

# Characteristics of Uninsured Motorist

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February 1999

## ABSTRACT

This paper describes work to identify the characteristics of uninsured motorists and to find out why they do not insure. To the extent that this study's findings overlap with prior studies, the findings tended to be in agreement. This survey found that about 10% of vehicle owners owned an uninsured vehicle. Of these uninsured, 58% also owned another insured vehicle and 42% were pure uninsured, not owning any insured vehicles. Demographically, the uninsured had a higher likelihood of being a home renter, having an income of less than \$20,000, being in the 18 to 24 age group, having a high school or less education, being male, being Hispanic or Black, and having lived in their present home for a shorter time period. While the uninsured appear to be relatively more active in searching for insurance information, they seem to have less trust of insurance companies and perceived themselves as the type of person who does not have insurance. A wide variety of reasons exist for not insuring. However, 80% of the uninsured cited non-use of the vehicle or the cost of insurance as the main reason they did not insure. The pure uninsured appeared to be the most alienated from the insurance system, and had more difficulty simply finding a place to buy auto insurance. A majority of those currently uninsured and those currently purchasing a minimum limits policy had a high level of interest in a lower cost alternate to the current minimum limits policy and stated that they would probably purchase such a policy even if it was offered at only a 10% reduction from the current minimum level. While this paper describes the best information currently available on the uninsured, a certain amount of caution is appropriate in projecting the findings. Assessments of the representativeness and accuracy of the data indicate that the source data are not likely to be complete.

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## **EXECUTIVE SUMMARY**

This report describes attempts to add some meaning to the statistics on the number of uninsured motorists. Several studies during the past ten years have begun the process of identifying the characteristics associated with uninsured motorists. These studies tended to have relatively small samples and not to have included any assessments of how representative their data was of all uninsured.

The issue of representativeness is significant because the uninsured seem to be more likely to be found in the most difficult to reach segments of the population. Also, collecting accurate data is problematic. Driving an uninsured vehicle is against the law and is punishable by a substantial fine. Not surprisingly, individuals violating this law are not always completely forthcoming when questioned.

In order to develop a questionnaire that would maximize the ability to capture accurate information on the ownership of uninsured vehicles, several survey techniques were considered and the literature on surveys dealing with sensitive issues was reviewed. Also, three focus groups and two questionnaire pretests were conducted. This work yielded a more complete understanding of the reasons individuals have for not insuring their vehicle and a questionnaire that seemed to gather information on uninsured vehicles in an unobtrusive and non-threatening way.

Initial plans to use a dual frame methodology that had a component that focused on in-person interviews of households without telephones to complement a large telephone survey had to be abandoned due to the high costs of the in-person interviews of households without telephones. Instead a random telephone survey of 1,008 vehicle owning individuals was conducted. This sized survey has a confidence interval of +/- 3% around estimated percents.

About 10% of those surveyed reported owning an uninsured vehicle. One of the surprising findings was that most of those who owned an uninsured vehicle also owned a vehicle that was insured. These uninsured are called hybrid uninsured and represent 58% of the uninsured in the

sample. The remaining 42% were pure uninsured and did not own any insured vehicles.

The uninsured were more likely to have the following characteristics:

Variable:	Uninsured More Likely To Be:
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

While concern about the costs of auto insurance was wide spread among all respondents, uninsured respondents had an even higher level of concern than those with auto insurance. Uninsured expressed a greater interest in purchasing a lower cost lower coverage (LCLC) policy. Also, uninsured are more likely to say that auto insurance costs more money than they have available. Uninsured respondents also had a higher level of concern about simply being able to find some place where they could buy auto insurance. They also seem to have less trust of insurance companies and are less likely to say that insurance companies are operated fairly. Despite this, it appears that the uninsured were more active in seeking out information on insurance. Uninsured were more likely to have asked a friend about insurance and to have checked on insurance information. However, uninsured are more likely to say that people like themselves do not have auto insurance. This alienation from the insurance system coupled with the low level of involvement most consumers have with the purchase of auto insurance, are challenges an information campaign will have to address. Other differences between uninsured and insured included the tendency of uninsured to own more vehicles than insured. Also, uninsured are more likely to not have either health or life insurance.

A total of 47 different reasons for being uninsured were identified. These were grouped into 11 different categories. Most (80%) of the reasons for being uninsured fell into the two categories of non-use of vehicle or the cost of insurance. The reason for not insuring the vehicle was a key

distinguishing feature of the pure and hybrid uninsured. The majority of the pure uninsured did not insure because of the high cost of insurance. The majority of the hybrid did not insure because they claimed not to use the vehicle.

The pure uninsured tended to match the characteristics of the uninsured described above. The hybrid's characteristics were more like those of the completely insured. In addition to the previously described characteristics, pure uninsured were also more likely to be female (as opposed to all uninsured more likely being male), not employed, single, and speak a language other than English at home.

In general pure uninsured appeared to be more alienated from the insurance system. They reported a higher level of concern about being able to find a *place* to buy auto insurance. They were less likely to have called an insurance company or be contacted by an insurance company. They were more likely to perceive themselves as the kind of person who does not have insurance.

When asked about their interest in a lower cost policy that provides less benefits than the current minimum limits policy, the uninsured expressed a greater interest than the insured. Both the pure uninsured and those currently purchasing a minimum limits policy reported a high level of interest in purchasing such a policy, even if it was offered at only 10% below the price for a current minimum limits policy. Individuals currently purchasing a policy with limits higher than the minimum were the least interested in a lower cost policy involving lower limits.

Most of the previous studies on the characteristics of the uninsured only identified demographic characteristics associated with the uninsured. The findings from the present study related to demographic characteristics of the uninsured tended to match the findings from the earlier studies and in some cases, provide a greater level of detail. Findings related to the uninsured's attitudes, experiences, and purchase interest and intentions are unique to the present study.

Also unique to the present study is an assessment of the representativeness of the sample and the accuracy of the responses. From this assessment it appears that there are problems in the

survey's representativeness and accuracy that are likely to create an incomplete picture of the uninsured. At this point the extent of incompleteness in describing the characteristics of all uninsured is not known, but up to half of the uninsured may be missing from most studies. Additional research and analyses of the survey data may shed light on portion of uninsured escaping measurement.

## BACKGROUND

Persons driving without insurance constitute a public policy problem for California. Quantitative estimates of the numbers of such persons are subject to some reservations and the reasons for violating this insurance law are not well understood. The California Department of Insurance (CDI) embarked on a project in 1997 to learn more about the uninsured motorists in California. The purpose of this report is to describe the methodology and findings of the surveys of the uninsured. Other related reports include Bernstein's (1999) description of an analysis to measure the number and rate of California uninsured vehicles as of June 1, 1997 using large databases of vehicle registrations and insurance records. Hunstad (1999) addresses methodological issues related to measuring the uninsured. A preliminary report on California's uninsured was released in September (CDI, 1998).

Previous efforts to address these issues have suffered from relatively small samples of unknown representativeness. In 1989 as part of a larger national survey the Insurance Research Council (IRC) was able to identify and question about 112 households that had an uninsured vehicle (IRC, 1989). Based on this sample it appears that several factors may affect the likelihood of being uninsured. These factors were:

<u>Variable</u>	<u>Uninsured More Likely</u>	<u>Uninsured Less Likely</u>
age	18-20, 21-24, 25-29	45-54, 55-64, 65+
education	less than high school	college graduate
residence	rent home	own home
employment	unemployed	retired
income	< \$5,000, \$5,000 to 7,499	\$15,000 to 19,999, \$20,000 to 24,999, etc.

A similar survey by the IRC in 1995 identified 159 respondents with an uninsured vehicle. The primary reasons given for not insuring the vehicle were: vehicle not in operating condition (24%), can not afford to buy it (21%), premiums too high (20%), and vehicle runs but is not being used (17%) (IRC, 1995). Another national survey by the IRC in 1996 identified about 338 respondents with uninsured vehicles. This survey confirmed the 1989 findings related to age and education. It found that respondents with less than \$20,000 income were more likely to be uninsured. The increased income level from 1989 to 1996 could have been due to inflation and



the way IRC grouped the income data for reporting purposes. In the 1996 survey, about half of those identified as owning an uninsured vehicle only had one uninsured vehicle. The other half owned two or more uninsured vehicles.

In 1995 the CDI reported correlation coefficients between the rate of uninsured vehicles and the percent minority, per capita income, and average premium for the zip codes in Los Angeles and Alameda counties (CDI, 1995). Their findings showed that:

- the higher the percent minority, the higher the uninsured rate,  
 $r = 0.74(\text{LA})/0.78(\text{Alameda})$
- the higher the average premium, the higher the uninsured rate,  
 $r = 0.62(\text{LA})/0.64(\text{Alameda})$
- the higher the per capita income, the lower the uninsured rate,  
 $r = -0.49(\text{LA})/-0.58(\text{Alameda})$

Using California data that were aggregated to the statewide level for the 11 years from 1978 to 1988, Marowitz (1990) found a significant relationship between median household income and the percent uninsured.

A 1997 survey of California households by the University of Wisconsin reconfirmed some of the earlier findings by the IRC. It found a statistically significant relationship between owning an uninsured vehicle and age, education, and income (Parker, 1998). Respondents who were younger (under 24), less educated, and had less income were more likely to be uninsured.

In a 1998 CDI study comparing 1997 DMV records to insurance company records, the CDI found a clear relationship between vehicle age and the percent of vehicles uninsured. The correlation coefficient between vehicle age and percent uninsured was 0.69, however the relationship between the two variables was not perfectly linear. The uninsured rate was observed to rise rapidly from new vehicles until the vehicles reach an age of about 15 years old, at this point over 40% of these older vehicle were uninsured. After 15 years old, the uninsured rate continued to increase but at a relatively slower pace (CDI, 1998).

## **METHODS**

This study entailed a thorough process to assure as much representativeness as possible in the survey that asked the sensitive question of whether people were breaking the law and driving without insurance. A detailed review of all of the processes used to develop the final data is given in Attachment 1. A summary of the essential steps is give below.

Another CDI study compared 1997 DMV records to insurance company records. Where there were DMV records but no insurance company showing of coverage, an exception file was created. Findings from this matching process are described in detail in Bernstein, 1998. This exception file was the basis for some of the later sampling process. This study's design sought to gain further insight by interviews with persons who owned uninsured vehicles. The rest of this report describes this process and its findings.

### *Focus Groups:*

Prior to the development of a survey instrument to collect information on insurance status, three focus groups were conducted. The purpose of these focus groups was to gain additional insight into the reasons why some people do not insure their vehicle and conversely, to explore why some similarly situated people do insure their vehicle. Additionally, information relevant to the issue of making the survey instrument as non-threatening as possible were solicited.

The three focus groups were conducted in September 1997. Two of the groups were conducted in English and one was conducted in Spanish among individuals who primarily spoke Spanish. One of the English groups was composed of only uninsured motorists and the other was composed of individuals who only purchased the minimum liability insurance required by law.

### *Pretest:*

Using the information collected in the focus groups to build upon the information from previous studies of uninsured motorists, an initial questionnaire was developed.

This questionnaire was pretested in October 1997 on a sample of 59 individuals that were

believed to have a high likelihood of being uninsured.

The results of first pretest did not clearly indicate whether the actual uninsured rate in the sampled population was dramatically lower than expected or the survey instrument was failing to elicit accurate information from uninsured motorists. In order to rule out possible difficulties with the survey instrument a second pretest was performed in November 1997.

*RDD Survey:*

The questionnaire used in the random digit dialing (RDD) telephone survey was a modified version of the second pretest. In order to keep the length of the interview within reason, if the respondent owned more than one vehicle, detailed data were collected on only the oldest vehicle (under the assumption that if any of the respondent's vehicles were not insured, the oldest vehicle would be the most likely candidate, and the lack of insurance expenses would be a confirmation that the vehicle was uninsured).

The survey was fielded in December 1997. A total of 1,008 full interviews were completed. Quotas were established for Los Angeles County and the balance of the state. A minimum of 300 interviews were from Los Angeles County and a minimum of 700 interviews were from the balance of the state. Attachment 4 is a copy of the questionnaire that has been marked to show the basic response frequencies for each question.

The primary purpose of the survey was to explore the possibility of accurately identifying uninsured vehicle owners. If the uninsured vehicle owners could be accurately identified, the results could be used to identify their demographic characteristics and reasons for being uninsured. A secondary objective was to: 1) determine the level or limits of the insured respondents, and 2) to obtain a rough estimate of the interest in low cost low coverage policy. A third level objective was to obtain data on vehicle owner's experiences and attitudes towards insurance.

Due to the need to keep the interview length relatively short (12 minutes) not as many questions

could be included for the second and third level objectives. The net impact of this is that results related to these areas should be considered as indicative of a general inclination of the respondents. Before implementing any large scale programs, additional research should be conducted. A study primarily limited to one of these areas could explore it in greater detail, possibly include some types of validation devices, and provide a more accurate quantification.

*Exception File Survey:*

To validate the suspected uninsured status of the vehicles identified in the exception file created in the file matching process, an additional survey was conducted. The sampling frame for this survey used the same exception file as in the two pretests. In the time period since the pretests additional cleaning had made improvements to the quality of the data. This survey was intended to provide additional data on the type of vehicles and their owners that appeared in the exception file. This survey was fielded in late January and early February 1998. The total sample was slightly over 580.

## **RESULTS**

*Focus Groups:*

Based on the review of previous research findings and the results of the focus groups a comprehensive list of possible reasons for not insuring was prepared. Forty-eight reasons were identified and grouped into the following eleven categories (see Attachment 5 for the complete list):

- vehicle related reasons
- cost or lack of cash/assets
- driving record problems
- availability issues
- lack of perceived need or knowledge of the insurance requirement
- communication/understanding problems
- “it's no benefit to me”
- bad experience with insurance
- not important enough
- miscellaneous
- other

The vehicle related reasons include the vehicle not running or not being used, the perception that

the vehicle is not worth enough to insure<sup>1</sup>, and not being able to get the vehicle registered. Cost related reasons were of two basic types: the insurance costs more than it is worth, and the respondent not having enough money to pay what the insurance costs. The driving record problem reasons involved the respondent having too many tickets or accidents, or being too young. Insurance companies can refuse to sell a policy to individuals who have been involved in an injury accident or have had two tickets in the past three years, or have not been licensed to drive for three years.

Reasons related to not insuring related to availability involve not finding an agent or being refused or have one's coverage cancelled. It appears that some respondents believed (or were led to believe) that they could not purchase insurance for older model vehicles. Insurance companies may refuse to sell physical damage coverage for an older vehicle, but can not base a decision to refuse to sell liability coverage only on the vehicle's age.

The group of reasons labeled lack of need or knowledge involved the respondent's perception that they were not likely to be in an accident. This could be due to driving only short distances or the respondent considering themselves to be a very safe driver. This group of reasons also included the general (incorrect) perception that there was no requirement to have insurance.

The next group of reasons had to do with not understanding the details related to acquiring insurance. This could involve not being able to communicate with anyone at an insurance company, not knowing which of the many companies to choose from, and not understanding what types or amounts of insurance should be purchased.

Another group of reasons involved the respondent believing that they get no benefit from having insurance. Several reasons related to the respondent having a negative orientation towards insurance companies. These could have involved a negative experience such as an insurer not

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<sup>1</sup> Actually a vehicle of low value can cause just as much damage as a high value vehicle. Thus, the vehicle's low value is not a valid justification for not purchasing insurance. However, the purpose of this survey was to accurately collect the respondent's perceptions and not to educate. Consequently, the reasons for not insuring include both valid and invalid reasons.

paying a claim, which led the respondent to a distrust or general avoidance of insurance companies.

The group of reasons labeled “not important enough” generally involve reasons that indicate some inclination to purchase insurance. However, these respondents just never seem to get around to it. Miscellaneous reasons included not wanting to obey a law and “bucking the system.”

An overall conclusion reached from the focus groups was that for most people auto insurance was not highly important or a high priority relative to other life concerns. Things like medical insurance and children's clothing were seen as more important. However, auto insurance was not considered to be without value. Even those who did not have insurance acknowledged that they would feel better, more secure, and more a part of society if they did have insurance. Those who purchased the minimum required by law tended to have a greater concern for obeying the law and appeared to be less marginal members of society. These findings of low involvement levels with the purchase of insurance were not surprising. Several other studies have found the auto insurance is not highly important in most peoples lives (for example, see: Childers, 1981; Kunreuther, 1985; Schlesinger, 1993; and Sherden, 1984).

When discussing participating in a survey dealing with auto insurance, the distrust for governmental agencies was clear. There was the fear that the phone call might be a setup. That “they” (the authorities) were “just trying to catch you” In general, people reported that they would be reluctant to give out personal information. Also, if the call was perceived as a sales call, some would report having insurance when they did not, just to get rid of the caller. However, if the individual did not feel that they were being personally sought out, they would be more inclined to cooperate with the interviewer.

#### *RDD Survey:*

Of the respondents who were contacted, 55% were initial refusals, refusing to even start an interview. Of those willing to be interviewed, 34% were terminated prior to completing the

entire interview. Of those terminated, not counting those over the county quotas, the majority (61%) of the terminations were initiated by the interviewer due to the respondent not owning a vehicle, or refusing to answer the first question asking what county they lived in. These dispositions were very similar to the initial refusals. It just took these respondents a little longer to refuse to cooperate. About 9% were terminated due to not being willing to make a commitment to providing accurate answers or not being willing to take 10 minutes to complete the interview. The average interview length was 12 minutes. A total of 1,008 interviews were completed. For this size sample a 95% confidence interval about estimated percents is +/-3%.

The respondents completing interviews appeared to be fairly representative of the total California population as reflected in the 1990 census. Table 1 shows selected demographic factors of the survey respondents answering the question and the 1990 census for California.

