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Traffic Safety  
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**Final Report**

**August 1988**

# **Analysis of Insurance Premiums and Payouts for 1983-1984 Designated High Theft Rate Passenger Cars**

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16. Abstract  Insurance records were obtained for claims involving thefts of automobiles which occurred during calendar years 1983 and 1984. These claim records were analyzed to identify recovery rates for stolen vehicles and insurance losses due to automotive theft.  This information will ultimately be compared with similar data from later years as part of an effort to assess the impact of the theft deterrent provisions of the Motor Vehicle Theft Law Enforcement Act of 1984.					
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## PREFACE

The data base used to conduct this study was provided through the cooperation of the insurance industry. In respect for the participants desire for confidentiality, we refrain from individual acknowledgements and express our appreciation to the officers and staff of all participating organizations.

## EXECUTIVE SUMMARY

Over the last two decades, the problem of automobile theft has continued to increase and evolve from a problem of teenage joyriding to a highly professional adult crime. A growing market for stolen parts has led to an increase in the number of vehicles which are stolen and dismantled for their parts. By the early 1980's, it was estimated that this problem cost Americans approximately four billion dollars annually.

To address the growing problem of automobile theft, Congress enacted the Motor Vehicle Theft Law Enforcement Act of 1984 (Public Law 98-547). This legislation added a new Title VI to the Motor Vehicle Information and Cost Savings Act which required the Department of Transportation to promulgate a Theft Prevention Standard for selected passenger cars exhibiting high theft rates.

This standard became effective for selected 1987 and later models and requires automobile manufacturers and manufacturers of replacement parts to affix a unique identification number on major vehicle components. This labelling is intended to facilitate law enforcement efforts to prosecute criminals who are involved in the theft and dismantling of automobiles and serve as a deterrent to auto thieves.

The Theft Act also requires the Department of Transportation to evaluate the effectiveness of the Theft Prevention Standard and assess whether the standard should be extended to other classes of motor vehicles. The results of this evaluation must be reported to Congress by October 1990.

To comply with this reporting requirement, the National Highway Traffic Safety Administration (NHTSA) is developing a data base of insurance claim information for motor vehicles stolen during the six year period from 1983 through 1988. This database will include information from seven major insurance companies and describes motor vehicle thefts, recoveries, insurance losses due to vehicle theft and premiums charged to consumers for theft coverage.

As part of the evaluation effort, insurance claim data for pre-standard 1983-1986 vehicles will be compared with similar data for post-standard 1987-1988 vehicles.

This report describes the initial development of the insurance claim data base. During this stage, claim data was obtained from one company and analyzed. This data described vehicle thefts which occurred during calendar years 1983 and 1984 and includes thefts of current model year, one and two year old vehicles.

An analysis of the 1983 and 1984 claim data provides the basis to examine theft claim patterns independent of any influence of the Theft Prevention Standard. The study thus lays the groundwork for

a future comparative analysis of pre and post standard theft claim data.

An examination of the theft claim samples for 1983 and 1984 reveals a recovery rate of 76% for insured vehicles stolen in 1983 and a recovery rate of 77% for vehicles stolen in 1984.

Recovery rates observed in the insurance claim samples are substantially higher than those recorded by the U.S. Department of Justice. Justice Department figures suggest a recovery rate of 52.8% during 1983, whereas the insurance sample for the same period indicates a recovery rate of 76%. The difference between these figures reflect the following factors:

1. Justice Department figures include both insured and non-insured vehicles whereas the insurance claim figures include only vehicles with theft coverage.
2. Justice Department figures include thefts and recoveries regardless of the age of the vehicle. The insurance claim sample expressly includes only thefts and recoveries of current model year, one and two-year old vehicles. Only vehicles in these age categories will be equipped with labelled parts at the time that NHTSA must evaluate the effectiveness of the labelling program.

These factors suggest that older vehicles and those without theft coverage exhibit a substantially poorer rate of recovery than newer vehicles and those with theft coverage. This result seems to suggest that older vehicles are more likely to be stolen and dismantled for their parts than newer vehicles. Therefore, any future increase in recovery rates which is observed in the insurance claim samples may be indicative of even greater increases in the population as a whole.

The average payment for a theft claim expressed in 1988 dollars was found to be \$5,597 in the 1983 sample and \$5,750 in the 1984 sample. Approximately 60% of the claims in each sample exhibited claim costs below the average while 52% of the claims exhibited payouts under \$4,000.

Twenty-two percent of all recoveries in the 1983 sample and 21% of all recoveries in the 1984 sample were total losses.

If the Theft Prevention Standard is effective in reducing the theft and dismantling of vehicles, it could be expected that the proportion of recovery claims classified as total losses might decrease below the 22%-23% range observed in the 1983-1984 samples.

Vehicles which were recovered intact comprised 10% of the recoveries in both the 1983 and 1984 samples.

