured motorist coverage and just 8% require both uninsured motorist and underinsured motorist coverage.

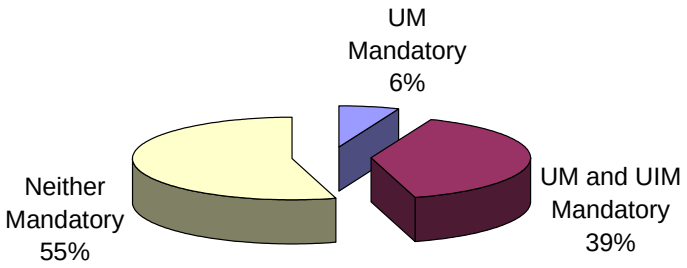


Figure 29. Compulsory UM and UIM Per Respondents

Although survey responses to the question, "Is uninsured motorist coverage compulsory?" were not predictive of the IRC uninsured motorist rate, III data on whether or not uninsured motorist is compulsory was significantly predictive at the 95% level. According to the simple regression model, if uninsured motorist coverage were compulsory, we would expect to see a decrease of .036% in the IRC uninsured motorist rate. (For SPSS output, see Output 5 in the Appendix.)

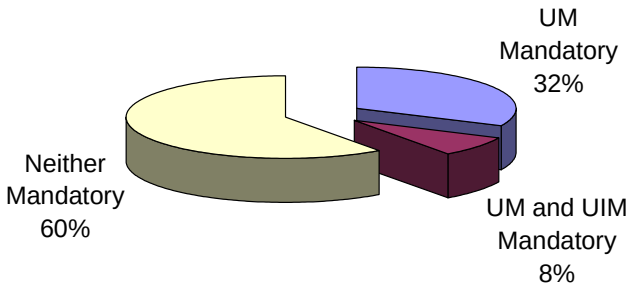


Figure 30. Compulsory uninsured motorist and UIM Per III

However, survey responses and III data conflict for two states: Colorado and Nebraska. If they are removed from the model, the variable is no longer predictive.

Whether respondents specify the language of offer (or declination) of uninsured motorist coverage was also significantly predictive at the 95% level. If the language were specified by law, we would expect to see a decrease of .054% in the IRC uninsured motorist rate. The same was true of underinsured motorist coverage, but with an expected decrease of .047%. (For SPSS output, see Output 6 in the Appendix.)

The two are not additive, however. Multiple regression analysis using both variables found that they were highly correlated with each other and that of the two, uninsured motorist coverage was the better predictor.

Only two respondents estimated the percent of insured motorists who carry uninsured or underinsured motorist coverage. They believe the number is between 80% and 90% for uninsured motorist coverage and between 75% and 85% for underinsured motorist coverage.

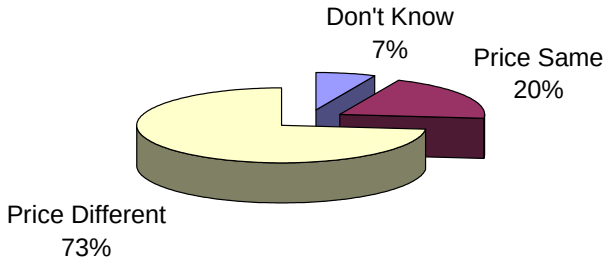


Figure 31. UM Premiums Same Statewide?

In most respondent states, uninsured motorist premiums differ according to territorial and/or individual rating factors. But in six states, uninsured motorist premiums are the same statewide. (See Figure 31 above.)

Uninsured motorist coverage covers different types of damages in different states. While covering economic loss in 92.9% of respondent states, it covers non-economic loss (pain and suffering) in 85.7%, property loss in 84.6% and punitive damages in just 15.4%. (See Figure 32 below.)

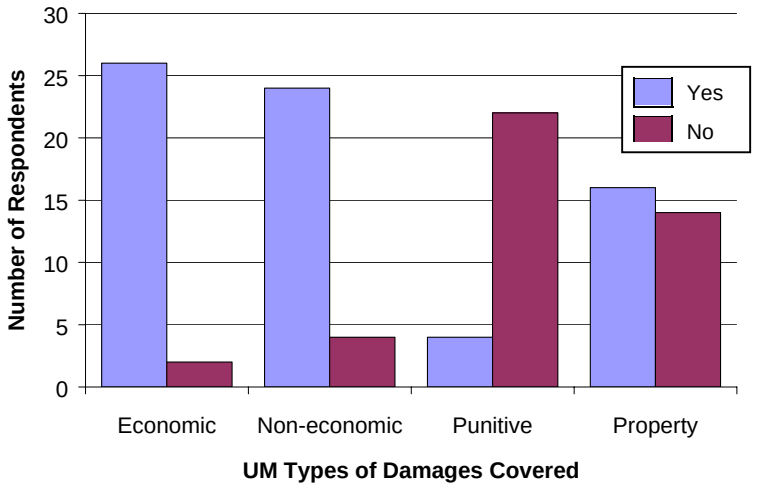


Figure 32. Types of Damages Covered by UM

Few respondents knew the average annual premiums for uninsured motorist coverage or underinsured motorist coverage in their states; most gave estimates. The estimated average annual premium for uninsured motorist coverage is $50 or less in 76.5% of respondent states. For underinsured motorist coverage, it is $50 or less in 88.9% of respondent states.

Involuntary Market

Using III figures for vehicles insured in the voluntary and involuntary markets in 2000, neither the size of the involuntary market nor the percent of vehicles insured in the involuntary market was predictive of the IRC uninsured motorist rate.

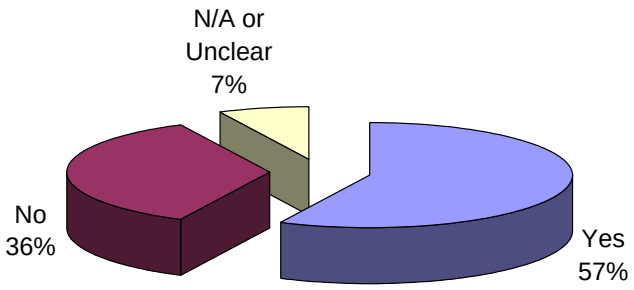


Figure 33. Involuntary Market Requires Insurer Rejection?

A majority of respondent states require some form of insurer rejection to be eligible to obtain coverage in the involuntary market. (See Figure 33) A significant minority

excludes applicants with either outstanding premium payments or cancellations for nonpayment, for the past 12 or 24 months. (See Figure 34)

Just one respondent knew the average annual premiums for compulsory coverage in the voluntary and involuntary markets. Estimated figures range from $60 to $750 in the voluntary market and $500 to $1,400 in the involuntary market. (See Figure 35 below.)

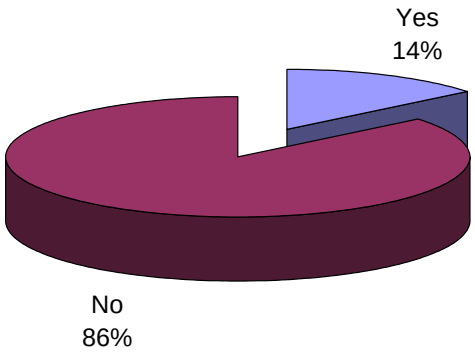


Figure 34. Involuntary Market Requires Good Payment History?

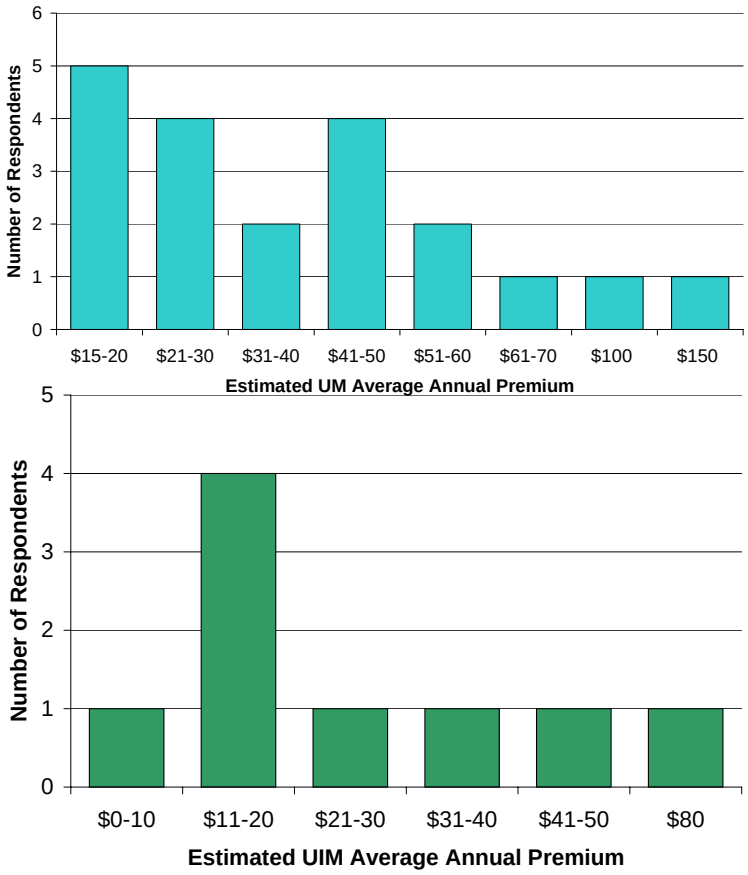


Figure 35. Estimated UM and UIM Coverage Average Annual Premiums

Low Cost, Low Benefit (LCLB) Coverage

Just one respondent state, California, reported allowing low cost, low benefit coverage: a 10/20/3 policy available to Los Angeles and San Francisco County residents who meet the following requirements:

- Age 19 and older.
- Continuously licensed for the past three years.
- Household income 25% over federal poverty level or less.
- No more than one at fault property damage only accident or one point for a moving violation.
- No felony or misdemeanor conviction involving the vehicle code.
- No dependent college students.

The average annual premium for this coverage is $314-$347 and 2,503 policies are active.

To put this in perspective, 2,503 policies would cover roughly 0.2% of the population 18 and over living below poverty level in Los Angeles and San Francisco Counties in 2000 according to the United States Census Bureau, or roughly 1/100th of a percent of the registered private automobiles and trucks in California in 2001 according to the Bureau of Transportation Statistics. (See Tables 15 and 16 below.)

Table 15. Driving-Age Population Living Below Poverty Level in Los Angeles and San Francisco Counties That Could Be Served By Active LCLB Policies

	Population 18 and Over	* % Living Below Poverty Level	= Population 18 and Over Living Below Poverty Level
Los Angeles Co.	6,851,362	15.3%	1,048,258
San Francisco Co.	663,931	10.8%	71,705
Total			1,119,963

	Active LCLB Policies	/ Population 18 and Over Living Below Poverty Level	= % Population 18 and Over Living Below Poverty Level With LCLB Policies
Los Angeles and San Francisco Counties	2,503	1,119,963	0.2%

Table 16. California Registered Private Vehicles that Could Be Served by Active Low Cost/Low Benefit (LCLB) Policies

	Registered Private Autos	+ Registered Private Trucks	= Registered Private Autos and Trucks
California (Statewide)	17,726,983	10,531,853	28,258,836

	Active LCLB Policies	/ Registered Private Autos and Trucks	= % Registered Private Autos and Trucks With LCLB Policies
California (Statewide)	2,503	28,258,836	.009%

Public Assistance

In addition to California, Maine and Nebraska indicated in their response to the surveys that they have provided public assistance to help low-income residents afford motor vehicle insurance. Neither state, however, described its program.

California and Texas have provided tax or other incentives to increase the availability of insurance services or the number of motor vehicle policies written in underserved communities.

Database

No respondent reported compensating insurers for database information. One state, Oregon, reported that it has no penalties for failing to submit information or submitting inaccurate information. Another state, Arkansas, reported that in 2002, it penalized four insurers a total of $15,000 for failing to submit information or submitting inaccurate information.

Pay-As-You-Go Policies

Although 11 respondent states allow pay as you go policies, none reported any insurers offering such policies or any active policies in their states.

Penalties

Most respondents do not require motorists convicted of driving without insurance or any other violation to prepay motor vehicle liability premiums. Two states, however, require six months' prepayment and one state requires 12 months' prepayment for those required to make proof of insurance (SR-22) filings or whose driving privileges were revoked or suspended for failure to maintain insurance. Seventy percent allow insurers to cancel policies of motorists convicted of DUI; 30% do not.

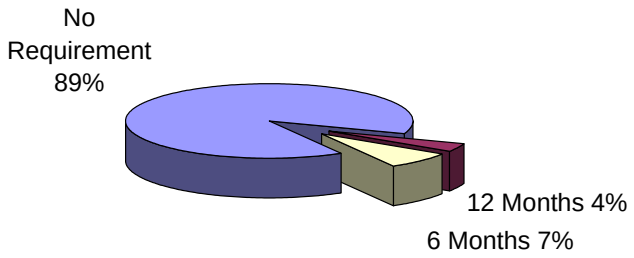


Figure 36. Premium Prepayment Required for Violators

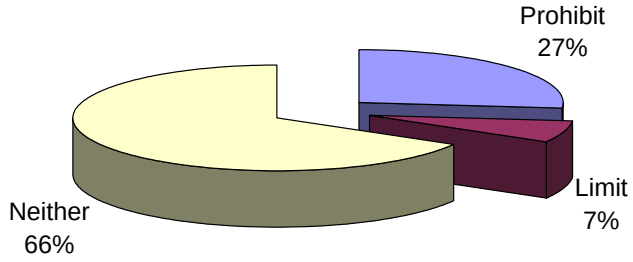


Figure 37. Allow Surcharges On Previously Uninsured Motorists?

California and Michigan prohibit or limit claims by uninsured motorists injured in motor vehicle accidents. Michigan has done so since 1973; California, since 1997. Michigan is a no-fault state. Therefore, by definition, uninsured motorists would have no insurance to look to. California, on the other hand, is a tort state. There, uninsured motorists are barred from collecting pain and suffering or punitive damages.

Respondents were asked whether their state prohibits or limits insurer surcharges on previously uninsured motorists. Eight states prohibit surcharges and two limit them. (See Figure 37 above.) Of those who limit surcharges, one limits the length of time insurers can impose surcharges to six months. The other limits surcharges to what insurers can actuarially support.

SECONDARY DATA ANALYSIS

Secondary data analysis looked at the ability of different variables to predict not only the uninsured motorist rate but also average amount paid out for damages covered by liability insurance. Interestingly, the average amount paid out for damages covered by liability

insurance was not predictive of the uninsured motorist rate, nor was the ratio of average amount paid out for damages covered by liability insurance to median household income.

Variables that were correlated with the uninsured motorist rate and average amount paid out for damages covered by liability insurance are listed in Tables 17 and 18 below in rank order from strongest to weakest with a plus (+) or minus (–) sign indicating whether the variables rise and fall together (+) or whether an increase in one is accompanied by a decrease in the other (-). (For SPSS output, see Outputs 1 and 7, Appendix.)

Table 17. Correlation with IRC % UM 1995-1997 Average

Rank	Variable	Relationship	Significance
1	UM Offer Language Specified	-	99%
2	2000 Census % of Population Minority	+	99%
3	UIM Offer Language Specified	-	95%
4	Reinstate Registration Charge	+	95%
5	Reinstate License Charge	+	95%
6	III Per Person Minimum III Per Accident Minimum	- -	99% 99%
7	III 2000 Voluntary Insured PPA	+	99%
8	2001 BTS registered private truck	+	99%
9	2001 BTS registered private auto	+	95%
11	III Property Minimum	-	95%
12	III UM Compulsory	-	95%
13	2000 Census % of Population Urban	+	95%

Table 18. Correlation with III 2000 Average Amount Paid Out for Damages Covered by Liability Insurance

Rank	Variable	Relationship	Significance
1	2000 Census % of Population Urban	+	99%
2	2000 Census 1999 Median Household Income	+	99%
3	2000 Census % of Population Minority	+	99%
4	III Property Minimum	-	99%
5	III Per Person Minimum III Per Accident Minimum	- -	99% 99%
6	III 2000 Involuntary Insured PPA	+	99%

Surprisingly, higher minimum coverage was predictive both of lower uninsured motorist rate and of lower average amount paid out for damages covered by liability insurance. According to the simple regression model, for every $5,000 increase in minimum per person liability limits, we would expect to see a .018% decrease in the uninsured motorist rate. (For SPSS output, see Output 8 in the Appendix.) Vertical bars show the range from minimum to maximum at each level.

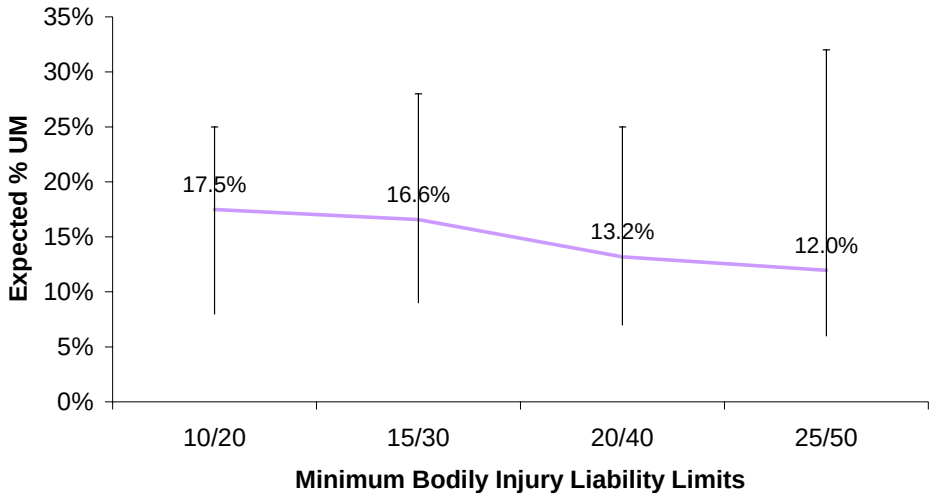


Figure 38. Average Uninsured Motorist Rate By Coverage Level

Further investigation found that coverage has an inverse relationship with minority population, which increases with the uninsured motorist rate, and with urban population, which increases with average amount paid out for damages covered by liability insurance. (See Figures 39 through 42 below.)