Table 1  
Sample Demographics Compared to 1990 Census

Variable	1990 Census for California	RDD Survey Respondents
<b>Sex:</b>		
Male	50%	49%
Female	50%	51%
<b>Ethnic Group:</b>		
White	57%	64%
Black	7%	5%
American Indian	1%	2%
Asian	9%	5%
Hispanic	25%	21%
Other	0%	n a
Multi-racial	n a	3%
<b>Age:</b>		
18 to 20	6%	5%
21 to 24	9%	7%
25 to 29	13%	9%
30 to 39	24%	26%
40 to 49	17%	23%
50 to 64	16%	18%
65 or older	14%	11%
<b>Education</b>		
less than 9th grade	11%	5%
some high school	14%	7%
high school graduate	23%	23%
some college	31%	29%
bachelor's degree	14%	24%
graduate degree	7%	11%
<b>Income:</b>		
less than \$10 000	12%	7%
\$10 000 to \$20 000	15%	15%
\$20 000 to \$30 000	15%	16%
\$30 000 to \$40 000	14%	15%
\$40 000 to \$50 000	12%	11%
\$50 000 to \$60 000	9%	9%
over \$60 000	24%	28%

There were minor, but statistically significant differences in the respondents ethnic group, age, education and income. Survey respondents were slightly more likely to be White, and less likely to be Hispanic or Black. The survey provided a multi-racial category that 3% of respondents chose. Multi-racial was not an option on the 1990 census.



Survey respondents were more likely to be in their 40's and less likely to be over 65 or 25 to 29. They were also more likely to have a college degree and less likely to have a less than high school education. The income distribution of the respondents matched the 1990 census figures fairly closely. There were slightly more high income (\$60,000 or more) respondents, and less very low income (less than \$10,000) respondents.

Given what is known about the characteristics of uninsured motorist, we would expect the survey respondents to have a tendency to have a lower incidence of uninsured motorist than the total California population.

As was the case in the pretests a lower than expected uninsured rate was observed. About 10% of the respondents reported owning an uninsured vehicle. Attachment 4 shows the layout of the questionnaire and the basic frequencies for each question. Of particular interest are the differences between those who owned an uninsured vehicle and those who did not. These differences are summarized in Table 2. Also contained in Table 2 is a column showing the differences between "pure" and "hybrid" uninsured. One of the surprising findings from this survey was that most of the uninsured also owned an insured vehicle. "Pure" uninsured are defined as those uninsured who do not own any insured vehicles. "Hybrid" uninsured own both uninsured and insured vehicles. Of the uninsured, 58% were hybrid and 42% were pure. Interest in LCLC refers to the respondents interest in and stated likelihood of purchasing a low cost low coverage (LCLC) insurance policy if one were to be made available.

Table 2  
Differences Between Insured & Uninsured and Pure & Hybrid

Factor	Difference between Uninsured & Insured	Difference between Pure & Hybrid Uninsured
Interest in LCLC	Uninsured have a greater interest in purchasing (58% v. 45%).	Pures are more likely to purchase with just a slight (10%) reduction from current prices (59% v. 39%).
Number of Vehicles Owned	Uninsured own more vehicles (2.63 v. 1.71).	Hybrids own more vehicles (3.58 v 1.32).
Reason for Not Insuring	n.a.	Hybrid's primary reason (70%) is the vehicle is not used or doesn't run. Pure's primary reason (63%) is due to the high cost of insurance.
Insurance Involvement Level	Uninsured are slightly more likely to have asked a friend about insurance (25% v. 17%) and checked on insurance information (24% v. 18%).	Pures are more likely to have asked a friend about insurance (34% v. 18%), but less likely to have: called an insurance company (34% v. 46%), be contacted by an insurance company (17% v. 38%), or switched to a different insurance company (7% v. 14%).
Insurance Attitudes	Uninsured are more likely to agree that: auto ins. costs more money than I have (59% v. 41%), many people similar to me don't have ins. (60% v. 42%); and less likely to say ins. companies are operated in a fair way (29% v. 41%)	Pures are more likely to agree that: auto ins. costs more money than I have (73% v. 48%), many people similar to me don't have ins. (68% v. 54%)
Availability & Affordability	Uninsured are more concerned about availability (67% v. 55%). Concern about affordability is wide spread, with uninsured slight more concerned (91% v. 86%).	Pures have more concern about availability (74% v. 61%), but paradoxically less concern about affordability (80% v. 98%).
Estimated Cost to Insured	n.a.	Both seem to have a reasonable expectation of costs. Pures may have a slightly higher expectation, but it is not a statistically significant difference.
Tickets & Accidents	n.a.	Pures report having fewer tickets and accidents (22% v. 30%).
Other insurance coverage	Uninsured are less likely to have health (63% v. 85%) or life insurance (35% v. 64%).	Pures are less likely to have health (44% v. 77%) or life insurance (20% v. 46%).

Factor	Difference between Uninsured & Insured	Difference between Pure & Hybrid Uninsured
Demographics	Uninsured are more likely to be:	Pures are more likely to be:
Sex	- male (62% v. 51%)	- female (46% v. 32%)
Employment	- not different	- not employed (39% v. 24%)
Education	- H.S. or less (45% v. 33%)	- H.S. or less (61% v. 32%)
Age	- 18 to 24 (22% v. 10%)	- 18 to 24 (34% v. 13%)
Ethnicity	- Hispanic or Black (35% v. 24%)	- Hispanic or Black (54% v. 22%)
Marital	- not different	- single (37% v. 23%)
HH Size	- larger HH (3.3 v. 3.0)	- larger HH (3.5 v. 3.2)
	- more kids (1.4 v. 1.1)	- more kids (1.7 v. 1.2)
Home Owner	- renters (48% v. 33%)	- renters (61% v. 39%)
Stability	- less time in home (93 mo. v. 139	- less time in home (67 mo. v. 110 mo.)
Language	mo.)	- speak another at home (34% v. 16%)
Income	- not different	- less than \$20,000 (51% v. 18%)
	- less than \$20,000 (32% v. 16%)	

#### Uninsured Vs Insured:

In terms of demographic factors, this survey confirmed the findings of several earlier surveys. Respondents owning an uninsured vehicle were more likely to be young, have less than a high school education, rent their home, have a lower income, and be Hispanic or Black. Additional demographic factors not identified in prior surveys include the findings that uninsured were more likely to be male, from a home with more people, and have less home stability or have lived in their home for a shorter time period. No meaningful differences were observed for employment status, marital status, and language spoken in the home.

While concern about what it costs to buy auto insurance was wide spread among all respondents, uninsured respondents had an even higher level of concern than those with auto insurance. Uninsured expressed a greater interest in purchasing a LCLC policy. Also, uninsured are more likely to say that auto insurance costs more money than they have available. Uninsured respondents also had a higher level of concern about simply being able to find some place where they could buy auto insurance. They also seem to have less trust of insurance companies and are less likely to say that insurance companies are operated fairly. Despite this, it also appears that the uninsured were more active in seeking out information on insurance. Uninsured were more likely to have asked a friend about insurance and to have checked on insurance information. However, uninsured are more likely to say that people like themselves do not have auto

insurance.

Other differences between uninsured and insured included the tendency of uninsured to own more vehicles than insured. Also, uninsured are more likely to not have either health or life insurance.

Pure vs. Hybrid:

As a hybrid uninsured by definition must own a minimum of two vehicles, one uninsured and one insured, it is not too surprising that they owned more vehicles than pure uninsured. In general the pure uninsured tended to be a better fit of the demographic profile associated with the uninsured as a whole. The pures were more likely to be young, have less than a high school education, rent their home, have low income, be Hispanic or Black, from a home with more people, and have lived in the home for a shorter time period. Additional characteristics of the pures not shared with the uninsured as a whole included being more likely to be female, not employed, single, and speak a language other than English at home.

The main reason that hybrids gave for not insuring was that the vehicle did not run or was not being used. If these vehicles are really not being used on the public roads, there is no legal requirement that they be insured. Pures on the other hand cited the high cost of insurance as the primary reason for not insuring.

Pures' concern with the cost of insurance also came out in their responses to other questions. Pures were more likely to say that auto insurance costs more money than they had available. They had a higher level of interest in purchasing a LCLC policy. They may also tend to estimate the cost of a minimum limits liability policy as costing slightly more than the hybrid uninsured estimated. However, there is not a statistically significant difference between the estimated premium of pures and hybrids. The loss costs in the zip codes where the pure respondents were located were compared to the loss costs in the zip codes where the hybrid respondents were located. The two areas had very similar loss costs. Since premiums charged by insurers are suppose to have a very close relationship to loss costs, it is likely that the premiums facing pures

and hybrids are very similar.

Pures reported a higher level of concern about being able to find a place to buy auto insurance. They were less likely to have called an insurance company, be contacted by an insurance company, or switch to a different insurance company. However, pures were more likely to have asked a friend about insurance. Paradoxically, pures reported less concern about being able to afford auto insurance. This could be the result of auto insurance being so far out of their reach that it is not considered as a real possibility.

#### Reason For Not Insuring:

The classification of uninsured into the pure and hybrid categories is based on the insurance status of the vehicles owned. If instead of categorizing the uninsured by whether or not they own an insured vehicle, we look at the reason for being uninsured, two primary groups emerge. Table 3 summarizes the different reasons for not insuring.

Table 3  
Reason for Not Insuring by Type of Uninsured

Reason for Not Insuring	Total (N=97)	Pure (N=41)	Hybrid (N=56)
Vehicle not used/doesn't run	49%	20%	71%
Costs too much/can't afford	30%	63%	5%
Don't Need (1)	6%	0%	11%
May insure in future (2)	5%	5%	5%
Access problems (3)	3%	2%	4%
Misc (4)	6%	10%	4%
Total	100%	100%	100%

(1): vehicle not worth it; I'm a safe driver; receive no benefit

(2): just bought vehicle; looking; haven't got around to it; forgot renewal

(3): couldn't find a company; company canceled; avoid insurance companies

(4): vehicle not registered; too many tickets; refused

The largest group is uninsured who do not insure because the vehicle is not used. They represent about half of the uninsured. The second group is those who do not insure because the cost of

insurance is too high. This second group represents 30% of the uninsured in the survey and 63% of the pure uninsured. Since the majority of the pures have a household income below \$20,000 their perception of insurance costing too much seems reasonable. The remaining uninsured reflect a variety of different reasons for being uninsured, such as just bought the car, vehicle not worth insuring, haven't got around to it, could not find an insurance company, etc. For most of the characteristics measured in the survey, this remainder group tended to be situated between the two primary groups but generally were more like the vehicle-not-used group than the costs-too-much group. Key differences between the vehicle-not-used group and the cost-to-much group are shown in Table 4.

Table 4  
 Characteristics of Vehicle-not-used and Costs-too-much Uninsured

Factor	Description
Pure/Hybrid	Vehicle-not-used uninsured tended to be hybrid (83%). Cost-too-much uninsured tended to be pure (90%).
Interest in LCLC	Cost-too-much uninsured reported a higher interest in the LCLC policy at only a 10% reduction from current prices (57% v. 41%). Interestingly, when any level of interest in the LCLC was examined, both groups expressed about the same level of interest. It just took a greater price reduction to attract many of the vehicle-not-used uninsured.
Number of Vehicles Owned	The cost-too-much uninsured were much more likely to be single vehicle owners (72% v. 6%). Overall, the vehicle-not-used uninsured owned on average of 3.4 vehicles, while the cost-too-much uninsured averaged 1.3 vehicles.
Number of Uninsured Vehicles Owned	The cost-too-much uninsured also were more likely to own just one uninsured vehicle (79% v. 57%). Overall, the vehicle-not-used uninsured owned on average of 1.8 uninsured vehicles, while the cost-too-much uninsured averaged 1.2 uninsured vehicles.
Information Seeking Behavior	Cost-too-much uninsured were more likely to: <ul style="list-style-type: none"> <li>- Ask a friend about buying auto insurance (35% v. 20%).</li> <li>- Look in a newspaper or magazine for information (28% v. 18%).</li> </ul> Vehicle-not-used uninsured were more likely to: <ul style="list-style-type: none"> <li>- Call an insurance company for information (47% v. 31%).</li> <li>- Be contacted by an insurance company (33% v. 10%).</li> <li>- Switch to a different insurer (14% v. 3%).</li> </ul>
Insurance Attitudes	Cost-too-much uninsured were more likely to agree that: <ul style="list-style-type: none"> <li>- Auto insurance cost more than I have available (72% v. 51%).</li> <li>- Insurance companies are operated in a fair and reasonable way (41% v. 29%).</li> <li>- Auto insurance is priced fairly (38% v. 29%).</li> <li>- Many people similar to me don't have auto insurance (72% v. 47%).</li> </ul>
Availability & Affordability	Paradoxically, more of the vehicle-not-used uninsured group had a major concern about affordability (57% v. 45%). Cost-too-much uninsured were more likely to have a major concern about availability (48% v. 18%). This is supported by the cost-too-much uninsured group reporting a greater likelihood of having problems getting auto insurance (21% v. 8%).
Estimated Cost to Insured	Cost-too-much uninsured tended to have a substantially higher estimation of the cost of insurance (\$597 v. \$396).
Tickets & Accidents	There does not appear to be much of a difference in the percent of each group that has tickets or at-fault accidents (27% of vehicle-not-used uninsured v. 21% of cost-too-much uninsured).
Other insurance coverage	Vehicle-not-used uninsured are more likely to have health (69% v. 52%) and life insurance (45% v. 21%).

Factor	Description
Demographics	Vehicle-not-used uninsured are more likely to be:
Sex	- no difference
Employment	- employed full time (67% v. 45%)
Education	- better educated: H.S. or less (37% v. 65%)
Age	- older: 18 to 24 (12% v. 31%)
Ethnicity	- White (59% v. 38%) and not Hispanic or Black (29% v. 52%)
Marital	- married (51% v. 38%)
HH Size	- smaller HH (3.2 v. 3.7) - less kids (1.3 v. 12.0)
Home Owner	- owners (57% v. 24%)
Stability	- more time in home (111 mo. v. 48 mo.)
Region	- not from L.A. County (29% v. 41%)
Language	- not speak a language other than English at home (18% v. 38%)
Income	- higher income: less than \$20,000 (16% v. 52%)

Individuals who are uninsured because of the cost of insurance are more likely to only own a single uninsured vehicle. Whereas individuals whose reason for owning an uninsured vehicle is due to the vehicle not being used tend to own other vehicles that are insured.

Demographically the individuals who own an extra vehicle that is not insured due to it not being used tended to fit the profile of the fully insured. They are more likely to be older, better educated, employed full time, have a higher income, be married, be from a smaller household, own their home, and have lived in their home for a longer time. They are also more likely to have health and life insurance.

Both the costs-too-much uninsured and the vehicle-not-used uninsured had about the same overall level of interest in purchasing a LCLC policy when the amount of price reduction was not considered. However, when only a 10% reduction in price was considered, the costs-too-much uninsured had a higher level of interest than the vehicle-not-used uninsured.

The information seeking behaviors of the two types of uninsured also differed. The vehicle-not-used uninsured are more likely to take concrete steps that are likely to lead to action, such as contacting an insurance company or switching insurance companies. The costs-too-much uninsured are more likely to engage in less focused behaviors such as asking a friend about insurance or looking in a newspaper for information.



It is somewhat surprising that a larger percentage of the vehicle-not-used uninsured reported a major concern about the cost of insurance. It may be that the costs-too-much uninsured view many other issues in their lives to be a major concern and the concern over auto insurance does not raise to a high enough relative level to be considered a major concern. Also, the vehicle-not-used uninsured may in part base the decision not to use their vehicle on the high cost of insuring the vehicle, and hence have more concern about insurance cost. The costs-too-much uninsured seem to have difficulty just finding a place where they can buy auto insurance. They are more than twice as likely to report a major concern about the availability of auto insurance and nearly three times as likely to report having problems buying auto insurance.

The costs-too-much uninsured are more likely to have attitudes that insurance is not something that they are likely to be able to have. They are more likely to say that auto insurance costs more than they have and that many people similar to themselves do not have auto insurance. However, the costs-too-much uninsured do not seem to have negative attitudes towards insurance companies or the insurance industry. They are more likely to say auto insurance is priced fairly and that insurance companies are operated in a fair and reasonable way.

The costs-too-much uninsured tended to have a much higher perception of what auto insurance actually would cost. This is in spite of the fact that there did not appear to be much of a difference between the number of tickets or at-fault accidents between the costs-too-much and the vehicle-not-used uninsured.

#### LCLC Policy:

One option for dealing with the uninsured motorist problem is to attempt to lower the price of auto insurance. One way to lower costs is to provide a policy that provides less benefits. To investigate the appeal of such an approach one part of the survey asked respondents if they were interested in a LCLC policy.

Interest in the LCLC policy asked of both the currently uninsured and the currently insured.

Overall interest was fairly wide spread. Over half of the respondents expressed an interest in the policy. Those interested in the LCLC policy had the following characteristics:

- A higher level of interest among the uninsured than the insured (12% v. 7%).
- Among those uninsured, they are *less* likely to report that the reason for their not insuring is due to the “vehicle is not used” (47% v. 53%).
- Generally they have a higher level of insurance information seeking (“Asked a friend or relative about . . .”, 22% v. 14%; “Checked on info. about . . .”, 24% v. 14%; “Called an agent or company . . .”, 41% v. 29%; “Switched to a different insurer . . .”, 14% v. 10%).
- More likely to have attitudes that reflect the perception that insurance costs too much, is not fair, and other people like me don't have it (“Auto insurance costs more money than I have available . . .”, 56% v. 31%; “Insurance companies are operated in a fair . . .”, 35% v. 43%; “Auto insurance is priced fairly . . .”, 24% v. 33%; “The cost is more than the benefits . . .”, 68% v. 35%).
- More likely to be concerned about finding a place to buy insurance and about it being affordable (“Place to buy . . .”, 70% v. 43%; “Affordability . . .”, 94% v. 81%).
- There is not a statistically significant difference in their estimated cost of insurance. However, the uninsured may have a slightly higher estimate of cost (\$468 v. \$435).
- Less likely to be covered by health insurance (78% v. 89%).
- Less likely to have life/burial insurance (51% v. 72%).
- Less educated (H.S. or less = 41% v. 27%).
- Younger (18 - 39 = 57% v. 34%).
- More likely to be Hispanic or Black (34% v. 16%).
- More likely to be single - never married (32% v. 19%).
- Have larger households with more kids (mean HH size = 3.2 v. 2.9; mean # < 18 = 1.3 v. 1.0).
- Rent their home (44% v. 26%).
- More mobile (in home < 5 yrs., 56% v. 38%; months in home = 163 v. 225).
- More likely to live in L.A. County (36% v. 28%).
- Have lower income (less than \$20,000 = 30% v. 14%).

These characteristics indicate that those who have the most interest in a LCLC policy have characteristics similar to the pure uninsured. This is supported by information in Table 2 showing that pure uninsured are more likely to purchase a LCLC policy if it is offered at just 10% lower than current prices. Thus, it seems that the LCLC policy will have the strongest appeal among the most appropriate segment of the uninsured. However, the widespread interest in a LCLC policy indicates that other segments of the uninsured would be interested in purchasing the policy. Also, there would be a segment of the currently insured that could likely step down to a LCLC policy if given the opportunity. Based on the respondents reported interest and the relatively larger size of the insured population, it is likely that the majority of those

purchasing a LCLC policy would come from the currently insured.