For purposes of this analysis, a recovery was classified as intact if the vehicle was recovered without damage or the claim

payment (after deductible) was less than \$100 based on 1988 costs. The average claim payment (repair cost) for non-intact recoveries was in the range of \$4,500-\$4,600 (adjusted for inflation) based on the 1983 and 1984 samples.

If the mandatory labelling of parts encourages a reduction in the number of automobiles stolen to provide parts, it might be expected that insurance claim samples for calendar years after the implementation of the parts labelling requirements (i.e. after 1986) would exhibit:

- o A higher proportion of intact recoveries than the 1983 and 1984 samples.
- o Lower repair costs for non-intact recoveries than those exhibited in 1983 and 1984.
- o Higher recovery rates than the 76% - 77% range exhibited in 1983-1984.
- o Average theft claim payments (adjusted for inflation) which are less than the \$5,600-\$5,800 figures exhibited in 1983-1984 claim samples.

Recovery claims were stratified as to whether payment occurred prior or subsequent to recovery. Recoveries which occurred prior to settlement accounted for 92% of all recoveries in the 1983 sample and 93% of all recoveries in the 1984 sample.

The high proportion of recoveries prior to settlement reflects the operating procedures of the insurance company which supplied these samples and their time frame for settling claims. Approximately 50% of the claims with recovery prior to settlement were settled within 30 days of the report of vehicle theft. Approximately 85%-90% of these claims were settled within 90 days.

The Theft Act required that 1983 and 1984 theft rates be used to select the high theft rate car lines subject to the part labelling requirements for 1987 models.

This study investigated whether any other differences existed between the 1983-1984 high theft rate lines and other lines which were excluded from the standard in 1987. Therefore, the claim samples were stratified into ancestors of lines subject to the standard and ancestors of lines excluded from the standard.

The average recovery rates for these two groups were found to be the same in both the 1983 and 1984 samples with 95% confidence. Thus, it is possible that any changes detected in recovery rates between these two groups in 1987 (and later) claim samples may reflect an effect of the Theft Prevention Standard.

The ancestors of car lines excluded from the standard exhibited theft claim costs which were 30% cheaper in 1983 and 19%

cheaper in 1984 than average theft claim costs for ancestors of vehicles included in the standard.

Therefore, designated high theft car lines not only were stolen more frequently but also cost insurers more per theft claim. These higher insurer payments reflected the fact that the high theft lines selected for the standard were also significantly more expensive to purchase in 1983 and 1984 than models excluded from the standard. These results suggest that any decrease in theft rates for the models subject to the standard may cause even greater proportion decreases in insurance payouts.

## TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
1.	INTRODUCTION	1
1.1	Background	1
1.1.1	Legislative Action	2
1.1.2	Actions Required by the Theft Act	3
1.1.2.1	Insurance Industry Requirements	3
1.1.2.2	Department of Transportation Requirements	4
1.2	NHTSA Actions in Response to Legislation	6
1.2.1	Selection of Covered Parts and Labelling Requirements	6
1.2.2	Selection of High Theft Lines	6
1.2.3	Selection of Insurer Reporting Requirements and Subject Insurers	8
1.3	Role of This Study	12
1.4	Data Base Characteristics	14
2.	DATA ANALYSIS AND INTERPRETATION	16
2.1	Development of Claim Data Base	16
2.2	Analysis of 1983-1984 Theft Claim Base	17
2.2.1	Examination of Theft and Recovery Data	19
2.2.2	Examination of Intact, In-Whole/In-Part Recoveries	29
2.2.3	Examination of Total Loss Recoveries	38
2.2.4	Examination of Recoveries Prior to Settlement	47
2.2.5	Examination of Intact Recoveries Prior to Settlement	56
2.2.6	Examination of Distribution of Theft Losses	66
2.2.7	Statistical Analyses of Recovery and Payout Data	84
3.	RESULTS AND CONCLUSIONS	97
	REFERENCES	103

LIST OF TABLES

<u>No.</u>	<u>Title</u>	<u>Page</u>
1	Parts Subject to Identification Labelling Requirements	7
2	Lines Subject to Theft Prevention Standard	9
3	Insurer Reporting Requirements of Motor Vehicle Theft Law Enforcement Act of 1984	13
4	Thefts and Recoveries During 1983	20
5	Thefts and Recoveries During 1984	24
6	Stratification of Recoveries: Intact, In-Whole/In-Part, During 1983	30
7	Stratification of Recoveries: Intact, In-Whole/In-Part, During 1984	34
8	Stratification of In-Whole/In-Part Recoveries: Total Loss Recoveries During 1983	39
9	Stratification of In-Whole/In-Part Recoveries: Total Loss Recoveries During 1984	43
10	Stratification of Recoveries: Recoveries Prior to Settlement During 1983	48
11	Stratification of Recoveries: Recoveries Prior to Settlement During 1984	52
12	Stratification of Recoveries Prior to Settlement: Intact Recoveries During 1983	57
13	Stratification of Recoveries Prior to Settlement: Intact Recoveries During 1984	61
14	Make/Model Identification Codes for Payout Distribution Tables	67
15	Distribution of Theft Losses by Dollar Values During 1983	72
16	Distribution of Theft Losses by Dollar Values During 1984	77
17	New Car Prices, Thefts and Recoveries During 1983 - Models Subject to the Standard in 1987	85