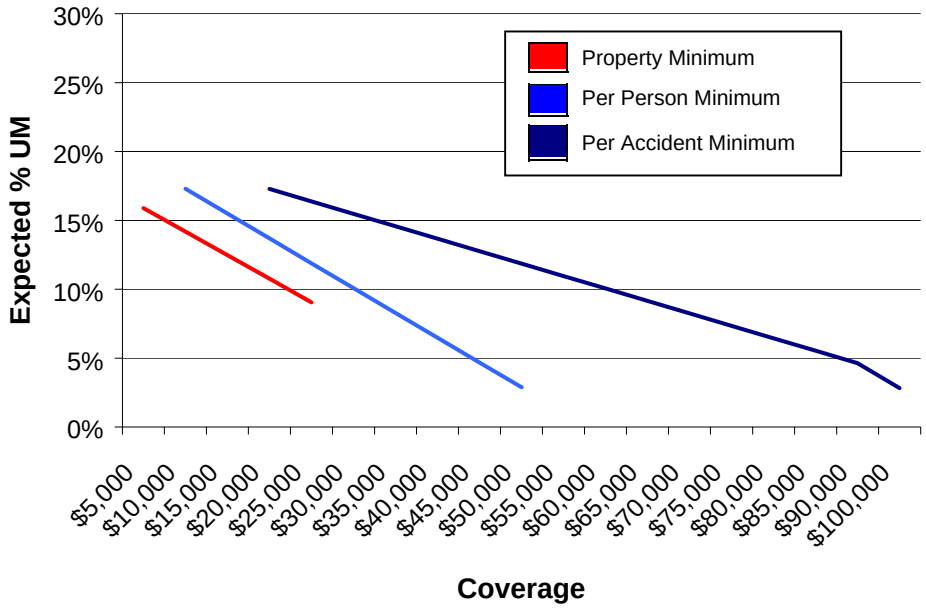


Figure 39. Coverage and Expected Uninsured Motorist Rate

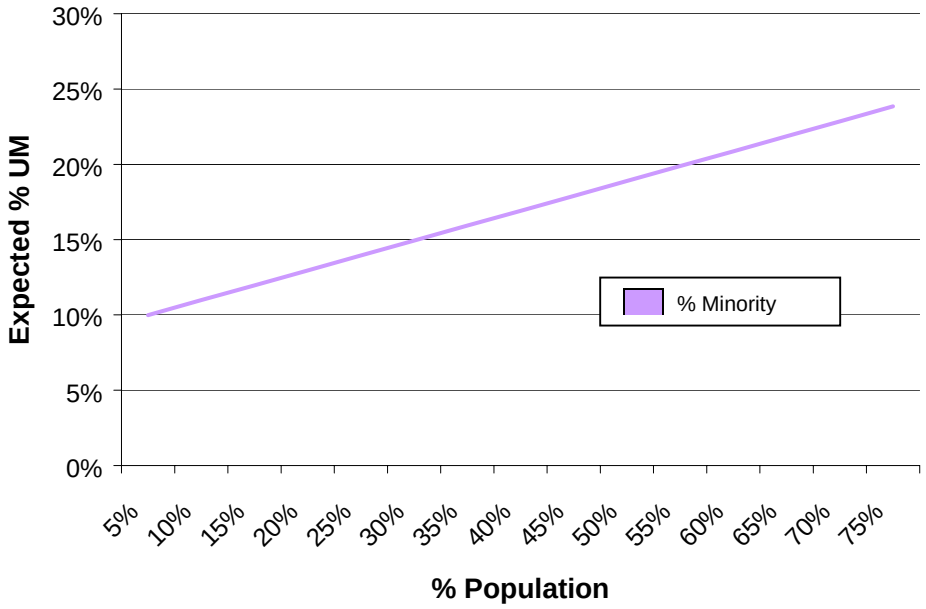


Figure 40. Minority Population and Expected Uninsured Motorist Rate

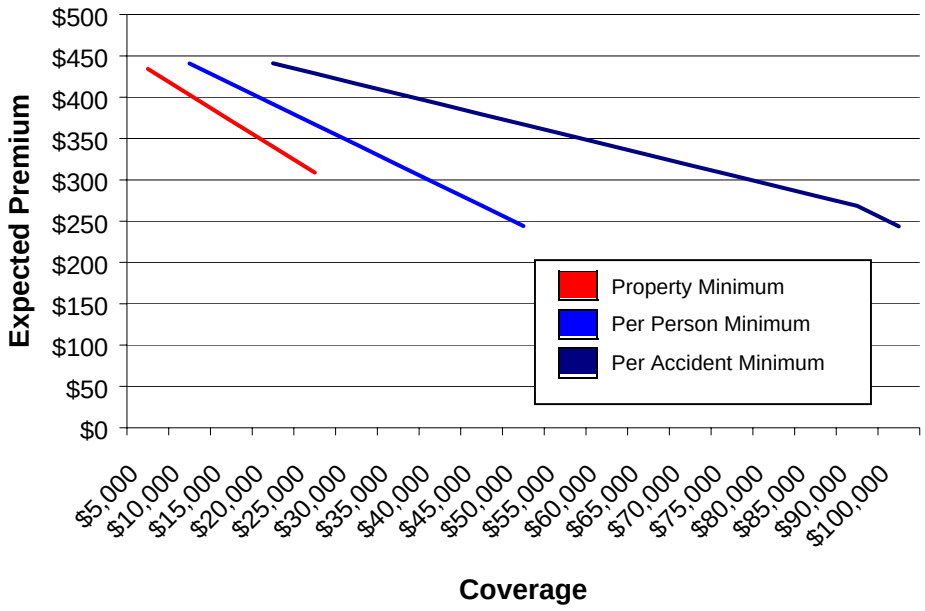


Figure 41. Coverage and Expected Average Amount Paid Out for Damages Covered by Liability Insurance

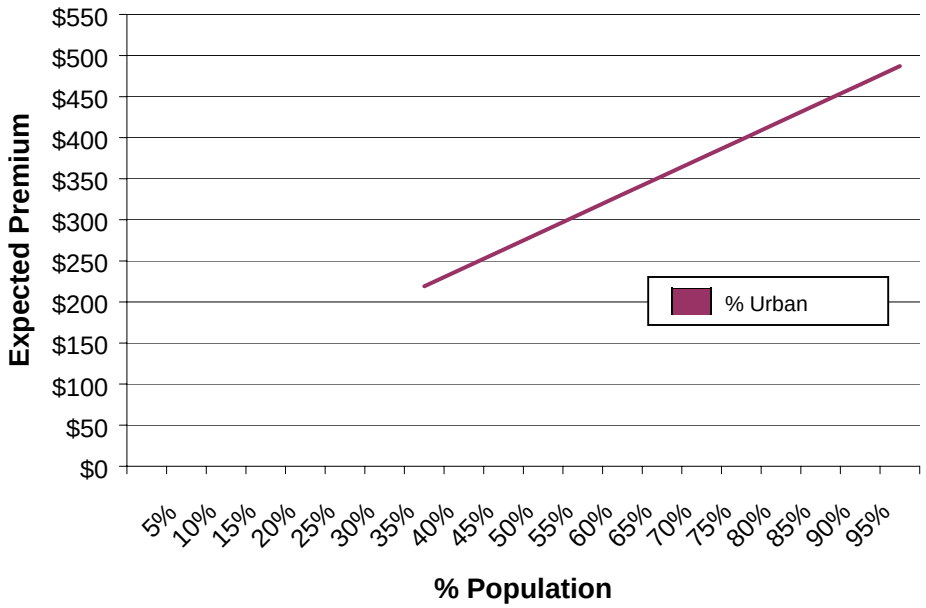


Figure 42. Urban Population and Expected Average Amount Paid Out for Damages Covered by Liability Insurance

Conclusions and Recommendations

There is no one standard approach to the problem of uninsured motorists. The many methods in use and the difficulties in measuring the size of the problem before and after intervention make evaluating program effectiveness problematic.

The lack of academic journal articles and publicly available data point to a lack of systematic analysis of the effects of various interventions on the uninsured motorist rate, despite the fact that dramatic improvements in information technology (IT) have made such analysis available at low cost. As yet, however, IT's full capabilities are not being used in compulsory insurance law enforcement.

Conclusions and recommendations are based on imperfect data. They are offered as suggestions for consideration. Also, review of ADOT operations is outside the scope of this report. Where operational suggestions are made, MVD may already be doing so or have good reason not to do so.

COMPULSORY INSURANCE

1. Raise bodily injury requirements above the current 15/30.

Cost: Raising the requirements would increase the cost of motor vehicle liability insurance for those who have 15/30 coverage now.

Benefit: Average bodily injury costs from motor vehicle accidents exceed current limits, raising the cost of health insurance and adding to the burden on the state – especially where health insurance is not available. Although higher premiums would affect low-income residents more, low minimum limits already affect low-income residents more, as they are less likely to have other insurance to fall back on if coverage is insufficient.

The Cole, Dumm, McCullough study and this report found correlation between higher minimum liability limits and a lower uninsured motorist rate. Below are average IRC uninsured motorist rates for states with different minimum liability limits:

10/20	→	17.5%
15/30	→	16.6%
20/40	→	13.2%
25/50	→	12.0%

2. Alternatively or in addition, require single-limit – not split-limits – coverage (e.g., 30/30 instead of 15/30, 40/40 instead of 20/40, etc.).

Cost: Single-limit coverage is available now in Arizona, but many consumers may not be aware of it. It may or may not cost more. In any event, single-limit coverage would not increase premiums as much as higher split-limits.

Accidents with two seriously injured persons in the same vehicle under the same coverage might be more difficult to resolve, potentially increasing insurer administrative costs and litigation. Accidents with three or more severely injured persons, however, would not be any more difficult to resolve, because split limits divide total available coverage into two – not three or more – equal pieces. Also, passengers are often family members and friends. Even where there are two seriously injured persons, equitable division of benefits may be achieved without additional cost. Finally, insurers are already required to distribute benefits fairly and equitably among multiple insureds or incur liability.

Benefit: Requiring single-limit coverage would double the amount of coverage available to any one individual. Much driving is done alone. Even where there are passengers, it is not unusual for one person to have more serious injuries than others. It would also double the amount of uninsured motorist or underinsured motorist coverage available to any one individual.

3. Make uninsured motorist and underinsured motorist coverage compulsory in the same amount as minimum bodily injury liability limits. Allow additional uninsured motorist/underinsured motorist coverage up to the amount of excess coverage purchased.

Cost: Requiring uninsured motorist and underinsured motorist coverage would increase the cost of motor vehicle insurance for those who do not have those coverages now; however, the increase would be relatively small. In Table 19 below are estimated average uninsured motorist and underinsured motorist premiums for states with different minimum limits, from survey data.

Table 19. Estimated Average UM and UIM Premiums

Minimum Bodily Injury Liability	UM Est. Avg. Annual Premium	UIM Est. Avg. Annual Premium	Number Respondents
15/30	$51.25		2
20/40	$50	$65	2
25/50	$38.58	$20.80	10 UM/5 UIM

Regression analysis of whether or not uninsured motorist coverage was mandatory, per person minimum limits, average amount paid out for damages

covered by liability insurance and the dependent variable estimated average uninsured motorist premium showed that for every $5,000 increase in per person minimum limits, we would expect to see a $16.50 increase in uninsured motorist premium. It should be noted, however, that average uninsured motorist premium came from survey data and consisted mostly of estimates. (For SPSS output, see Output 9 in the Appendix.)

Benefit: Requiring uninsured motorist coverage would guarantee that only uninsured drivers, their passengers and accident victims not in motor vehicles (such as pedestrians) would be unable to collect insurance benefits for accidents caused by uninsured motorists. Requiring underinsured motorist coverage in the amount of minimum bodily injury liability limits would double available coverage for minimally insured drivers and their passengers and would not increase premiums as much as higher split limits.

To illustrate benefits if recommendations 2 and 3 were adopted, assume the following:

- Minimum coverage required by law is $30,000 per person, $30,000 per accident, $30,000 uninsured motorist coverage and $30,000 underinsured motorist coverage.
- Both the at-fault driver and the injured victim have minimum coverage.

If injuries are severe, the injured victim can collect $30,000 from the at-fault driver and $30,000 from his own underinsured motorist coverage for a total of $60,000. Under current law, which does not mandate single limits, uninsured motorist or underinsured motorist coverage, if both drivers have minimum coverage, the injured victim can collect just $15,000.

4. If uninsured motorist and underinsured motorist insurance are not made compulsory, a state law should require that drivers who are declining the coverage sign a document prepared by the insurer that indicates:

- Dollar amount saved by declining coverage per policy period.
- Dollar amount of benefits surrendered.
- Clarification that benefits surrendered would pay the insured, using "I, other passengers and authorized drivers of my vehicle" language.
- Clarification that benefits surrendered would pay more than just medical care and treatment – listing lost wages, disability, pain and suffering, benefits to family or estate upon death and punitive damages (if available) as well as medical care and treatment.

Cost: Administrative cost.

Benefit: It is expected that more consumers will buy uninsured motorist and underinsured motorist coverage if they understand it is for them and their families, is inexpensive, and pays for more than medical bills.

5. If uninsured motorist and underinsured motorist are not made compulsory, allow insurers and agents who advise consumers that they do not need or need less uninsured motorist/underinsured motorist coverage if they have health insurance to be held liable for this bad advice.

Cost: May increase litigation costs. However, if such advice already provides grounds for bad faith or other claims, may decrease litigation costs by clarification.

Benefit: Such advice is misleading and a disservice to the public. It is expected that fewer consumers will reject uninsured motorist and underinsured motorist coverage if not given this bad advice.

6. If not already the case, have some insurance requirements apply to commercial motor carriers carrying agricultural products within 25 miles of the Arizona-Mexico border. May require change to ADOT's R17-5-504 (Requirement to Submit Proof of Financial Responsibility).

OPTIONAL INSURANCE

1. Encourage a pilot program of economic loss only bodily injury coverage for at-fault drivers. Offset equity and "moral hazard" concerns by:

1) Allowing at-fault bodily injury (AFBI) coverage up to half the amount of bodily injury liability coverage.
2) Alternatively or in addition, allowing AFBI to apply first to injured victims as excess coverage, and then to the at-fault driver.
3) Or, allowing AFBI to be paid to the at-fault driver only if injured victims agree or panel arbitration finds that bodily injury liability coverage was sufficient to compensate them.
4) Allowing cancellation, denial or nonrenewal of AFBI for DUI or upon reaching a certain number of points for moving violations.

Cost: Would be determined in pilot program. Options 2 and 3 may increase litigation costs. AFBI would be optional coverage.

Benefit: The main advantage to the state of a no-fault system is that it makes coverage available to many more people. But eliminating or drastically curtailing liability – as in no-fault systems – is not the only way to make coverage available to at-fault drivers. In numerous studies, no-fault systems have been linked to increased accident fatalities and DUI – strongly suggesting that the absence of liability or the presence of coverage for risky

behavior is encouraging or removing a deterrent to risky behavior. This is called "moral hazard."

The experiment proposed may have a similar effect. However, it differs from a no-fault system in that:

- It does not take away liability from the at-fault driver.
- It gives limited benefits to the at-fault driver. Because they would not exist, benefits for pain and suffering could not encourage risky behavior.
- It may encourage purchase of higher limits under options 1, 2, or 3. However, it may encourage drivers with excess coverage to cut back on bodily injury liability in favor of AFBI. They might make that choice as a hedging strategy – giving up some uninsured motorist or underinsured motorist coverage in exchange for limiting risk if the accident is their fault. Or, they might make that choice if they know they are risky drivers. This is called "adverse selection." Option 4 might reduce some of the harmful effects of adverse selection.

SURCHARGES

1. Do not allow insurers to decline coverage for the reason of having been previously uninsured or for the reason of license or registration suspension and do not allow insurers to assess surcharges for previously uninsured. Alternatively,

1) Do not allow surcharges for those who have not maintained continuous insurance if they did not own a motor vehicle or if they did not own an operational motor vehicle while they were uninsured.
2) Do not allow surcharges for those who have had a gap of 72 hours or less in insurance coverage.
3) Limit surcharges to increased administrative costs, supported by evidence, if last insurance was cancelled for nonpayment or within 90 days of issue.
4) Do not allow surcharges once the new customer has three or six months of continuous coverage with the new insurer.

Cost: Insurers may lose some revenue.

Benefit: Insurers have claimed that failure to maintain continuous insurance is predictive of risk. Before that is accepted as fact, actuarial evidence should be presented. It may be that other correlated variables are what actually predict risk. Even if prior insurance status is predictive of risk, it is illogical to assume that it is also predictive of risk for those who did not own motor vehicles or who owned nonoperational motor vehicles. Finally, allowing surcharges on previously uninsured motorists may deter or prevent them from becoming insured. Prohibiting surcharges, on the other hand, removes an obstacle to becoming insured that may reduce the uninsured motorist rate.

DATABASE

Driver's License

1. Require proof of insurance to obtain driver's license, or require certification that the driver will drive only fleet vehicles. (North Carolina model).
2. Link the insurance verification database with driver's license records so that insurance can be checked by driver's license as well as by registration.
3. Report new driver's license holders to insurers with active motor vehicle liability policies at the same address. (North Carolina model).
4. If a person is excluded from a motor vehicle liability policy, require the insurer to notify the excluded person and ADOT. Have the insurer inform the excluded person of Arizona's Assigned Risk Plan. Enter the excluded driver in the insurance verification database.

   Cost: Administrative costs for insurers and the state. Parents who would not have complied with compulsory insurance laws will pay higher premiums to be in compliance or will list their children as excluded drivers. Reporting new driver's license holders to insurers will require review of the federal Driver Privacy Protection Act. May require changes to the Arizona Revised Statutes (ARS) sections § 20-1631 or 28-4009.

   Benefit: Either inadvertently or deliberately, parents may not report new teenage drivers to their insurers. If the teenager causes an accident, the parents may have to declare bankruptcy. If younger siblings are injured, their injuries may not be covered. If the teenager is injured by an at-fault uninsured or underinsured motorist, those coverages may not apply.

   Families will obtain protection by complying with compulsory insurance laws. Insurers will obtain higher premium payments from households in which teenagers have gotten their driver's licenses.

   Excluded drivers will know they are not insured if they drive household vehicles and they will have the opportunity to purchase other insurance. If a vehicle is pulled over and an excluded driver is behind the wheel, the officer will know the vehicle is uninsured, even though it would otherwise show as insured in the database.

Private Passenger Auto

1. Require insurers to report the vehicles they insure, the people who own them, and their addresses (as Arkansas did).
2. Require insurers to report all named insureds for a vehicle, not just the policyholder.
3. Require information on vehicle additions, deletions, and policy reinstatements. May require change to ARS § 28-4148.

Commercial Motor Carrier

1. Require commercial motor carrier insurers to report VIN. May require change to ADOT's commercial vehicle regulations R17-5-505, R17-5-506 and R17-5-507.
2. Require insurance cards for all vehicles under commercial policies. May require change to ARS § 28-4133
3. Require policy expiration date and amount of liability coverage on Form E; require policy number on Form K of ADOT's commercial vehicle regulations. May require change to R17-5-505.
4. Give insurers enough lead-time to gather this information before the law goes into effect.

   Cost: Administrative cost for insurers and the state.

   Benefit: Increased database accuracy leading to better enforcement.

5. Require insurance for nonmotorized commercial passenger vehicles such as pedal-powered taxis (pedicabs).

   Cost: Administrative cost.

   Benefit: Increased availability of insurance, reduced accident costs passed along to the state.

Insurer Fines

1. Structure fines so that insurers with more policies pay more for missing or inadequate data. May require change to ARS § 20-237.

   Cost: Administrative cost.

   Benefit: Increased equity, increased accuracy leading to better enforcement. There should not be the same fine for failing to submit 100 policies for one month as for failing to submit 10,000 policies for one month. The same holds true for submitting inadequate data.

2. Work with the Department of Insurance so that insurers who fail to submit data or who submit inadequate data are fined.
3. Allow insurers who submit inadequate data to escape fines the first time by working with ADOT to correct the problem.
4. Put penalty information on the Department of Insurance website.

   Cost: Administrative cost.

Benefit: Increased accuracy leading to better enforcement. Consumers have an interest in whether or not insurers submit accurate, timely reports to ADOT. If they do not, the insured may be cited and have to go to court.

Prior Violation Information

1. Link information on prior insurance and moving violation citations, convictions, and penalties to the insurance verification database.
2. Ensure that law enforcement officers have in-vehicle computer access to the database.
3. Ensure that judges have courtroom computer access to database prior insurance and moving violation information.
4. Work on interstate cooperation to share insurance, registration and violation data. Partner with other interested groups, such as child support collection, and tax authorities.
5. Treat violations in other jurisdictions as violations in Arizona (as Wisconsin did).

Cost: Costs of adapting existing law enforcement and court computer networks, data entry, database design changes, and training

Benefit: Law enforcement officers will be able to check insurance and prior violation status quickly and without taking up dispatch time. Law enforcement and court access to prior violations may affect decisions to cite and to sentence. Public education about the new system, including news media stories explaining the technology, announcing the start date, reporting the number of citations issued, etc. will spread the word that buying insurance, canceling it, and keeping the old card in the glove box no longer works.

Judges will be able to see a defendant's past history of driving without insurance and of driving recklessly (reinforcing the seriousness of driving without insurance) before passing sentence. Repeat offenders will be less likely to get away with telling judges it was all a mistake.

Design and Operation

1. Have an IT specialist review database structure and how matching is done to ensure that enough data is captured in enough fields and that the process efficiently delivers accurate results.

2. Compare all database records periodically, not just when there is a change.

3. Report full book of business rather than policy changes. Continue the current seven-day reporting cycle.

OWNER/INSURED REPORTING

1. Print information contained in fields used for matching in the insurance database on registration and renewal documents (such as name, address, policy number, expiration date, VIN, license plate, etc.) and ask owners to provide corrections with their registration or renewal fee.
2. When proof of insurance is presented at registration and renewal, include notification to advise MVD of any name change within 30 days. Include MVD's website address, where a name change can be entered 724 hours a day, seven days as a week, contact information, hours of operation, and other information regarding ways to register a name change (phone number, mailing address).
3. Have initial enforcement letter from ADOT explain how owners can certify their vehicle is nonoperational, in storage, or otherwise indicate the vehicle will not be operated on Arizona highways pursuant to ARS § 28-4152.

VEHICLE REGISTRATION

1. Require vehicle loan providers to offer to "roll in" financing of vehicle registration into loan packages. Require them to report declinations to ADOT.
2. Include title information in the insurance verification database, including salvage title information.
3. Watch for vehicles dropping off registration rolls. Send letters advising the owners that they will be responsible for late fees and registration until they change the title, surrender the plates, or prove that the vehicle has been registered in another state.

   Cost: Administrative cost.

   Benefit: Increased accuracy leading to better enforcement. Registration fees for new vehicles are high and remain high for several years. High registration fees can be a disincentive to buying insurance, especially as the public becomes more aware that if they buy insurance, the state will check their registration status, and vice versa. A database is a powerful tool in enforcing compulsory insurance laws, but vehicle registration is its Achilles' heel. It cannot catch uninsured motorists driving unregistered vehicles.

ONGOING EVALUATION

1. Have the Auditor General's Office audit the insurance verification database annually or biennially for accuracy.

   - Share audit accuracy information with law enforcement for distribution in agency newsletters and on agency websites

2. Determine from database records what reporting is being done. Discuss with interested parties what reporting could be done and what it could be used for; then prioritize. Possibilities include:

- Identifying neighborhoods with high uninsured motorist rates for targeted education efforts
- Rating motorists based on useful "red flags" such as a history of DUI or reckless driving, moving violations, prior insurance lapses and vehicles disappearing from registration. Rating information could be used for monitoring and enforcement contacts.