### Unregistered Vehicles

Two lines of questions dealt with the registration status of the respondent's vehicles. The first questions dealt with expenses related to vehicle registration. Initially the respondent was asked if they had had any expenses related to vehicle registration in the last six months. If the respondent said no, they were asked if they had any expenses related to vehicle registration in the last twelve months. The second group of questions asked for the number of unregistered vehicles and, if the respondent reported any, the reason for not registering. Table 5 summarizes the responses.

Table 5  
Unregistered Vehicles

Registration Status	Percent
	(N=1,008)
Reported an unregistered vehicle	7%
Had no registration expenses	*
Refused to answer the question	8%
Total reported and possibly unregistered	15%
<u>Reason for not registering:</u>	(N=72)
Vehicle not used/doesn't run	49%
Costs too much/can't afford	21%
No smog or proof of insurance	7%
May register in future (1)	6%
Registered vehicle as PNO	7%
Misc (2)	11%
Total	100%

\* less than 0.5%

(1): just bought vehicle; haven't got around to it

(2): vehicle not worth it; negative attitude towards DMV; other; DK; refused

It should be noted that 7% of those giving a reason for not registering indicated that their vehicle was not registered because it was registered as a Planned Non-Operative (PNO) vehicle.

Technically a vehicle registered as PNO is not considered unregistered as long as it is not being

operated. If these respondents were removed from those reporting an unregistered vehicle, the 7% in Table 5 would be reduced by less than 0.5%.

#### Number and Type of Vehicles:

Attachment 7 contains tables showing the counts and percentage of the number and types of vehicles the respondents owned and that were uninsured. While the small number of respondents with 3 or more vehicles limits the ability to generalize, a few observations can be made:

- On a percent of vehicles basis, about 9% of the vehicles respondents own were reported as uninsured. This matches the percent of respondents who reported owning an uninsured vehicle.
- Generally, the more vehicles owned, the more likely it is an individual will own one or more uninsured vehicles. Counting respondents refusing to answer the question on uninsured vehicles with the respondents who reported an uninsured vehicle a steadily increasing percent of uninsured is observed as the number of vehicles increases (see Table 6).

Table 6  
Likelihood of Owning an Uninsured Vehicle by Number of Vehicles Owned

Number of Vehicles Owned	Percent of Uninsured Vehicles
1	7%
2	9%
3	16%
4+	36%

- While the number of individuals who own motorcycles is small, individuals who do own motor cycles appear to be much more likely to own a uninsured vehicle.
- Only about one third of the respondents with an uninsured vehicle had a single vehicle that was not insured. Most individuals who own an uninsured vehicle owned multiple vehicles.

#### Interest in LCLC Policy by Amount of Insurance Purchased, Location, and Income:

Those respondents who purchased insurance were asked if the liability insurance covering their vehicle was at the minimum limits or at a higher level. Over one third (35%) said that their insurance was at the minimum level. Another 14% said that some vehicles were insured at the minimum level and some vehicles were insured at a higher level. If only one third of those with some minimum and some higher were at the minimum level, approximately 40% of the vehicles might be estimated to have a minimum limits policy. Analyses of insurance company data indicates that approximately 15% of the insured vehicles have minimum limits liability coverage.

This large discrepancy between what consumers report their coverage is and what insurers are actually selling is indicative of a problem. It could be that what consumers think of as the minimum level is really the minimum level that they would consider or be comfortable with or the minimum level that was recommended by their insurance agent.

Regardless of the amount of insurance purchased, respondents were asked about their general interest in a LCLC policy. Unless the respondent said they were not at all interested, they were asked if they would probably buy or probably not buy the new policy if they could save 10% off the cost of a current minimum limits policy. If the respondent was not interested at a 10% discount, they were offered a 20% discount. If they were still not interested the respondent was presented with one more offer of a 30% discount to assess their purchase interest. Table 7 presents the results of this set of questions.

Table 7  
Interest in a LCLC Policy by Level of Insurance Purchased

<u>Level of Insurance Purchased</u>	<u>Interest in LCLC Policy</u>			
	<u>General Interest</u>			
	<u>Total</u>	<u>No Interest</u>	<u>Some to Very</u>	<u>DK &amp; refused</u>
Only minimum limits	100%	27%	69%	4%
Some min. & some higher	100%	43%	53%	4%
Only higher limits	100%	61%	36%	3%
Pure uninsured	100%	24%	73%	2%
Total	100%	45%	52%	4%

  

<u>Among Those Somewhat to Very Interested:</u>					
<u>Would Probably Buy LCLC If Saved:</u>					
	<u>Total</u>	<u>10%</u>	<u>20%</u>	<u>30%</u>	<u>Balance</u>
Only minimum limits	100%	78%	8%	4%	10%
Some min. & some higher	100%	68%	12%	3%	17%
Only higher limits	100%	61%	12%	5%	22%
Pure uninsured	100%	77%	6%	0%	16%
Total	100%	71%	10%	4%	16%

Overall, over half (52%) of all respondents said they were somewhat or very interested in the LCLC policy. The less insurance a respondent currently purchased, the more interest was expressed in the LCLC concept. About 3 out of 4 (73%) of the pure uninsured were interested. Only one out of three (36%) of those currently buying more than minimum limits expressed an interest. These are people currently buying more than is required right now, who could lower their costs simply by lowering the amount of insurance they are currently purchasing. It could not be determined if those respondents were simply expressing an interest in lowering their auto insurance costs and perhaps did not appreciate that they would also have a lower level of coverage. When asked if they would probably buy the lower coverage policy 22% of those who were interested stated they would not buy the less expensive policy even if the policy was priced 30% less than a current minimum limits policy.

The most likely purchasers of the LCLC policy offered at just a slight (10%) discount from the current minimum limits policy were the pure uninsured and those who only bought the minimum limits now. About three quarters (77% to 78%) of these respondents said they would probably buy the LCLC policy at a 10% discount. The least likely group to buy the LCLC policy at a 10% reductions was the group currently buying polices with above the minimum level coverage. But

still, a surprising 61% of this higher limits group indicated they would purchase the LCLC policy at only 10% off current pricing of a minimum limits policy.

Table 8 shows the amount of interest in a LCLC policy by the respondent’s location. Due to the limited sample in other counties the results are grouped into Los Angeles county and the balance of the state. Interest in the LCLC policy was slightly higher in Los Angeles county compared to the rest of the state (57% vs. 49%). Also, there was a slightly greater tendency in Los Angeles county to indicate a purchase intent at just a 10% discount (75% vs. 69%).

Table 8  
Interest in a LCLC Policy by Location

Interest in LCLC Policy					
General Interest					
<u>Location</u>	<u>Total</u>	<u>No Interest</u>	<u>Some to Very</u>	<u>DK &amp; refused</u>	
Los Angeles County	100%	41%	57%	3%	
Rest of State	100%	47%	49%	4%	
Total	100%	45%	52%	4%	
Among Those Somewhat to Very Interested: Would Probably Buy LCLC If Saved:					
	<u>Total</u>	<u>10%</u>	<u>20%</u>	<u>30%</u>	<u>Balance</u>
Los Angeles County	100%	75%	10%	3%	13%
Rest of State	100%	69%	10%	4%	17%
Total	100%	71%	10%	4%	16%

Table 9 shows the amount of interest in a LCLC policy by the respondent’s income level. As would be expected, those with lower income levels were more likely to be interested in the LCLC policy. The interest level of those with under \$20,000 income was nearly double the interest level of those with over \$60,000 income. Those with lower incomes were also more likely to express an intent to purchase a LCLC policy at only a 10% discount. Of those with under \$20,000 income, 81% said they would probably purchase a LCLC policy at a 10% discount, compared to 63% of those with over \$60,000 income.

Table 9  
Interest in a LCLC Policy by Income Level

Income Level	Interest in LCLC Policy			
	General Interest			
	Total	No Interest	Some to Very	DK & refused
Under \$20,000	100%	26%	69%	6%
\$20,000 to \$60,000	100%	42%	55%	3%
Over \$60,000	100%	59%	38%	3%
Total	100%	43%	53%	4%

  

Income Level	Among Those Somewhat to Very Interested: Would Probably Buy LCLC If Saved:				
	Total	10%	20%	30%	Balance
Under \$20,000	100%	81%	8%	2%	10%
\$20,000 to \$60,000	100%	73%	10%	1%	16%
Over \$60,000	100%	63%	12%	8%	16%
Total	100%	73%	10%	3%	14%

Frequency of Use of Uninsured Vehicle:

If a respondent indicated that they had an uninsured vehicle, they were asked how frequently the vehicle was used. If a respondent had more than one uninsured vehicle, they were asked the frequency that each vehicle was used. Table 10 shows the reported frequency that the uninsured vehicles were used. It is based on the 150 uninsured vehicles that were identified in the survey.

Table 10  
Frequency of Use of Uninsured Vehicle

Frequency of Use	Total	Pure	Hybrid
Daily	30%	58%	14%
Less than 5 times/week	7%	16%	2%
1 to 3 times/month	12%	5%	16%
1 to 11 times/year	11%	2%	16%
Less than 1/year	3%	2%	3%
Never	32%	13%	43%
Don't know/refused	5%	4%	6%
Total	100%	100%	100%

Overall, 30% of the vehicles were reported to be used on a daily basis and 32% were reported to be never used. The remaining one-third were reported to be used, but on a less than daily basis.

The pure uninsured, who were more likely to own a single uninsured vehicle, were the most



likely to be using the vehicle on a daily or at least weekly basis. The hybrid uninsured, who tended to cite non-use of the vehicle as the reason for not insuring it, were the most likely to report never using the uninsured vehicle.

#### Information Search:

In order to estimate how involved different individuals were in seeking out information related to auto insurance, a series of five questions were asked. These five questions asked the respondent if they had done any of the following within the past year:

1. Asked a friend or relative about changing or buying auto insurance?
2. Checked on information about auto insurance in a newspaper, magazine, or pamphlet?
3. Called an insurance agent or company to get information on auto insurance?
4. Was contacted by an insurance agent or company [e.g., letter, phone call, visit]?
5. Switched to a different auto insurance company?

An information search score was computed for each respondent. One point was given for each activity. The average scores for different respondent types are shown in Table 11.

Table 11  
Information Search by Respondent Type

Respondent Type	Average Number of Search Activities
Pure Uninsured	1.17 (n = 41)
Hybrid Uninsured	1.37 (n = 57)
Completely Insured	1.11 (n = 934)
Only Minimum Limits	1.21 (n = 350)
Some Minimum & Some Higher	1.16 (n = 134)
Only Higher Limits	1.10 (n = 473)

While the differences are not statistically significant, the hybrid uninsured seemed to be slightly more active in searching out information. When the level of coverage is considered the differences were also not statistically significant, but those buying the minimum limit policies were slightly more active in searching for information.

As shown in Table 2, the activities more likely to be engaged in by the uninsured were asking a friend or relative about insurance and checking insurance information in a newspaper or magazine. The pure uninsured were more likely than the hybrid uninsured to ask a friend or relative about insurance. The hybrid uninsured were more likely to actually call an insurance company, be contacted by an insurance company, and switch insurance companies.

**Attitudes and Opinions:**

A series of six statements reflecting different attitudes and opinions regarding auto insurance were read to respondents. Respondents were asked if, from their point of view, they agreed or disagreed with the statement. The six statements were:

1. No law requires you to buy auto insurance.
2. Auto insurance cost more money than I have available.
3. Insurance companies are operated in a fair and reasonable way.
4. Auto insurance is priced fairly.
5. The cost of auto insurance is more than the benefits it provides.
6. Many people similar to me don't have auto insurance.

In order to assess the degree of negativity the respondent had towards the purchase of auto insurance, a score was computed. One point was earned if the respondent agreed with statements 1, 2, 5, or 6. One point was earned if the respondent disagreed with statements 3 or 4. The average scores for the different respondent types are shown in Table 12.

Table 12  
Negative Orientation Towards Auto Insurance by Respondent Type

Respondent Type	Average Number of Negative Statements
Pure Uninsured	3.32 (n = 41)
Hybrid Uninsured	2.95 (n = 57)
Completely Insured	2.66 (n = 934)
Only Minimum Limits	3.01 (n = 350)
Some Minimum & Some Higher	2.95 (n = 134)
Only Higher Limits	2.47 (n = 473)

The differences between the different respondent types were not statistically significant. The

data does suggest that the further out of the insurance system an individual is, the more negative their attitude towards auto insurance. The pure uninsured seemed to have the most negatives and the completely insured the least. This basic relationship seemed to hold when the amount of insurance purchased was considered. Those with only minimum limits had the highest average number of negative statements and those with only higher limits had the least.

The pure uninsured's attitudes are consistent with their seeing themselves as outside of the insurance system. They are most likely to say "auto insurance costs more money than I have available" and "many people similar to me don't have auto insurance."

#### Affordability and Availability:

Respondents were asked about their level of concern about locating a place to buy auto insurance and about being able to buy auto insurance at an affordable price. Overall, there was a much greater concern about the price of auto insurance. Nearly twice as many respondents reported a major or moderate concern about the price of auto insurance compared to the availability of a place to buy auto insurance (79% vs. 41%). Only 18% reported no concern or only a minor concern with *both* auto insurance's affordability and availability. Table 13 summarized the affordability and availability responses.

Table 13  
Concern About Affordability and Availability

Concern About Availability	Concern About Affordability (row / column percentages)					Total
	Major	Moderate	Minor	None	DK	
Major	90% / 41%	6% / 5%	1% / 4%	3% / 5%	0% / 0%	23%
Moderate	53% / 19%	42% / 27%	3% / 6%	2% / 3%	1% / 7%	18%
Minor	41% / 13%	34% / 18%	19% / 34%	6% / 7%	1% / 7%	15%
None	30% / 25%	34% / 50%	11% / 56%	24% / 84%	1% / 33%	42%
Don't Know	42% / 2%	11% / 1%	0% / 0%	5% / 1%	42% / 53%	2%
Total	50%	29%	8%	12%	2%	100%

When a respondent expressed a major or moderate concern about availability, over 95% of the time they also had a major or moderate concern about affordability. The reverse was not true. When a respondent expressed a major or moderate concern about affordability, only 50% of the time there was also a major or moderate concern about availability. However, 60% of the time when a major concern about affordability was expressed, a major or moderate concern about availability was expressed. If only a moderate concern about affordability was expressed, 31% of the time a major or moderate concern about availability was expressed.

**Uninsured's Experience With Insurance:**

If a respondent reported owning an uninsured vehicle, they were asked a series of questions about their experiences with auto insurance (see Q.1350 to Q.1420 in Attachment 4). The response to these questions suggest:

- Most uninsured did not report a problem getting auto insurance in the past year (only 11% reported a problem). However, it should be noted that it is not clear how many uninsured tried to obtain insurance. (Since about half of the uninsured are hybrids, we know that at least these uninsured attempted to obtain insurance. Only about one-third of the pure

uninsured reported calling an agent or company.)

- Most uninsured have not made any claim against any insurer in the past three years (only 11% reported making a claim). If a claim was made 9 out of 10 were very or somewhat satisfied with how the claim was handled.
- Their expectation of the cost of liability insurance does not seem to be unrealistic. The average estimated six month premium was \$483, but there was considerable individual variations<sup>2</sup>.
- Their driving record seems to be slightly worse than the average insured driver, but not greatly worse. Assuming that the violations respondents reported could be considered one point violations (i.e., not major violations like driving under the influence or hit-and-run) and the accidents respondents reported were injury accidents (and not property damage only). The uninsured that said they had tickets or accidents in the last three years seem to have a slightly worse safety record than the insured population. Table 14 shows the estimated distribution of points for the uninsured and the insured.

Table 14  
Estimated Safety Record of Uninsured and Insured

Number of Safety Record Points	Percent of Uninsured	Percent of Insured
0 points	72%	82%
1 point	14%	9%
2 points	10%	5%
3+ points	4%	3%

The point distribution of the insured population shown in Table 14 is based on a large 1993 insurance company data call (Hunstad, 1994). The distribution is representative of the majority

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<sup>2</sup>The NAIC reported the average annual liability premium in 1996 for California was \$512 (NAIC, 1998). However, NAIC's number includes UM and MP coverages, as well as the effect of increased limits. The corresponding six month premium from the NAIC report would be \$256. The BI loss costs for the zip codes where the uninsured respondents were located in the CDI report *California Private Passenger Auto Frequency and Severity Bands* manual (CDI, 1996) and were compared to the statewide average loss costs. The zip codes where the uninsured respondents were located averaged approximately 40% higher loss costs. Theoretically, this should translate into a 40% higher premium. Increasing the \$256 by 40% would yield \$358. The premium of \$358 is not statistically significant difference from the \$483 estimated by respondents.

of the private passenger auto market in California. The values shown in the table are the points the insurance companies are using to calculate their customer's premiums. Generally these insurance company data are based on a combination of self report and verified driving records from DMV.

It should be noted that the uninsured point distribution shown in Table 14 is based on only 94 respondents and thus is subject to considerable sampling variation. Respondents were given extra assurances before these questions that their answers were totally confidential and would not be associated with them. However, there is also the possibility of underreporting. Even with the considerable variance due to the small sample, the estimated 72% of the uninsured with 0 points is a statistically significant difference from the 82% for the general insured population. Based on this data, it is reasonable to conclude that the uninsured have a slightly worse driving record than the general population. Using relativities from the safety record rating factor from several large insurers, it is possible to estimate the increased risk presented by the uninsured. This estimate assumes that the relativities used by the insurance companies are directly related to their actual losses. Using these relativities, the average relativity for the uninsured was computed to be 1.04 versus an average of 1.00 for the insured drivers. This means that based on the poorer driving record of uninsured, the average losses associated with insuring them would be estimated to be 4% greater than the losses for those currently being insured.

*Exception File Survey:*

A key difference between the RDD survey and the exception file survey was that in the exception file survey a specific vehicle owner was identified as the target respondent because they were thought to possibly be an uninsured driver. Of the telephone calls where an individual was contacted, 49% of the time it was not possible to reach the target respondent. Once the target respondent was reached, a completed interview was obtained for 558 or 63% of the time. The target respondent refused to be interviewed 21% of the time and 16% of the time the interview was interrupted after the introduction section was completed.