LIST OF TABLES

<u>No.</u>	<u>Title</u>	<u>Page</u>
18	New Car Prices, Thefts and Recoveries During 1983 - Models Not Subject to the Standard in 1987	87
19	New Car Prices, Thefts and Recoveries During 1984 - Models Subject to the Standard in 1987	90
20	New Car Prices, Thefts and Recoveries During 1984 - Models Not Subject to the Standard in 1987	92

LIST OF FIGURES

<u>No.</u>	<u>Title</u>	<u>Page</u>
1	Distribution of theft claims by dollar values	82
2	Cumulative distributions of theft claims by dollar values	83
3	Percentage Breakdown of Recoveries	98
4	Percentage Breakdown of Recoveries by Settlement Date	99

## 1. INTRODUCTION

This document constitutes the final report for research performed by KLD Associates, Inc. for the National Highway Traffic Safety Administration (NHTSA) under Contract DTNH22-86-C-6030.

This project represents the first stage in an effort to develop a database of insurance claim information that will be utilized by the NHTSA in its efforts to evaluate the effectiveness of the Motor Vehicle Theft Law Enforcement Act of 1984 in reducing automotive theft.

In recognition of the growing problem of automotive theft, Congress enacted legislation requiring the Department of Transportation to promulgate a Theft Prevention Standard for selected passenger cars with high theft rates. This standard requires automobile manufacturers and manufacturers of replacement parts to affix a unique Vehicle Identification Number (VIN) on major vehicle components. This labelling is intended to facilitate law enforcement efforts to prosecute criminals who are involved in the theft and dismantling of automobiles and serve as a deterrent to the theft of motor vehicles.

As a part of the legislation, Congress has required the NHTSA to report on the effectiveness of the Theft Prevention Standard including specific recommendations for the future continuation of this standard.

To comply with this reporting requirement, the NHTSA is developing a database of insurance claim information which identifies the thefts and recoveries of motor vehicles as well as the losses incurred by insurers due to theft and the premiums charged to consumers for theft coverage.

This report describes the initial development of this insurance claim database. In this stage, insurance claims for vehicles stolen during calendar years 1983 and 1984 have been obtained and analyzed. This analysis depicts the problem of automotive theft as reflected in insurance data prior to the implementation of the Theft Prevention Standard.

### 1.1 Background

Over the last 20 years, the profile of automotive theft has changed dramatically. In 1960, theft was considered to be primarily a juvenile problem with approximately 94% (1) of thefts attributed to "joyriders". In the 1980's, motor vehicle theft has become an adult crime which is increasingly professional in nature. Examples of this problem include (1):

- By 1982, the percent of juveniles (18 and under) arrested for auto theft had dropped to 34.6%.

- The recovery rate of stolen motor vehicles dropped to 52.8% in 1983 compared to 86% in 1967.
- The solution rate for motor vehicle theft declined to 12.8% in 1982 and further decreased in 1983.
- Approximately 50% of all larcenies reported to law enforcement officials involved the theft of a motor vehicle, its contents or its parts.

These statistics translate into one theft of a motor vehicle, its contents or parts every 31 seconds. The cost of these thefts to Americans has been estimated at \$4 billion per year.

Motor vehicle theft is perceived by criminals as a low risk, high profit crime. Police and other agencies have been unable to track missing vehicles since many are "chopped" into component parts which become untraceable. Such dismantling of vehicles frustrates police efforts for arrests and minimizes the risks to criminals of prosecution and punishment.

There is a growing market for stolen parts which has contributed to the stealing and "chopping" of vehicles. "Chop" shops can often deliver parts overnight, stealing to order the necessary parts, whereas legitimate replacement parts could take weeks to receive from manufacturers. Besides these time savings, chop shops can also deliver parts already assembled, thereby decreasing labor costs to repair facilities. Garage owners can profit from these savings since they can charge the same price for a part whether it is legitimate or stolen.

#### 1.1.1 Legislative Action

As a result of these problems, Congress enacted the Motor Vehicle Theft Law Enforcement Act of 1984. In an effort to address the chop shop problem, the law requires manufacturers to label certain parts on high theft vehicles. This facilitates law enforcement efforts to trace and recover stolen vehicles and parts as well as arrest and prosecute the criminals responsible.

The legislation also enacted criminal penalties for altering Vehicle Identification Numbers (VIN's) and for possessing, trafficking, importing or exporting stolen vehicles.

The purposes stated by Congress for this legislation were:

- 1) To provide for the identification of certain motor vehicles and their major replacement parts to impede motor vehicle thefts.

- 2) To augment Federal criminal penalties imposed upon persons trafficking in stolen motor vehicles.
- 3) To encourage decreases in premiums charged consumers for motor vehicle theft insurance.
- 4) To reduce opportunities for exporting or importing motor vehicle and off-highway mobile equipment.