3. Department of Insurance should mandate periodic testing for correlation between rate and minority, income, gender and age that is statistically significant after loss history is accounted for. Test specifically for overrepresentation of protected groups in the nonstandard and assigned risk markets.

4. Report insurance citations issued by law enforcement according to jurisdiction.

Cost: Administrative costs, including IT infrastructure, if currently missing, however, it is anticipated that this would be tried first in jurisdictions with infrastructure in place that would allow reporting.

Benefit: Comparison with the insurance verification database will show if the number of citations are proportional to the number of suspected uninsured motorists. If the two are way off, it may indicate a problem (with the database.

VEHICLE IMMOBILIZATION AND IMPOUNDMENT

1. For repeat offenders with moving violations, allow courts to order impoundment or immobilization of all owned uninsured vehicles until proof of insurance and bond are presented.

2. Provide a mechanism for transfer of title and sale after six months' failure to present proof of insurance and bond.

Cost: Impoundment or immobilization costs, transfer of title and selling costs.

Benefit: Seizure and sale options are intended for the egregious offender who clearly poses a threat and who is likely to continue to drive whether or not driver's license is suspended. Bond would be bond to continue to purchase insurance for three years.

3. Allow courts to suspend sentence for 30 days if uninsured motorist consents to immobilization until proof of insurance is presented. Allow motorist to present proof to officer with access to the insurance verification database who can verify proof and release the vehicle.

DUI AND CRIMINAL MOVING VIOLATIONS

1. Require insured DUI offenders and criminal moving violation offenders to present a bond that they will maintain motor vehicle liability insurance for three years.

Cost: Administrative costs.

Benefit: Although the first impulse may be to punish drunk or reckless drivers by canceling their insurance, the critical public policy issue is not whether drivers' assets are protected, but whether the public is protected. Insurance provides that protection.

IMMIGRANTS AND SPANISH-SPEAKING CITIZENS

1. Contact the Texas motor vehicle or insurance authority to see what evaluation has been done of its "insurance at the border" program.

2. Issue "foreign national" driver's licenses to noncitizens who provide proof of insurance.

   Cost: Administrative cost. Politically contentious.

   Benefit: Arizona residents would benefit, as more drivers would carry insurance. Rather than provide social service benefits to noncitizens, this would reduce what the state has to pay to provide emergency medical treatment to noncitizens.

3. Include information on how and where to buy auto insurance in MVD publications in English and Spanish, including the driver's license manual and test.

   Cost: Administrative cost.

   Benefit: The 1999 California telephone survey found that finding a place to buy insurance was a concern of single vehicle owner uninsureds, who were more likely to speak a language other than English at home. It is expected that providing this information will remove what is for some an obstacle to becoming insured.

EDUCATION AND OUTREACH

1. Conduct focus-group research on one or more representative samples of uninsured motorists to determine reasons for not buying auto insurance. Using themes derived from research, develop a persuasive message for a public education campaign.

2. Target public education efforts at minority communities.
   Cost: Depends on media and scale. Focus groups can cost $3,000 to $5,000 each.

   Benefit: Better understanding yields better results. Without the right message for the intended audience, public education campaigns are not worth doing.

FURTHER RESEARCH

1. Commission research to check for discrimination based on minority status and income. If denial of coverage based on income is not already illegal, make it so.

Cost: Cost of research.

Benefit: Minority population is a strong predictor of the IRC uninsured motorist rate. The 1999 California telephone survey found that uninsured motorists were more likely to be Hispanic or African American with incomes of $20,000 or less.[286] The 1995 Texas study showed that high minority and low-income zip codes were far more likely to have been denied coverage and wind up in the more expensive nonstandard or assigned risk markets.[287] The study also found that minorities were no more likely to be involved in motor vehicle accidents than whites. If occurring in Arizona, such discrimination should not be tolerated on equity grounds alone. Because it may add to the number of uninsured motorists is another good reason to look carefully at this issue.

GENERAL

1. Clean up language in: ARS § 28-4144, R17-4-402, R17-5-504, R17-5-507. For specifics, see Exhibit 5 in the Appendix.

2. Allow wrongful death uninsured motorist/underinsured motorist claims by spouse, children and parents whether or not they are named insureds.

Cost: May require change to ARS § 20-259.03. May reduce tax revenue to the state by shifting some claims from the estate to the surviving heirs.

Benefit: Wrongful death claims are intended to compensate the family for lost emotional and financial support. Spouses, children and parents may not be named insureds if they are not able to drive. If the family is unable to collect underinsured motorist benefits, the decedent may have been underinsured no matter how much coverage was purchased.

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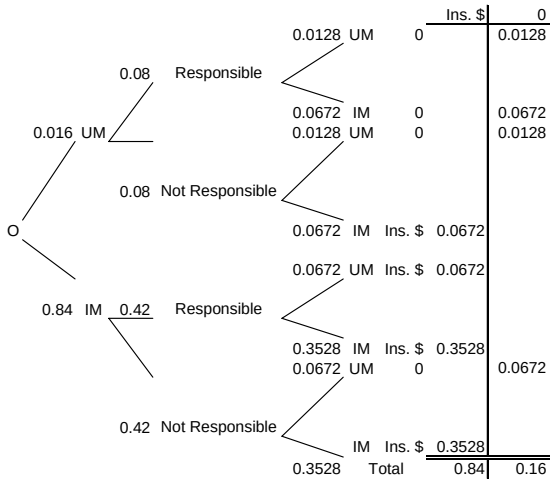
[286] Characteristics of Uninsured Motorist," Hunstad, Lyn; *California Department of Insurance;* February 1999.

[287] "Private Passenger Automobile Availability in Texas: An Analysis of the NAIC/Texas Special Data Call," Birnbaum, Birney; *NAIC Research Quarterly;* April 1995, Volume I, Issue 2

Appendix

Exhibit 1
Bayesian Probability Diagram: Probability of No Coverage

Probabilities of Coverage With No UM Coverage



Probabilities of Coverage With Universal UM Coverage

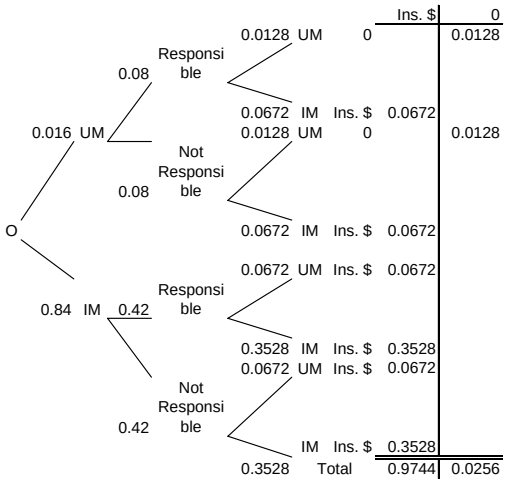


Exhibit 2
Motor Vehicle Department General Survey and Summary Results

Arizona Department of Transportation Survey on Uninsured and Underinsured Drivers – To DoT Managers

The Arizona Department of Transportation is interested in learning how other states deal with uninsured and underinsured drivers. We appreciate your help and will provide you with a copy of our final report.

You may tab between the gray shaded areas ( ) to enter answers directly on the form below, or print out the survey and fill it in by hand. Please return completed surveys by email lisa@mktg-intelligence.com or fax (520) 321-1649 by July 1, 2003, if possible.

If you have any questions, please contact Lisa Markkula at (520) 321-0110 or lisa@mktg-intelligence.com.

Person completing this survey:

Name: _____ Phone: ( ) -_____

State: _____ Email: _____

General

1. For the most recent year for which data are complete, please fill in the table below with the estimated percent of uninsured motorists in your state, giving the source of the estimate or describing how it was arrived at.

Year	Estimated % of uninsured motorists	Source of estimate	How estimate was arrived at
	%		

a. Does this estimate exclude hit and run drivers? ☐ Yes ☐ No ☐ Don't know

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Year UM Est	21	7	1996	2003	2000.71	2.17
% UM Est	22	23.1%	4.9%	28.0%	12.0%	5.2%
Valid N (listwise)	1					

Source of UM Estimate

		Frequency	Valid Percent	Cumulative Percent
Valid	Accident reports	7	31.8%	31.8%
	Database	4	18.2%	50.0%
	Insurance industry	6	27.3%	77.3%
	Internal	2	9.1%	86.4%
	Questionnaire sampling	3	14.3%	100.0%
	Total	22	100.0%	
Missing	System	29		
Total		50		

Exclude Hit and Run?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	8	36.4%	36.4%
	Yes	4	18.2%	54.5%
	Unknown	10	45.5%	100.0%
	Total	22	100.0%	
Missing	System	28		
Total		50		

2. Currently, how many registered vehicles in your state are subject to compulsory insurance laws? _____

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
# Reg Vehicles	24	25000000	0	25000000	5716099	5412907
Valid N (listwise)	24					

Database

1. Does your state use a database to check compliance with compulsory insurance laws? ☐ Yes ☐ No
(If no, skip to next section.)

Database?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	17	60.7%	60.7%
	Yes	11	39.3%	100.0%
	Total	28	100.0%	
Missing	System	22		
Total		50		

2. Is your state's database maintained by an outside vendor? ☐ Yes ☐ No *(If no, skip to question 5.)*

Outside Vendor?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	10	90.9%	90.9%
	Yes	1	9.1%	100.0%
	Total	11	100.0%	
Missing	System	39		
Total		50		

3. How satisfied are you with your vendor's performance? *(Please check a selection.)*

1	2	3	4	5	6	7
☐	☐	☐	☐	☐	☐	☐
Very *dis*satisfied			Neither satisfied nor dissatisfied			Very satisfied

Vendor Satisfaction

		Frequency	Valid Percent	Cumulative Percent
Valid	Neither satisfied nor dissatisfied	1	100.0%	100.0%
Missing	System	49		
Total		50		

4. Has the following database information been verified by audit?
   a. Accuracy rates ☐ Yes ☐ No (If yes, for what years? _____)
   b. Estimated percentages of uninsured motorists ☐ Yes ☐ No (If yes, for what years? _____ _____)

Accuracy Rates Verified By Audit?

		Frequency	Valid Percent	Cumulative Percent	Number of Years
Valid	No	4	66.7%	66.7%	N/A
	Yes	2	33.3%	100.0%	2 (both)
	Total	6	100.0%		
Missing	System	44			
Total		50			

Estimated Percent of Uninsured Verified By Audit?

		Frequency	Valid Percent	Cumulative Percent	Number of Years
Valid	No	1	50.0%	50.0%	N/A
	Yes	1	50.0%	100.0%	2
	Total	2	100.0%		
Missing	System	48			
Total		50			

5. What is the annual cost to the state per registered vehicle to maintain and operate the database? $_____

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Database Cost Per Reg. Vehicle	4	$1.26	$.02	$1.28	$.3750	$.6045
Valid N (listwise)	4					

Driver's License

1. Does your state allow non-United States citizens to obtain driver's licenses? ☐ Yes ☐ No
   a. If yes, does it require proof of lawful alien status? ☐ Yes ☐ No
   b. Does it provide different driver's licenses for non-United States citizens? ☐ Yes ☐ No

Non-Citizen Licenses?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	4	14.3%	14.3%
	Yes	24	85.7%	100.0%
	Total	28	100.0%	
Missing	System	22		
Total		50		

Require Proof Lawful?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	2	8.3%	8.3%
	Yes	22	91.7%	100.0%
	Total	24	100.0%	
Missing	System	26		
Total		50		

Different Licenses For Non-Citizens?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	19	82.6%	82.6%
	Yes	4	17.4%	100.0%
	Total	23	100.0%	
Missing	System	27		
Total		50		

How Are Non-Citizen Licenses Different?

		Frequency	Valid Percent	Cumulative Percent
Valid	N/A – No non-citizen licenses	4	16.0%	16.0%
	Not different	19	76.0%	92.0%
	Non-immigrants have status check date on front, coincides with expiration of authorization to be in US	1	4.0%	96.0%
	Only in the length of time issued – only for time authorized to be present as est. by INS, not to exceed 2 years	1	4.0%	100.0%
	Total	25	100.0%	
Missing	System	25		
	Total	50	100.0%	

2. Does your state require any of the following on driver's licenses? *(Check all that apply.)*
☐ Bar code ☐ Mag stripe ☐ Smart card ☐ Encryption

Bar Code Required?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	4	17.4%	17.4%
	Yes	19	82.6%	100.0%
	Total	23	100.0%	
Missing	System	27		
Total		50		

Mag Stripe Required?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	11	47.8%	47.8%
	Yes	12	52.2%	100.0%
	Total	23	100.0%	
Missing	System	27		
Total		50		

Smart Card Required?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	23	100.0%	100.0%
Missing	System	27		
Total		50		

Encryption Required?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	19	82.6%	82.6%
	Yes	4	17.4%	100.0%
	Total	23	100.0%	
Missing	System	27		
Total		50		

Enforcement

1. Does your state outsource any compulsory insurance enforcement? ☐ Yes ☐ No
   a. If yes, what enforcement functions are outsourced?

Outsource Enforcement?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	25	100.0%	100.0%
Missing	System	25		
Total		50		

2. Please indicate which of the following methods are used to ***check proof of insurance*** in your state and estimate how often each is used. *(Please check a selection for each method.)*

At traffic stop checkpoints	☐ Not used	☐ Almost never	☐ Rarely	☐ Sometimes	☐ Often	☐ Almost always
At traffic stops for registration or "paperwork" violations	☐ Not used	☐ Almost never	☐ Rarely	☐ Sometimes	☐ Often	☐ Almost always
At traffic stops for moving violations	☐ Not used	☐ Almost never	☐ Rarely	☐ Sometimes	☐ Often	☐ Almost always
At accidents	☐ Not used	☐ Almost never	☐ Rarely	☐ Sometimes	☐ Often	☐ Almost always

3. Please indicate which of the following methods are used to ***enforce compulsory insurance laws*** in your state and estimate how often each is used. *(Please check a selection for each method.)*

	Not used	Almost never	Rarely	Sometimes	Often	Almost always
Fines	☐	☐	☐	☐	☐	☐
Jail time	☐	☐	☐	☐	☐	☐
Vehicle registration suspension	☐	☐	☐	☐	☐	☐
Driver's license suspension	☐	☐	☐	☐	☐	☐

	N	Not Used	Almost Never	Rarely	Sometimes	Often	Almost Always
Accidents	26	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Moving Violations	25	4.0%	0.0%	0.0%	12.0%	4.0%	80.0%
Paperwork Stops	25	4.0%	0.0%	0.0%	12.0%	4.0%	80.0%
Traffic Checkpoints	25	12.0%	0.0%	8.0%	16.0%	4.0%	60.0%

	Not used	Almost never	Rarely	Sometimes	Often	Almost always
Driver's license seizure by law enforcement officer	☐	☐	☐	☐	☐	☐
License plate seizure	☐	☐	☐	☐	☐	☐
Vehicle impoundment	☐	☐	☐	☐	☐	☐
Vehicle immobilization ("booting")	☐	☐	☐	☐	☐	☐

	N	Not Used	Almost Never	Rarely	Sometimes	Often	Almost Always
Fines	24	12.5%	0.0%	0.0%	0.0%	37.5%	50.0%
Jail	23	43.5%	21.7%	13.0%	21.7%	0.0%	0.0%
Reg. Susp.	25	24.0%	0.0%	0.0%	8.0%	28.0%	40.0%
Lic. Susp.	26	11.5%	0.0%	0.0%	15.4%	38.5%	34.6%
Lic. Seizure	25	64.0%	4.0%	4.0%	12.0%	8.0%	8.0%
Plate Seizure	25	52.0%	4.0%	8.0%	12.0%	20.0%	4.0%
Impoundment	25	60.0%	0.0%	12.0%	12.0%	12.0%	4.0%
Booting	25	88.0%	0.0%	8.0%	4.0%	0.0%	0.0%

Penalties

1. What are the penalties for the ***1st offense*** of violating compulsory insurance laws?

1st Offense Fine

		Frequency	Valid Percent	Cumulative Percent
Valid	$150	1	10.0%	10.0%
	$250	2	20.0%	30.0%
	$500	2	20.0%	50.0%
	$650	2	20.0%	70.0%
	$750	1	10.0%	80.0%
	$1,000	1	10.0%	90.0%
	$1,500	1	10.0%	100.0%
	Total	10	100.0%	
Missing	System	40		
Total		50		

1st Offense Jail Days

		Frequency	Valid Percent	Cumulative Percent
Valid	30	1	33.3%	33.3%
	180	1	33.3%	66.7%
	365	1	33.3%	100.0%
	Total	3	100.0%	
Missing	System	47		
Total		50		

Days Registration Suspended 1st Offense

		Frequency	Valid Percent	Cumulative Percent
Valid	90	1	100.0%	100.0%
Missing	System	49		
	Total	50		

Days License Suspended 1st Offense

		Frequency	Valid Percent	Cumulative Percent
Valid	30	2	28.6%	28.6%
	60	1	14.3%	42.9%
	90	2	28.6%	71.4%
	180	1	14.3%	85.7%
	365	1	14.3%	100.0%
	Total	7	100.0%	
Missing	System	43		
Total		50		

Days Plate Suspended 1st Offense

		Frequency	Valid Percent	Cumulative Percent
Valid	90	2	100.0%	100.0%
Missing	System	48		
Total		50		

2. Are penalties for the ***2nd offense*** the same as for the 1st offense? ☐ Yes ☐ No
    a. If no, what are the penalties for the 2nd offense?

2nd Offense Same Penalties as First?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	15	71.4%	71.4%
	Yes	6	28.6%	100.0%
	Total	21	100.0%	
Missing	System	29		
Total		50		

2nd Offense Fine

		Frequency	Valid Percent	Cumulative Percent
Valid	$250	1	10.0%	10.0%
	$300	1	10.0%	20.0%
	$500	2	20.0%	40.0%
	$750	1	10.0%	50.0%
	$1,000	2	20.0%	70.0%
	$1,650	1	10.0%	80.0%
	$3,000	1	10.0%	90.0%
	$5,000	1	10.0%	100.0%
Missing	Total	10	100.0%	
	System	40		
Total		50		

2nd Offense Jail Days

		Frequency	Valid Percent	Cumulative Percent
Valid	14	1	25.0%	25.0%
	30	1	25.0%	50.0%
	180	1	25.0%	75.0%
	365	1	25.0%	100.0%
	Total	4	100.0%	
	System	46		
		50		

Days Registration Suspended 2nd Offense

		Frequency	Valid Percent	Cumulative Percent
Valid	180	1	100.0%	100.0%
Missing	System	49		
Total		50		

Days License Suspended 2nd Offense

		Frequency	Valid Percent	Cumulative Percent
Valid	90	4	50.0%	50.0%
	180	1	12.5%	62.5%
	365	2	25.0%	87.5%
	730	1	12.5%	100.0%
	Total	8	100.0%	
Missing	System	42		
Total		50		

Days Plates Suspended 2nd Offense

		Frequency	Valid Percent	Cumulative Percent
Valid	120	1	50.0%	50.0%
	180	1	50.0%	100.0%
	Total	2	100.0%	
Missing	System	48		
Total		50		

3. Are penalties for the ***3rd and subsequent offenses*** the same as for the 2nd offense? ☐ Yes ☐ No
   a. If no, what are the penalties for the 3rd and subsequent offenses?

3rd Offense Same Penalties as 2nd?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	8	38.1%	38.1%
	Yes	13	61.9%	100.0%
	Total	21	100.0%	
Missing	System	29		
Total		50		

2nd and 3rd Offenses Same Penalties as 1st?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	15	71.4%	71.4%
	Yes	6	28.6%	100.0%
	Total	21	100.0%	
Missing	System	29		
Total		50		

3rd Offense Fine

		Frequency	Valid Percent	Cumulative Percent
Valid	$250	1	10.0%	10.0%
	$300	1	10.0%	20.0%
	$500	1	10.0%	30.0%
	$750	2	20.0%	50.0%
	$1,000	2	20.0%	70.0%
	$1,650	1	10.0%	80.0%
	$3,000	1	10.0%	90.0%
	$5,000	1	10.0%	100.0%
	Total	10	100.0%	
Missing	System	40		
Total		50		

3rd Offense Jail Days

		Frequency	Valid Percent	Cumulative Percent
Valid	365	1	100.0%	100.0%
Missing	System	49		
Total		50		

Days Registration Suspended 3rd Offense

		Frequency	Valid Percent	Cumulative Percent
Valid	365	1	100.0%	100.0%
Missing	System	49		
Total		50		

Days License Suspended 3rd Offense

		Frequency	Valid Percent	Cumulative Percent
Valid	90	2	25.0%	25.0%
	273	1	12.5%	37.5%
	365	3	37.5%	75.0%
	730	2	25.0%	100.0%
	Total	8	100.0%	
Missing	System	42		
Total		50		

Days Plate Suspended 3rd Offense

		Frequency	Valid Percent	Cumulative Percent
Valid	120	1	50.0%	50.0%
	365	1	50.0%	100.0%
	Total	2	100.0%	
Missing	System	48		
Total		50		

4. Are penalties different for ***younger drivers***? ☐ Yes ☐ No

Different for Younger?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	23	100.0%	100.0%
Missing	System	27		
Total		50		

   a. If yes, for what age range are they different? _____ to _____
   b. What are the penalties for the ***1st offense***?

   c. Are penalties for the ***2nd offense*** the same as for the 1st offense? ☐ Yes ☐ No
      i. If no, what are the penalties for the 2nd offense?

   d. Are penalties for the ***3rd and subsequent offenses*** the same as for the 2nd offense? ☐ Yes ☐ No
      i. If no, what are the penalties for the 3rd and subsequent offenses?