Of particular interest in this survey was the percent of the records sampled from the exception

file to claim to have insurance. As discussed in more detail in the methodology section (see Attachment 1), due to incomplete reporting by insurance companies, it was estimated that approximately 34% of the exception file records would likely have insurance. For the purposes of this comparison, respondents were categorized into the following categories:

- reported vehicle as uninsured [283] 52%
- vehicle is estimated to be uninsured [42] 8%
- vehicle is estimated to be insured [219] 40%

Vehicles were estimated to be uninsured if the respondent refused to answer a key question related to the vehicle's insurance. Vehicles were estimated to be insured if the respondent claimed the vehicle was insured and knew the name of the company or agent insuring the vehicle. Given the biases introduced in the tele-matching and respondent contacting process, the insured rate estimate of 40% from the survey was a fairly close agreement with the 34% estimated based on the analysis of administrative records.

The characteristics of the exception file uninsured and the RDD survey uninsured were examined to determine if there was enough similarity to combine the two groups of uninsured for analysis purposes. If these two groups of uninsured had a reasonable amount of similarity, the data could be combined and more confidence could be placed in the findings related to the characteristics of the uninsured. Unfortunately, the two groups of uninsured did appear to reflect the differing methodologies used to collect the data. A comparison of the differences between the uninsured in the two surveys identified that the exception file uninsured were:

- less likely to be pure uninsured
- less interested in the LCLC policy
- more likely to be male
- more likely to be older
- more likely to be married
- more likely to own their own home
- more likely to have been in their home for a longer time period
- more likely to be Hispanic and Asian
- less likely to be from Los Angeles County
- have slightly higher income
- have not as high a level of concern about insurance affordability and availability
- have a higher level of trust in insurance companies

In the exception file survey, in order to be included in the sample from which the calls were made, respondents had to have a listed phone number and not have moved since the latest telephone directory was published. These respondents tended to be more stable and less on the fringe of the system. Because of these differences in the sampled population, it is not possible to relate or combine the exception file sample with the RDD sample.

For the exception file uninsured, cost seemed to be less of a factor in the decision not to insure. This is probably reflective of the more upscale nature of this group. Table 15 summarized the reasons given by the exception file uninsured for not insuring.

Table 15  
Reason for Not Insuring by Type of Uninsured

Reason for Not Insuring	Total (N=239)	Pure (N=65)	Hybrid (N=174)
Vehicle not used/doesn't run	63%	52%	67%
Costs too much/can't afford	16%	22%	14%
Don't Need (1)	2%	3%	1%
May insure in future (2)	5%	11%	3%
Access problems (3)	1%	2%	1%
Misc (4)	13%	11%	14%
Total	100%	100%	100%

(1): vehicle not worth it; I'm a safe driver; receive no benefit

(2): just bought vehicle; looking; haven't got around to it; forgot renewal

(3): couldn't find a company; company canceled; avoid insurance companies

(4): vehicle not registered; too many tickets; refused

## DISCUSSION

Two key questions that are important in assessing the usefulness of surveys dealing with sensitive issues are:

- Did the survey reach a representative group of the target population?, and
- Did the survey accurately collect information on the sensitive issues (in this case, uninsured vehicles)?



Because the RDD survey was limited to households *with* telephones, the potential group to be surveyed initially excluded about 4% of the households in the state. These non-telephone households are likely to be on the lowest end of the income distribution, have less education, be home renters, and have spent a shorter amount of time in their home. All of these characteristics point to a higher incidence of uninsured vehicles. Eliminating these households is likely to result in an under estimation of the rate of uninsured vehicles. However, even if every household without a telephone also had an uninsured vehicle, the maximum increase in the percent of households with an uninsured vehicle would be 4%. Because the maximum bias associated with eliminating the non-telephone households did not seem large, after contractor problems prevented the inclusion of the non-telephone households in the survey, it was decided that there would still be value in testing the ability to identify the uninsured via a RDD survey.

Table 1 shows the demographic characteristics of the RDD survey compared with the 1990 census. A higher percentage of the survey respondents were white (64% vs. 57%). A previous CDI study, the *Commissioner's Report on Underserved Communities*, showed a fairly strong relationship between the percent of the population that are minority and the uninsured rate (CDI, 1995). Having a higher percentage of whites in the sample is likely to lead to an underestimation of the rate of uninsured.

Fewer survey respondents were under 30 years old (21% vs. 28%) and more were in the 30 to 64 age group (67% vs. 57%). Survey respondents tended to be better educated than the overall population. Only 12% of the survey respondents had less than a high school education. In the 1990 census, 28% reported an education less than completing high school. In the survey, 35% had completed college compared to 21% in the overall population. The main differences in the income level occurred at the extreme ends of the distribution. The survey respondents did not contain as many of those in the less than \$10,000 category (7% vs. 12%) and contained more of the over \$60,000 category (28% vs. 24%).

Based on these demographic comparisons, it appears that the survey respondents were less likely to be non-white, under 30 years old, have a less than high school education, and have an income

of under \$10,000. All of these characteristics have been found, by the present and previous surveys, to be positively related to a higher uninsured rate. The segment of the population the survey was most likely to miss was the segment more likely to have an uninsured vehicle. Thus, the survey is likely to under estimate the uninsured rate and, at least partly, exclude a segment of the uninsured from its analysis. It is not known if the survey had included more of these likely candidates for uninsured vehicle ownership, the resulting uninsured rate would have been more in line with the rate obtained from other methods.

An attempt was made to adjust for the unrepresentativeness of the survey respondents by weighting the sample. A three way distribution of ethnicity by age by education was used. A fourth dimension, income, was considered but not included because of its correlation with education, and because of the small cell sizes that would have resulted from a fourth dimension. Attachment 8 shows the details on the distributions and weights that were used.

The net effect of weighting the sample was small. The uninsured rate increased by 1.6 percentage points to 11.3%. The mix of pure and hybrid uninsured shifted slightly to include more pures. But pures were still less than half of the uninsured (unweighted pure/hybrid = 42%/58%; weighted = 47%/53%). Also, there was an increase in the percentage of those who only had minimum limits policies (to 38%) and a decrease in those who only had higher limits policies (to 42%). Because of the small effect of weighting, it is likely that other factors lead to the lower than expected uninsured rate. Unless otherwise noted, all other survey numbers cited in this report represent unweighted data.

As more than half of those contacted refused to be interviewed, it could be that those who cooperated with a unknown telephone interviewer and agreed to be interviewed were also more likely to “cooperate” with society’s laws and less likely to be uninsured. In the RDD survey only about 10% of the respondents reported owning an uninsured vehicle. This is less than half the anticipated rate, but consistent with the results of other surveys (IRC, 1997a and 1997b; Parker, 1998). Based on the data from this survey, it is unclear why the rate for uninsured vehicle owners was so low. It does not appear that the question asking if the respondent had any

uninsured vehicles was particularly threatening. Only 1% of the respondents asked the question refused to answer it. On the other hand, in the RDD survey, there was no other independent data available to verify the respondent's answers. It could be that an uninsured respondent who felt too uncomfortable to admit being uninsured, would have said that they had no uninsured vehicles rather than refusing to answer the question.

Due to the sensitive nature of the questions dealing with not having insurance, several questions were included to see if there were any indications that the respondent might have an uninsured vehicle. Besides the respondent directly reporting owning an uninsured vehicle, the following were considered as possible indicators of an uninsured vehicle:

- Refusal to answer the question dealing with uninsured vehicle ownership.
- Reporting no insurance expenses in the past six months.
- The respondent reporting that the vehicle had some type of insurance but had no liability insurance.
- The interviewer rating the respondent as not at all honest in their responses.

There was a total of 151 or 15.0% of the respondents who did not directly report owning an uninsured vehicle but did give an indication of a possible uninsured vehicle. If all of these respondents are considered to be uninsured, the estimated uninsured rate increases from 9.7% to 24.7%. This estimated rate is actually 2.1% higher than the 22.6% estimated by comparing DMV and insurance company records (CDI, 1998).

It is unlikely that 100% of the respondents who did not report a uninsured vehicle, but did give an indication that they *might* own one, actually do own an uninsured vehicle. However, the large number of respondents who fell in the “possible” category indicate that there may be a significant under reporting bias. A substantial effort went in to designing a questionnaire that would minimize reporting bias and accurately collect information on the respondent’s uninsured vehicles. The appearance of possible underreporting indicates that there are no easy answers to the dilemma of how best to elicit accurate information on the sensitive subject of uninsured vehicles. Separate research studies on how best to capture this information (perhaps along the

lines of the work done on drug use reporting) would be useful.

Another area of the survey asked about the amount of insurance purchased. Respondents were asked if they purchased the minimum required or a higher amount. About half (49%) of the respondents with insured vehicles reported owning a vehicle with the minimum required level of insurance. A 1994 analysis of a very large database of insurance records had showed that about 15% of those with insurance actually purchased the minimum limits of 15/30. A more recent analysis of 1995 data put the percent of insured purchasing the minimum liability limits at around 18%. This discrepancy between administrative records and the survey data could be due to inaccurate perceptions of the respondents. Respondents may think they are buying the minimum legal coverage, when in fact they are buying slightly more or buying the *minimum* that may have been *recommended* by their agent. These difference could also be a reflection of consumer's low level of involvement in the purchase of insurance (see Berger, 1989; Dahlby, 1986; Schlesinger, 1993; and Sherden, 1984 for a discussion of consumer's low involvement with insurance products). Many consumers may not remember how much insurance they purchased. In the short telephone interview it was not possible to ask respondents to try to locate their policy paperwork and get the information from it. Their apparent bias towards reporting they have the minimum level of coverage could reflect their desire to minimize their involvement with insurance altogether. There did not appear to be any sampling bias that would have increased the number of minimum limits respondents. Also, there does not appear to be anything socially objectionable to reporting a higher level of coverage that would have created a bias. Consumers desire to minimize their involvement with insurance could make it more difficult for any information campaign to have a meaningful impact.

If the truly uninsured survey respondents felt uncomfortable admitting to being uninsured and instead reported that their vehicle had insurance, it seems likely that when questioned about the amount of coverage they had purchased, they would report only buying the minimum level. It is also possible that due to the difficulty of reaching certain groups of people in a telephone survey, the survey did not reach a substantial portion of the uninsured population.

It should also be mentioned that there is a possibility that the uninsured rate has dropped sharply. Beginning January 1, 1997 the DMV started requiring vehicle owners to show proof of insurance before they can re-register their vehicle. Also, beginning January 1, 1997 Proposition 213 took effect. This proposition prohibits uninsured motorists from recovering pain and suffering benefits when they are involved in an accident regardless of who caused it. However, it is unlikely that by the end of 1997 the uninsured rate had dropped to near 10% as found in the RDD survey.

It seems reasonable to conclude that there were a combination of forces affecting the accuracy of the survey. The two main factors appear to be the difficulty in reaching an elusive segment of the population (young, mobile, low income, low education, and non-white) and the difficulty in eliciting honest responses regarding the illegal behavior of operating an uninsured vehicle. From the present survey it is not possible to determine which of these two is the greater problem. However, it is clear that a substantial portion of the uninsured were not identified. The RDD survey's rate of 10% is less than half the 22.6% estimated on June 1, 1997 from administrative records (CDI, 1998). The characteristics of those unidentified uninsured could not be determined. The weighting of the sample data suggests that those uninsured who were not identified are more like the pure uninsured than the hybrids. Additional analyses of the survey data may be able to estimate the possible impact of a more representative sample containing a higher percentage of the difficult to reach population segments.

It should also be noted that due to pressure to keep the interview length fairly short, it was not possible to conduct a detailed assessment of the intent to purchase the LCLC policy. The questions that were included in the survey give a general idea of interest. The questions on purchase intention seem to provide a better indication of interest, rather than an accurate prediction of future behavior. The purchase intention results seem to reflect the overwhelming concern about the cost of auto insurance, and the belief that lower prices are good. The results seem consistent with a top-of-head response of a consumer with a low level of involvement to an involved decision. This is especially true for those who are currently purchasing higher limits. Most of these individuals could achieve a savings right not by lowering their limits, and yet they

have not elected to do so. It seems reasonable that many of these higher limit individuals who expressed an intent to purchase the LCLC policy would revise their intentions upon further thought.

The data from this survey shows that there is a broad level of interest in a LCLC policy. Based on reported intentions, it appears that the majority of those who would purchase the new policy would come from the currently insured. It is also significant that over a third of the pure uninsured reported either no interest in a LCLC policy or were not likely to buy it even with a 30% reduction in price. In order to have a greater level of precision in predicting the demand for the LCLC policy, a survey focused primarily on demand should be conducted.

From the work with the exception file, it appears that the process of tele-matching (i.e., using a name and address to locate a phone number in a published telephone directory) produced a biased sample population. After failing to find matches for 75% of the original list, the individuals for whom a phone number was found turned out to be more stable, older, and more likely to own their home. This type of bias is likely to result in a lower than expected rate of uninsured vehicles. However, it was not clear that the low rate of respondents in the pretests who admitted to owning an uninsured vehicle was due to the sensitive nature of the questions or the bias introduced by the tele-matching process.

## **SUMMARY & CONCLUSIONS**

Owners of uninsured vehicles come from all age, education, income, and ethnic groups. However, owners of uninsured vehicles are more likely to: have less education, be under 30 years old, rent their home, be non-white, have a lower income, move more frequently, and be male. Not surprisingly, compared to the insured the uninsured have a heightened level of concern about the cost of auto insurance and about being able to find a place to buy it.

It appears that many of the uninsured are not content to remain in their present position. A majority of them say they are interested in lower cost ways of acquiring insurance coverage. A substantial percentage say they would purchase a reduced benefits policy at only a 10% discount

from current price levels. At least that is their initial reaction. Whether they would actually follow through with their stated interest and purchase a policy costing 90% of the price they are currently facing, could not be determined with a high level of accuracy from this study. It appears that there is a core group of uninsured that would not voluntarily purchase a policy even if it were 30% less than the current price. It also appears that the uninsured are more active at considering their insurance options. The uninsured are more likely to have sought out information on insurance than those who are currently insured.

Despite the apparent motivation to acquire insurance, it may be difficult to voluntarily bring many of the uninsured into the market. In order for any effort to be successful it needs to focus on more than price alone. Among these may be attitudes such as less trust of insurance companies, and being more likely to perceive themselves as the kind of person who does not have insurance. It also appears that their information seeking behavior may not be as effective as it could be. They are more likely to ask a friend for information and not as likely to actually call or be contacted by an insurance company. This is consistent with their viewing themselves as outsiders to the current insurance system. Significant obstacles would need to be identified and overcome before these uninsured can be brought into the system.

An additional problem may be the slightly poor safety record of the uninsured. While approximately 85% of the uninsured appear to qualify for a good driver discount, the higher percentage with two or more points on their safety record indicate that the uninsured may be slightly more costly for insurance companies to insure.

Once these problems are addressed, a number of the uninsured may elect to purchase insurance. There does not appear to be other factors holding a segment of the uninsured away from the purchase of insurance, but additional study in this area is warranted. Most of the uninsured seemed to have not had any recent problems in getting insurance. Most have not made any recent claims, but the limited data that is available shows that those who have, tended to be satisfied with their experience. Also, the uninsured's expectation of the cost to insure a vehicle seems to be in a reasonable range.

There also appears to be a core group of uninsured that are very unlikely to purchase auto insurance. Their low incomes and alienation from the current system make it unlikely that any cost reductions and/or outreach efforts would be successful. The only practical way to recover the costs these uninsured are currently transferring to the insured drivers, is through a non-voluntary mechanism.

A new finding from this survey is that the uninsured do not appear to be a single homogenous group. Two primary types of uninsured were identified in this survey: the pure and the hybrid. All the vehicles owned by a pure uninsured are uninsured, whereas a hybrid uninsured owns one or more insured vehicles as well as one or more uninsured vehicles. It appears that about half of the uninsured may be hybrids.

Many reasons were identified for failing to insure a vehicle. The two primary reasons that accounted for about 80% of the uninsured involved non-use of the vehicle and the cost of insurance. About half of the uninsured claimed their vehicle was not insured because it did not run or was not being used. The cost reasons involved not being able to afford what insurance costs and the belief that insurance just costs too much. The majority of the pure uninsured cite the cost of insurance as the reason they did not insure. The majority of the hybrid uninsured stated that non-use was the reason for their uninsured vehicles.

In the areas where they overlapped, the findings from this survey tended to match the findings from previous studies on the uninsured. However, the findings from the present and previous surveys may not present the complete picture of the uninsured. Analysis of the types of respondents in the sample indicate that some of the groups most likely to be uninsured tended to be under represented in the survey. It may be extremely difficult to obtain a completely representative sample of the uninsured from a strictly random telephone survey. Further analysis of the data may be able to provide some insight into this problem. It is clear that tele-matching is not a viable method for investigating uninsured motorists. The low rate that names and addresses can be linked to a listed phone number results in a biased sample.



Another problem faced by any analysis of the uninsured that uses self reported data is the issue of under reporting. It appears that under reporting was encountered in this survey. However the extent that it has affected the results is difficult to assess. In order to make further progress quantifying the impact of some individuals tendency to be less than forthright in their responses additional research is needed.

This report provides a good description of what is currently known about the characteristics of the uninsured. However, a certain amount of caution in applying the findings is in order. This study is the first one we are aware of that attempts to systematically estimate the under reporting and biases in measuring the uninsured. At this point it is not possible to say how complete the present and previous surveys have been. However, it is possible that over half of the uninsured population are not represented by the survey's data.

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Attachment 1  
Methodological Details

## Methodological Details

Any survey attempting to reach a population that tended to be younger, less educated, lower income, and renters (the characteristics of those with a higher likelihood of being uninsured) would likely find that reaching a representative sample would be difficult. When the survey also dealt with a sensitive subject (driving an uninsured vehicle is illegal in California), the difficulty of obtaining a representative and accurate sample increases. Any attempt to measure the characteristics of uninsured motorist has to face these problems. Different survey techniques were considered and each approach has different capacities to deal with these sampling problems. The primary survey approaches considered included:

- Mail Survey. This type of survey requires a large initial mailings to intended respondents. A frequently encountered problem is that those who do respond to the survey are not representative of the entire population. Also, presenting this type of survey in a written format is logistically difficult due to the language and cultural diversity of the California population. It is possible that a segment of the uninsured population is very mobile and may be difficult to reach through the mail. Other segments of the target group may have low reading skills or be illiterate.
- A telephone survey from an “exception file.”<sup>3</sup> As the exception file does not contain phone numbers, this approach requires the searching of telephone listings and matching names in the exception file with listed telephone numbers. The high number of unlisted numbers in

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<sup>3</sup>As part of a 1998 CDI analysis to measure the rate of uninsured vehicles, two large databases of individual vehicle information were matched against each other. The first database was from the DMV and contained detailed data on the vehicles registered in California. The second database was created by merging the insurance records of nearly every insurance company doing business in California. Once these files were matched against each other, the non-matched records in the DMV registration database were written to an exception file. This exception file contained records for approximately 6.5 million vehicles. Each of these vehicles is suspected of being uninsured.