Section 101(a) added a new Title VI to the Motor Vehicle Information and Cost Savings Act (15 US 1901), requiring the Department of Transportation to promulgate a Theft Prevention Standard for passenger cars with high theft rates. This is a minimum performance standard relating to the identification of new motor vehicle parts and major replacement parts.

#### 1.1.2 Actions Required by the Theft Act

The Theft Act calls for specific actions by several groups including:

- Automobile manufacturers (Original Equipment manufacturers and Manufacturers of Replacement Parts).
- The Automobile Insurance Industry
- The National Highway Traffic Safety Administration (NHTSA) and Secretary of Transportation.

Under the Theft Act, manufacturers are held responsible for inscribing or affixing the appropriate identification numbers for the affected parts and car lines.

##### 1.1.2.1 Insurance Industry Requirements

The insurance industry is required to provide information to the Secretary of Transportation under Section 612 of the Theft Act. The following information is required to be reported annually:

- 1) The theft and recovery (in whole or in part) of motor vehicles.
- 2) The number of vehicles which have been recovered intact.
- 3) The rating rules and plans, such as loss data and rating characteristics, used by insurers to establish premiums for comprehensive insurance coverage for motor vehicles. Also to be included is the basis for such premiums and premium penalties for those motor vehicles considered as more likely to be stolen.

- 4) The actions taken by insurers to reduce premiums including changes in rate levels for automobile comprehensive coverages due to a reduction in thefts of motor vehicles.
- 5) The actions taken by insurers to assist in deterring or reducing thefts of motor vehicles.
- 6) Other information as required by the Secretary of Transportation to administer this title and produce the report and findings required by this title.

The first insurer reports were submitted in 1987 covering calendar year 1985.

#### 1.1.2.2 Department of Transportation Requirements

Under the Title VI Theft Prevention Standard, the National Highway Traffic Safety Administration has been given the responsibility to:

- Select the parts which are to be marked with the appropriate identification numbers.
- Select the high theft lines which are to be covered by the requirement.
- Establish the performance criteria for inscribing or affixing the appropriate identification numbers.
- Specify the manner and form for compliance certification and who will be authorized to certify compliance.
- Grant exemptions to insurers and small rental and leasing companies which qualify under Section 612, so that they are not subject to the insurer reporting requirements.
- Grant an exemption from the standard if a line of vehicles is manufactured with an anti-theft device which is determined to most likely be as effective as the standard in deterring theft.

Under Section 614 of the legislation, the Secretary of Transportation is required to submit two reports to Congress on Motor Vehicle Theft. The first report was completed by NHTSA in October 1987 (2) and describes the impact of automotive theft on the insurance industry during calendar year 1985. This time frame preceded the implementation of the Theft Prevention Standard.

A second report is required to be submitted to Congress in October 1990. This report will provide an extensive evaluation of the effectiveness of the Motor Vehicle Theft Prevention Standard including recommendations to Congress to either:

- Continue the standard without change.
- Modify the standard to include fewer passenger car lines.
- Modify the standard to include other classes of motor vehicles, such as trucks, vans and motorcycles.
- Terminate the standard.

As required by subsection 614 b, the report shall also include:

- A) The methods and procedures used by public and private entities for collecting, compiling and disseminating information concerning the theft and recovery of motor vehicles including:
  - 1) The accuracy, reliability and timeliness of the data.
  - 2) How such information can be improved.
- B) Data on the number of motor vehicles stolen and recovered annually compiled by vehicle class, make and line.
- C) The extent to which motor vehicles stolen annually are dismantled or exported.
- D) A description of the market for such stolen parts.
- E) Information concerning costs to manufacturers and car purchasers in complying with the standard, as well as the dollar benefits of the standard and the extent to which these benefits exceed costs.
- F) The experience of Federal, State and local officials in making arrests and successfully prosecuting violators.
- G) Information concerning comprehensive premiums charged by insurers including any increase in these premiums charged because a vehicle is a likely candidate for theft. Also the extent to which the standard may have led to reduced comprehensive premiums or alleviated premium increases.
- H) The adequacy and effectiveness of Federal and State laws aimed at preventing the distribution and sale of used parts removed from stolen vehicles.
- I) An assessment of whether the identification of parts for classes other than passenger cars would be beneficial.
- J) Any other information available to the Secretary concerning the impact of the Act.

## 1.2 NHTSA Actions in Response to Legislation

As empowered under the Motor Vehicle Theft Law Enforcement Act of 1984, the NHTSA promulgated a series of rules to implement the Theft Prevention Standard. These rules identified:

- The parts which must be marked and the labelling requirements.
- The high theft lines which are covered by the requirement.
- The annual insurer reporting requirements and the insurers who are subject to these requirements.

Each of these rulemaking activities and their results are described in the sections which follow.

In addition to these activities, the NHTSA Office of Standards Evaluation began to gather information to provide an extensive evaluation of the effectiveness of the legislation as required for the October 1990 report to Congress.