5. Are there penalties for allowing coverage to lapse even though the vehicle is insured at the time the lapse is discovered? ☐ Yes ☐ No

Lapse Penalties?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	15	65.2%	65.2%
	Yes	8	34.8%	100.0%
	Total	23	100.0%	
Missing	System	27		
Total		50		

a. If yes, what are the penalties for allowing coverage to lapse?

Lapse Fine

		Frequency	Valid Percent	Cumulative Percent
Valid	$25	1	100.0%	100.0%
Missing	System	49		
Total		50		

6. If ***vehicle registration*** is suspended for violating insurance laws, what is the charge to reinstate? $_____ ☐ N/A

Reinstate Registration Charge

		Frequency	Valid Percent	Cumulative Percent
Valid	$10	1	6.7%	6.7%
	$20	1	6.7%	13.3%
	$45	1	6.7%	20.0%
	$50	2	13.3%	33.3%
	$63	1	6.7%	40.0%
	$100	2	13.3%	53.3%
	$110	1	6.7%	60.0%
	$125	1	6.7%	66.7%
	$200	1	6.7%	73.3%
	$210	1	6.7%	80.0%
	$325	1	6.7%	86.7%
	$375	1	6.7%	93.3%
	$450	1	6.7%	100.0%
	Total	15	100.0%	
Missing	System	35		
Total		50		

7. If a ***driver's license*** is suspended for violating insurance laws, what is the charge to reinstate? $_____ ☐ N/A

Reinstate Driver's License Charge

		Frequency	Valid Percent	Cumulative Percent
Valid	$0	1	4.8%	4.8%
	$20-30	2	9.5%	14.3%
	$31-40	1	4.8%	19.0%
	$41-50	5	23.8%	42.9%
	$51-60	2	9.5%	52.4%
	$61-70	2	9.5%	61.9%
	$71-80	1	4.8%	66.7%
	$100	2	9.5%	76.2%
	$200	1	4.8%	81.0%
	$210	1	4.8%	85.7%
	$325	2	9.5%	95.2%
	$450	1	4.8%	100.0%
	Total	21	100.0%	
Missing	System	29		
Total		50		

8. If license plates are seized for violating insurance laws, what is the charge to redeem? $_____ ☐ N/A
   a. What percent of seized license plates are redeemed? _____% ☐ Don't know
   b. What percent are from vehicles incorrectly ID'd as uninsured? _____% ☐ Don't know

Redeem Plate Charge

		Frequency	Valid Percent	Cumulative Percent
Valid	$0	1	25.0%	25.0%
	$5	1	25.0%	50.0%
	$150	1	25.0%	75.0%
	$325	1	25.0%	100.0%
	Total	4	100.0%	
Missing	System	46		
Total		50		

Know Percent Redeemed?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	7	100.0%	100.0%
Missing	System	43		
Total		50		

Know Percent Incorrect?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	5	83.3%	83.3%
	Yes	1	16.7%	100.0%
Missing	Total	6	100.0%	
Total	System	44		

Percent Incorrect

		Frequency	Valid Percent	Cumulative Percent
Valid	5%	2	100.0%	100.0%
Missing	System	48		
Total		50		

9. If a vehicle is towed and impounded for violating insurance laws, what is the charge to redeem? $_____ ☐ N/A
   a. What percent of impounded vehicles are redeemed? _____% ☐ Don't know
   b. What percent are incorrectly ID'd as uninsured? _____% ☐ Don't know
   c. How long before an impounded vehicle can be sold? _____

Know Percent Redeemed?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	4	100.0%	100.0%
Missing	System	46		
Total		50		

Know Percent Incorrect?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	3	100.0%	100.0%
Missing	System	47		
Total		50		

Percent Incorrect

		Frequency	Valid Percent	Cumulative Percent
Valid	5%	1	100.0%	100.0%
Missing	System	49		
Total		50		

10. Is information on prior insurance law violations available in a database accessible by judges at time of sentencing? ☐ Yes ☐ No

Judge Access?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	10	40.0%	40.0%
	Yes	15	60.0%	100.0%
Missing	Total	25	100.0%	
Total		50		

11. Does your state require motorists convicted of DUI to maintain compulsory insurance, even if their driving privileges are suspended? ☐ Yes ☐ No
    a. If yes, for how long? _____

DUI Required to Maintain Ins?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	15	62.5%	62.5%
	Yes	9	37.5%	100.0%
	Total	24	100.0%	
Missing	Total	26		
Total		50		

Days Must Maintain Insurance

		Frequency	Valid Percent	Cumulative Percent
Valid	365	1	25.0%	25.0%
	1095	3	75.0%	100.0%
	Total	4	100.0%	
Missing	System	46		
Total		50		

Research

1. Has your state done studies into the following issues over the past 10 years?
   a. Uninsured motorists ☐ Yes ☐ No
   b. Privatization of or public/private partnership in compulsory insurance enforcement ☐ Yes ☐ No
   c. Motor vehicle insurance and discrimination ☐ Yes ☐ No

UM Study?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	18	69.2%	69.2%
	Yes	8	30.8%	100.0%
	Total	26	100.0%	
Missing	System	24		
Total		50		

Privatization Study?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	24	96.0%	96.0%
	Yes	1	4.0%	100.0%
	Total	25	100.0%	
Missing	System	25		
Total		50		

Discrimination Study?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	24	96.0%	96.0%
	Yes	1	4.0%	100.0%
	Total	25	100.0%	
Missing	System	25		
Total		50		

Technology

1. Has your state used windshield stickers for compulsory insurance enforcement? ☐ Yes ☐ No

No affirmative responses.

   a. Please describe the system used.

   b. In what years were windshield stickers used? _____

   c. How did they perform? *(Please check a selection.)*

1	2	3	4	5	6	7
☐	☐	☐	☐	☐	☐	☐
Very badly			Neither well nor badly			Very well

   d. For the most recent year for which data are complete, what was the cost to the state per stickered vehicle per year? $ _____

Exhibit 3
Motor Vehicle Department Database Survey and Summary Results

Arizona Department of Transportation Survey on Uninsured and Underinsured Drivers – To Database Managers

The Arizona Department of Transportation is interested in learning how other states deal with uninsured and underinsured drivers. We appreciate your help and will provide you with a copy of our final report.

If your state uses a database to check compliance with compulsory insurance laws, we ask that your in-house database manager or outside vendor answer the following questions. You may tab between the gray shaded areas ( ) to enter answers directly on the form below, or print out the survey and fill it in by hand. Please return completed surveys by email lisa@mktg-intelligence.com or fax (520) 321-1649 by July 1, 2003, if possible.

If you have any questions, please contact Lisa Markkula at (520) 321-0110 or lisa@mktg-intelligence.com.

Person completing this survey:

Name: _____ Phone: (___) - _____

State: _____ Email: _____

Database

1. What year did your state first use a database to check compliance with compulsory insurance laws? _____
   a. In that year, what percent of registered vehicles were uninsured according to the database? _____%
   b. In that year, what was the database's accuracy rate in identifying uninsured vehicles? _____%

State	Year	% UM	% Correctly Identified as UM
AL	2001	15%	
AR	1999	19%	
AZ	2000	15%	
CO	1999	33%	
FL	1989	30%	60%
GA	2003		
KY	1986	30%	
MN	1985		
MO	2002	9%	
NJ	1991	8%	96%
NY	2000		
OR	2001		
VA	1997		

2. Currently, what percent of registered vehicles are uninsured according to the database? _____%
   a. Currently, what is the database's accuracy rate in identifying uninsured vehicles? _____%

State	% UM	% Correctly Identified as UM
AR	11%	
AZ	8%	
CO	12%	
FL	6%	98%
KY	30%	
MO	10%	
NY	5%	

3. What is the annual cost to the state per registered vehicle to maintain and operate the database? $_____

Annual Cost Per Registered Vehicle

		Frequency	Valid Percent	Cumulative Percent
Valid	$.02	1	20.0%	20.0%
	$.05	1	20.0%	40.0%
	$.10	2	40.0%	80.0%
	$.27	1	20.0%	100.0%
	Total	5	100.0%	
Missing	System	45		
Total		50		

4. How often are insurance companies required to submit information? *(Fill in all that apply.)*
   a. Every _____ days, regardless of change
   b. _____ days after cancelled
   c. _____ days after nonrenewed
   d. _____ days after vehicle removed from policy
   e. _____ days after new policy issued
   f. _____ days after policy renewed
   g _____ days after vehicle added

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Submission Cycle - Days	3	0	30	30	30.0	.0
Days After Cancelled	10	44	0	44	24.1	13.7
Days After Nonrenewed	3	30	0	30	13.3	15.3
Days After Vehicle Removed	5	44	0	44	22.8	17.6
Days After New Policy	8	23	7	30	22.3	10.7
Days After Renewed	1	0	30	30	30.0	.0
Days After Vehicle Added	6	23	7	30	22.2	11.8
Compared Every X Days	7	364	1	365	108.7	139.8
Valid N (listwise)	1					

State	Submission Cycle – Days	Days After Cancelled	Days After Nonrenewed	Days After Vehicle Removed	Days After New Policy	Days After Renewed	Days After Vehicle Added	Compared Every X Days	Required By Law?	Accessed by Law - Avg. Day
AL									Yes	0
AR		30		30	30		30	183	No	0
AZ		7			7		7	180	No	0
CO	30	10	10	10	30	30	30	1	Yes	
FL		44		44	29		29		Yes	5500
GA		0	0	0	30		30	365	Yes	20000
KY		30							Yes	
MN		30								
MO	30									0
NJ		30			30			30	Yes	0
NY		30	30	30	7		7	1	No	
OR		30			15			1	No	
VA	30								Yes	

Submission Cycle - Days

		Frequency	Valid Percent	Cumulative Percent
Valid	30	3	100.0%	100.0%
Missing	System	47		
Total		50		

Days After Cancelled

		Frequency	Valid Percent	Cumulative Percent
Valid	0	1	10.0%	10.0%
	7	1	10.0%	20.0%
	10	1	10.0%	30.0%
	30	6	60.0%	90.0%
	44	1	10.0%	100.0%
	Total	10	100.0%	
Missing	System	40		
Total		50		

Days After Nonrenewed

		Frequency	Valid Percent	Cumulative Percent
Valid	0	1	33.3%	33.3%
	10	1	33.3%	66.7%
	30	1	33.3%	100.0%
	Total	3	100.0%	
Missing	System	47		
Total		50		

Days After Vehicle Removed

		Frequency	Valid Percent	Cumulative Percent
Valid	0	1	20.0%	20.0%
	10	1	20.0%	40.0%
	30	2	40.0%	80.0%
	44	1	20.0%	100.0%
	Total	5	100.0%	
Missing	System	45		
Total		50		

Days After New Policy

		Frequency	Valid Percent	Cumulative Percent
Valid	7	2	25.0%	25.0%
	15	1	12.5%	37.5%
	29	1	12.5%	50.0%
	30	4	50.0%	100.0%
	Total	8	100.0%	
Missing	System	42		
Total		50		

Days After Renewed

		Frequency	Valid Percent	Cumulative Percent
Valid	30	1	100.0%	100.0%
Missing	System	49		
Total		50		

Days After Vehicle Added

		Frequency	Valid Percent	Cumulative Percent
Valid	7	2	33.3%	33.3%
	29	1	16.7%	50.0%
	30	3	50.0%	100.0%
	Total	6	100.0%	
Missing	System	44		
Total		50		

5. How often is insurance information compared to vehicle information? _____
   a. Does state law require that information be compared this often? ☐ Yes ☐ No

Compared Every X Days

		Frequency	Valid Percent	Cumulative Percent
Valid	1	3	42.9%	42.9%
	30	1	14.3%	57.1%
	180	1	14.3%	71.4%
	183	1	14.3%	85.7%
	365	1	14.3%	100.0%
	Total	7	100.0%	
Missing	System	43		
Total		50		

Compared Other

		Frequency	Valid Percent	Cumulative Percent
Valid	At renewal	1	25.0%	25.0%
	Compared every time when needed	1	25.0%	50.0%
	Compared only when insurance questionnaire responses received from owners (2% of the 4.2 million annually) and when verification data is received from insurance companies	1	25.0%	75.0%
	Upon receipt of original insurance and cancellation of insurance	1	25.0%	100.0%
	Total	4	100.0%	
Missing	System	46		
Total		50		

Required By Law?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	4	36.4%	36.4%
	Yes	7	63.6%	100.0%
	Total	11	100.0%	
Missing	System	39		
Total		50		

6. On average, how many times a day do law enforcement officers access the database? _____ times/day

Accessed By Law Enforcement - Average Day

		Frequency	Valid Percent	Cumulative Percent
Valid	0	5	71.4%	71.4%
	5500	1	14.3%	85.7%
	20000	1	14.3%	100.0%
	Total	7	100.0%	
Missing	System	43		
Total		50		

7. Can motorists verify that their information is correct in the database? ☐ Yes ☐ No
   a. If yes, how can they do this?

Can Verify Correct?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	8	66.7%	66.7%
	Yes	4	33.3%	100.0%
	Total	12	100.0%	
Missing	System	38		
Total		50		

How Verify Correct

		Frequency	Valid Percent	Cumulative Percent
Valid	By contacting their local county tag office. Insurance carriers also have web access to what our system shows.	1	20.0%	20.0%
	Call DMV's Insurance Call Center or request a Freedom of Information (FOIL) search	1	20.0%	40.0%
	Info is available on vehicle records	1	20.0%	60.0%
	They can verify that their driver license status is "valid" or they can get a transcript of their registration data for a fee and verify that their insurance is "on file."	1	20.0%	80.0%
	This capability will be available in August of 2003.	1	20.0%	100.0%
	Total	5	100.0%	
Missing	System	45		
Total		50		

8. Does the database interface with traffic cameras and license plate reader technology? ☐ Yes ☐ No
   a. If yes, for which vehicles is input received or information sent? *(Check one.)*
   ☐ *Only* vehicles involved in traffic violations ☐ Potentially any vehicle

No affirmative responses.

9. Does the database contain information on citations, convictions or penalties imposed for:
   a. Insurance violations ☐ Yes ☐ No
   b. Traffic violations ☐ Yes ☐ No

Insurance Violation Info?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	8	61.5%	61.5%
	Yes	5	38.5%	100.0%
	Total	13	100.0%	
Missing	System	37		
Total		50		

Traffic Violation Info?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	8	61.5%	61.5%
	Yes	5	38.5%	100.0%
	Total	13	100.0%	
Missing	System	37		
Total		50		

10. Do state agencies responsible for the following or their vendors access the database when:
   a. Vehicles are registered ☐ Yes ☐ No
   b. Driver's licenses are issued ☐ Yes ☐ No

Access At Registration?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	4	33.3%	33.3%
	Yes	8	66.7%	100.0%
	Total	12	100.0%	
Missing	System	38		
Total		50		

Access At License Issue?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	9	81.8%	81.8%
	Yes	2	18.2%	100.0%
	Total	11	100.0%	
Missing	System	39		
Total		50		

Access Other

		Frequency	Valid Percent	Cumulative Percent
Valid	County license plate issuing officials do not have access to the insurance database; however, they do receive monthly lists of suspended registrations which they are required to reference and deny registration/renewal of those found on the list.	1	50.0%	50.0%
	Driver's license and motor vehicle program administration	1	50.0%	100.0%
	Total	2	100.0%	
Missing	System	48		
Total		50		

11. Has the database been used for purposes other than enforcement of compulsory insurance laws? ☐ Yes ☐ No
    c. If yes, how else has it been used?

Other Use?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	4	30.8%	30.8%
	Yes	9	69.2%	100.0%
	Total	13	100.0%	
Missing	System	37		
Total		50		

Other Use Description

		Frequency	Valid Percent	Cumulative Percent
Valid	Insurance info is verified on accident, renewal of vehicle registration by mail and random sample insurance verification actions	1	12.5%	12.5%
	On occasion, law enforcement officers can obtain information through us (not directly) for other investigations.	1	12.5%	25.0%
	Registration compliance	2	25.0%	50.0%
	Statistics	1	12.5%	62.5%
	The department's Internet application for renewing motor vehicle registration will hit against the database to ensure the customer has insurance on the vehicle being renewed.	1	12.5%	75.0%
	To provide insurance info to a requestor who wants to file a claim as a result of an accident. A fee of $6 is required for the search.	1	12.5%	87.5%
	UM info is posted to our driver history violation records. We do not maintain a separate insurance database.	1	12.5%	100.0%
	Total	8	100.0%	
Missing	System	42		
Total		50		

Enforcement

1. Enforcement letters are sent on letterhead from: *(Check all that apply.)*
   ☐ State agency *(name of agency)* _____
   ☐ Outside vendor *(name of vendor)* _____
   If different letters are sent on different letterhead, please state which letters are sent on which letterhead.

State Agency Letterhead

		Frequency	Valid Percent	Cumulative Percent
Valid	No	1	8.3%	8.3%
	Yes	11	91.7%	100.0%
	Total	12	100.0%	
Missing	System	38		
Total		50		

State Agency Name

		Frequency	Valid Percent	Cumulative Percent
Valid	Highway or Public Safety Agency	3	30.0%	30.0%
	Motor Vehicle Agency	5	50.0%	80.0%
	Revenue Agency	2	20.0%	20.0%
	Total	10	100.0%	
Missing	System	41		
Total		50		

Outside Vendor Name

		Frequency	Valid Percent	Cumulative Percent
Valid	Explore Information Services	1	100.0%	100.0%
Missing	System	49		
Total		50		

2. Enforcement letters are sent to: *(Check all that apply.)* ☐ Named insured ☐ Registered owner
If different letters are sent to different recipients, please state which letters are sent to which recipients.

Sent to Named Insured?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	9	75.0%	75.0%
	Yes	3	25.0%	100.0%
	Total	12	100.0%	
Missing	System	38		
Total		50		

Sent to Registered Owner?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	1	8.3%	8.3%
	Yes	11	91.7%	100.0%
	Total	12	100.0%	
Missing	System	38		
Total		50		

Sent to Both Named Insured and Registered Owner?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	10	83.3%	83.3%
	Yes	2	16.7%	100.0%
	Total	12		
Missing	System	38		
Total		50		

3. Enforcement letters are sent on the following timeline:
   Letter 1: _____ days after vehicle ID'd as uninsured
   Letter 2: _____ days after letter 1 sent
   Letter 3: _____ days after letter 2 sent
   If additional letters are sent, please provide additional information.

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
L1 Days After	12	119	1	120	42.58	42.60
L2 Days After	6	15	15	30	27.50	6.12
L2 Days After Discovery	6	89	31	120	65.83	42.29
L3 Days After	2	0	30	30	30.00	.00
L3 Days After Discovery	2	4	61	65	63.00	2.83
Valid N (listwise)	2					

4. Response to enforcement letters: *(Please indicate if ☐ estimated or ☐ known.)*
   a. After letter 1 and before letter 2 is sent:
      _____% comply _____% provide proof were wrongly ID'd as uninsured
   b. After letter 2 and before letter 3 is sent:
      _____% comply _____% provide proof were wrongly ID'd as uninsured
   c. After letter 3 and before letter 4 is sent:
      _____% comply _____% provide proof were wrongly ID'd as uninsured

If additional letters are sent, please provide additional information.

State	Letter 1 Sent X Days After Discovery	After Letter 1, X% Comply	After Letter 1, X% Prove Wrongly ID'd as UM	Letter 2 Sent X Days After Discovery	After Letter 2, X% Comply	After Letter 2, X% Prove Wrongly ID'd as UM	Letter 3 Sent X Days After Discovery	After Letter 3, X% Comply	After Letter 3, X% Prove Wrongly ID'd as UM
AL	1								
AZ	30			45					
CO	90	33%	10%						
FL	120	80%	26%						
GA	30								
KY	30	20%	40%						
MN	10	87%	84%						
MO	90	*56%		120	*25%				
NJ	1	44%	25%	31	48%	19%	61	71%	5%
NY	14	60%		44					
OR	5	80%		35	50%		65	20%	
VA	90			120					

* Known, not estimated.