Due to less than complete reporting by some insurance companies, not all insured vehicles were reported. Based on other summary financial reports it was possible to estimate the total number of vehicle years covered for the time in question. Using these check totals it was determined that an additional 2.2 million vehicles should probably be removed from the exception file because they actually do have insurance. However, there was no way of identifying which vehicle should be removed. The implication of this is that approximately 34% of the vehicles in the exception file are likely to be insured. It should also be noted that due to errors in recording the VINs in both the DMV and insurance company databases, some insured vehicles were not identified. This would increase the percent of insured vehicles in the exception file.

the state, the likelihood that the registered owner of the vehicle may not be the same person who has a listing in the telephone directory, and the suspected transientness of a segment of the target population could result in a low match rate and bias. Another possible problem using the exception file is the age of the information. The data in the file has an effective date of 6-1-97. Due to the time lag involved in obtaining and processing the insurance information, a minimum of three to six months would elapse before a survey could be fielded. Depending on the level of mobility in the survey population, this time lag could result in an undetermined percentage being excluded from the sample.

- In-person interview based on samples from the exception file. This type of sample could be stratified, and possibly limited to important areas if the effects of truncating the sampling frame was not too severe. On the positive side, this approach could lessen the bias associated with unlisted and non-telephone households. Cost considerations would be a limit on the sample size. Using the exception file as the sampling frame would exclude any uninsured vehicles that were never registered or had their registrations expire more than four years ago<sup>4</sup>. An issue relevant here concerns whether or not there is a significant differences between those who fit the estimated profile of the uninsured (low income, renter, younger, etc.) *with* telephones and those who fit the estimated profile of the uninsured *without* telephones. If there is no differences between low income, highly mobile, etc. *with* a telephone and a similar population *without* a telephone, then the additional costs associated with the in-person interviews could be avoided by focusing on a telephone sample. However, it is not clear that even if only in-person interviews were conducted, that there would be a large enough sample of the uninsured without telephones to adequately evaluate differences with respect to other similar uninsured.

- Telephone survey from a random sample of the general population. This type of sample could stratify the sample by estimated incidence rates for a somewhat improved contact rate.

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<sup>4</sup>Records are purged from DMV's vehicle registration database four years after the date of the last activity. Data from the 1990 Census shows that only 4% of the households in the western region are without telephones. However, 2% of home owners and 11% of renters are without telephones. Data (unweighted) from the 1996 Current Population Survey from California shows that an estimated 12% to 16% of the households with income below \$10,000 are without telephones. The 1989 IRC survey previously cited found a higher incidence of renter and low income households among the uninsured.

Based on historical trends, the proportion of the general population that is expected to have an uninsured vehicle is estimated to be in the 25% to 30% range. It is possible to develop estimates of the incidence rate for uninsured vehicles at the zip code and/or county level. This type of approach would be able to include uninsured vehicles that are also unregistered (and not identified in the exception file). It is estimated that approximately 10% of vehicles may lack current registration (Hunstad, 1999). However, to the extent that those uninsured without telephones are different than those uninsured with telephones, the inability to reach uninsured without telephones may result in bias.

Problems related to conducting surveys dealing with sensitive subjects are not unique to uninsured motorists. Previous studies have evaluated different approaches to eliciting information on drug use, sexual activity, illegal immigration, and concealed income. It is unusual for these studies to have hard data that can be used to estimate the extent of underreporting or bias. The most common approach taken is to compare two different approaches on the same population to determine which approach results in the higher (and presumably more accurate) estimate. Key findings from these studies applicable to measuring the characteristics of the uninsured include:

- ease into the sensitive questions by the prior administration of less sensitive questions
- ask for the respondent's commitment to try to give accurate answers at the beginning of the interview
- provide controlled feed back to the respondent
- provide the respondent with information on the intent of the question (Groves, 1989; Gfroerer, 1992; Hser, 1992; Aday, 1989; and Edin, 1997).

Contradictory results were observed on the benefit of in-person interviews versus telephone interviews. Drug use tended to have higher estimates when the survey was done in-person and the respondent was handed a paper and pencil questionnaire to complete without interviewer involvement and allowed to seal the questionnaire in an unmarked envelop before returning it to the interviewer (Aquilino, 1990, 1994, and 1996). However, surveys on personal health experienced a higher reported rate of illnesses in surveys done over the telephone (Thornberry,

1987).

Surveys by the IRC in 1997 seem to suggest in-person interviews are better for measuring the uninsured vehicle rate. In a July 1997 in-person survey they estimated a 17% uninsured rate for the United States (IRC, 1997a). In a telephone survey conducted in September and October of 1997 a 9% rate was estimated (IRC, 1997b). However, these two surveys used different questionnaires that may account for the different findings and they were not designed to test the accuracy of different modes of interviewing.

The initial plan for the present study on the characteristics of uninsured motorists involved a dual frame approach.<sup>5</sup> The primary sample would be collected through a random telephone survey. Non-telephone households would be sampled through a multi-staged truncated area probability sample. The area probability sample was to be truncated for efficiency reasons. With the incidence of non-telephone households at about 4% statewide, finding them becomes an expensive proposition. By eliminating less than 10% of the census block groups with a very low probability of non-telephone households, the screening work load could be decreased by over 50%. Weighting adjustments could compensate for the truncation of the area sampling frame. The area probability sample of non-telephone households was thought to be an ideal approach to measuring the incidence of uninsured vehicles in a segment of the population where the incidence was likely to be higher than average.

The random telephone survey portion was thought to be desirable because it would allow some disguise of and permit easing into the transition into the sensitive nature of the survey. This could increase cooperation rates and sample representativeness. Any type of written questionnaire provided to the respondent would not have allowed this. The random nature of the survey would avoid the bias associated with attempting to phone a sub-sample of the exception file (due to low match rate from using only listed telephone numbers, respondent mobility and aging of the data in the exception file). A random sample would also include the unregistered

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<sup>5</sup>The sampling design was modeled after the approach used by Westat in the National Survey of America's Families. (see Waksberg, 1997).



(and possibly uninsured) in the sampling frame to the extent that these owners had telephones. Finally, at this point we are aware of no good data or good theoretical basis that would show or suggest a significant differences between individuals fitting the profile of the uninsured (low income, renter, younger, etc.) without telephones and those who fit the estimated profile of the uninsured with telephones. If the lack of a telephone is not correlated with a significant difference in the factors related to uninsured vehicles after controlling for the factors known to be associated with uninsured vehicles (age, education, home ownership, employment, and income), then the increased expense and difficulty of in-person interviews is not beneficial.

A contract was awarded to implement a dual framed survey that would have collected over 3,000 telephone interviews and 100 in-person interviews with uninsured respondents. However, the Department was forced to abandon the dual frame approach when the selected vendor sought to increase the costs of the area probability sample by over 400%. Because of existing time line commitments it was decided to implement a reduced sample of the random telephone survey and evaluate the extent of under reporting.

*Focus Groups:*

Prior to the development of a survey instrument to collect information on insurance status, three focus groups were conducted. The purpose of these focus groups was to gain additional insight into the reasons why some people do not insure their vehicle and conversely, to explore why some similarly situated people do insure their vehicle. Additionally, information relevant to the issue of making the survey instrument as non-threatening as possible were solicited.

The three focus groups were held in September 1997 in Sacramento. Two of the groups were conducted in English and one was conducted in Spanish among individuals who primarily spoke Spanish. One of the English groups was composed of only uninsured motorists and the other was composed of individuals who only purchased the minimum liability insurance required by law. The Spanish group was composed of both those with uninsured vehicles and those with minimum limits insurance.

*Pretest 1:*

Using the information collected in the focus groups to build upon the information from previous studies of uninsured motorists, an initial questionnaire was developed. The basic approach taken in the initial questionnaire was to first build rapport and warm up the respondent with questions about driving in general. Also, half of the respondents received additional warm up questions covering their estimation of the rate of uninsured vehicles and the reason why people (in general) do or do not insure a vehicle. The hypothesis was that the additional questions dealing with the subject of not insuring in a general, non-personal way would tend to de-sensitize the issue and make the respondent less hesitant about personal questions on not insuring when the respondent encountered them latter in the interview. The warm up questions were followed by questions on the model year of their vehicle(s) and how frequently the vehicle(s) was used. Then the sensitive issues of insurance and registration status were asked. If any vehicle was reported as uninsured or unregistered, the respondent was asked the reason why.

The remaining portion of the interview included questions covering whether the respondent's current insurance (if a vehicle with insurance was owned) was at the minimum or a higher level, purchase interest in a lower cost lower coverage (LCLC) policy, information seeking behavior, insurance attitudes, experience with insurance, and demographics. Attachment 2 outlines the content of the questionnaire.

This questionnaire was pretested in October 1997 on a sample of 59 individuals that were believed to have a high likelihood of being uninsured. This sample was selected from the exception file. Because neither the DMV nor the insurance company records contained a telephone number, the sample was tele-matched to append a telephone number. Any vehicle identified as currently registered for which no insurance records could be located was believed to have a high likelihood of being uninsured. For any respondent who reported that they did have insurance on their vehicle, the interviewer compared to the suspected vehicle identified in the exception file to the one(s) reported by the respondent. If a match could be made, the respondent was offered a \$10 incentive to mail or fax their proof of insurance. This questionnaire was

designed and planned to be used in a random telephone survey, and as such, as part of the normal interview flow it did not presume to have knowledge of the respondent's name or vehicle. Because of this, a specific effort was not made to reach a targeted individual and consequently not all of the respondents matched the information in the sample file.

*Pretest 2:*

The results of pretest 1 did not clearly indicate whether the actual uninsured rate in the sampled population was dramatically lower than expected or the survey instrument was failing to elicit accurate information from uninsured motorists. In order to rule out possible difficulties with the survey instrument a second pretest was performed. In the second pretest the questionnaire was revised and two different ways of approaching the subject of not insuring were evaluated. In the approach called the “vehicle expense approach,” the issue of insurance was approached in the context of documenting the expenses the respondent incurred while owning their vehicle. Detailed expense data was collected on each vehicle.

The section of this questionnaire dealing with the vehicle expenses started out asking about the frequency that gas was purchased and the average amount spent per stop for gas. Following this were questions about routine maintenance, expenses for other work, insurance expenses, and registration expenses. For each of these expenses areas, the respondent was asked if they had incurred any expenses in the prior 6 months, and if they had, how much was spent. If insurance expenses were mentioned the respondent was asked if the insurance was currently in force. If no insurance expense was mentioned the respondent was asked what was the reason for the vehicle not being insured. In order to encourage the reporting of uninsured vehicles, this question implicitly assumed that the vehicles without insurance expenses was not insured. The interviewers were instructed to correctly code responses where the respondent indicated that the vehicle actually was insured (perhaps due to the premium being paid on an annual basis, someone else paying the premium, etc.).

In the approach called the “direct approach” the survey was introduced as being conducted on behalf of the California Department of Insurance. The Department's regulation of insurance

companies was emphasized. The respondent was told that the Department “has nothing to do with the DMV, drivers licenses, auto registrations, or the enforcement of any traffic laws.” An appeal was made for the respondent to help develop greater knowledge about how different people are involved with insurance. The respondent was told “there is little known about how people like yourself think on many important issues, so we are attempting to find out. . . . We would like to get you opinion . . .”. In order to assure the respondent that they were not being targeted, the random calling process was explained. Also, it was emphasized that nothing was being sold, and that the survey was for research purposes only and all information would be kept strictly confidential. Finally, there was an appeal to the respondent “if you, or anyone you know, has a vehicle that was without auto insurance at any time in the last six months, we would very much like to have you help us understand the reasons and what you think about it.”

Survey components that were common to both approaches included:

- a request for commitment to give accurate truthful information for each question and to put in the effort to think carefully about each question before answering.
- the number and type of vehicles owned (cars, trucks, vans, sports utility vehicles, motorcycles, etc.)
- in the direct approach, only the model year of the uninsured vehicles was obtained. In the vehicle expense approach the make and model year of each vehicle was obtained. Similarly, with the information on frequency of vehicle use, in the direct approach it was collected just for the uninsured vehicles and in the vehicle expense approach it was collected for each vehicle.
- once the section on insurance and registration status was passed, the remaining portion of both interview types included identical questions covering whether the respondent's current insurance (if a vehicle with insurance was owned) was at the minimum or a higher level, purchase interest in a LCLC policy, and demographics. The questions on information seeking behavior, insurance attitudes, experience with insurance had worked well in pretest 1 and were not repeated again in pretest 2. Attachment 3 outlines the content of the two different approaches used in the questionnaire in pretest 2.

The two versions of the pretest 2 questionnaire were fielded in early November 1997 on a total sample of 100. Each version of the questionnaire had a sample of 50 individuals. The sampling frame was the same exception file that was used in pretest 1. However, during the preceding month, additional cleaning work had been done on the exception file and it was possible to eliminate about 4% of the cases due to their being matched to insurance records. Similar to pretest 1, a verification process was used to attempt to verify the accuracy of any respondent claiming to have insurance for the vehicle suspected to be uninsured. Also, in order to provide a higher level of motivation to return proof of insurance, the incentive was increased from \$10 to \$25. As in pretest 1, the test was intended to duplicated the conditions of a completely random survey without any prior knowledge about the respondent. Because of this some interviews were completed with respondents who did not correspond to the name in the exception file, but who were otherwise qualified to participate in the survey.

*RDD Survey:*

The questionnaire used in the random survey was a modified version of the vehicle expense approach used in pretest 2. The questions on information seeking behavior, insurance attitudes, and experience with insurance were added back into the questionnaire. In order to keep the length of the interview within reason, if the respondent owned more than one vehicle, detailed expense data were just collected on the oldest vehicle (under the assumption that if any of the respondent's vehicles were not insured, the oldest vehicle would be the most likely candidate, and the lack of insurance expenses would be a confirmation that the vehicle was uninsured). However, information on the insured status of every other owned vehicles was also captured latter in the interview. Prior to implementing the survey, concurrent and retrospective think-aloud cognitive techniques were used to identify questions that could be considered unclear or confusing to respondents.

The survey was fielded in December 1997, from December 5th through the 21st. A total of 1,008 full interviews were completed. The questionnaire was translated into Spanish and reviewed by an independent translator. Spanish language interviewers were available if the respondent preferred to speak in Spanish. Quotas were established for Los Angeles County and the balance

of the state. A minimum of 300 interviews were from Los Angeles County and a minimum of 700 interviews were from the balance of the state. A total of five attempts that included both weekday and weekends, were made before abandoning a phone number. All non-hostile refusals to grant an interview were called back at least once and an attempt was made to complete the interview. Attachment 4 is a copy of the questionnaire that has been marked to show the basic response frequencies for each question.

*Exception File Survey:*

In order to validate the suspected uninsured status of the vehicles identified in the exception file an additional survey was conducted. The sampling frame for this survey was the same exception file used in the two pretests. However, during the time period since the pretests additional cleaning had made slight improvements to the quality of the data. Even with the additional cleaning of the sampling frame, it was realized that a sample drawn from it may produce a biased sample of the uninsured. However, if the survey could provide any insights into the type of vehicles and their owners that appeared in the exception file, it would be of value. This survey was fielded in late January and early February 1998. Spanish language interviewers were available for Spanish speaking respondents. The total sample was slightly over 580.

The basic approach used in this survey was to present the interview as an attempt to verify vehicle information from the public records. The subject of a possible uninsured vehicle was not brought up until latter in the interview. Strict confidentiality was assured. Also it was emphasized that nothing was being sold and that the study was only for research. This survey departed from the previous ones in that prior to the substantive questions, the name and the vehicle year and model was verified. This ensured that the interview was completed with the individual who was identified in the exception file. Once the name and vehicle information was verified the individual was told that there was no record of the vehicle being insured and was asked what was the reason for that particular vehicle not being insured at that particular time. Following this, the respondent was asked about the frequency of use, the number and types of other vehicles owned, and the number of these other vehicles that were not insured. From this point the questionnaire was identical to the instrument used in the random survey and covered the

following areas: level of insurance purchased (minimum or higher), purchase interest in a LCLC policy, information seeking behavior, insurance attitudes, experience with insurance, and demographics. Attachment 5 outlines the content of this questionnaire.

*Pretest 1 Results:*

For the first pretest 201 respondents were contacted. About half (49%) refused to allow an interview. Of the remaining 102 willing to be interviewed, 43 did not qualify due to not being an owner or responsible for a vehicle. In total 59 respondents completed the entire interview. Even though the length of the interview was longer than expected (15 minutes instead of 12), very few respondents terminated mid-interview. The tele-match process for associating a telephone number with the DMV record was less successful than expected. Only 25% of the sample was able to be assigned a phone number.

Of the 59 completed interviews only 4 (7%) reported having an uninsured vehicle in their household. All of these uninsured also reported owning an insured vehicle. This was a much lower rate of uninsured than was expected. In order to verify if the target individual and vehicle were located, the model year of the respondent's vehicles were compared to the vehicle identified in the exception file. For 29 of the respondents there seemed to be a match up between the respondent's vehicle and the DMV-insurance exception file vehicle. Of these 29, 4 said they had purchased insurance *after* the effective date of the exception file (i.e., 6-1-97). Two said they did not have the paperwork that would show proof of insurance on 6-1-97. Sixteen were not willing to send in their proof of insurance for the \$10 incentive that was offered. The remaining 7 agreed to send in their proof of insurance. Four of these 7 actually did so. Even if the four who purchased insurance after 6-1-97 were combined with the respondents that could be suspected of misrepresenting their insurance status (i.e., said they didn't have paperwork, not willing to send in a copy of paperwork for the incentive, or agreeing to send proof and they not doing so), the total number of uninsured would only be 13 or 22%. This is still much lower than expected.