### 1.2.1 Selection of Covered Parts and Labelling Requirements

In October 1985, the NHTSA added a new Part 541 to Title 49 of the Code of Federal Regulations establishing the Vehicle Theft Prevention Standard (3). The Standard identified the performance requirements for inscribing or affixing identification numbers onto original and replacement parts of vehicle lines with high theft rates. This rule also specified fourteen parts which are subject to these labelling requirements. These parts are identified in Table 1.

In its selection process, the NHTSA sought to increase the risks for chop shop operators for their most potentially profitable parts. The NHTSA also indicated that it would be inconsistent with the purposes of the Theft Act to include front doors and exclude rear doors from the standard and thus allow these doors to be stolen and fenced with minimal risk.

Thus, the VIN marking requirements apply to twelve major components of two door vehicles and fourteen major components of four door vehicles.

### 1.2.2 Selection of High Theft Lines

The Theft Act defined three categories of car lines as high theft lines for purposes of the Theft Prevention Standard. These categories include:

Table 1. Parts Subject to Identification Labelling Requirements

- 1) Engine
- 2) Transmission
- 3) Right front fender
- 4) Left front fender
- 5) Hood
- 6) Right front door
- 7) Left front door
- 8) Right rear door
- 9) Left rear door
- 10) Front bumper
- 11) Rear bumper
- 12) Right rear quarter panel
- 13) Left rear quarter panel
- 14) Decklid, tailgate or hatchback

- 1) Existing lines that had a theft rate exceeding the median theft rate in 1983 and 1984.
- 2) New lines likely to have a theft rate exceeding the median theft rate.
- 3) Existing or new lines that had a theft rate below the median rate, but had a majority of major parts which are interchangeable with lines whose theft rate exceeded or is likely to exceed the 1983 and 1984 median theft rate.

Existing lines were defined as lines first produced before January 1, 1983.

The Theft Act also directed the Department of Transportation to compile and publish theft rate listings for model year 1983 and later car lines offered for sale in the United States. The initial listing was published in November of 1985 for model years 1983 and 1984 and covered 130 car lines. It also set the median theft rate for car lines subject to the Standard at 3.2712 thefts per 1,000 vehicles produced.

The requirements for labelling automotive parts became effective for 1987 model year vehicles. In April of 1986, NHTSA selected the 1987 car lines subject to these labelling requirements. Existing lines were selected on the basis of actual theft data. New lines were selected according to defined procedures (4). Several of the car lines initially selected were found to be equipped with anti-theft devices and were subsequently exempted from the standard in November 1986.

The final list of car lines which were required to include labelled parts during the 1987 model year are presented in Table 2.

#### 1.2.3 Selection of Insurer Reporting Requirements and Subject Insurers

In January 1987, the NHTSA promulgated a final rule (5) which defined the insurer reporting requirements under Section 612 of the Theft Act and identified 31 insurers who were subject to these reporting requirements. The information submitted by insurers under this rule is intended to aid NHTSA in its responsibility to publish insurance information in a form that would be helpful to the public, the law enforcement community and the Congress.

The insurer reports also provide the NHTSA with information needed to prepare the 1987 and 1990 evaluation reports for Congress as required in Section 614 of the legislation.

Table 2. Lines Subject to Theft Prevention Standard

<u>Manufacturer</u>	<u>Subject Lines</u>
BMW	3-Carline 5-Carline 6-Carline 7-Carline
Chrysler	Chrysler Executive Sedan/Limousine Chrysler Fifth Avenue/Newport Chrysler Laser Chrysler LeBaron/Town & Country Chrysler LeBaron GTS Dodge Aries Dodge Conquest Dodge Daytona Dodge Diplomat Dodge Lancer Dodge 600 Plymouth Caravelle Plymouth Gran Fury Plymouth Reliant "Q" Car
Ferrari	Mondial 8 308 328
Ford	Ford Mustang Ford Thunderbird Mercury Capri Mercury Cougar Lincoln Continental Lincoln Mark Lincoln Town Car Merkur Scorpio Merkur XR4TI
General Motors	Buick Electra Buick LeSabre Buick Riviera Cadillac DeVille Cadillac Eldorado Cadillac Seville Chevrolet Camaro Chevrolet Nova

Table 2. Lines Subject to Theft Prevention Standard  
(continued)

<u>Manufacturer</u>	<u>Subject Lines</u>
General Motors	Oldsmobile Delta 88 Oldsmobile 98 Oldsmobile Toronado Pontiac Bonneville Pontiac Fiero Pontiac Firebird
Honda	Acura Legend
Jaguar	XJ XJ-6 XJ-40
Maserati	Biturbo Quattroporte
Mazda	GLC 626
Mercedes-Benz	190 D/E 300 D/E 300 SDL 380 SEC/500 SEC 380 SEC/500 SEL 380 SL 420 SEL 560 SEL 560 SEC 560 SL
Mitsubishi	Cordia Tredia
Porsche	911 928
Reliant	SS1
Saab	900 9000
Subaru	XT

Table 2. Lines Subject to Theft Prevention Standard  
(Concluded)

<u>Manufacturer</u>	<u>Subject Lines</u>
Toyota	Camry Celica Corolla/Corolla Sport MR2 Starlet
Volkswagen	Audi Quattro Volkswagen Cabriolet Volkswagen Rabbit Volkswagen Scirocco

An initial list of the insurance reporting requirements was specified by Congress in the legislation as indicated in Section 1.1.2.1 of this report. Under the authority given to NHTSA in developing its final rule, one additional reporting requirement was added to assist the agency in satisfying its requirement to determine whether anti-theft devices are as effective as parts marking in deterring and reducing vehicle thefts.