After Letter 1 Percent Who Comply

		Frequency	Valid Percent	Cumulative Percent
Valid	20%	1	12.5%	12.5%
	33%	1	12.5%	25.0%
	44%	1	12.5%	37.5%
	56%	1	12.5%	50.0%
	60%	1	12.5%	62.5%
	80%	2	25.0%	87.5%
	87%	1	12.5%	100.0%
	Total	8	100.0%	
Missing	System	42		
Total		50		

After Letter 1 Percent Who Prove Wrongly ID'd

		Frequency	Valid Percent	Cumulative Percent
Valid	10%	1	20.0%	20.0%
	25%	1	20.0%	40.0%
	26%	1	20.0%	60.0%
	40%	1	20.0%	80.0%
	84%	1	20.0%	100.0%
	Total	5	100.0%	
Missing	System	45		
Total		50		

After Letter 2 Percent Who Comply

		Frequency	Valid Percent	Cumulative Percent
Valid	25%	1	33.3%	33.3%
	48%	1	33.3%	66.7%
	50%	1	33.3%	100.0%
	Total	3	100.0%	
Missing	System	47		
Total		50		

After Letter 2 Percent Who Prove Wrongly ID'd

		Frequency	Valid Percent	Cumulative Percent
Valid	19%	1	100.0%	100.0%
Missing	System	49		
Total		50		

After Letter 3 Percent Who Comply

		Frequency	Valid Percent	Cumulative Percent
Valid	20%	1	50.0%	50.0%
	71%	1	50.0%	100.0%
	Total	2	100.0%	
Missing	System	48		
Total		50		

After Letter 3 Percent Who Prove Wrongly ID'd

		Frequency	Valid Percent	Cumulative Percent
Valid	5%	1	100.0%	100.0%
Missing	System	49		
Total		50		

5. Enforcement actions are taken on the following timeline:
   a. Vehicle registration suspended: _____ days after Letter #_____
      or ☐ Suspending registration is not an option.
   b. Driver's license suspended: _____ days after Letter #_____
      or ☐ Suspending driver's license is not an option.
   c. License plates ordered seized: _____ days after Letter #_____
      or ☐ Ordering license plates seized is not an option.
      i. Is a law enforcement officer sent to seize license plates? ☐ Yes ☐ No

If additional enforcement actions are taken, please provide additional information.

State	Vehicle Registration Suspended After L	Vehicle Registration Suspended Days After Discovery	Driver's License Suspended After L	Driver's License Suspended Days After Discovery	Plates Ordered Seized After L	Plates Ordered Seized Days After Discovery	Officer Sent to Seize Plates?
AL	1	46					No
AZ	1	45					
CO	1	135					
FL	1	150	1	150	1	160	No
GA	1	60					
KY		65					No
MN	1	24	1	24			
MO			2	153			
NJ	1	31	2	61			No
NY	1	44	1	44			
OR			3	95			
VA	2	150	2	150			No

Suspending Registration An Option?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	2	16.7%	16.7%
	Yes	10	83.3%	100.0%
	Total	12	100.0%	
Missing	System	38		
Total		50		

Registration Suspended After Letter X

		Frequency	Valid Percent	Cumulative Percent
Valid	1	8	88.9%	88.9%
	2	1	11.1%	100.0%
	Total	9	100.0%	
Missing	System	41		
Total		50		

Registration Suspended Days After Discovery

		Frequency	Valid Percent	Cumulative Percent
Valid	24	1	10.0%	10.0%
	31	1	10.0%	20.0%
	44	1	10.0%	30.0%
	45	1	10.0%	40.0%
	46	1	10.0%	50.0%
	60	1	10.0%	60.0%
	65	1	10.0%	70.0%
	135	1	10.0%	80.0%
	150	2	20.0%	100.0%
	Total	10	100.0%	
Missing	System	40		
Total		50		

Suspending Driver's License An Option?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	1	12.5%	12.5%
	Yes	7	87.5%	100.0%
	Total	8	100.0%	
Missing	System	42		
Total		50		

Driver's License Suspended After Letter X

		Frequency	Valid Percent	Cumulative Percent
Valid	1	3	42.9%	42.9%
	2	3	42.9%	85.7%
	3	1	14.3%	100.0%
	Total	7	100.0%	
Missing	System	43		
Total		50		

Driver's License Suspended Days After Discovery

		Frequency	Valid Percent	Cumulative Percent
Valid	24	1	14.3%	14.3%
	44	1	14.3%	28.6%
	61	1	14.3%	42.9%
	95	1	14.3%	57.1%
	150	2	28.6%	85.7%
	153	1	14.3%	100.0%
	Total	7	100.0%	
Missing	System	43		
Total		50		

Ordering Plates Seized An Option?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	5	100.0%	100.0%
	Total	45		
Missing	System	50		
Total		50		

Plates Ordered Seized After Letter X

		Frequency	Valid Percent	Cumulative Percent
Valid	1	1	100.0%	100.0%
Missing	System	49		
Total		50		

Plates Ordered Seized Days After Discovery

		Frequency	Valid Percent	Cumulative Percent
Valid	160	1	100.0%	100.0%
Missing	System	49		
Total		50		

Officer Sent to Seize Plates?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	5	100.0%	100.0%
Missing	System	45		
Total		50		

Records Request

1. For each enforcement letter, please provide a sample, labeled "Letter 1," "Letter 2," "Letter 3," etc.

2. Please attach a printout showing fields you require:
   a. ***Insurance companies*** to submit
   b. ***State agencies or their vendors*** to submit

   Please indicate whether fields are required for private motor vehicles, commercial motor vehicles, or both.

If you prefer, you can mail requested records to:

Lisa Markkula
Marketing Intelligence, LLC
1630 N. Swan Rd., Ste. 102
Tucson, AZ 85712

Exhibit 4

Insurance Department Survey and Summary Results

Arizona Department of Transportation
Survey on Uninsured and Underinsured Drivers
To Private Passenger Auto Manager

The Arizona Department of Transportation is interested in learning how other states deal with uninsured and underinsured drivers. We appreciate your help and will provide you with a copy of our final report.

You may tab between the gray shaded areas ( ) to enter answers directly on the form below, or print out the survey and fill it in by hand. Please return completed surveys by email lisa@mktg-intelligence.com or fax (520) 321-1649 by July 1, 2003, if possible.

If you have any questions, please contact Lisa Markkula at (520) 321-0110 or lisa@mktg-intelligence.com.

Person completing this survey:

Name: _____ Phone: ( ) -_____

State: _____ Email: _____

Uninsured Motorist Coverage

1. Is ***un***insured motorist coverage mandatory in your state? ☐ Yes ☐ No
   a. If yes, what amount is required? $_____
   b. If no, is the offer of uninsured motorist coverage mandatory? ☐ Yes ☐ No
   c. Is the language of offer specified by law? ☐ Yes ☐ No

UM Mandatory?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	18	54.5%	54.5%
	Yes	15	45.5%	100.0%
	Total	33	100.0%	
Missing	System	17		
Total		50		

Per Person Required

		Frequency	Valid Percent	Cumulative Percent
Valid	$20,000	3	25.0%	25.0%
	$25,000	8	66.7%	91.7%
	$50,000	1	8.3%	100.0%
	Total	12	100.0%	
Missing	System	38		
Total		50		

Per Accident Required

		Frequency	Valid Percent	Cumulative Percent
Valid	$40,000	3	25.0%	25.0%
	$50,000	8	66.7%	91.7%
	$100,000	1	8.3%	100.0%
	Total	12	100.0%	
Missing	System	38		
Total		50		

Property Damage Required

		Frequency	Valid Percent	Cumulative Percent
Valid	$10,000	2	50.0%	50.0%
	$15,000	1	25.0%	75.0%
	$25,000	1	25.0%	100.0%
	Total	4	100.0%	
Missing	System	46		
Total		50		

UM Required Other

		Frequency	Valid Percent	Cumulative Percent
Valid	$50,000	1	20.0%	20.0%
	Based on liability limits	1	20.0%	40.0%
	Mandatory if you purchase a liability policy	1	20.0%	60.0%
	Same limits as B.I.	1	20.0%	80.0%
	The companies must offer this coverage equal to the BI limits purchased. The policyholder has the right to reject to the minimum limit of 25/50.	1	20.0%	100.0%
	Total	5	100.0%	
Missing	System	45		
	Total	50		

UM Offer Mandatory?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	2	11.8%	11.8%
	Yes	15	88.2%	100.0%
	Total	17	100.0%	
Missing	System	33		
Total		50		

UM Offer Language Specified By Law?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	11	47.8%	47.8%
	Yes	12	52.2%	100.0%
	Total	23	100.0%	
Missing	System	27		
Total		50		

2. If not mandatory, what estimated percentage of insured motorists carries ***un***insured motorist coverage?
_____% ☐ Cannot estimate

Estimate Percent UM Insured?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	15	88.2%	88.2%
	Yes	2	11.8%	100.0%
	Total	17	100.0%	
Missing	System	33		
Total		50		

Estimated Percent UM Insured

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.83	1	2.0	50.0	50.0
	.90	1	2.0	50.0	100.0
	Total	2	4.0	100.0	
Missing	System	48	96.0		
Total		50	100.0		

3. What types of claims does ***un***insured motorist coverage cover?
   a. Economic loss ☐ Yes ☐ No
   b. Non-economic loss ☐ Yes ☐ No
   c. Punitive damages ☐ Yes ☐ No
   d. Property damage ☐ Yes ☐ No

Economic Loss?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	2	7.1%	7.1%
	Yes	26	92.9%	100.0%
	Total	28	100.0%	
Missing	System	22		
Total		50		

Non-economic Loss?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	4	14.3%	14.3%
	Yes	24	85.7%	100.0%
	Total	28	100.0%	
Missing	System	22		
Total		50		

Punitive Damages?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	22	84.6%	84.6%
	Yes	4	15.4%	100.0%
	Total	26	100.0%	
Missing	System	24		
Total		50		

Property Damage?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	14	46.7%	46.7%
	Yes	16	53.3%	100.0%
	Total	30	100.0%	
Missing	System	20		
Total		50		

4. What is the average annual premium for ***un***insured motorist coverage? $_____
(Please indicate if ☐ estimated or ☐ known.)

Know UM Average Annual Premium?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	25	96.2%	96.2%
	Yes	1	3.8%	100.0%
	Total	26	100.0%	
Missing	System	24		
Total		50		

UM Average Annual Premium

		Frequency	Valid Percent	Cumulative Percent
Valid	$15-20	5	25.0%	25.0%
	$21-30	4	20.0%	45.0%
	$31-40	2	10.0%	55.0%
	$41-50	4	20.0%	75.0%
	$51-60	2	10.0%	85.0%
	$61-70	1	5.0%	90.0%
	$100	1	5.0%	95.0%
	$150	1	5.0%	100.0%
	Total	20	100.0%	
Missing	System	30		
Total		50		

5. Is the price for ***un***insured motorist coverage the same throughout the state regardless of territory or individual rating factors? ☐ Yes ☐ No ☐ Don't know

Know Price Same or Not?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	2	6.7%	6.7%
	Yes	28	93.3%	100.0%
	Total	30	100.0%	
Missing	System	20		
Total		50		

Price Same?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	22	78.6%	78.6%
	Yes	6	21.4%	100.0%
	Total	28	100.0%	
Missing	System	22		
Total		50		

Underinsured Motorist Coverage

1. Is ***under***insured motorist coverage mandatory in your state? ☐ Yes ☐ No
   a. If yes, what amount is required? _____
   b. If no, is the offer of underinsured motorist coverage mandatory? ☐ Yes ☐ No
   c. Is the language of offer specified by law? ☐ Yes ☐ No

UIM Mandatory?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	20	60.6%	60.6%
	Yes	13	39.4%	100.0%
	Total	33	100.0%	
Missing	System	17		
Total		50		

Per Person Required

		Frequency	Valid Percent	Cumulative Percent
Valid	$10,000	1	12.5%	12.5%
	$20,000	2	25.0%	37.5%
	$25,000	4	50.0%	87.5%
	$50,000	1	12.5%	100.0%
	Total	8	100.0%	
Missing	System	42		
Total		50		

Per Accident Required

		Frequency	Valid Percent	Cumulative Percent
Valid	$20,000	1	12.5%	12.5%
	$40,000	2	25.0%	37.5%
	$50,000	4	50.0%	87.5%
	$100,000	1	12.5%	100.0%
	Total	8	100.0%	
Missing	System	42		
Total		50		

Property Damage Required

		Frequency	Valid Percent	Cumulative Percent
Valid	$10,000.00	1	50.0%	50.0%
	$15,000.00	1	50.0%	100.0%
	Total	2	100.0%	
Missing	System	48		
Total		50		

UIM Required Other

		Frequency	Valid Percent	Cumulative Percent
Valid	Based on liability limits up to $100/300 with UM	1	16.7%	16.7%
	Mandatory if limits are greater than financial responsibility	1	16.7%	33.3%
	Must be the same as UM	3	50.0%	83.3%
	Same as BI, unless rejected in writing	1	16.7%	100.0%
	Total	6	100.0%	
Missing	System	44		
	Total	50		

UIM Offer Mandatory?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	6	30.0%	30.0%
	Yes	14	70.0%	100.0%
	Total	20	100.0%	
Missing	System	30		
Total		50		

UIM Offer Language Specified By Law?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	12	54.5%	54.5%
	Yes	10	45.5%	100.0%
	Total	22	100.0%	
Missing	System	28		
Total		50		

2. If not mandatory, what estimated percentage of insured motorists carries ***under***insured motorist coverage?
_____% ☐ Cannot estimate

Estimate Percent UIM Insured?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	20	90.9%	90.9%
	Yes	2	9.1%	100.0%
	Total	22	100.0%	
Missing	System	28		
Total		50		

Estimated Percent UIM Insured

		Frequency	Valid Percent	Cumulative Percent
Valid	.75	1	50.0%	50.0%
	.83	1	50.0%	100.0%
	Total	2	100.0%	
Missing	System	48		
Total		50		

3. What is the average annual premium for ***under***insured motorist coverage? $_____
(Please indicate if ☐ estimated or ☐ known.)

Know UIM Average Annual Premium?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	17	85.0%	85.0%
	Yes	3	15.0%	100.0%
	Total	20	100.0%	
Missing	System	30		
Total		50		

UIM Average Annual Premium

		Frequency	Valid Percent	Cumulative Percent
Valid	$0-10	1	11.1%	11.1%
	$11-20	4	44.4%	55.6%
	$21-30	1	11.1%	66.7%
	$31-40	1	11.1%	77.8%
	$41-50	1	11.1%	88.9%
	$80.00	1	11.1%	100.0%
	Total	9	100.0%	
Missing	System	41		
Total		50		

Involuntary Market

3. What are the eligibility requirements to obtain coverage in the involuntary market?

Involuntary Eligibility

		Frequency	Valid Percent	Cumulative Percent
Valid	A resident who owns a motor vehicle registered or principally garaged in this State or who has a valid driver's license in this State or who is required to file proof of financial responsibility pursuant to Article 9A or 13 of the N.C. M V Code	1	3.6%	3.6%
	Cannot obtain coverage in the voluntary market	7	25.0%	28.6%
	An applicant who is turned down for standard insurance must get an application from a licensed agent to obtain insurance through the automobile plan (involuntary market).	1	3.6%	32.1%
	Applicant must certify that he/she has attempted within 60 days prior to date of application to obtain automobile insurance in the state and has been unable to do so	2	7.1%	39.3%
	Application to the residual market assigned risk plan	1	3.6%	42.9%
	Certify could not obtain coverage for 60 days prior; applicant & other drivers must have paid all insurance premiums due for the past 12 months	1	3.6%	46.4%
	Connecticut registration, license	1	3.6%	50.0%
	Declination by 3 insurance companies	3	10.7%	60.7%
	Does not require proof that the person is unable to obtain insurance	1	3.6%	64.3%

		Frequency	Valid Percent	Cumulative Percent
	Excluded if policy cancelled for nonpayment within immediately preceding 2-year period, unless pay in full premium installment	1	3.6%	67.9%
	If risk cannot find voluntary coverage at a rate less than the assigned risk pool	1	3.6%	71.4%
	Mandatory unless coverage is waived in writing by the named insured	1	3.6%	75.0%
	N/A in WY	1	3.6%	78.6%
	ND resident; current, valid ND license; vehicle registered in ND; no outstanding auto premiums in past 12 months	1	3.6%	82.1%
	No requirements	1	3.6%	85.7%
	TX resident and have or are applying for a TX drivers license. Have been declined by at least two insurers in the voluntary market.	1	3.6%	89.3%
	Unable to find insurance in last 60 days; no incorrect info or misrepresentations on the application; operator's license; has not failed to pay auto insurance premiums in last 2 years; hasn't been cancelled for failure to make auto available for inspection in last 12 months	1	3.6%	92.9%
	Vehicle must be registered & used in Virginia (with exceptions for military & foreign diplomats); Operator must be licensed in Virginia (with exceptions for military & foreign diplomats).	1	3.6%	96.4%
	Vehicles registered in state	1	3.6%	100.0%
	Total	28	100%	
Missing	System	22		
Total		50		

4. What is the average annual premium for ***compulsory*** coverage:
   a. In the ***voluntary*** market? $_____
   b. In the ***involuntary*** market? $_____

(Please indicate if ☐ estimated or ☐ known.)

Know Average Annual Premiums?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	16	94.1%	94.1%
	Yes	1	5.9%	100.0%
	Total	17	100.0%	
Missing	System	33		
Total		50		

Average Annual Voluntary Premium

		Frequency	Valid Percent	Cumulative Percent
Valid	$60	1	11.1%	11.1%
	$160	1	11.1%	22.2%
	$270	1	11.1%	33.3%
	$294	1	11.1%	44.4%
	$334	1	11.1%	55.6%
	$350	2	22.2%	77.8%
	$483	1	11.1%	88.9%
	$750	1	11.1%	100.0%
	Total	9	100.0%	
Missing	System	41		
Total		50		

Average Annual Involuntary Premium

		Frequency	Valid Percent	Cumulative Percent
Valid	$500	2	25.0%	25.0%
	$503	1	12.5%	37.5%
	$550	1	12.5%	50.0%
	$618	1	12.5%	62.5%
	$741	1	12.5%	75.0%
	$818	1	12.5%	87.5%
	$1,400	1	12.5%	100.0%
	Total	8	100.0%	
Missing	System	42		
Total		50		

Low Cost Coverage

1. Does your state allow a low cost or "bare bones" policy to satisfy the requirement for compulsory insurance even though it offers less coverage than compulsory insurance? ☐ Yes ☐ No *(If no, skip to the next section.)*

Allow Bare Bones Policy?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	27	96.4%	96.4%
	Yes	1	3.6%	100.0%
	Total	28	100.0%	
Missing	System	22		
Total		50		

2. What are the eligibility requirements to obtain a low cost policy?

Bare Bones Eligibility

		Frequency	Valid Percent	Cumulative Percent
Valid	Reside in LA or SF county; household 25% federal poverty level or less; age 19 or older, continuously licensed for 3 yrs prior; no more than 1 property damage only accident at fault or 1 point for moving violation; no felony or misdemeanor conviction for vehicle code violation; no dependent college students	1	100.0%	100.0%
	Total	1	100.0%	
Missing	System	49		
Total		50		

3. What coverage is provided? *(Please give type and amount.)* _____
   a. Is liability coverage provided? ☐ Yes ☐ No

Per Person Bare Bones

		Frequency	Valid Percent	Cumulative Percent
Valid	$10,000	1	100.0%	100.0%
Missing	System	49		
Total		50		

Per Accident Bare Bones

		Frequency	Valid Percent	Cumulative Percent
Valid	$20,000	1	100.0%	100.0%
Missing	System	49		
Total		50		

Property Damage Bare Bones

		Frequency	Valid Percent	Cumulative Percent
Valid	$3,000	1	100.0%	100.0%
Missing	System	49		
Total		50		

Bare Bones Include Liability?

		Frequency	Valid Percent	Cumulative Percent
Valid	Yes	1	100.0%	100.0%
Missing	System	49		
Total		50		

4. What is the average annual premium for low cost coverage? $_____
(Please indicate if ☐ estimated or ☐ known.)

Know Bare Bones Average Annual Premium?

		Frequency	Valid Percent	Cumulative Percent
Valid	Yes	1	100.0%	100.0%
Missing	System	49		
Total		50		

Bare Bones Average Annual Premium

		Frequency	Valid Percent	Cumulative Percent
Valid	$314-347	1	100.0%	100.0%
Missing	System	49		
Total		50		

5. How many low cost policies are active? _____ *(Please indicate if ☐ estimated or ☐ known.)*

Know Number of Bare Bones Policies Active?

		Frequency	Valid Percent	Cumulative Percent
Valid	Yes	1	100.0%	100.0%
Missing	System	49		
Total		50		

Number of Bare Bones Policies Active

		Frequency	Valid Percent	Cumulative Percent
Valid	2503	1	100.0%	100.0%
Missing	System	49		
Total		50		

Public Assistance

1. Has your state provided assistance to help low income people afford motor vehicle insurance? ☐ Yes ☐ No

Provided Low Income Assistance?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	25	92.6%	92.6%
	Yes	2	7.4%	100.0%
	Total	27	100.0%	
Missing	System	23		
Total		50		

a. If yes, what assistance has it provided?