Possible explanations for the low uninsured rate observed in the first pretest include:

- The uninsured rate could be an accurate reflection of that particular sample. The new

requirements that, effective 1-1-97, proof of insurance must be provided at the time a vehicle registration is renewed, coupled with Proposition 213's reduction in benefits due to uninsured motorist involved in accidents, may have dramatically reduced the rate of uninsured.

Historically, the uninsured vehicle rate has been estimated at 25% to 30%.

- The "right" individual (identified in the exception file) was not interviewed, therefore the likelihood of finding an uninsured was reduced. We know that slightly over half (51%) of the respondents did not appear to own the vehicle identified in the exception file. This could have been due to reaching the wrong household (due to the tele-matched telephone number being in error) or talking to an individual in the household who was not the owner of nor aware of the vehicle identified in the exception file.

- Insurance was purchased after the date of the exception file match. In fact, 4 additional respondents did say that this was the case. However, including these additional 4 only brings the uninsured rate up to 14%.

- Many respondents could have felt uncomfortable admitting to having an uninsured vehicle and reported the vehicle was insured when in fact it was not.

The additional warm up questions on estimating the overall rate of uninsured vehicles and the reasons why some people do not insure and some people do, did not seem to make a difference in the number of uninsured reported.

#### *Pretest 2 Results:*

The disposition of the initial phone sample into refused, not meeting the qualifying criteria, and completed interview was similar for both versions of the questionnaire used in pretest 2. These disposition results were also similar to the results for the sample disposition in pretest 1.

Of the two approaches, the vehicle expense approach resulted in a higher rate of reported uninsured vehicles. Counting both those reported as uninsured and those where the insurance was not purchased until after 6-1-97 (the cutoff date for the exception file), the vehicle expense approach resulted in an estimated uninsured rate of 20% versus the 4% rate estimated by the direct approach. Both of these rates are well under the expected rate for this sample of



individuals considered to have a high likelihood of owning an uninsured vehicle. A summary of the validation outcomes for each approach is shown in Table 16.

Table 16.  
Validation Outcome of the Vehicle Expense and Direct Approaches in Pretest 2

Outcome	Vehicle Expense Approach	Direct Approach
Reported vehicle as insured	26%	20%
Reported vehicle as uninsured	8%	2%
Reported vehicle as insured <i>after 6-1-97</i>	12%	2%
Vehicle year did not match	40%	38%
Respondent's name did not match	<u>14%</u>	<u>38%</u>
	100%	100%

Attachment 2  
Outline of Pretest 1 Questionnaire

## Outline of Pretest 1 Questionnaire

- ▶ Introduction: survey is for research only, no sales involved.
- ▶ Screen: respondent must be the owner or responsible for a vehicle
- ▶ Warm Up Questions: general questions about driving in California (e.g., more or less vehicles on the road?, amount of maintenance required by vehicles today?, frequency of noticing aggressive driving?)
- ▶ General Questions About Insurance (asked only of ½ of respondents):
  - estimate of the percent of uninsured vehicles
  - what is the reason for people not insuring
  - what is the reason for people insuring
- ▶ Questions About Respondent's Vehicle:
  - model year
  - frequency of use
  - current insurance status
  - current registration status
- ▶ (if any uninsured vehicles) Question on the Reason for Not Insuring
  - ▶ (if any uninsured vehicles & a cost related reason is given for not insuring) Questions on the likelihood of buying insurance if respondent had more income or more assets or the basic policy also covered first party medical
- ▶ (if any unregistered vehicles) Question on the Reason for Not Registering
- ▶ (if any insured vehicles) Question on Minimum or Higher Limits
- ▶ Question Requesting an Estimated of the Cost of a Minimum Limits Policy
- ▶ Question on Interest in LCLC
- ▶ Questions on the Likelihood of Buying LCLC at 10%, 20%, and 30% Reductions
- ▶ Question on the Likelihood of Buying If Could Pay Weekly, Bi-weekly, or Monthly
- ▶ Questions on Information Seeking Behavior
- ▶ Questions on Insurance Affordability and Availability
- ▶ Questions on Experiences with Insurance: made a claim, number of tickets & accidents
- ▶ Questions on Attitudes Towards Insurance
- ▶ Questions on Medical and Life Insurance Coverage
- ▶ Demographics: sex, employment status, education, age, ethnic group, marital status, H.H. size, number of children, length of time in home, zip code, language spoken at home, income

Attachment 3  
Outline of Pretest 2 Questionnaire

## Outline of Pretest 2 Questionnaire

- ▶ Introduction: survey is for research only, no sales involved.
- ▶ Screen: respondent must be the owner or responsible for a vehicle
- ▶ Commitment: asks respondent to agree to make an effort to think carefully and give accurate answers to each question
- ▶ (if Direct Approach) Appeal for Help & Assurance of Confidentiality
- ▶ Questions About the Number and Type of Respondent's Vehicle:
  - model year
  - frequency of use
  - current insurance status
  - current registration status
- ▶ (if Direct Approach) Questions Insurance Status and (if applicable) Reason for Not Insuring
- ▶ (if Direct Approach) Questions Registration Status and (if applicable) Reason for Not Registering
- ▶ (if Vehicle Expense Approach) Question on Vehicle Expenses
- ▶ (if Vehicle Expense Approach and insured vehicles) Question on Insurance Currently in Force
- ▶ (if Vehicle Expense Approach and uninsured vehicles) Question on Reason for Not Insuring
- ▶ (if Vehicle Expense Approach and unregistered vehicles) Question on Reason for Not Registering
- ▶ Question of Frequency of Vehicle Use
- ▶ (if any insured vehicles) Question on Minimum or Higher Limits
- ▶ Question Requesting an Estimated of the Cost of a Minimum Limits Policy
- ▶ Question on Interest in LCLC
- ▶ Questions on the Likelihood of Buying LCLC at 10%, 20%, and 30% Reductions
- ▶ Demographics: sex, employment status, education, age, ethnic group, marital status, H.H. size, number of children, length of time in home, zip code, language spoken at home, income

Attachment 4  
Questionnaire Used for RDD Survey with Summary of Results

## Questionnaire Used for RDD Survey with Summary of Results

### .. INTRODUCTION:

Hello, my name is \_\_\_\_\_. I'm calling from \_\_\_\_\_, a research company located in Van Nuys, California. We are doing a brief survey on peoples' experiences with their motor vehicles and would like to include your opinion.

SEX. [INTERVIEWER: ENTER GENDER OF RESPONDENT]

49% [675] 1) Female

51% [705] 2) Male

### .. SCREENS:

5. First of all, in what county are you located?

4% [55] Alameda	- [2] Kings	1% [14] Placer	- [0] Sierra
- [2] Alpine	- [3] Lake	- [2] Plumas	- [3] Siskiyou
- [1] Amador	- [3] Lassen	4% [46] Riverside	1% [17] Solano
1% [7] Butte	33% [427] Los Angeles	3% [41] Sacramento	2% [16] Sonoma
- [4] Calaveras	- [4] Madera	- [3] San Benito	1% [14] Stanislaus
- [1] Colusa	1% [13] Marin	4% [51] San Bernardino	- [2] Sutter
2% [28] Contra Costa	- [0] Mariposa	8% [99] San Diego	- [4] Tehama
- [1] Del Norte	- [2] Mendocino	3% [36] San Francisco	- [2] Trinity
- [5] El Dorado	- [5] Merced	1% [16] San Joaquin	1% [8] Tulare
2% [25] Fresno	- [1] Modoc	1% [12] San Luis Obispo	- [3] Tuolumne
- [2] Glenn	- [0] Mono	2% [27] San Mateo	2% [29] Ventura
1% [6] Humboldt	1% [10] Monterey	2% [23] Santa Barbara	1% [7] Yolo
- [4] Imperial	1% [6] Napa	5% [60] Santa Clara	- [1] Yuba
- [4] Inyo	1% [7] Nevada	1% [13] Santa Cruz	- [2] other county
2% [25] Kern	5% [67] Orange	1% [7] Shasta	1% [6] outside CA
			2% [24] Don't Know
			5% [67] Refused

10. Are you the owner of any of the vehicles in your household?

82% [1073] 1) Yes-Appears to be English-speaking [GOTO REQUEST]

4% [47] 2) No [GOTO NEXT QUESTION]

1% [11] 3) Appears to be non-English-speaking [GOTO LANGUAGE PREFERENCE]

13% [168] 4) No vehicles in the household [THANK & TERMINATE]

1% [12] 5) Refused

20. May I speak with the person who is the owner of most of the vehicles in your household?

[NOTE TO INTERVIEWER: If more than one person, try to speak with the person who is most knowledgeable about the vehicles.]

[-] 1) Yes-Person available [BEGIN WITH INTRODUCTION]

[-] 2) Person not available [SCHEDULE CALLBACK]

[47] 9) Refused [THANK & TERMINATE]

*.. LANGUAGE PREFERENCE:*

IF NEEDED, ASK:

30. Would you prefer that I speak with you in English or another language?

[IF ANOTHER LANGUAGE: RECORD NAME AND BEST TIME TO CALL.]

[-] 1) English is preferred [BEGIN INTERVIEW]

[-] 2) Spanish is preferred [THANK & TERMINATE, SAY SOMEONE WILL CALL BACK TO CONDUCT INTERVIEW IN PREFERRED LANGUAGE]

[-] 3) Mandarin Chinese is preferred [THANK & TERMINATE, SAY SOMEONE WILL CALL BACK TO CONDUCT INTERVIEW IN PREFERRED LANGUAGE]

[-] 4) Vietnamese is preferred [THANK & TERMINATE, SAY SOMEONE WILL CALL BACK TO CONDUCT INTERVIEW IN PREFERRED LANGUAGE]

[9] 5) Spanish is preferred AND Interviewer is Spanish-speaking [BEGIN INTERVIEW]

[-] 8) Other language is preferred (please specify) [THANK & TERMINATE, SAY SOMEONE WILL PROBABLY CALL BACK TO CONDUCT INTERVIEW IN PREFERRED LANGUAGE]

[2] 9) Refused

*.. REQUEST:*

40. Do you have about 10 minutes for a confidential interview? Your opinions are important for this research project.

98% [1059] 1) Yes [BEGIN SURVEY]

- [-] 2) No [ARRANGE FOR A CALLBACK TIME]

2% [23] 9) Refusal [THANK & TERMINATE]

*.. COMMITMENT:*

50. This survey is for research purposes only. We are not selling anything. Your answers will be kept strictly confidential and will only be grouped with other people's answers.

In this survey, it is important to get accurate information on each question, even on those which may seem unimportant. This may take some effort. Is this a good time for you to be able to think carefully about each question in order to give an accurate answer?

99% [1047] 1) Yes [GOTO Q.70]

1% [12] 2) No [CONTINUE]



60. Getting accurate information is important for this study. Would another time be better for you? [I need to get your commitment to think carefully before we can continue the interview.]

- [-] 1) Accuracy commitment given [CONTINUE]
- [-] 2) Respondent can't continue - but callback [TERMINATE & SCHEDULE CALLBACK]
- [13] 3) Respondent can't continue - Do Not Callback [TERMINATE]

.. *VEHICLE OWNERSHIP:*

70. Thank you. We appreciate your willingness to make the extra effort for accurate answers. Your participation is important and your answers will be strictly confidential.

First of all, how many motor vehicles do you own? That is, how many cars, trucks, vans, or motorcycles do you own?

[NOTE TO INTERVIEWER:

- Business or corporate cars should not be included in any count.
- Jeeps and campers or RV's should be included in the Van count (Q.70b).
- ENTER TOTAL NUMBER OF EACH TYPE OF VEHICLE-NO RANGES
- CODE 0 FOR NONE; 99 FOR REFUSED]

	<u>mean</u> (N = 1045)
70a. (And) how many of those are Cars [passenger cars of any type]?	1.15
70b. (And) how many are Vans or Utility Vehicles?	0.27
70c. (And) how many are Trucks?	0.33
70d. (And) how many are Motorcycles?	0.05

[70e. CATI CALCULATED: Total number of vehicles owned by respondent] = 1.79

Q75. Just to confirm, the total number of vehicles owned by you is |Q.70e|?

- 1) Yes [CONTINUE]
- 2) No [REPEAT Q.70]

IF TOTAL NUMBER OF VEHICLES = 0, OR IF RESPONDENT REFUSES TO PROVIDE NUMBER OF VEHICLES, THANK & TERMINATE

80. Are there any other vehicles in your household that you do not own?

- 26% [268] 1) Yes [CONTINUE]
- 74% [773] 2) No [SKIP NEXT QUESTION]
- [-] 3) Don't Know [SKIP NEXT QUESTION]

90. How many other cars, trucks, vans, or motorcycles are there that you do not own? mean (N = 268)
- 90a. (And) how many of those are Cars (passenger cars of any type)? 1.19
- 90b. (And) how many are Vans or Utility Vehicles? 0.23
- 90c. (And) how many are Trucks? 0.42
- 90d. (And) how many are Motorcycles? 0.12

IF OTHER VEHICLES IN HOUSEHOLD (Q80=1), SAY:

The remaining questions will apply just to the vehicle(s) you own.

*..INSURANCE & REGISTRATION STATUS:*

500. What is the model year and make of your (oldest) vehicle?
- a) YEAR (mean = 1985, range = 1922 to 1998)
- b) MAKE \_\_\_\_\_

510. We are trying to get an idea of how much people actually spend on different types of vehicles. On average, how often do you buy gas for this vehicle? [READ LIST, IF NECESSARY]

- 23% [238] 01) More than once a week
- 47% [493] 02) Once a week
- 17% [180] 03) 2-3 times a month
- 7% [72] 04) Once a month
- 2% [19] 05) 4-11 times a year
- 1% [9] 06) 2-3 times a year
- [4] 07) Once a year
- [3] 08) Less than once a year
- 2% [18] 09) Never [SKIP NEXT QUESTION]
- 1% [5] 98) Undecided/Don't know
- [-] 99) Refused

520. On average, how much do you spend each time you stop for gas?  
[ENTER WHOLE DOLLAR AMOUNTS; NO DECIMALS. NO RANGES; ESTIMATE MIDPOINT, IF NECESSARY]

(mean = \$17 , range = \$1 to \$75, N = 1003)

530. In the past 6 months, have you had any maintenance expenses such as oil change, new tires, or other work?

- 75% [776] 1) Yes
- 25% [264] 2) No [SKIP NEXT TWO QUESTIONS]
- [1] 8) Undecided/Don't know [SKIP NEXT TWO QUESTIONS]
- [-] 9) Refused [SKIP NEXT TWO QUESTIONS]

540. Approximately how much did these expenses come to?

(mean = \$339, range = \$0 to \$6,000, N = 733)

550. And did you do any of this work yourself?

- 24% [853] 1) Yes
- 76% [558] 2) No
- [-] 8) Undecided/Don't know
- [-] 9) Refused

560. And, in the past six months, have you had any expenses for auto insurance for this vehicle?

- 82% [853] 1) Yes
- 18% [186] 2) No [SKIP NEXT QUESTION]
- [2] 8) Undecided/Don't know [TRY TO GET THEIR BEST ESTIMATE, USE THE MIDPOINT IF NECESSARY TO ESTIMATE THE AMOUNT IN Q.570]
- [-] 9) Refused [GOTO Q.570]

570. About how much did the auto insurance come to (for this vehicle)?

[NOTE TO INTERVIEWER: AMOUNT SHOULD BE FOR SIX-MONTH PERIOD.]

(mean = \$464, range = \$1 to \$7,800, N = 767)

580. And, in the past six months, have you had any expenses for the license or registration for this vehicle?

- 54% [561] 1) Yes [SKIP NEXT QUESTION, GOTO Q.590]
- 45% [468] 2) No
- 1% [10] 8) Undecided/Don't know
- [2] 9) Refused

585. How about during the past 12 months? [Have you had any expenses for the license or registration for this vehicle?]

- 79% [379] 1) Yes
- 19% [89] 2) No [SKIP NEXT QUESTION]
- 2% [10] 8) Undecided/Don't know
- [2] 9) Refused [SKIP NEXT QUESTION]

590. About how much did the registration cost (for this vehicle)?

(mean = \$161, range = \$2 to \$900, N = 824)

IF MORE THAN 1 VEHICLE OWNED, ASK:

700. What is (are) the model year(s) of your other vehicle(s)? (Starting with the oldest first.)  
[INTERVIEWERS: Key the year in as 19XX, (not XX). Don't know/Refused = 9999]

			(mean, range,	N)
a.	Year of (owned) vehicle	#2	(1990, 1929 - 1998,	491)
b.	Year of (owned) vehicle	#3	(1990, 1953 - 1998,	173)
c.	Year of (owned) vehicle	#4	(1988, 1948 - 1997,	48)
d.	Year of (owned) vehicle	#5	(1987, 1966 - 1997,	20)
e.	Year of (owned) vehicle	#6	(1986, 1965 - 1997,	11)

710. Now, we are trying to determine the types of vehicles that might not have insurance. Sometimes people will not insure some or all of their vehicles. Just thinking about your own vehicle would you say it is currently not insured or currently insured? (Thinking about all [Q.70e] of your vehicles, how many are not currently insured?)

90%	[934]	0) 0 vehicle uninsured [is currently insured]
6%	[67]	1) 1 vehicle uninsured [is currently <u>not</u> insured]
2%	[20]	2) 2 vehicles uninsured
1%	[5]	3) 3 vehicles uninsured
-	[2]	4) 4 vehicles uninsured
-	[-]	5) 5 vehicles uninsured
-	[2]	6) 6 vehicles uninsured
-	[2]	7) 7 or more vehicles uninsured
-	[1]	8) Undecided/Don't know [TRY TO GET A ROUGH ESTIMATE, USE THE MIDPOINT IF NECESSARY]
1%	[8]	9) Refused [THANK & TERMINATE]

IF Q.710 = 8, ASK:

715. Could you ask someone who would know if the vehicle(s) is (were) insured? (or, Could you look up this information?)

[-]	1) Yes [REPEAT Q.710]
[1]	2) No [TERMINATE & SCHEDULE CALL BACK]
[-]	9) Refused [TERMINATE]

IF Q.710 = 0, ASK:

718. (INTERVIEWER: CHECK / DO NOT READ), IN Q710 YOU ENTERED RESPONDENT HAD NO UNINSURED VEHICLES. ARE YOU SURE?