Considering the Congressional intent of the insurer reporting requirements, the agency formulated its reporting rule so that:

- 1) Insurers are required to report only information essential to the purposes of the Theft Act.
- 2) The costs of time and money imposed upon the insurers to supply information should be kept to the minimum necessary to satisfy the need for information.
- 3) To the maximum extent possible, insurers should report data already gathered for their own purposes. The generation of new data could be justified only if this data was explicitly required by Section 612 of the legislation.

Given these considerations, the final rule requires that only theft and recovery data be stratified according to model, make and line. Loss and rating information are to be provided to the NHTSA in the same categories used by the insurers for their own purposes. This approach imposes the minimum burden on the insurers because they do not have to arrange data in a new format.

The actual reporting requirements under the NHTSA's final rule are presented in Table 3.

By the end of January 1987, the first insurer reports were filed with the NHTSA Office of Rulemaking covering calendar year 1985. Many of the individual insurance companies designated the National Automobile Theft Bureau (NATB) as their reporting instrument to comply with these requirements. The information in these reports was reviewed and analyzed by the Office of Rulemaking and was incorporated in NHTSA's October 1987 report. Insurer reports for each calendar year after 1985 are due approximately 10 months after the year has concluded.

### 1.3 Role of This Study

In addition to the NHTSA's responsibilities and actions described in the previous sections, the Agency must also submit to Congress its evaluation of the Theft Prevention Standard along with recommendations covering the future of the Standard. The purpose of the Theft Act was not only to deter automotive theft but also

Table 3. Insurer Reporting Requirements of Motor Vehicle  
Theft Law Enforcement Act of 1984

1. Total thefts and recoveries of insured vehicles during the reporting period, broken down into make, model, and line for each vehicle type, and the use made by the insurer of this information;

2. The rating rules and plans used by the insurer to establish comprehensive insurance premiums and premium penalties for motor vehicles considered by the insurer as more likely to be stolen, broken down into the risk groupings the insurer uses for its purposes;

3. The actions taken by the insurer to reduce comprehensive insurance premiums because of a reduction in vehicle thefts;

4. Information about any discounts the insurer offers for vehicles equipped with antitheft devices, including the number of such discounts and thefts and recoveries of vehicles that received such discounts; and

5. The insurer's actions to assist in deterring and reducing vehicle thefts.

to encourage decreases in the comprehensive premiums charged for motor vehicle theft insurance. Therefore the NHTSA's evaluation must examine both issues of theft rates and recoveries as well as insurance premiums and claim losses.

As part of the evaluation, it is necessary to gather and examine insurance data covering several years both before and after the part labelling requirements took effect. This would include data for the pre-standard period 1983 through 1986 as well as post 1986 data.

Under this project, the development of such a data base of insurance claim information was begun. Under this initial phase of development, the project focused on obtaining and summarizing claim data on vehicle thefts which occurred during calendar years 1983-1984.

For purposes of evaluating the Theft Prevention Standard, it is important to consider theft data as far back as 1983 since the first lines subjected to the parts labelling requirements in model year 1987, were selected on the basis of their 1983 theft rates.

The 1983-1984 theft data obtained for this project will eventually be integrated with similar data which will be obtained for other model years so that it will be possible to examine differences in insurance theft claim patterns before and after the Theft Prevention Standard took effect.

Even before data is available for the post-standard period, an examination of the 1983-1984 data is useful to identify the variation which exists in the claim data independent of any influence of the Theft Prevention Standard.

Thus, the initial development of the insurance claim data base performed in this study comprises an important component of NHTSA's overall effort to evaluate the effectiveness of the Theft Prevention Standard.

#### 1.4 Data Base Characteristics

The data base being developed for the evaluation of the Theft Prevention Standard includes insurance claim information on vehicle thefts, recoveries and payouts for theft losses. It will also include comprehensive premiums charged to insure selected lines at various geographic locations.

Thus, this insurance claim data base contains detailed information that supplements the information that insurers are required to provide in their annual reports to NHTSA under Section 612 of the Theft Act.

Besides the additional detail, this supplementary data base also considers claims as far back as 1983 whereas Section 612 did not require any insurer reporting information for thefts prior to 1985.

It is expected that the NHTSA will consider information both from the annual insurer reports and the supplementary claim data base to prepare its evaluation of the Theft Prevention Standard.