Assistance Provided

		Frequency	Valid Percent	Cumulative Percent
Valid	Contact NE Health & Human Services	1	50.0%	50.0%
	Info would have to come from VT Welfare Dept.	1	50.0%	100.0%
	Total	2	100.0%	
Missing	System	48		
	Total	50		

b. What were the eligibility requirements to receive assistance?

No responses provided.

c. In what years was assistance provided? _____

No responses provided.

d. For the most recent year assistance was provided for which data are complete:
   i. How many people received assistance? _____
   ii. What was the total amount of assistance provided? $_____
   iii. What year are the data for? _____

No responses provided.

2. Has your state provided loans to help low income people afford motor vehicle insurance? ☐ Yes ☐ No

Provided Low Income Loans?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	24	100.0%	100.0%
Missing	System	26		
Total		50		

a. If yes, what were the terms of the loans?

No responses provided.

b. What were the eligibility requirements to receive loans?

No responses provided.

c. In what years were loans provided? _____

No responses provided.

d. For the most recent year loans were provided for which data are complete,
   i. How many people received loans? _____
   ii. What was the total amount lent? $_____
   iii. What year are the data for? _____

No responses provided.

3. Has your state provided tax or other incentives to increase the availability of insurance services or the number of motor vehicle policies written in underserved communities? ☐ Yes ☐ No

Provided Tax or Insurer Incentives?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	22	91.7%	91.7%
	Yes	2	8.3%	100.0%
	Total	24	100.0%	
Missing	System	26		
Total		50		

Database

1. Does your state use a database to check compliance with compulsory insurance laws? ☐ Yes ☐ No
   (If no, skip to next section.)

Use Database?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	17	60.7%	60.7%
	Yes	11	39.3%	100.0%
	Total	28	100.0%	
Missing	System	22		
Total		50		

2. Do insurance companies receive compensation for providing database information? ☐ Yes ☐ No.
   a. If yes, for the most recent year for which data are complete, how much compensation was paid? $_____
      i. What year are the data for? _____

Compensate Insurers for Database Info?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	7	100.0%	100.0%
Missing	System	43		
Total		50		

3. For the most recent year for which data are complete, what penalties has your state assessed against insurance companies for failing to submit information or for submitting inaccurate information?

Year	# of insurance companies penalized	Total penalties assessed
		$

or *(Check all that apply.)*
☐ There are no penalties for failing to submit information.
☐ There are no penalties for submitting inaccurate information.

No Penalties For No Info

		Frequency	Valid Percent	Cumulative Percent
Valid	Yes	1	100.0%	100.0%
Missing	System	49		
Total		50		

No Penalties For Inaccurate Info

		Frequency	Valid Percent	Cumulative Percent
Valid	Yes	1	100.0%	100.0%
Missing	System	49		
Total		50		

Year Penalties Assessed

		Frequency	Valid Percent	Cumulative Percent
Valid	2002	1	100.0%	100.0%
Missing	System	49		
Total		50		

Number of Insurers Penalized

		Frequency	Valid Percent	Cumulative Percent
Valid	4	1	100.0%	100.0%
Missing	System	49		
Total		50		

Total Penalties Assessed

		Frequency	Valid Percent	Cumulative Percent
Valid	$15,000	1	100.0%	100.0%
Missing	System	49		
Total		50		

"Pay-as-you-go" Policies

1. Can insurance companies charge motor vehicle insurance premiums by the mile ("pay-as you-go" policies) in your state? ☐ Yes ☐ No

Allow Pay As You Go Policies?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	17	60.7%	60.7%
	Yes	11	39.3%	100.0%
	Total	28	100.0%	
Missing	System	22		
Total		50		

a. If yes, in what year did the first insurance company do so? _____
b. Currently, how many insurance companies offer pay-as-you-go policies? _____ ☐ Don't know

Know Number of Insurers Offering PAYG?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	2	18.2%	18.2%
	Yes	9	81.8%	100.0%
	Total	11	100.0%	
Missing	System	39		
Total		50		

Number of Insurers Offering PAYG

		Frequency	Valid Percent	Cumulative Percent
Valid	0	10	100.0%	100.0%
Missing	System	40		
Total		50		

2. How many pay-as-you-go policies are active? _____ ☐ Don't know

Know Number of PAYG Active Policies?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	3	30.0%	30.0%
	Yes	7	70.0%	100.0%
	Total	10	100.0$	
Missing	System	40		
Total		50		

Number of PAYG Active Policies

		Frequency	Valid Percent	Cumulative Percent
Valid	0	7	100.0%	100.0%
Missing	System	43		
Total		50		

Penalties

1. For those convicted of driving without insurance, or any other violation, how many months of premium payment are required "up front"? _____ *(number of)* Months ☐ No minimum requirement
   a. Who is subject to this requirement?

Number of Months Required to Pay Up Front

		Frequency	Valid Percent	Cumulative Percent
Valid	No minimum requirement	24	88.9%	88.9%
	6	2	7.4%	96.3%
	12	1	3.7%	100.0%
	Total	27	100.0%	
Missing	System	23		
Total		50		

Who Required to Pay Up Front

		Frequency	Valid Percent	Cumulative Percent
Valid	Drivers requiring financial safety responsibility certification (SR-22)	1	33.3%	33.3%
	Driving privileges revoked or suspended due to failure to maintain required security	1	33.3%	66.6%
	Habitual violators must make SR-22 filings.	1	33.3%	100.0%
	Total	3	100.0%	
Missing	System	47		
Total		50		

2. Does your state allow insurance companies to cancel policies of motorists convicted of DUI? ☐ Yes ☐ No

Allow Insurers to Cancel for DUI?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	9	30.0%	30.0%
	Yes	21	70.0%	100.0%
	Total	30	100.0%	
Missing	System	20		
Total		50		

3. Does your state prohibit or limit claims from uninsured motorists injured in motor vehicle accidents?
☐ Yes ☐ No

Prohibit or Limit Claims From UM?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	30	93.8%	93.8%
	Yes	2	6.3%	100.0%
	Total	32	100.0%	
Missing	System	18		
Total		50		

a. If yes, please describe.

How Prohibited or Limited

		Frequency	Valid Percent	Cumulative Percent
Valid	They do not have immunity from tort action under our no-fault law, but properly insured drivers have immunity from tort when the injuries received by the other party are below the verbal threshold described in MCLA 500.3135.	1	33.3%	33.3%
	UMC cannot be stacked within the same policy.	1	33.3%	66.6%
	Uninsured motorists will not be compensated for non-economic damages from an accident.	1	33.3%	100.0%
	Total	3	100.0%	
Missing	System	47		
Total		50		

b. In what year did this take effect? _____

Year 1st Prohibited or Limited

		Frequency	Valid Percent	Cumulative Percent
Valid	1973	1	50.0%	50.0%
	1997	1	50.0%	100.0%
	Total	2	100.0%	
Missing	System	48		
Total		50		

4. Has your state used an amnesty program to encourage uninsured motorists to comply with the law?
☐ Yes ☐ No

Used Amnesty?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	31	100.0%	100.0%
Missing	System	19		
Total		50		

a. If yes, in what years have amnesty programs been used? _____

No responses provided.

b. For the most recent year for which data are complete, how many previously uninsured motorists obtained insurance during the amnesty period? _____ ☐ Don't know
   i. What year are the data for? _____

No responses provided.

5. Does your state prohibit surcharges on previously uninsured motorists? ☐ Yes ☐ No *(If yes, skip to next section.)*

Prohibit Surcharges?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	22	73.3%	73.3%
	Yes	8	26.7%	100.0%
	Total	30	100.0%	
Missing	System	20		
Total		50		

6. Does your state limit surcharges on previously uninsured motorists? ☐ Yes ☐ No

Limit Surcharges?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	18	90.0%	90.0%
	Yes	2	10.0%	100.0%
	Total	20	100.0%	
Missing	System	30		
Total		50		

a. If yes, what is the limit? _____

No responses provided.

b. If no, what is the average percent surcharge? _____% ☐ Don't know

Know Average Percent Surcharge?

		Frequency	Valid Percent	Cumulative Percent
Valid	No	4	100.0%	100.0%
Missing	System	46		
Total		50		

Surcharge Other

		Frequency	Valid Percent	Cumulative Percent
Valid	Can only surcharge for 6 months pursuant to the "failure to provide proof of insurance" criteria located in MCLA 500.2120. The vast majority of companies do not utilize this provision.	1	50.0%	50.0%
	It depends on what an insurer can actuarially support.	1	50.0%	100.0%
	Total	2	100.0%	
Missing	System	48		
Total		50		

No other responses provided.

Exhibit 5

SUMMARY OF ARIZONA FINANCIAL RESPONSIBILITY LAWS

Title 17. Transportation

Chapter 4. Department of Transportation Title, Registration and Driver Licenses

Article 2. Vehicle Title

R17-4-307 Motor Vehicle Registration and License Plate Reinstatement Fee

ADOT charges a mandatory $50 fee to reinstate registration and plates suspended for insurance cancellation or non-renewal after notice pursuant to 28-4148 (insurer notice to ADOT of cancellation or nonrenewal) and 28-4149 (ADOT notice to insured of suspension for cancellation or non-renewal).

Article 4. Drivers Licenses

R17-4-402. Financial Responsibility Suspension; Restricted License and Restricted Registration

Drivers with suspended license or registration under 28-1256.02 may apply to MVD for a restricted license or registration. To receive either, they must file proof of financial responsibility pursuant to 28-1251(A) and 28-1253(A). At the end of suspension, to be reinstated, they must file proof of financial responsibility with MVD pursuant to Title 28, Article 7, Chapter 4, pay a fee of $10 (for license reinstatement) or $25 (for registration reinstatement) and maintain proof of financial responsibility for three years. *(There is no 28-1256.02, 28-1251(A) or 28-1253(A). Title 28, Article 7, Chapter 4 refers to liens and encumbrances, not proof of financial responsibility.)*

R17-4-404 Driver Point System

Describes Arizona's point system for traffic violations. For drivers earning 8-12 points in 12 months, MVD must either suspend their licenses or, if they have not completed traffic school in the last 24 months, must order them to attend. Drivers have 60 days within which to complete traffic school or MVD must suspend their licenses for 6 months. For others, MVD must suspend as follows:

- 13-17 points in 12 months – 3 months suspension
- 8-12 points in 12 months and completed traffic school in last 24 months – 3 months suspension
- 18-23 points in 12 months – 6 months suspension
- 24 or more points in 36 months – 12 months suspension

Article 5. Safety

R17-5-502 Insurance Company Reporting Requirements

Describes insurance company reporting procedures. Once a week, insurers must report to MVD all issues, cancellations, nonrenewals, reinstatements, vehicle additions or deletions of motor vehicle liability

coverage processed within the last 7 days by EDI. Companies may report on cartridge tape if:

- They have less than 10,000 motor vehicle liabilities policies written in Arizona as of January 1, and
- They don't use EDI reporting in any other state, and
- EDI reporting would be a hardship

Companies may report manually if:

- They have less than 100 motor vehicle liability policies written in Arizona as of January 1, and
- They don't use EDI or cartridge tape reporting in any other state, and
- EDI or cartridge tape reporting would be a hardship

If an insurer fails to report, MVD notifies the company to submit missing information within 7 days. If the company does not, MVD "proceeds" under 20-237. (After hearing, 20-237 allows the Director of Insurance to impose a $250 fine for each day an insurer fails to provide information required under 28-4148 unless failure was inadvertent or accidental. The Director of Insurance may also suspend the insurer's certificate of authority to do business in Arizona. 28-4148 requires information on issues, cancellations and nonrenewals, but not on vehicle additions or deletions.)

R17-5-503 Reporting Formats, Cartridge Tape Specifications, and Required Information for Manual Reporting

Describes insurance company reporting formats.

R17-5-504 Motor Carrier Financial Responsibility

Describes commercial "for hire" motor vehicle liability requirements. Exempt vehicles include:

- church-owned vehicles
- government-owned vehicles
- vehicles used only as school buses under contract to a school district
- tax-exempt non-profit school owned vehicles used only for school functions
- tax-exempt non-profit owned vehicles
- non-profit owned search and rescue vehicles exempt from gross weight fees
- vehicles owned by car pool operators defined in 28-101(9) *(There is no definition of car pool operators in 28-101; there is a definition of car pool operators in 28-4032 (see below).)*
- vehicles defined in 28-1232(B). *(There is no 28-1232(B).)*

Vehicles subject to commercial motor vehicle liability requirements include:

- vehicles subject to registration under 28-221, 28-225, 28-302, 28-501. *(There is no 28-221 or 28-225; there are no vehicle registration requirements in 28-302 or 28-501; the appropriate statute is 28-4032 (see below).)*

Commercial motor carriers must file proof of financial responsibility with MVD in amounts not less than those set forth in 28-1233. *(There is no 28-1233; the appropriate statute is 28-4033 (see below).)*
Commercial motor carriers operating vehicles tax licensed under 28-1559 or 28-1559.01 must comply with R17-5-505 or R17-5-506; if not operating vehicles tax licensed under these statutes, must comply with R17-5-507. *(There is no tax license provision in 28-1559 or 28-1559.01.)*
Commercial motor carriers operating light weight vehicles defined in 28-1599(3) or registered under 28-221 or 28-225 must comply with R17-5-505 or R17-5-506. *(There is no light weight vehicle definition in 28-1559; there is no 28-228 or 28-225.)*
Commercial motor vehicle liability insurers must report to MVD by R17-5-505, R17-5-506 or R17-5-507. (See below.)
MVD will accept the following as proof of commercial motor vehicle financial responsibility:

- Form E (See R17-5-505 below)
- Form K (See R17-5-505 below) *(This is a notice of cancellation – not proof of financial responsibility.)*
- Certificate of Insurance (See R17-5-505 and R17-5-506 below)
- Written 45 day notice of cancellation of Certificate of Insurance *(This is a notice of cancellation – not proof of financial responsibility.)*

"These rules" do not apply to commercial motor carriers carrying agricultural products within 25 miles of the border between Arizona and Mexico.
MVD cannot register vehicles unless they comply with 28-1233 or 28-1235 and their owners, lessors or lessees have filed proof of commercial motor vehicle financial responsibility pursuant to R17-5-505 or R17-5-506. *(There is no 28-1233 or 28-1235; the appropriate statute is 28-4033 (see below).)*
MVD must cancel registration of vehicles on which insurance has been cancelled.
MVD must reissue registration if 1) an insurance binder covering the vehicle is submitted to them and 2) Form E is submitted to them prior to expiration of the insurance binder. If both are not submitted as set forth, MVD must cancel the reissued registration "without further notice."
Upon receiving a notice of cancellation from an insurer, MVD must send a certified letter to the insured asking for proof of commercial motor vehicle financial responsibility pursuant to 28-1233 on or before the date cancellation becomes effective; otherwise, MVD must cancel registration and plates. *(There is no 28-1233; the appropriate statute is 28-4033 (see below).)*

R17-5-505 Form E; procedures for preparing, filing and canceling liability insurance

Form E may be filed with MVD instead of an original or certified copy of a commercial motor vehicle liability policy. Form E must contain:

- Arizona Department of Transportation, Motor Vehicle Division named as the "Commission"

- Full name and address of insurer
- Full name and address of insured
- Policy effective date
- Liability insurance policy number
- Signature of authorized representative

(Does not require policy expiration date or amount of liability coverage.)

Form K must be used "in all cases when an insurance policy is canceled."

Form K must contain:

- Arizona Department of Transportation, Motor Vehicle Division, appearing as the "Commission"
- Full name and address of insurer
- Full name and address of insured
- Cancellation effective date
- Signature of authorized representative

(Does not require policy number.)

R17-5-506 Certificate of Insurance; procedures for preparing, filing and canceling liability insurance

A Certificate of Insurance may be filed with MVD instead of Form E. A Certificate of Insurance must contain:

- Full name, address and telephone number of insurer
- Full name, address and telephone number of "the producer"
- Full name, address and telephone number of insured
- Policy effective date
- Policy expiration date
- Liability insurance policy number
- Amount of liability coverage
- If multiple liability insurance policies, all names, addresses, telephone numbers, effective dates, expiration dates and policy numbers
- Arizona Department of Transportation, Motor Vehicle Division named as the "Certificate Holder"

All Certificate of Insurance filings must contain a cancellation statement to the effect that should any policy set forth in the Certificate of Insurance be canceled before that policy's expiration date, the issuing company will mail a 45-day notice to MVD. "Failure to mail such notice shall impose obligation or liability upon the insurance carrier."

R17-5-507 Certification when Form E Not Required

Owners, lessors or lessees of vehicles weighing up to 26,000 pounds subject to commercial motor vehicle liability requirements under 17-5-504 must file an original certificate of insurance with MVD's Insurance Unit. The certificate of insurance must be issued by an insurer and contain:

- Full name, address and telephone number of insurer
- Full name, address and telephone number of "the producer"
- Full name, address and telephone number of insured
- Policy effective date
- Policy expiration date
- Liability insurance policy number

- Amounts and types of coverage
- If multiple liability insurance policies, all names, addresses, telephone numbers, effective dates, expiration dates and policy numbers
- Department of Transportation, Motor Vehicle, Motor Vehicle Division named as the "certificate holder"

Owners, lessors or lessees of vehicles required to file Certificates of Insurance under this Section (R17-5-507) can list a self-insured retention on the Certificate of Insurance if a Certificate of Self-insurance issued by the state pursuant to 28-1222 or 28-1235 is filed with the Certificate of Insurance. *(There is no 28-1222 or 28-1235.)*

A copy of the Certificate of Insurance must be submitted with initial and renewal registration applications for each vehicle.

All Certificate of Insurance filings must contain a cancellation statement to the effect that should any policy set forth in the Certificate of Insurance be canceled before that policy's expiration date, the issuing company will mail a 45-day notice to MVD. "Failure to mail such notice shall impose obligation or liability upon the insurance carrier."

Upon receipt of notice of cancellation or upon policy expiration date, MVD must suspend registration until a certificate of insurance is filed with MVD.

MVD can "randomly verify compliance with" commercial motor carrier financial responsibility requirements. If compliance can't be verified, MVD must mail notice of intent to suspend registration within 30 days.

Statutes

Title 20. Insurance

Chapter 2. Transaction of Insurance Business

Article 1. Authorization of Insurers and General Requirements

20-236 Civil penalty for failure to respond to a request for verification of financial responsibility

After hearing, DOI must fine insurers a maximum $250 per violation for failure to respond in writing to a request for verification of financial responsibility pursuant to 28-4143 (see below). This fine may not exceed $20,000 in 6 months.

20-237 Failure to provide information; penalty

After hearing, DOI must fine insurers a maximum $250 per day per violation for failure to comply with 28-4148 (see below) and may suspend their authorization to business in Arizona until they are compliant. There cannot be a penalty if noncompliance was inadvertent or accidental.

Article 2. Kinds of Insurance; Reinsurance; Limits of Risk

20-259.01 Motor vehicle liability policy; uninsured optional; underinsured optional; subrogation; medical payments liens; definitions

Insurers must offer, in writing, uninsured (UM) and underinsured (UIM) coverage in limits not less than the policy's liability limits, but insureds may reject uninsured motorist or underinsured motorist coverage or select uninsured motorist or underinsured motorist coverage in amounts less than

the policy's liability limits. In the case of uninsured motorist coverage, such coverage, if selected, cannot be less than the limits prescribed in 28-4009 (see below). Insureds must select or reject uninsured motorist or underinsured motorist coverage on forms approved by DOI. Insurers do not have to offer uninsured motorist or underinsured motorist coverage at policy reinstatement, transfer, substitution, modification or renewal. Insurers may require insureds to have the same uninsured motorist and underinsured motorist limits on all vehicles.

Uninsured vehicles include insured vehicles if the insurer cannot make payment due to insolvency. Underinsured coverage covers the shortfall between the sum of all available liability coverages and damages due to bodily injury or death. Claimants cannot "stack" uninsured motorist and underinsured motorist coverage; in claims where uninsured motorist applies, underinsured motorist cannot apply. In claims where underinsured motorist applies, uninsured motorist cannot apply.

UM insurers may sue responsible parties for reimbursement of claims paid.

Medical payments coverage (med pay) insurers can file a lien for med pay claims paid over $5,000.

20-259.03 Uninsured and underinsured motorist coverages; insured; wrongful death recovery

To bring a wrongful death claim against uninsured motorist or underinsured motorist coverage, a person must 1) be a named insured under the policy that provided uninsured motorist or underinsured motorist coverage and 2) have the statutory right to bring a wrongful death claim. If both conditions are not met, then the deceased's estate is beneficiary to any such wrongful death claim.