100%	[906]	1) YES [CONTINUE]
-	[-]	2) NO [REPEAT Q.710]

IF Q.710 = 0, ASK:

720. Now, liability insurance is the kind of insurance that just pays for damage to the other person's car or injuries to the other person. "Full coverage" would include liability insurance and additionally pay for damage to your vehicle. Do you have liability only, full coverage, or something else on your vehicle(s)?

- 25% [234] 1) Liability only
- 67% [625] 2) Full coverage only
- 7% [62] 3) Some liability only and some full coverage
- 1% [11] 4) Something else
- [3] 5) Something else and either liability only and/or full coverage
- [3] 8) Don't Know
- [1] 9) Refused

IF Q.720 = 4 or 5, ASK:

725. How many of the vehicles with the "something else" coverage do not also have liability insurance?

- [12] 0) 0 vehicle uninsured
- [1] 1) 1 vehicle uninsured [UPDATE Q.710 (Q.710 = Q.710 + 1)]
- [-] 2) 2 vehicles uninsured [UPDATE Q.710 (Q.710 = Q.710 + 2)]
- [-] 3) 3 vehicles uninsured [UPDATE Q.710 (Q.710 = Q.710 + 3)]
- [-] 4) 4 vehicles uninsured [UPDATE Q.710 (Q.710 = Q.710 + 4)]
- [-] 5) 5 vehicles uninsured [UPDATE Q.710 (Q.710 = Q.710 + 5)]
- [-] 6) 6 vehicles uninsured [UPDATE Q.710 (Q.710 = Q.710 + 6)]
- [-] 7) 7 or more vehicles uninsured [UPDATE Q.710 (Q.710 = Q.710 + 7)]
- [1] 8) Undecided/Don't know [TRY TO GET A ROUGH ESTIMATE, USE THE MIDPOINT IF NECESSARY]
- [-] 9) Refused [THANK & TERMINATE]

IF Q.710 > 0, ASK:

730. What is (are) the year(s) of the vehicle(s) without insurance?

[START WITH THE OLDEST VEHICLE FIRST AND WORK FORWARD. IF MORE THAN 5 VEHICLES ARE UNINSURED, JUST RECORD THE 5 OLDEST VEHICLES.]

- |   | <u>(mean, range,</u> | <u>N)</u> |
|---|----------------------|-----------|
| a. Model Year of 1st uninsured vehicle: | (1978, 1922 - 1997,  | 91)       |
| b. Model Year of 2nd uninsured vehicle: | (1977, 1948 - 1997,  | 26)       |
| c. Model Year of 3rd uninsured vehicle: | (1973, 1948 - 1996,  | 9)        |
| d. Model Year of 4th uninsured vehicle: | (1974, 1950 - 1997,  | 5)        |
| e. Model Year of 5th uninsured vehicle: | (1980, 1979 - 1982,  | 3)        |

IF THE OLDEST VEHICLE DIDN'T HAVE ANY INSURANCE EXPENSE (Q560 =2 or 8 or 9) AND WAS NOT MENTIONED AS UNINSURED (Q.500a = Q730a, b, c, d, or e), SAY:  
 740. You mentioned not having any insurance expenses for your [YEAR OF OLDEST VEHICLE (Q500a)] vehicle. Is the insurance coverage for it currently in force?

- 94% [135] 1) Yes  
 6% [8] 2) No [UPDATE Q.730 (adding year of oldest veh.) AND Q.710 (Q.710 = Q.710 + 1)]  
 - [-] 9) Refused [THANK & TERMINATE]

*..REASONS FOR UNINSURED:*

IF Q.710 > 0, ASK Q.800 TO Q.880 (as appropriate):

800. Just thinking of the [YEAR OF 1st UNINSURED VEHICLE (Q.730a)] vehicle? What was the reason for it not being insured?

[INTERVIEWERS: REFER TO UNINSURED REASON CODE LIST. ENTER REASONS BY TWO-DIGIT CODE. DO NOT READ LIST. (Allow up to 10 reasons.)]

(PROBE:) Are there any other reasons?

(PROBE:) Any others?

<u>Category</u>	<u>Code</u>	<u>Frequency</u>	<u>Percent</u>
Vehicle is not used	1	36	36.4
Vehicle does not run	2	11	11.1
Vehicle not worth ins.	3	4	4.0
Vehicle is not reg...	4	2	2.0
Just bought the veh.	7	1	1.0
Registered PNO ...	9	2	2.0
Costs too much, or ...	11	17	17.2
Can not afford it, ...	13	12	12.1
Too many tickets ...	22	3	3.0
Could not find anyone ...	31	1	1.0
Company canceled ...	35	1	1.0
Looking for ...	37	1	1.0
'I'm a safe driver'	42	1	1.0
I receive no benefit	61	1	1.0
Avoid any involvement ...	73	1	1.0
Have not got around ...	81	2	2.0
Plan to but have not	82	1	1.0
Forgot to pay ...	83	1	1.0
Refusal	99	1	1.0

IF LISTED MORE THAN ONE REASON, ASK:

830. (And) which of those reasons would you say was the main or most important reason?

IF RESPONDENT HAS 2 OR MORE UNINSURED VEHICLES, ASK:

840. You also mentioned you had another (other) vehicle(s) that was (were) not insured. Is the reason that it (they) is (are) not insured the same as the first? Or is it something different?

- 32% [10] 1) Different [CONTINUE]  
68% [21] 2) Same as first [GOTO Q.900]

850. What was the reason it (they) was (were) not insured?

[INTERVIEWERS: REFER TO UNINSURED REASON CODE LIST. ENTER REASONS BY TWO-DIGIT CODE. DO NOT READ LIST. (Allow up to 10 reasons.)]

Probe: Are there any other reasons?

Probe: Any others?

IF LISTED MORE THAN ONE REASON, ASK:

880. (And) which of those reasons would you say was the main or most important reason?

.. REASONS FOR UNREGISTERED:

900. How many of your [Q.70e] vehicles do not have a current license sticker?

- 93% [961] 0) 0 vehicle unregistered  
5% [53] 1) 1 vehicle unregistered  
1% [10] 2) 2 vehicles unregistered  
- [3] 3) 3 vehicles unregistered  
- [-] 4) 4 vehicles unregistered  
- [-] 5) 5 vehicles unregistered  
- [1] 6) 6 vehicles unregistered  
- [1] 7) 7 or more vehicles unregistered  
- [4] 8) Undecided/Don't know [TRY TO GET A ROUGH ESTIMATE, USE THE MIDPOINT IF NECESSARY]  
- [1] 9) Refused

IF THE OLDEST VEHICLE DIDN'T HAVE ANY REGISTRATION EXPENSE (Q.580 =2, 8, or 9) AND (Q.585 = 2, 8, or 9) AND (Q.900 = 0), SAY:

910. You mentioned not having any registration expenses for your [YEAR OF OLDEST VEHICLE (Q500a)] vehicle. Is the registration for it currently in force?

- 94% [76] 1) Yes  
4% [3] 2) No [UPDATE Q.900]  
3% [2] 9) Refused

IF Q.900 > 0, ASK Q.920 TO Q.990 (as appropriate):

920. Just thinking of your oldest vehicle without a current license? What is the reason for it not being registered?

[INTERVIEWERS: REFER TO UNREGISTERED REASON CODE LIST. ENTER REASONS BY TWO-DIGIT CODE. DO NOT READ LIST. (Allow up to 10 reasons.)]

Probe: Are there any other reasons?

Probe: Any others?

<u>Category</u>	<u>Code</u>	<u>Frequency</u>	<u>Percent</u>
Vehicle is not used	1	22	30.6
Vehicle does not run	2	13	18.1
Vehicle not worth	3	2	2.8
Just bought the veh.	7	2	2.8
Registered PNO ...	9	5	6.9
Costs too much ...	11	9	12.5
Can not afford it ...	13	6	8.3
Vehicle does not meet smog	21	2	2.8
Don't have proof of ins.	22	3	4.2
Had a negative exper. ...	71	1	1.4
Don't like DMV	72	1	1.4
Avoid any involvement ...	73	1	1.4
Have not got around to it	81	2	2.8
Undecided/Don't know	98	3	4.2

IF LISTED MORE THAN ONE REASON, ASK:

950. (And) which of those reasons would you say was the main or most important reason?

IF RESPONDENT HAS 2 OR MORE UNREGISTERED VEHICLES, ASK:

960. You also mentioned you had another (other) vehicle(s) that was (were) not registered. Is the reason it (they) is (are) not registered the same as the first? Or is it something different?

1) Different [CONTINUE]

2) Same as first

970. What was the reason it (they) was (were) not registered?

[INTERVIEWERS: REFER TO UNREGISTERED REASON CODE LIST. ENTER REASONS BY TWO-DIGIT CODE. DO NOT READ LIST. (Allow up to 10 reasons.)]

Probe: Are there any other reasons?

Probe: Any others?



**IF LISTED MORE THAN ONE REASON, ASK:**

990. (And) which of those reasons would you say was the main or most important reason?

**.. FREQUENCY OF USE:**

[This block of questions (Q.1050 to Q.1150) is to be asked only of those with either an uninsured or an unregistered vehicles. (Q.710 > 0) or (Q.900 > 0)]

1050. On average, how often is your [Q.730a] (first) vehicle driven?

1110. On average, how often is your [Q.730b] (second) vehicle driven?

1120. On average, how often is your [Q.730c] (third) vehicle driven?

1130. On average, how often is your [Q.730d] (fourth) vehicle driven?

1140. On average, how often is your [Q.730e] (fifth) vehicle driven?

<u>CATEGORIES:</u>	<u>Q1050</u>		<u>Q1110</u>		<u>Q1120</u>		<u>Q1130</u>		<u>Q1140</u>	
1) Daily (5 or more times a week)	34%	[33]	32%	[10]	18%	[2]	-	-	-	-
2) Less than 5 times a week	8%	[8]	7%	[2]	9%	[1]	-	-	-	-
3) 1-3 times a month	11%	[11]	10%	[3]	18%	[2]	17%	[1]	25%	[1]
4) 1-11 times a year	11%	[11]	10%	[3]	-	-	17%	[1]	-	-
5) Less than once a year	3%	[3]	3%	[1]	9%	[1]	-	-	-	-
6) Never	30%	[29]	32%	[10]	36%	[4]	50%	[3]	50%	[2]
8) No Answer/ Don't know	3%	[3]	3%	[1]	9%	[1]	17%	[1]	25%	[1]
9) Refused	-	-	3%	[1]	-	-	-	-	-	-

**IF OWN MORE THAN FIVE UNINSURED VEHICLES, ASK:**

1150. And of the other uninsured vehicles in the household, are any of them driven at least once a year?

- [-] 1) Yes
- [-] 2) No
- [-] 7) No Answer/Don't know
- [-] 9) Refused

*.. FURTHER INSURANCE CLASSIFICATION:*

ASK Q.1200 IF ANY VEHICLE HAS INSURANCE (Q.70e - Q.710 > 0):

1200. Now, I have a few questions about auto insurance. The minimum required liability limits are \$15,000 per person and \$30,000 for all individuals in an accident. Are the limits for the insurance covering your vehicles at the minimum level or at a higher level?

[NOTE TO INTERVIEWER: This is an important question. Make sure respondent understands what the minimum limits are. Common higher limit coverages are:

- \$25,000 per person and \$50,000 per occurrence

- \$100,000 per person and \$300,000 per occurrence

Having "full coverage" does not necessarily mean higher limits.]

- 35% [351] 1) All with insurance are insured at minimum level only (no higher level)
- 14% [134] 2) Some at minimum level; some at higher level
- 48% [473] 3) All insured vehicles at higher level only (no minimum level)
- 3% [32] 8) Undecided/Don't know
- [2] 9) Refused [THANK & TERMINATE]

IF DON'T KNOW INSURANCE STATUS (Q.1200 = 8), ASK:

1210. Could you look up the information or could you ask someone else in the household who might know?

[-] 1) Respondent looked up information [GOTO Q.1200]

[-] 2) Got information from someone else in household [GOTO Q.1200]

[32] 3) Unable to get information [THANK & TERMINATE & SCHEDULE A CALL BACK]

*.. MINIMUM LIMITS AND PAYMENT SCHEDULE QUESTIONS:*

1220. There are different ways that might make insurance more useful to a variety of people. One option would be to lower the minimum coverage required by California law.

Right now the law requires a minimum insurance policy that pays up to \$15,000 for injury to one person; and up to \$30,000 for injuries to two or more people.

Now, if the minimum coverage were lowered to, say, \$10,000 for one person, and \$20,000 for two or more people; and the insurance premiums were lowered as well, how interested would you be in purchasing this lower coverage? In general, would you be [READ LIST]:

22% [219] 1) Very interested,

30% [297] 2) Somewhat interested, or

45% [455] 3) Not at all interested

3% [34] 8) [DO NOT READ] No Answer/Don't know

- [3] 9) [DO NOT READ] Refused

IF "SOMEWHAT" OR "VERY", OR DON'T KNOW (q.1220 = 1, 2, or 8), ASK:

1230a. And, if this lowered your insurance premium by 10%, would you probably buy it or probably not buy it?

- 71% [392] 1) Probably buy at 10%
- 18% [100] 2) Probably not buy at 10%
- [1] 5) Would never buy it [VOLUNTEERED]
- 10% [57] 8) No Answer/Don't know
- [-] 9) Refused

[IF NOT BUY AT 10%, ASK]

1230b. If, instead, the premium was 20% lower, would you probably buy it or probably not buy it?

- 53% [53] 1) Probably buy at 20%
- 41% [41] 2) Probably not buy at 20%
- 1% [1] 5) Would never buy it [VOLUNTEERED]
- 5% [5] 8) No Answer/Don't know
- [-] 9) Refused

[IF NOT BUY AT 20%, ASK]

1230c. If, instead, the premium was 30% lower, would you probably buy it or probably not buy it?

- 49% [20] 1) Probably buy at 30%
- 46% [19] 2) Probably not buy at 30%
- [-] 5) Would never buy it [VOLUNTEERED]
- 5 [2] 8) No Answer/Don't know
- [-] 9) Refused

*.. ATTITUDES AND EXPERIENCES:*

1300. During the past year, have you or has anyone in your household done any of the following? [ROTATE ORDER];

- (1). Asked a friend or relative about changing or buying auto insurance?
- (2). Checked on information about auto insurance in a newspaper, magazine, or pamphlet?
- (3). Called an insurance agent or company to get information on auto insurance?
- (4). Was contacted by an insurance agent or company [e.g., letter, phone call, visit]?
- (5). Switched to a different auto insurance company?

CATEGORIES:	(1)		(2)		(3)		(4)		(5)	
1) Yes	18%	[179]	18%	[185]	34%	[346]	33%	[331]	12%	[118]
2) No	82%	[825]	81%	[820]	65%	[657]	66%	[668]	88%	[887]
3) Don't Know	-	[3]	-	[2]	-	[4]	1%	[7]	-	[2]
4) Refused	-	[1]	-	[1]	-	[1]	-	[2]	-	[1]

IF none of Q.1300a to Q.1300e = 1, ASK:

1310. How long has it been since you or anyone in your household made inquiries about auto insurance or changed auto insurance?

[ROUND TO THE NEAREST YEAR. 0 TO 6 MONTHS = 0; 7 TO 18 MONTHS = 1, ETC.; NEVER = 97; DON'T KNOW = 98; REFUSED = 99.]

(mean = 16 years      range = 0 to 97      N = 369)

1320. Now I'm going to read some statements. For each statement, please tell me if from your point of view, you would agree or disagree: [ROTATE ORDER]

- (1). No law requires you to buy auto insurance.
- (2). Auto insurance cost more money than I have available.
- (3). Insurance companies are operated in a fair and reasonable way.
- (4). Auto insurance is priced fairly.
- (5). The cost of auto insurance is more than the benefits it provides.
- (6). Many people similar to me don t have auto insurance.

Response	(1)	(2)	(3)	(4)	(5)	(6)
1) Agree	19% [188]	42% [427]	40% [399]	29% [289]	55% [556]	43% [437]
2) Disagree	80% [802]	55% [556]	52% [519]	66% [660]	39% [395]	49% [491]
3) DK	1% [14]	2% [21]	9% [86]	6% [55]	5% [54]	8% [76]
4) Refused	- [4]	- [4]	- [4]	- [4]	- [3]	- [4]

1330. Would you say that being able to find some place that would sell you auto insurance is a [READ LIST]:

- 23% [227] 1) Major Concern,
- 18% [182] 2) Moderate Concern,
- 15% [155] 3) Minor Concern, or
- 42% [425] 4) Not a Concern
- 2% [19] 5) [DO NOT READ] Don t Know

1340. Would you say that being able to buy auto insurance at an affordable price is a [READ LIST]:

- 50% [499] 1) Major Concern,
- 29% [290] 2) Moderate Concern,
- 8% [85] 3) Minor Concern, or
- 12% [119] 4) Not a Concern
- 2% [15] 5) [DO NOT READ] Don t Know

IF ANY UNINSURED VEHICLES (Q.710 > 0), ASK Q.1350 to Q.1420:

1350. Have you or anyone in your household had trouble getting auto insurance in the past year?

- |     |      |               |                      |
|-----|------|---------------|----------------------|
| 11% | [11] | 1) Yes        |                      |
| 86% | [84] | 2) No         | [SKIP NEXT QUESTION] |
| 1%  | [1]  | 3) Don t Know | [SKIP NEXT QUESTION] |
| 2%  | [2]  | 9) Refused    | [SKIP NEXT QUESTION] |

1360. What kind of trouble was it? Please explain.

[DO NOT READ LIST. ENTER ALL THAT APPLY]

- |     |  |
|-----|--|
| [6] | 1) Premium too high                                      |
| [3] | 2) Could not afford the premium                          |
| [3] | 3) Driving record of self or household member            |
| [-] | 4) Alcohol or drug use of self or family member          |
| [-] | 5) Could not find a company that would sell me insurance |
| [-] | 6) Other   |
| [-] | 7) Don t Know  |
| [-] | 9) Refused   |

1370. Have you made a claim on your or any other insurance policy in the last three years?

- |     |      |               |                      |
|-----|------|---------------|----------------------|
| 11% | [11] | 1) Yes        |                      |
| 86% | [84] | 2) No         | [SKIP NEXT QUESTION] |
| 1%  | [1]  | 3) Don t Know | [SKIP NEXT QUESTION] |
| 2%  | [2]  | 9) Refused    | [SKIP NEXT QUESTION] |

1380. How satisfied were you with how the claim was handled? Would you say you were [READ LIST]:

- |     |                              |
|-----|------------------------------|
| [8] | 1) Very Satisfied,           |
| [1] | 2) Somewhat Satisfied,       |
| [-] | 3) Somewhat Dissatisfied, or |
| [1] | 4) Very Dissatisfied         |
| [-] | 5) [DO NOT READ] Don t Know  |

1390. How much would you estimate it would cost you to buy 6 months of auto insurance that just covered the minimum liability requirements for just one vehicle? [15/30/5]

[ROUND TO THE NEAREST DOLLAR. GREATER THAN \$9,997 = 9997; DON'T KNOW = 9998; REFUSED = 9999.]