The information for the supplementary detailed claim data base is being furnished by a limited number of major insurers who are voluntarily cooperating with the NHTSA in providing important data for the evaluation of the Theft Prevention Standard.

At the time this report was written, theft, recovery and payout data had been obtained from one of these insurers and was processed by KLD Associates. Detailed claim data is also being supplied by six other major insurers for calendar years 1983-1986. This data will also include information on premiums charged consumers for comprehensive coverage. Thus, the data base described in this report is in the process of being expanded to include new information. A separate report will be forthcoming to describe this next state of development of the insurance claim data base.

## 2. DATA ANALYSIS AND INTERPRETATION

This section of the report provides a description of the elements included in the first stage of the insurance claim data base. It also presents the results of an investigation of the data to quantify the thefts, recoveries and insurance payouts for vehicles stolen in calendar years 1983-1984.

### 2.1 Development of Claim Data Base

The data base constructed for this project consists of individual insurance claim records resulting from the theft of a motor vehicle during calendar years 1983 and 1984. These claims were all filed with a single major insurer and represent a nationwide sample. This insurer's sample was especially well suited to the needs of this project since its theft claim records contained considerable detail. This detail includes the connection of a recovery transaction to a specific theft claim payment transaction. Also included is the identification of repair costs for stolen vehicles which were recovered with damage.

This level of recovery information is important to help assess the extent to which stolen vehicles are dismantled for parts.

The theft claim data was maintained by the insurer in written form only. In support of NHTSA's evaluation effort, the insurer agreed to permit KLD Associates to review its hand-written claim records and construct a computerized sample of these records.

The sample captured all theft claims of Current Model Year (CMY), one-year old and two-year old vehicles. That is, all claims filed with the insurer during 1983 for thefts of 1983, 1982 and 1981 model year vehicles were included in the sample. Similarly, all claims for thefts of 1984, 1983 and 1982 model year vehicles filed during 1984 were included.

The decision to construct the sample of claims for CMY, one and two-year old vehicles was made recognizing that only data for post-standard vehicles in these age categories will be available when the final analysis must be performed for NHTSA's evaluation report to Congress.

For each selected motor vehicle theft claim, the following information was entered into the computerized data base:

- Claim number
- Date case was opened
- Date case was closed
- Date of loss
- Vehicle make
- Model year
- Vehicle Identification Number (VIN)

- Date of recovery
- Date of settlement
- Net amount paid
- Repair cost
- Disposition

## 2.2 Analysis of 1983-1984 Theft Claim Data Base

The 1983 and 1984 claim samples were each examined to identify pertinent information which would describe the number of thefts and recoveries of motor vehicles as well as the average payments associated with theft claims. To ultimately apply these samples to a study of the effects of the part labelling program, it is important to examine the extent to which vehicles in these samples were stolen and dismantled for parts.

Therefore, particular emphasis was placed on examining claims for cases in which stolen vehicles were recovered and identifying the condition of recovered vehicles. In its ruling on insurer reporting requirements (5), the NHTSA defined three categories of recoveries depending upon whether or not major vehicle parts were missing from the vehicle at the time of recovery. These categories are:

- 1) Recovery Intact - A vehicle reported as stolen is recovered with no major parts missing at the time of the recovery and with no apparent damage to the vehicle other than damage necessary to enter and operate the vehicle and ordinary wear and tear.
- 2) Recovery In-Whole - A vehicle reported as stolen is recovered with no major parts missing at the time of the recovery but with damage in addition to that sustained during unauthorized entry and operation. This would include vehicles stripped of other parts, wrecked vehicles, burned vehicles (with no major parts missing), etc.
- 3) Recovery In-Part - A vehicle reported as stolen is recovered with one or more major parts missing at the time of recovery. This would include vehicles stripped of other parts, wrecked vehicles, burned vehicles, etc.

A recovery in-part would indicate a possibility that the vehicle was stolen for use by a chop shop. These classifications of recoveries were not maintained in insurance industry data prior to 1986. However, for purposes of investigating the available samples of 1983 and 1984 theft claims, recoveries were classified as intact if the claim value was less than \$100 1988 dollars or the claim record indicated that no damage was sustained by the vehicle. A combined category of in-whole/in-part recoveries was created for all other recoveries.

To examine samples, the Vehicle Identification Number contained in each claim record was decoded to identify the make, line and model of each stolen vehicle. Each calendar year sample of claims was then stratified by vehicle model for analysis. The following categories of information were identified for each model for each calendar year:

- Number of thefts and average payment per theft claim
- Percent of stolen vehicles recovered, average claim payment per recovery
- Percent of recoveries with vehicle intact, average claim payment per intact recovery
- Percent of recoveries in-whole/in-part, average claim payment per recovery in-whole/in-part
- Percent of recoveries which were total losses, average claim payment per total loss recovery
- Percent of recoveries which occurred prior to settlement, average claim payment for a recovery prior to settlement
- Percent of recoveries prior to settlement in which the vehicle was recovered intact, average claim payment for an intact recovery prior to settlement
- Distribution of claim payments by dollar amount.