Chapter 6. Particular Types of Insurance

Article 11. Cancellation or Nonrenewal of Automobile Insurance

20-1631 Definition of motor vehicle; cancellation of or failure to renew coverage; limitations; limitation of liability; exceptions; insurance producers

After 60 days from issuance or immediately upon renewal, an insurer may not cancel a motor vehicle policy unless: 1) there is non-payment of premium; 2) the policy was obtained through fraudulent misrepresentation; 3) the named insured, a household resident or other regular driver of the insured vehicle a) has their driver's license suspended or revoked, b) becomes permanently disabled, c) is convicted within 36 months of criminal negligence resulting in death or injury, DUI, leaving the scene of an accident, making false statements on driver's license application or reckless driving; or 4) the named insured, household resident or other regular driver of the insured vehicle regularly uses the vehicle for a commercial purpose.

An insurer may refuse to renew a policy by sending notice 45 days before nonrenewal if the same person, whether the named insured, a household resident or another regular driver of the insured vehicle:

- has had 3 or more at least 50% at-fault accidents in 36 months under any policy issued by the insurer in which property damage paid in each meets a threshold published by DOI (approximately $1,800)

An insurer may not refuse to renew under this provision if:

- the insurer has covered that person for 10 consecutive years prior; or
- the named insured excludes the driver above

An insurer may not refuse to renew more than .5% of its policies under this provision.

This provision does not apply to policies in effect less than 60 days unless the policy is a renewal, or to policies insuring motor vehicles other than private passenger motor vehicles.

Modification of a policy at renewal is not a nonrenewal if it doesn't eliminate essential benefits of basic coverage, including uninsured and underinsured coverage.

An insurer may transfer up to 1% of its policies to an affiliate each year if:

- one or more insureds have had two or more at least 50% at-fault accidents in 36 months under any policy issued by the insurer in which property damage paid in each exceeds $1,500; or
- one or more insureds have had three or more moving violations for which an approved traffic school program has not been completed, unless the named insured excludes the driver above

20-1632 Cancellation, nonrenewal and reduction of limits for reasons other than nonpayment of premium; notices to insured; refund of unearned premium

An insurer must send notice 10 days before cancellation, nonrenewal or reduction of limits for reasons other than nonpayment or nonrenewal under 20-1631(E) (see 20-1631 above regarding nonrenewal for three or more accidents in 36 months). That notice must include notice of possible eligibility for insurance through the automobile assigned risk plan.

20-1632.01 Cancellation or nonrenewal for nonpayment of premium; grace period; notice of cancellation; discrimination; definition

The insured is entitled to a 7-day grace period on all but the initial payment of premium unless it's a finance company cancellation, in which case a 10-day notice from the finance company satisfies the grace period.

Title 28. Transportation

Article 4. Agreements

28-405 Contract; civil penalty collection

Courts or political subdivisions may collect ADOT fees pursuant to contract.

28-447 Public records

Mailing to the last address shown in ADOT's records establishes the presumption of receipt of notice of suspension of registration or driver's license unless "clear and convincing" evidence is presented to the contrary.

28-448 Notice of address or name change; address update; civil traffic violation
Failure to notify ADOT of an address or name change is a civil traffic violation.

28-450 Release of information prohibited; classification; definition
ADOT may release driving records to Arizona motor vehicle liability insurers who provide identifying information on the driver.

Chapter 7. Certificate of Title and Registration

Article 6. Fleet Registration

28-2166 Registration of vehicle rented without a driver; liability insurance; joint liability; violation; classification; definition
Owners who rent or intend to rent motor vehicles without drivers cannot do so until they provide ADOT with proof of insurance from a DOI approved insurer in the amount of $15,000 for the first vehicle and $10,000 for each subsequent vehicle, up to $100,000 total, which is sufficient for any number of vehicles. Policies must provide renters with 15/30/10 coverage (see 28-4009 below) and must cover passengers unless the owner gives the renter written notice they do not cover passengers. ADOT must cancel the registration of vehicles rented in violation of this provision. Owners who rent in violation of this provision are jointly and severally liable with renters and are guilty of a class two misdemeanor.

Chapter 9. Vehicle Insurance and Financial Responsibility

Article 1. General Provisions

28-4007 Self-insurers
Persons with more than 25 vehicles registered may apply for full or partial self-insurance certification. After notice and hearing, the ADOT may cancel a certificate on reasonable grounds.

28-4008 Assigned risk plans
DOI shall consult with insurers and approve a plan to apportion qualified applicants for motor vehicle liability policies who would otherwise be unable to obtain coverage. All insurers issuing motor vehicle liability coverage policies in Arizona must participate in the plan.

28-4009 Motor vehicle liability policy requirements
Policies must designate covered vehicles by explicit description or appropriate reference. Policies cover the named insured and persons using the vehicle with the named insured's permission. Policies must offer coverage in at least the following limits (15/30/10 coverage):

- $15,000 for bodily injury or death of any one person in any one accident
- $30,000 for bodily injury or death in any one accident
- $10,000 for property damage in any one accident

Policies may exclude named persons by agreement in writing between the insurer and the named insured. Policies cover named insureds even when driving motor vehicles they don't own. Policies must state:

- name of insured
- address of insured
- coverage

- premium
- vehicle identification numbers for all covered vehicles
- policy period
- liability limits
- that they provide coverage for bodily injury and death, property damage or both in accordance with this chapter (i.e., that they provide 15/30/10 coverage)

Policies are not required to provide coverage for:

- liability covered by worker's compensation
- employees other than domestic employees
- damage or injury intended or directed by the named insured

Policies may require insureds to reimburse insurers for payments they would not have been required to make under the terms of the policy but for the provisions of this chapter.

Coverage in excess of or in addition to the required 15/30/10 coverage is not subject to the provisions of this chapter.

Article 2. Motor Carrier Financial Responsibility

28-4032 Persons subject to financial responsibility requirements

The following must comply with commercial motor carrier financial responsibility requirements:

- A person who operates a motor vehicle or motor vehicle and trailer or semitrailer weighing more than 20,000 lbs. in a commercial enterprise
- A person who operates a motor vehicle or motor vehicle and trailer or semitrailer for the purpose of transporting hazardous materials, unless any of the following applies:
  - It's not a commercial enterprise
  - Transporting hazardous materials is incidental to the purpose of travel at the time the accident occurs
  - The hazardous materials weigh less than 1,000 lbs.
  - If a combustible liquid, the hazardous material is less than 110 gallons
- A person who operates a passenger-carrying motor vehicle to transport passengers for hire, unless the person is a car pool operator and the following applies:
  - The person does not receive more than 20 cents per mile compensation or alternates driving with other passengers; and
  - The person is not making the trip solely for the purpose of carrying a passenger

28-4033 Financial responsibility requirements

Commercial motor carriers must maintain liability coverage in the following amounts (for bodily injury, death and property damage combined):

For non-hazardous materials transport:

- For vehicles weighing more than 26,000 lbs.: $750,000
- For vehicles weighing more than 20,001 lbs. up to 26,000 lbs.: $300,000

For passenger transport:

- For vehicles with a seating capacity of less than 16 passengers: $750,000 plus $300,000 uninsured coverage
- For vehicles with a seating capacity of less than 7 passengers, not operated on a regular route: $300,000 plus $300,000 uninsured coverage

For hazardous materials transport:

- Either $5 million or $1 million, depending on type and quantity

For leased or rented vehicles:

- Lessors must provide required minimum coverage or require that lessee meet financial responsibility requirements
- If the lessee uses the leased or rented vehicle for purposes that subject it to higher required minimum coverage, then the lessee must provide that coverage.

Uninsured motorist requirements may be met by a self-insurance program authorized under 28-4007.

Certain state and political subdivision vehicles are exempt from uninsured motorist requirements.

28-4034 Maintenance, certification and verification of financial requirements

Commercial motor carriers must maintain commercial motor vehicle liability requirements. ADOT may require commercial motor carriers to certify that they meet requirements and forward certification to insurers for verification. Regarding such verification, insurers incur no liability for good faith reports to ADOT based on the most recent information.

28-4036 Violation; classification

Someone who operates or causes to be operated a vehicle that does not meet commercial motor carrier requirements is guilty of a class 3 misdemeanor and a class 1 misdemeanor if the vehicle is involved in an accident.

28-4037 Foreign vehicles; exception

Foreign commercial motor carriers from countries that don't have an agreement with Arizona must provide ADOT with proof of financial responsibility, except single trip permit holders. To obtain single trip permits, operators must provide ADOT with proof of financial responsibility pursuant to 28-2325.

Article 3. Proof of Financial Responsibility for the Future

28-4072 Nonpayment of judgments; suspension; exceptions

Upon receipt of a certified copy of a judgment, ADOT must suspend the license and registration of the judgment debtor, unless the judgment creditor consents in writing on an ADOT form to the judgment debtor's retaining license and registration. Judgment debtors filing all of the following with ADOT may be relieved of suspension if ADOT is satisfied that coverage meeting the minimum requirements, issued by an authorized insurer, was in effect at the time of the accident and that the insurer is liable:

- An affidavit stating that the judgment debtor was insured at the time of the accident, that the insurer was liable to pay and the reason, if known, why the insurer has not paid; and
- An original or certified copy of the insurance policy in effect at the time of the accident; and
- Other documents to show coverage

28-4073 Suspension length; reinstatement; designated fund

Mandatory suspension under 28-4072 remains in effect until the judgment is satisfied, is not renewed or otherwise becomes unenforceable and the judgment debtor presents proof of financial responsibility. If an affidavit is filed with ADOT stating that the judgment creditor can't be found and setting forth the steps taken in the search, and the judgment is paid into an ADOT trust, license and registration may be reinstated.

28-4075 Installment payment of judgments; default

If a judgment debtor gets a court order allowing installment payments of a judgment, and maintains proof of financial responsibility, ADOT cannot suspend license and registration or must reinstate license and registration. If the debtor defaults, ADOT must suspend license and registration until the judgment is satisfied.

28-4076 Alternative methods of proof

Those required to provide proof of financial responsibility can do so by filing a certificate of insurance pursuant to 28-4077 or 28-4078 or a certificate of deposit of cash pursuant to 28-4084.

28-4077 Certificate of insurance

A person may give proof of financial responsibility to ADOT by filing a certificate of insurance in a form prescribed by ADOT. Motor vehicles may not be registered or renewed if not designated by explicit description or appropriate reference on a Certificate of Insurance in the name of the person required to file proof of financial responsibility.

28-4078 Certificate by nonresident

Nonresident owners of motor vehicles may (but are not required to) provide ADOT with proof of financial responsibility, which ADOT must accept if:

- The insurer executes a power of attorney authorizing the Director of ADOT to accept service on its behalf in an action arising out of a motor vehicle accident in Arizona; and
- The insurer agrees in writing that the policy conforms with the laws of Arizona

If an insurer unauthorized to conduct business in Arizona defaults on a judgment, ADOT cannot accept certification of that insurer as proof of financial responsibility.

28-4081 Notice; cancellation or termination of policy

If an insurer has certified a policy as proof of financial responsibility to ADOT pursuant to 28-4077 or 28-4078, the insurer cannot cancel the insurance until 10 days after providing notice of cancellation to ADOT.

28-4082 Applicability to other policies

Chapter 9 (this chapter) does not apply to policies covering persons in an insured's employ using motor vehicles not owned by the insured.

28-4084 Monies or certificates of deposit as proof; exception

The Arizona Treasurer may accept deposits of $40,000 cash or certificates of deposit and issue certificates of proof of financial responsibility, provided the depositor provides evidence that there are no judgments pending against the depositor in the depositor's county of residence. Deposits of this kind may not be used to satisfy the requirements of Article 2 (motor carrier financial responsibility).

28-4088 Duration, cancellation and return of proof

On request, ADOT must waive proof of financial responsibility requirements:

- At any time after three years from the date the proof was required; or
- The person for whom proof was given dies or becomes permanently unable to operate a motor vehicle; or
- The person who gave proof surrenders their license and registration to ADOT

If a person who surrenders their license and registration to ADOT applies for reinstatement within three years, ADOT cannot reinstate until proof of financial responsibility has been received for the intervening time period.

Article 4. Mandatory Motor Vehicle Insurance

28-4132 Financial responsibility requirement exemptions

Owners/operators of the following are exempt from proof of financial responsibility:

- Farm tractors and trailers
- Road machinery
- Trailers and semitrailers not used for commercial purposes
- Motor vehicles owned by United States government
- Vehicles subject to special registration under 28-2154 (a 30-day special registration for vehicles purchased by nonresidents that will be removed from the state or a 90-day special registration for noncommercial vehicles purchased by residents for which complete information is not available – a second 90-day special registration may be issued in certain cases, but no more than two consecutive 90-day special registrations may be issued in 12 months – or a 180-day special registration for residents who have a judgment against them in another state that requires suspension of registration)
- Golf carts
- ATVs operated exclusively on dirt roads not maintained by the state or a political subdivision

28-4133 Insurance identification cards; documentary evidence; exception

Insurers must issue at least two insurance identification cards that state:

- Persons must keep proof of financial responsibility in vehicles at all times
- The card meets that requirement

- The card is evidence of financial responsibility for ADOT

Evidence of proof of financial responsibility issued by insurers must state:

- The insurer's name as listed with DOI
- The mailing address and telephone number of the insured or its authorized agent
- Other information required by ADOT to verify coverage
- If a binder is issued by an agent, the name, mailing address and telephone number of the agent

This section does not apply to commercial motor carrier policies providing automatic coverage for additional or newly acquired vehicles.

28-4134 Law enforcement officer responsibilities

Upon investigating an accident or alleged violation, a law enforcement officer must check ADOT's computer system for any notice of cancellation or nonrenewal or indication the vehicle is not registered pursuant to 28-4152 (see below). The officer must require presentation of proof of financial responsibility and must issue a citation if the computer check is positive or there's an indication the vehicle is not registered pursuant to 28-4132 unless the person presents proof of financial responsibility.

28-4135 Motor vehicle financial responsibility requirement; civil penalties

Failure to produce proof of financial responsibility at the request of a law enforcement officer investigating an accident or alleged violation is a civil traffic violation for which the court:

- For the first offense, may fine a minimum $250 and suspend license, registration and plates for three months
- For 2 or more violations in 36 months, must fine a minimum $750 and suspend license, registration and plates for six months
- For 3 or more violations in 36 months, must fine a minimum $750 and suspend license, registration and plates for one year

Citations for violations under this section must be dismissed if the person provides evidence to the court at or before hearing that financial responsibility requirements were met at the time of the citation.

28-4137 Mitigation; rules

The court may reduce or waive penalties under 28-4135 upon proof of purchase of a six month policy and may suspend imposition of penalties under 28-4135 for 30 days if the person is willing to purchase insurance.

28-4138 Charges of violations

Suspensions under 28-4135 may run concurrently with other suspensions arising out of same acts.

28-4139 License plate display violation; civil penalty; disposition

There is a mandatory $250 fine for displaying plates after suspension of registration or plates. ADOT must provide information on suspended license plates to law enforcement agencies.

28-4141 Suspension of license, registration and license plates

If there is a violation of Article 4, Mandatory Motor Vehicle Insurance, the court

- For the first violation in 36 months, may suspend driver's license; if it suspends driver's license, then it must suspend registration and plates for 3 months
- For additional violations in 36 months, it must suspend driver's license; registration and plates
- Registration and plate suspensions remain in effect until proof of financial responsibility is filed with ADOT and a $25 fee is paid to ADOT
- License suspensions remain in effect until proof of financial responsibility is filed with ADOT and a $10 fee is paid to ADOT

If the person is a nonresident, the court must direct ADOT to suspend nonresident operating privileges and notify the driver's license issuing agency in the person's state of residence of that suspension.

28-4142 Vehicle registration; financial responsibility verifications; exception; violation; classification

A person applying to register a vehicle in Arizona consents to comply with ADOT financial responsibility verifications. ADOT must review compliance 30 days after issuance of initial registration and before renewal. If non-compliant, ADOT must send a notice of intent to suspend registration and plates to the registrant. Forged or unauthorized proof of financial responsibility is a class 2 misdemeanor.

28-4143 Vehicle accident; financial responsibility verification; suspension

ADOT may verify financial responsibility for vehicles involved in accidents in Arizona including unregistered vehicles. For any such vehicles it verifies, ADOT must send information in the record to the insurer or the "applicable party" for verification. Upon receipt of a denial or lack of information, ADOT must send notice to the registrant that they have 30 days to submit proof of financial responsibility. ADOT must verify proof submitted to it by registrants by sending information to the insurer or appropriate party with notice that they have 30 days to notify ADOT in writing whether or not the policy was valid on the date of the accident. Upon receipt of a letter of denial of coverage, ADOT must send notice to the registrant that the insurer denies coverage on the date of the accident and that their license and registration will be suspended in 15 days unless they submit further proof of coverage or request a hearing. If the proof of financial responsibility submitted indicates self-insurance or insurance via a certificate of deposit, ADOT must verify. If evidence of self-insurance or insurance via a certificate of deposit is invalid, ADOT must send notice to the registrant that their license and registration will be suspended in 15 days unless they request a hearing.

28-4144 Notice; suspension; reinstatement fees

After ADOT sends notice to the registrant as in 28-4143 above, if the response indicates the vehicle doesn't meet financial responsibility requirements, ADOT must send a second notice that the license and registration will be suspended in 15 days unless ADOT receives notice in writing that the financial responsibility requirement was met on the day of

the accident or they request a hearing. If ADOT receives no response in 30 days, ADOT must send notice that their license and registration will be suspended in 15 days unless they submit further proof of financial responsibility or proof the vehicle was sold. If no response is received, ADOT must suspend license, plates and registration. If proof of responsibility or sale is presented later, ADOT must (if no other basis for the suspension) remove the suspension if proof of financial responsibility is proven. With one exception (below), suspensions are for a minimum of one year and ADOT cannot terminate the suspension until the person files proof of financial responsibility with ADOT and pays ADOT $10 to reinstate the driver's license and $25 to reinstate the registration and plates. The exception to this is commercial motor carriers as set forth in Article 2, above. *(Another exception given is people whose registration was reinstated pursuant to subsection B of this section. There is no reinstatement provision in subsection B of this section.)*

28-4145 Restricted license and registration; rules

Someone whose license, registration and plates have been suspended pursuant to 28-4143 or 28-4144 can apply for a restricted license and registration to travel for work, to and from work, and at certain times, depending on work schedule. ADOT must prescribe criteria for issuing restricted license and registration by rule. ADOT cannot issue a restricted license before the person provides proof of financial responsibility and pays reinstatement fees set forth in 28-4144. People whose license, registration or plates have been suspended for a mandatory motor vehicle insurance violation under Article 4 (does not include commercial motor carriers) or by ADOT can apply for a restricted license and registration to travel for work, to and from work, for school and to and from school, and at certain times, depending on work and school schedule. ADOT cannot issue a restricted license before the person provides proof of financial responsibility.

28-4146 Immunity

Insurers are not civilly liable for reports to ADOT under 28-4143 or 28-4144 made in good faith and based on the most recent information available to the insurer or appropriate party.

28-4148 Notice of insurance cancellation or nonrenewal

Insurers must submit within 7 days, via EDI as prescribed by ADOT, all new issues, nonrenewals and cancellations. ADOT cannot require VIN numbers for vehicles covered under commercial policies that provide automatic coverage for newly acquired vehicles. ADOT must provide new issue, nonrenewal and cancellation information to law enforcement agencies via on-line computerized call-in from vehicles. On cancellation or nonrenewal, insurers must notify insureds that ADOT has been notified and that registration may be suspended. This information is available only to law enforcement agencies for law enforcement purposes except when it is sought pursuant to 28-4143 (verification of proof of financial responsibility sought in the case of an accident).

28-4149 Suspension; notice of intent

ADOT must send notice that it will suspend registration and plates upon receipt of information from an insurer or its own records that financial responsibility requirements have not been met pursuant to a schedule prescribed by ADOT. On receiving proof of financial responsibility, ADOT must delete cancellation or nonrenewal from the record. If the person doesn't provide proof of financial responsibility within 15 days of the notice, ADOT must notify the person that registration and plates have been suspended. If the person later provides proof of compliance prior to suspension, ADOT must void the suspension. ADOT cannot reinstate registration and plates until proof of financial responsibility is filed.

28-4151 Reinstatement fee; motor vehicle liability insurance enforcement fund

People cannot pay more than $50 to reinstate suspended registration and plates except commercial motor carriers. The fees are deposited into a motor vehicle liability insurance enforcement fund administered by ADOT and subject to legislative appropriation.

28-4152 Nonoperation of vehicle on highways of this state; exception; certification

Motor vehicles not operated on Arizona highways are not subject to proof of financial responsibility if, within 15 days of receipt of notice from an insurer to the insured that ADOT has been notified of cancellation or nonrenewal pursuant to 28-4148, owners/lessees:

- Certify that vehicles are non-operational, will be placed in storage or will not be operated on Arizona highways;
- Give the reason for doing so; and
- State that vehicles will not be operated on Arizona highways without complying with financial responsibility requirements.