(mean = \$483, range = \$69 to \$2,000, s.d. = 303, N = 71)

1400. I'd like to point out again that this survey is totally confidential and your answers won't be associated with you. Now thinking over past 3 years, have you had any tickets or been in an accident where you were considered at-fault?

27%	[26]	1) Yes	
69%	[68]	2) No	[SKIP NEXT 2 QUESTIONS]
1%	[1]	3) Don t Know	[SKIP NEXT 2 QUESTIONS]
3%	[3]	9) Refused	[SKIP NEXT 2 QUESTIONS]

1410. In the last 3 years, how many tickets for a moving violation have received?  
[7 OR MORE = 7; DON'T KNOW = 8; REFUSED = 9.]

(mean = 1.42, range = 0 to 4, N = 26)

1420. In the last 3 years, how many accidents have you had where you were considered at-fault?  
[7 OR MORE = 7; DON'T KNOW = 8; REFUSED = 9.]

(mean = 0.19, range = 0 to 1, N = 26)

.. *OTHER INSURANCE EXPERIENCES:*

1450. Are you covered by health insurance?:

83%	[838]	1) Yes	
16%	[158]	2) No	
-	[2]	3) Don t Know	
1%	[10]	9) Refused	

1460. Do you have any life or burial insurance?:

62%	[620]	1) Yes	
37%	[369]	2) No	
1%	[7]	3) Don t Know	
1%	[12]	9) Refused	

.. *DEMOGRAPHICS.*

1500. I have just a few more questions for statistical purposes. Which one of the following best describes your present occupation? [READ LIST]

- 60% [606] 01) Employed full-time
- 10% [105] 02) Employed part-time
- 4% [43] 03) A student
- 6% [65] 04) A homemaker
- 2% [22] 05) Looking for a job
- 12% [124] 06) Retired
- 2% [18] 07) On welfare or disability, or
- [1] 08) Do you do something else with your time?
- [3] 97) [DO NOT READ] No Answer/Don't know
- 2% [21] 99) [DO NOT READ] Refused

1510. What is the last grade of school you completed. [IF NECESSARY, READ LIST]

- 4% [40] 1) 8th grade or less
- 7% [66] 2) Some high school
- 23% [236] 3) Completed high school
- 29% [29] 4) Some college or trade/technical school
- 24% [238] 5) Completed college
- 11% [112] 6) Completed post-graduate work
- 2% [24] 9) [DO NOT READ] Refused

1520. Please stop me when I get to the group that includes your age: [READ LIST]

- 5% [49] 1) 18-20
- 7% [67] 2) 21-24
- 9% [94] 3) 25-29
- 25% [254] 4) 30-39
- 22% [226] 5) 40-49
- 17% [174] 6) 50-64
- 11% [113] 7) 65 or older
- 3% [31] 9) [DO NOT READ] Refused

1530. Do you consider yourself to be [READ LIST]:

- 61% [533] 1) White
- 20% [197] 2) Hispanic
- 5% [51] 3) African-american or Black
- 5% [50] 4) Asian
- 2% [23] 5) American Indian
- 3% [33] 6) Multi Racial
- [-] 7) Another group [SPECIFY]
- 4% [39] 9) [DO NOT READ] Refused

1540. Are you: [READ LIST]  
 53% [533] 1) Married  
 10% [100] 2) Divorced  
 2% [23] 3) Separated  
 6% [64] 4) Widowed  
 25% [255] 5) Single-never married  
 3% [33] 9) [DO NOT READ] Refused

1550. Including yourself, how many people, in total, live in your home?  
 [8 OR MORE = 8; REFUSED = 9]

(mean = 3.04, range = 1 to 8, N = 975)

IF Q.1550 > 1, ASK:

1560. How many people are under 18 years old?  
 [8 OR MORE = 8; REFUSED = 9]

(mean = 1.11, range = 0 to 7, N = 818)

1570. Is your house or apartment [READ LIST]:

- 62% [627] 1) Owned or is being purchased by someone in your household, or  
 34% [345] 2) Rented  
 - [4] 3) [DO NOT READ] Other  
 3% [32] 9) [DO NOT READ] Refused

1580. When did you move into your house or apartment?

a. Month: [DON'T KNOW/NO ANSWER = 98; REFUSED = 99]

b. Year: [DON'T KNOW/NO ANSWER = 98; REFUSED = 99]

time in home: 0 to 2 years 31% [261]

3 to 4 years 15% [127]

5 to 6 years 9% [73]

7 or more 45% [373]

1590. What is your zip code? \_\_\_\_\_ [CHECK: 90000 < zip < 96401]  
 [CODING: NO ANSWER/DON'T KNOW (99998); REFUSED (99999)]

1620. Do you speak a language other than English at home?

- 26% [258] 1) Yes  
 71% [718] 2) No  
 - [-] 3) Don't Know  
 3% [32] 9) Refused



IF Q.1620 = 1, ASK:

1630. What is the language [DO NOT READ]:

- 65% [168] 01) Spanish
- [8] 02) French
- [8] 03) German
- [8] 04) Chinese
- [6] 05) Italian
- [10] 06) Tagalog (Pilipino)
- [2] 07) Polish
- [2] 08) Korean
- [1] 09) Vietnamese
- [6] 10) Portuguese
- [5] 11) Japanese
- [-] 12) Greek
- [2] 13) Arabic
- [2] 14) Hindi (Urdu)
- [4] 15) Russian
- [16] 16) other [SPECIFY]
- [-] 98) Don't Know
- [10] 99) Refused

1640. Please stop me when I read the category that best describes your total household income in 1996 before taxes [READ LIST]:

- 6% [55] 1) Less than \$10,000
- 12% [124] 2) \$10,000 to \$20,000
- 13% [126] 3) \$20,000 to \$30,000
- 12% [124] 4) \$30,000 to \$40,000
- 9% [88] 5) \$40,000 to \$50,000
- 7% [73] 6) \$50,000 to \$60,000
- 23% [236] 7) Over \$60,000
- 3% [33] 8) [DO NOT READ] No Answer/Don't know
- 15% [149] 9) [DO NOT READ] Refused

1650. How many telephone lines do you have that you normally use to receive calls on? [DO NOT COUNT ANY BUSINESS ONLY, COMPUTER, OR FAX LINES.]

(mean = 1.37, range = 0 to 7, N = 965)

IF Q.1650 > 1, ASK:

1660. Is this telephone line that we are talking on right now, your main telephone line or one you don't use as frequently.

- 78% [238] 1) Main telephone line
- 9% [28] 2) Not the main telephone line
- 2% [5] 3) None of the telephone lines are the "main telephone line"
- [-] 8) No Answer/Don't know
- 12% [36] 9) Refused

.. *CLOSE:*

1800. And finally, someone from I.S.A. may call you to verify that this interview was conducted. To make sure we speak to the right person, may I please have your first name?

- 1) Yes [RECORD NAME]
- 2) No/Refused

Thank you very much for your help.

.. *INTERVIEWER RATINGS:*

1830. How well do you think the person understood the question on whether they had minimum or higher limits insurance (Q.1200)? Use a ten-point scale, where 1 corresponds to "Not at All" and 10 corresponds to "Very Well".

- 1% [10] 01) Not at All
- 1% [7] 02)
- 1% [5] 03)
- 1% [14] 04)
- 4% [43] 05)
- 2% [15] 06)
- 3% [25] 07)
- 7% [69] 08)
- 8% [77] 09)
- 73% [702] 10) Very Well

1840. How honest and candid did you feel the person was being with you in providing answers to the question about insuring their vehicles (Q.560 & Q.710)? Use a ten-point scale, where 1 corresponds to "Not at All" honest and 10 corresponds to "Very Honest".

1%	[10]	01) Not at All Honest
-	[4]	02)
-	[2]	03)
1%	[5]	04)
3%	[25]	05)
1%	[13]	06)
2%	[16]	07)
6%	[60]	08)
10%	[95]	09)
76%	[737]	10) Very Honest

Attachment 5  
Outline of Exception File

## Outline of Exception File Questionnaire

- ▶ Introduction: survey is to verify the accuracy of some vehicle information from the public records, no sales involved, it is for research only
- ▶ Screen: respondent must be the owner of the vehicle identified in the exception file
- ▶ Reason for Not Insuring:
- ▶ Frequency of Vehicle Use
- ▶ Questions About Respondent's Other Vehicle(s):
  - number of cars, vans, trucks, and motorcycles
  - number of other vehicles currently not insured
- ▶ (if any insured vehicles) Question on Minimum or Higher Limits
- ▶ Question on Interest in LCLC
- ▶ Questions on the Likelihood of Buying LCLC at 10%, 20%, and 30% Reductions
- ▶ Questions on Information Seeking Behavior
- ▶ Questions on Attitudes Towards Insurance
- ▶ Questions on Insurance Affordability and Availability
- ▶ Questions on Experiences with Insurance: made a claim, number of tickets & accidents
- ▶ Question Requesting an Estimated of the Cost of a Minimum Limits Policy
- ▶ Questions on Medical and Life Insurance Coverage
- ▶ Demographics: sex, employment status, education, age, ethnic group, marital status, H.H. size, number of children, length of time in home, zip code, language spoken at home, income

Attachment 6  
Reasons For Not Insuring A Vehicle

## Reasons For Not Insuring A Vehicle

### *Vehicle Related:*

01 vehicle is not used (or not used on the highway)

02 vehicle does not run.

03 vehicle not worth insuring/too old

### *Vehicle is not registered or licensed:*

04 vehicle is not registered/licensed (general)

05 could not get/have not gotten a smog certificate

06 DMV fees & penalties too high, so vehicle not registered

07 just bought the vehicle

08 plan to sell the vehicle soon

09 registered with DMV as Planned Non-Operation (PNO)

### *Cost or Lack of Cash / Assets:*

11 costs too much, or too expensive

12 the price exceeds a fair price

13 can not afford it, or don't have the money

14 have no assets to protect

### *Driving Record Problems:*

21 poor driving record

22 too many tickets or accidents

23 too young (don't have any previous driving experience)

### *Availability Issues:*

31 could not find anyone who would sell insurance to me

### *Company/agent refused to sell me insurance:*

32 general refusal

33 due to not licensed for 3 years

34 due to car too old for damage coverage

35 company canceled policy

36 applied for insurance, but haven't heard if covered yet

37 looking for or in the process of getting insurance

### *Lack of Need or Knowledge of the Requirement:*

41 not likely to be in an accident

42 "I'm a safe driver" or "I drive very carefully"

43 thinks there is no requirement that vehicles must be insured

44 do not drive very much

45 only drive locally

*Communication/Understanding Problems:*

- 51 can't communicate with the agent or company
- 52 can't reach a person to talk to, only reach automatic phone system
- 53 don't know which is the best insurance company for me
- 54 don't understand the requirements that the insurance company has

*It's No Benefit to Me:*

- 61 I receive no benefit from insurance so I don't buy it
- 62 I just give them money and never get anything in return

*Bad Experience with Insurance:*

- 71 had a negative experience with my insurance company/agent
- 72 don't like insurance companies
- 73 avoid any involvement with insurance companies
- 74 insurance companies are not reliable or not trustworthy
- 75 insurance companies are not honest or don't treat people fairly

*Not Important Enough:*

- 81 have not got around to it/too lazy
- 82 plan to but have not had time
- 83 forgot to pay my last renewal
- 84 most people I know don't buy auto insurance

*Misc:*

- 91 bucking the system
- 92 do not want to obey the law

*Other:*

- 96 other :\_(specify)\_\_\_\_\_
- 98 undecided/don't know
- 99 refusal



Attachment 7.  
Vehicle Counts by Type and Insurance Status

Number of Vehicles by Type and Uninsured Status

Number of Cars	Total Number of Vehicles					Number of Uninsured Vehicles				
	Respondents	1	2	3	4+	Respondents	0	1	2+	DK/refused
0	167	105	50	8	4	167	150	14	3	0
1	617	399	165	37	16	617	564	36	11	6
2	209	0	140	57	12	209	185	14	8	2
3+	48	0	0	27	21	48	35	4	8	1
Number of Vans/Utility Vehicles										
0	795	464	236	76	19	795	714	53	21	7
1	222	40	114	46	22	222	199	15	7	1
2	18	0	5	6	7	18	17	0	0	1
3+	6	0	0	1	5	6	4	0	2	0
Number of Trucks										
0	748	441	228	59	20	748	683	43	14	8
1	260	63	120	59	18	260	228	22	9	1
2	28	0	7	11	10	28	20	3	5	0
3+	5	0	0	0	5	5	3	0	2	0
Number of Motorcycles										
0	1002	502	349	116	35	1002	912	62	19	9
1	29	2	5	13	9	29	19	5	5	0
2	7	0	1	0	6	7	3	1	3	0
3+	3	0	0	0	3	3	0	0	3	0
Total Number of Vehicles										
1	504	504	0	0	0	504	469	30	0	5
2	355	0	355	0	0	355	323	22	9	1
3	129	0	0	129	0	129	108	12	7	2
4+	53	0	0	0	53	53	34	4	14	1
Number of Uninsured Vehicles										
0	934	469	323	108	34	934	934	0	0	0
1	68	30	22	12	4	68	0	68	0	0
2+	30	0	9	7	14	30	0	0	30	0
DK/refused	9	5	1	2	1	9	0	0	0	9

Percent of Vehicles by Type and Uninsured Status (N = 1,041)

Number of Cars	Respondents	Total Number of Vehicles				Number of Uninsured Vehicles				
		1	2	3	4+	Respondents	0	1	2+ DK/refused	
0	100%	63%	30%	5%	2%	100%	90%	8%	2%	0%
1	100%	65%	27%	6%	3%	100%	91%	6%	2%	1%
2	100%	0%	67%	27%	6%	100%	89%	7%	4%	1%
3+	100%	0%	0%	56%	44%	100%	73%	8%	17%	2%
Number of Vans/Utility Vehicles										
0	100%	58%	30%	10%	2%	100%	90%	7%	3%	1%
1	100%	18%	51%	21%	10%	100%	90%	7%	3%	0%
2	100%	0%	28%	33%	39%	100%	94%	0%	0%	6%
3+	100%	0%	0%	17%	83%	100%	67%	0%	33%	0%
Number of Trucks										
0	100%	59%	30%	8%	3%	100%	91%	6%	2%	1%
1	100%	24%	46%	23%	7%	100%	88%	8%	3%	0%
2	100%	0%	25%	39%	36%	100%	71%	11%	18%	0%
3+	100%	0%	0%	0%	100%	100%	60%	0%	40%	0%
Number of Motorcycles										
0	100%	50%	35%	12%	3%	100%	91%	6%	2%	1%
1	100%	7%	17%	45%	31%	100%	66%	17%	17%	0%
2	100%	0%	14%	0%	86%	100%	43%	14%	43%	0%
3+	100%	0%	0%	0%	100%	100%	0%	0%	100%	0%
Total Number of Vehicles										
1	100%	100%	0%	0%	0%	100%	93%	6%	0%	1%
2	100%	0%	100%	0%	0%	100%	91%	6%	3%	0%
3	100%	0%	0%	100%	0%	100%	84%	9%	5%	2%
4+	100%	0%	0%	0%	100%	100%	64%	8%	26%	2%
Number of Uninsured Vehicles										
0	100%	50%	35%	12%	4%	100%	100%	0%	0%	0%
1	100%	44%	32%	18%	6%	100%	0%	100%	0%	0%
2+	100%	0%	30%	23%	47%	100%	0%	0%	100%	0%
DK/refused	100%	56%	11%	22%	11%	100%	0%	0%	0%	100%

Attachment 8.  
Sample Weights

## Sample Weights

In order to capture the possible interaction among ethnicity, age, and education, a three dimensional distribution was used. To keep the cell sizes from becoming too small each dimension was divided into only two categories: white/nonwhite, less than 30/30 or older, and less than high school/high school or more. Only data records with valid data for all three variables were included.

The reference distribution was based on the Census Bureau's 5% Public Use Microdata Samples for 1990. Only adults age 18 or over were selected. Because there was over a 3% decrease in the white adult population from 1990 to 1997, the distribution was adjusted to reflect the increased nonwhite population aged 18 or older.

RDD Survey Data:	count	percent	estimated actual percent	weighting factor
white_<30_<HS	6	0.6%	1.8%	2.8543
white_<30_HS+	86	9.0%	11.1%	1.2433
white_>30_<HS	30	3.1%	6.3%	2.0293
white_>30_HS+	490	51.0%	37.3%	0.7315
nw_<30_<HS	18	1.9%	6.2%	3.2845
nw_<30_HS+	97	10.1%	9.3%	0.9226
nw_>30_<HS	48	5.0%	11.3%	2.2672
nw_>30_HS+	185	19.3%	16.6%	0.8606
	960	100.0%	100.0%	

PUMS (5%) data for 1990 (for age 18+):

white_<30_<HS	414356	1.9%	
white_<30_HS+	2586913	11.8%	
white_>30_<HS	1472912	6.7%	
white_>30_HS+	8672213	39.4%	59.8% (white)
nw_<30_<HS	1254676	5.7%	
nw_<30_HS+	1899140	8.6%	
nw_>30_<HS	2309496	10.5%	
nw_>30_HS+	3378661	15.4%	40.2% (nonwhite)
	21988367	100.0%	

Adjusting the distribution to reflect the estimated % white in 1997:

1997 % white (18+) =	56.6%
	43.4%

white_<30_<HS	1.8%	
white_<30_HS+	11.1%	
white_>30_<HS	6.3%	
white_>30_HS+	37.3%	56.6% (white)
nw_<30_<HS	6.2%	
nw_<30_HS+	9.3%	
nw_>30_<HS	11.3%	
nw_>30_HS+	16.6%	43.4% (nonwhite)
	<u>100.0%</u>	

PUMS (5%) data from Public Use Microdata Samples, 5% California, CD90-PUMSA1-R, reissued February 1995  
 1997 % white (18+) from California Department of Finance, Demographic Research Unit