Owners/lessees must so certify annually and vehicle status is noted on ADOT's computer system. Persons convicted of a violation of financial responsibility requirements may not so certify for one year post-conviction.

28-4153 False certification or affirmation; violation; classification; suspension; fees

False certification under 28-4152 is a class 2 misdemeanor. If ADOT believes false certification has occurred, it must suspend license, registration and plates for one year and send notice that it will do so unless the registrant requests a hearing within 15 days. ADOT may not reinstate until the registrant files proof of financial responsibility and pays ADOT a $10 fee responsibility.

Chapter 10. Vehicle Dealers, Automotive Recyclers and Transporters

Article 7. Dealer and Manufacturer License Plates

28-4549 Electronic record of temporary registration as notice of transfer; fee

Dealers issuing temporary registration plates must send issuance of temporary registration plates electronically to an authorized third party and pay the third party $1 per transmittal. Electronic transmittal is a notice of transfer.

28-4555 Notice of vehicle transfer

Dealers, manufacturers, etc. must immediately notify ADOT of motor vehicle sales, leases or transfers to non-dealer/non-manufacturers on a form that contains:

- date of the transfer
- the names and addresses of the transferor and transferee
- a description of the vehicle as provided in the form.

Output 1

Spearman Correlation Analysis: IRC UM Rate

Correlations

			IRC % UM '95-'97 Avg	UM Offer Language Specified?	2000 Census % of Population Minority	UIM Offer Language Specified?	Reinstate Reg Charge	Reinstate Lic Charge	III Per Person Minimum	III Per Accident Minimum	III 2000 Voluntary Insured PPA	2001 BTS reg priv truck	2001 BTS reg priv auto	III Property Minimum	III UM compulsory?	2000 Census % of Population Urban
Spearman's rho	IRC % UM '95-'97 Avg	Correlation Coefficient	1.000	-.587**	.568**	-.527*	.521*	.505*	-.433**	-.433**	.409**	.391**	.346*	-.345*	-.289*	.282*
		Sig. (2-tailed)	.	.003	.000	.012	.046	.019	.002	.002	.004	.005	.014	.014	.041	.048
		N	50	23	50	22	15	21	50	50	49	50	50	50	50	50
	UM Offer Language Specified?	Correlation Coefficient	-.587**	1.000	-.453*	.909**	.144	-.143	.451*	.451*	-.518*	-.564**	-.538**	.356	.371	-.590**
		Sig. (2-tailed)	.003	.	.030	.000	.758	.694	.031	.031	.014	.005	.008	.095	.082	.003
		N	23	23	23	21	7	10	23	23	22	23	23	23	23	23
	2000 Census % of Population Minority	Correlation Coefficient	.568**	-.453*	1.000	-.338	.261	.205	-.489**	-.489**	.315*	.345*	.383**	-.280*	-.248	.441**
		Sig. (2-tailed)	.000	.030	.	.124	.347	.372	.000	.000	.027	.014	.006	.049	.083	.001
		N	50	23	50	22	15	21	50	50	49	50	50	50	50	50
	UIM Offer Language Specified?	Correlation Coefficient	-.527*	.909**	-.338	1.000	.144	-.174	.394	.394	-.441*	-.489*	-.460*	.364	.356	-.518*
		Sig. (2-tailed)	.012	.000	.124	.	.758	.654	.069	.069	.045	.021	.031	.096	.104	.014
		N	22	21	22	22	7	9	22	22	21	22	22	22	22	22
	Reinstate Reg Charge	Correlation Coefficient	.521*	.144	.261	.144	1.000	.748**	-.488	-.488	.013	.002	.030	-.155	.062	-.240
		Sig. (2-tailed)	.046	.758	.347	.758	.	.002	.065	.065	.965	.995	.914	.582	.826	.390
		N	15	7	15	7	15	14	15	15	15	15	15	15	15	15
	Reinstate Lic Charge	Correlation Coefficient	.505*	-.143	.205	-.174	.748**	1.000	-.478*	-.478*	.130	-.074	-.061	-.259	-.231	-.014
		Sig. (2-tailed)	.019	.694	.372	.654	.002	.	.028	.028	.573	.751	.794	.257	.313	.951
		N	21	10	21	9	14	21	21	21	21	21	21	21	21	21
	III Per Person Minimum	Correlation Coefficient	-.433**	.451*	-.489**	.394	-.488	-.478*	1.000	1.000**	-.240	-.187	-.240	.587**	.263	-.353*
		Sig. (2-tailed)	.002	.031	.000	.069	.065	.028	.	.	.097	.192	.093	.000	.065	.012
		N	50	23	50	22	15	21	50	50	49	50	50	50	50	50
	III Per Accident Minimum	Correlation Coefficient	-.433**	.451*	-.489**	.394	-.488	-.478*	1.000**	1.000	-.240	-.187	-.240	.587**	.263	-.353*
		Sig. (2-tailed)	.002	.031	.000	.069	.065	.028	.	.	.097	.192	.093	.000	.065	.012
		N	50	23	50	22	15	21	50	50	49	50	50	50	50	50
	III 2000 Voluntary Insured PPA	Correlation Coefficient	.409**	-.518*	.315*	-.441*	.013	.130	-.240	-.240	1.000	.911**	.923**	-.284*	-.100	.374**
		Sig. (2-tailed)	.004	.014	.027	.045	.965	.573	.097	.097	.	.000	.000	.048	.495	.008
		N	49	22	49	21	15	21	49	49	49	49	49	49	49	49
	2001 BTS reg priv truck	Correlation Coefficient	.391**	-.564**	.345*	-.489*	.002	-.074	-.187	-.187	.911**	1.000	.944**	-.239	-.190	.332*
		Sig. (2-tailed)	.005	.005	.014	.021	.995	.751	.192	.192	.000	.	.000	.094	.187	.018
		N	50	23	50	22	15	21	50	50	49	50	50	50	50	50
	2001 BTS reg priv auto	Correlation Coefficient	.346*	-.538**	.383**	-.460*	.030	-.061	-.240	-.240	.923**	.944**	1.000	-.270	-.048	.446**
		Sig. (2-tailed)	.014	.008	.006	.031	.914	.794	.093	.093	.000	.000	.	.058	.740	.001
		N	50	23	50	22	15	21	50	50	49	50	50	50	50	50
	III Property Minimum	Correlation Coefficient	-.345*	.356	-.280*	.364	-.155	-.259	.587**	.587**	-.284*	-.239	-.270	1.000	.120	-.289*
		Sig. (2-tailed)	.014	.095	.049	.096	.582	.257	.000	.000	.048	.094	.058	.	.406	.042
		N	50	23	50	22	15	21	50	50	49	50	50	50	50	50
	III UM compulsory?	Correlation Coefficient	-.289*	.371	-.248	.356	.062	-.231	.263	.263	-.100	-.190	-.048	.120	1.000	-.045
		Sig. (2-tailed)	.041	.082	.083	.104	.826	.313	.065	.065	.495	.187	.740	.406	.	.755
		N	50	23	50	22	15	21	50	50	49	50	50	50	50	50
	2000 Census % of Population Urban	Correlation Coefficient	.282*	-.590**	.441**	-.518*	-.240	-.014	-.353*	-.353*	.374**	.332*	.446**	-.289*	-.045	1.000
		Sig. (2-tailed)	.048	.003	.001	.014	.390	.951	.012	.012	.008	.018	.001	.042	.755	.
		N	50	23	50	22	15	21	50	50	49	50	50	50	50	50

**. Correlation is significant at the .01 level (2-tailed).

*. Correlation is significant at the .05 level (2-tailed).

Output 2

Multiple Regression: IRC UM Rate, Urban Population, Minority Population, Median Household Income, Per Accident Minimum, Property Minimum, Voluntary Market, Involuntary Market and Average amount paid out for damages covered by liability insurance

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	2000 Census % of Population Urban	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	III 2000 Voluntary Insured PPA	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	III Property Minimum	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: III 2000 Avg Liab Expenditure

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.667[a]	.444	.431	$76.6287
2	.714[b]	.509	.485	$72.8902
3	.762[c]	.581	.550	$68.1791

a. Predictors: (Constant), 2000 Census % of Population Urban

b. Predictors: (Constant), 2000 Census % of Population Urban, III 2000 Voluntary Insured PPA

c. Predictors: (Constant), 2000 Census % of Population Urban, III 2000 Voluntary Insured PPA, III Property Minimum

ANOVA[d]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	197156.5	1	197156.510	33.576	.000[a]
	Residual	246622.2	42	5871.957		
	Total	443778.7	43			
2	Regression	225946.5	2	112973.259	21.264	.000[b]
	Residual	217832.2	41	5312.980		
	Total	443778.7	43			
3	Regression	257843.0	3	85947.677	18.490	.000[c]
	Residual	185935.7	40	4648.392		
	Total	443778.7	43			

a. Predictors: (Constant), 2000 Census % of Population Urban

b. Predictors: (Constant), 2000 Census % of Population Urban, III 2000 Voluntary Insured PPA

c. Predictors: (Constant), 2000 Census % of Population Urban, III 2000 Voluntary Insured PPA, III Property Minimum

d. Dependent Variable: III 2000 Avg Liab Expenditure

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	68.414	55.610		1.230	.225
	2000 Census % of Population Urban	442.013	76.282	.667	5.794	.000
2	(Constant)	38.946	54.391		.716	.478
	2000 Census % of Population Urban	521.727	80.235	.787	6.502	.000
	III 2000 Voluntary Insured PPA	-8.97E-06	.000	-.282	-2.328	.025
3	(Constant)	155.132	67.495		2.298	.027
	2000 Census % of Population Urban	447.007	80.287	.674	5.568	.000
	III 2000 Voluntary Insured PPA	-9.64E-06	.000	-.303	-2.668	.011
	III Property Minimum	-4.74E-03	.002	-.295	-2.620	.012

a. Dependent Variable: III 2000 Avg Liab Expenditure

Excluded Variables[d]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics: Tolerance
1	2000 Census % of Population Minority	.153[a]	1.176	.246	.181	.779
	IRC % UM '95-'97 Avg	-.042[a]	-.353	.726	-.055	.943
	III 2000 Voluntary Insured PPA	-.282[a]	-2.328	.025	-.342	.818
	III 2000 Involuntary Insured PPA	.074[a]	.642	.525	.100	1.000
	III Per Accident Minimum	-.142[a]	-1.136	.263	-.175	.837
	III Property Minimum	-.274[a]	-2.273	.028	-.335	.830
	2000 Census 1999 Median Household Income	.178[a]	1.152	.256	.177	.551
2	2000 Census % of Population Minority	.165[b]	1.339	.188	.207	.778
	IRC % UM '95-'97 Avg	.009[b]	.080	.936	.013	.907
	III 2000 Involuntary Insured PPA	.099[b]	.903	.372	.141	.991
	III Per Accident Minimum	-.179[b]	-1.506	.140	-.232	.824
	III Property Minimum	-.295[b]	-2.620	.012	-.383	.826
	2000 Census 1999 Median Household Income	.149[b]	1.008	.319	.157	.547
3	2000 Census % of Population Minority	.146[c]	1.269	.212	.199	.775
	IRC % UM '95-'97 Avg	-.068[c]	-.607	.548	-.097	.846
	III 2000 Involuntary Insured PPA	.170[c]	1.645	.108	.255	.939
	III Per Accident Minimum	-.041[c]	-.315	.755	-.050	.618
	2000 Census 1999 Median Household Income	.213[c]	1.544	.131	.240	.533

a. Predictors in the Model: (Constant), 2000 Census % of Population Urban

b. Predictors in the Model: (Constant), 2000 Census % of Population Urban, III 2000 Voluntary Insured PPA

c. Predictors in the Model: (Constant), 2000 Census % of Population Urban, III 2000 Voluntary Insured PPA, III Property Minimum

d. Dependent Variable: III 2000 Avg Liab Expenditure

Output 3

Multiple Regression: Urban Population, Median Household Income, Average amount paid out for damages covered by liability insurance, Minority Population and IRC UM Rate

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	2000 Census % of Population Minority	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: IRC % UM '95-'97 Avg

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.384[a]	.147	.127	5.985E-02

a. Predictors: (Constant), 2000 Census % of Population Minority

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.659E-02	1	2.659E-02	7.422	.009[a]
	Residual	.154	43	3.582E-03		
	Total	.181	44			

a. Predictors: (Constant), 2000 Census % of Population Minority

b. Dependent Variable: IRC % UM '95-'97 Avg

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.139E-02	.017		5.458	.000
	2000 Census % of Population Minority	.184	.067	.384	2.724	.009

a. Dependent Variable: IRC % UM '95-'97 Avg

Excluded Variables[b]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics: Tolerance
1	2000 Census % of Population Urban	.086[a]	.533	.597	.082	.774
	2000 Census 1999 Median Household Income	-.089[a]	-.602	.550	-.093	.930
	III 2000 Avg Liab Expenditure	-.056[a]	-.358	.722	-.055	.814

a. Predictors in the Model: (Constant), 2000 Census % of Population Minority

b. Dependent Variable: IRC % UM '95-'97 Avg

Output 4

Simple Regression: Reinstate License Fee and IRC UM Rate

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Reinstate Lic Charge[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: IRC % UM '95-'97 Avg

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.591[a]	.349	.315	4.568E-02

a. Predictors: (Constant), Reinstate Lic Charge

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.129E-02	1	2.129E-02	10.203	.005[a]
	Residual	3.964E-02	19	2.086E-03		
	Total	6.092E-02	20			

a. Predictors: (Constant), Reinstate Lic Charge

b. Dependent Variable: IRC % UM '95-'97 Avg

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.473E-02	.014		6.862	.000
	Reinstate Lic Charge	2.718E-04	.000	.591	3.194	.005

a. Dependent Variable: IRC % UM '95-'97 Avg

Simple Regression: Reinstate Registration Fee and IRC UM Rate

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Reinstate Reg Charge[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: IRC % UM '95-'97 Avg

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.659[a]	.434	.391	4.082E-02

a. Predictors: (Constant), Reinstate Reg Charge

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.663E-02	1	1.663E-02	9.983	.008[a]
	Residual	2.166E-02	13	1.666E-03		
	Total	3.829E-02	14			

a. Predictors: (Constant), Reinstate Reg Charge

b. Dependent Variable: IRC % UM '95-'97 Avg

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.967E-02	.016		6.264	.000
	Reinstate Reg Charge	2.531E-04	.000	.659	3.160	.008

a. Dependent Variable: IRC % UM '95-'97 Avg

Output 5

Simple Regression: UM Compulsory and IRC UM Rate

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	III UM compulsory?[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: IRC % UM '95-'97 Avg

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.279[a]	.078	.059	6.183E-02

a. Predictors: (Constant), III UM compulsory?

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.555E-02	1	1.555E-02	4.067	.049[a]
	Residual	.184	48	3.824E-03		
	Total	.199	49			

a. Predictors: (Constant), III UM compulsory?

b. Dependent Variable: IRC % UM '95-'97 Avg

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.145	.011		12.844	.000
	III UM compulsory?	-3.60E-02	.018	-.279	-2.017	.049

a. Dependent Variable: IRC % UM '95-'97 Avg

Output 6

Simple Regression: UM Offer Language Specified and IRC UM Rate

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	UM Offer Language Specified?[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: IRC % UM '95-'97 Avg

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.572[a]	.328	.295	4.041E-02

a. Predictors: (Constant), UM Offer Language Specified?

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.670E-02	1	1.670E-02	10.228	.004[a]
	Residual	3.428E-02	21	1.633E-03		
	Total	5.098E-02	22			

a. Predictors: (Constant), UM Offer Language Specified?

b. Dependent Variable: IRC % UM '95-'97 Avg

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.147	.012		12.089	.000
	UM Offer Language Specified?	-5.39E-02	.017	-.572	-3.198	.004

a. Dependent Variable: IRC % UM '95-'97 Avg

Simple Regression: UIM Offer Language Specified and IRC UM Rate

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	UIM Offer Language Specified?[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: IRC % UM '95-'97 Avg

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.502[a]	.252	.214	4.261E-02

a. Predictors: (Constant), UIM Offer Language Specified?

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.222E-02	1	1.222E-02	6.732	.017[a]
	Residual	3.631E-02	20	1.815E-03		
	Total	4.853E-02	21			

a. Predictors: (Constant), UIM Offer Language Specified?

b. Dependent Variable: IRC % UM '95-'97 Avg

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.143	.012		11.654	.000
	UIM Offer Language Specified?	-4.73E-02	.018	-.502	-2.595	.017

a. Dependent Variable: IRC % UM '95-'97 Avg

Output 7

Spearman Correlation Analysis: Average amount paid out for damages covered by liability insurance

Correlations

			III 2000 Avg Liab Expenditure	2000 Census % of Population Urban	2000 Census 1999 Median Household Income	2000 Census % of Population Minority	III Property Minimum	III Per Person Minimum	III Per Accident Minimum	III 2000 Involuntary Insured PPA
Spearman's rho	III 2000 Avg Liab Expenditure	Correlation Coefficient	1.000	.687**	.492**	.479**	-.430**	-.415**	-.415**	.378**
		Sig. (2-tailed)	.	.000	.001	.000	.002	.003	.003	.007
		N	50	50	45	50	50	50	50	49
	2000 Census % of Population Urban	Correlation Coefficient	.687**	1.000	.674**	.441**	-.289*	-.353*	-.353*	.242
		Sig. (2-tailed)	.000	.	.000	.001	.042	.012	.012	.094
		N	50	50	45	50	50	50	50	49
	2000 Census 1999 Median Household Income	Correlation Coefficient	.492**	.674**	1.000	.225	-.148	-.103	-.103	.405**
		Sig. (2-tailed)	.001	.000	.	.137	.331	.500	.500	.006
		N	45	45	45	45	45	45	45	44
	2000 Census % of Population Minority	Correlation Coefficient	.479**	.441**	.225	1.000	-.280*	-.489**	-.489**	.459**
		Sig. (2-tailed)	.000	.001	.137	.	.049	.000	.000	.001
		N	50	50	45	50	50	50	50	49
	III Property Minimum	Correlation Coefficient	-.430**	-.289*	-.148	-.280*	1.000	.587**	.587**	-.268
		Sig. (2-tailed)	.002	.042	.331	.049	.	.000	.000	.062
		N	50	50	45	50	50	50	50	49
	III Per Person Minimum	Correlation Coefficient	-.415**	-.353*	-.103	-.489**	.587**	1.000	1.000**	-.266
		Sig. (2-tailed)	.003	.012	.500	.000	.000	.	.	.065
		N	50	50	45	50	50	50	50	49
	III Per Accident Minimum	Correlation Coefficient	-.415**	-.353*	-.103	-.489**	.587**	1.000**	1.000	-.266
		Sig. (2-tailed)	.003	.012	.500	.000	.000	.	.	.065
		N	50	50	45	50	50	50	50	49
	III 2000 Involuntary Insured PPA	Correlation Coefficient	.378**	.242	.405**	.459**	-.268	-.266	-.266	1.000
		Sig. (2-tailed)	.007	.094	.006	.001	.062	.065	.065	.
		N	49	49	44	49	49	49	49	49

**. Correlation is significant at the .01 level (2-tailed).

*. Correlation is significant at the .05 level (2-tailed).

Output 8
Simple Regression: Per Person Minimum and IRC UM Rate

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	III Per Person Minimum[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: IRC % UM '95-'97 Avg

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.377[a]	.142	.124	5.965E-02

a. Predictors: (Constant), III Per Person Minimum

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.831E-02	1	2.831E-02	7.957	.007[a]
	Residual	.171	48	3.558E-03		
	Total	.199	49			

a. Predictors: (Constant), III Per Person Minimum

b. Dependent Variable: IRC % UM '95-'97 Avg

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.209	.029		7.195	.000
	III Per Person Minimum	-3.61E-06	.000	-.377	-2.821	.007

a. Dependent Variable: IRC % UM '95-'97 Avg

Output 9

Multiple Regression: UM Mandatory, Per Person Minimum, Average amount paid out for damages covered by liability insurance and UM Estimated Average Premium

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	III Per Person Minimum	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: UM Avg Ann Premium

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.535[a]	.286	.238	$29.9497

a. Predictors: (Constant), III Per Person Minimum

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5389.437	1	5389.437	6.008	.027[a]
	Residual	13454.813	15	896.988		
	Total	18844.250	16			

a. Predictors: (Constant), III Per Person Minimum

b. Dependent Variable: UM Avg Ann Premium

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	118.616	30.403		3.901	.001
	III Per Person Minimum	-3.30E-03	.001	-.535	-2.451	.027

a. Dependent Variable: UM Avg Ann Premium

Excluded Variables[b]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics: Tolerance
1	III UM compulsory?	-.116[a]	-.516	.614	-.137	.983
	III 2000 Avg Liab Expenditure	.150[a]	.480	.639	.127	.511

a. Predictors in the Model: (Constant), III Per Person Minimum

b. Dependent Variable: UM Avg Ann Premium

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