Tabulations were prepared for each of these items by model and calendar year (1983, 1984) and for each sample in aggregate. These tabulations are presented and the results discussed in the sections which follow. All payment amounts shown in these tabulations are expressed in 1988 dollars.

### 2.2.1 Examination of Theft and Recovery Data

Table 4 presents the number of theft claims and recoveries by model for each of the 177 models found in the 1983 claim sample. The percent of stolen vehicles which were recovered is also identified by model along with the average claim payment per theft claim and the average claim payment per recovery. Statistics for the sample in aggregate are shown at the end of the table.

In total, the 1983 sample represents 1,449 vehicle thefts and 1,105 vehicle recoveries, indicating a recovery rate of 76%. The number of theft claims for a given model ranged from a low of 1 to a high of 71. Only 4 models exhibited more than 50 claims each. Most models exhibited fewer than 20 claims in this sample. The rate of recoveries for models with more than 50 claims ranged from a low of 56% to a high of 83%.

The average claim payment for the theft of a current model year, one-year-old or two-year-old vehicles in the 1983 sample was \$5,597 expressed in 1988 dollars. If a stolen vehicle was recovered either prior or subsequent to payment of the claim, the average claim payment was \$4,025. Based on these two averages and the sample sizes, the average payment for a theft without recovery was \$10,647 or \$6,622 more than the average payment for a theft with recovery.

Table 5 presents similar information for claims filed in 1984. A total of 197 distinct models were identified in the 1984 sample. The 1984 sample represents 1,893 motor vehicle thefts with 1,457 recoveries, indicating a recovery rate of 77%. The largest number of thefts of vehicles of a single model was 105. Only 9 models exhibited more than 50 thefts in this claim sample, while most models in the sample exhibited under 25 thefts. The rate of recoveries for models with more than 50 claims ranged from a low of 69% to a high of 84%.

Based on 1988 dollars, the average claim payment for the theft of a current model year, one-year-old or two-year-old vehicle in the 1984 sample was \$5,750 compared with \$5,597 in the 1983 sample. The average payment in the 1984 sample for a theft claim involving a recovery was \$4,124. Expressed in 1988 dollars, the average payment for a theft claim without recovery was \$11,184 in the 1984 sample, as compared with \$10,647 in the 1983 sample. Thus the average payment in 1984 for a theft claim without recovery was \$7,060 more than payment for a claim with recovery prior or subsequent to settlement.

If the Theft Prevention Standard is successful in reducing the number of automobiles which are stolen to provide parts, then it might be expected that similar claim samples for calendar years after 1986 would exhibit:

Table 4: Thefts and Recoveries During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	----- Thefts -----		----- Recoveries -----		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
AMERICAN MOTORS	CONCORD	1	3023	0		0
AMERICAN MOTORS	EAGLE 30	3	6536	2	5810	67
AMERICAN MOTORS	SPIRIT	1	5947	0		0
AUDI	4000	1	3182	1	3182	100
*AUDI	4000 CPE OR QUATTRO 4 WD	1	14442	1	14442	100
AUDI	5000 & SW	6	8373	5	7720	83
*BMW	320I	22	13173	11	11437	50
*BMW	528E	6	9432	4	874	67
*BMW	528I	1	18869	0		0
-BMW	733I	1	4951	1	4951	100
BUICK	CENTURY ESTATE	6	3316	5	2055	83
BUICK	CENTURY LTD	7	3992	5	2024	71
*BUICK	ELECTRA LTD	5	2261	5	2261	100
*BUICK	ELECTRA PARK AVE	11	7350	8	5333	73
*BUICK	LESABRE	3	4256	3	4256	100
*BUICK	LESABRE ESTATE	1	3051	1	3051	100
*BUICK	LESABRE LTD & CUSTO	9	5072	7	3166	78
+BUICK	REGAL	44	4822	34	3414	77
+BUICK	REGAL LTD	38	3127	31	1630	82
+BUICK	REGAL SPRT	1	2735	1	2735	100
BUICK	RIVIERA LUXURY	31	6664	25	5089	81
BUICK	SKYHAWK	1	660	1	660	100
BUICK	SKYLARK	4	3509	2	161	50
BUICK	SKYLARK LTD	1	1652	1	1652	100
CADILLAC	CIMARRON	5	5239	4	3675	80
*CADILLAC	DEVILLE	59	8368	49	6557	83
*CADILLAC	ELDRADO	47	9744	41	8705	87
CADILLAC	FLEETWOOD BROUGHAM	17	8865	11	3954	65
*CADILLAC	SEVILLE	16	13992	11	12820	69
*CHEVROLET	CAMARO BERLINETTA	7	5164	4	2085	57
*CHEVROLET	CAMARO SPRT CPE	19	4630	16	3762	84
CHEVROLET	CAPRICE CLASSI	16	5539	11	3279	69
CHEVROLET	CAVALIER	6	6688	3	3911	50
CHEVROLET	CAVALIER 10	1	6560	0		0
CHEVROLET	CAVALIER CS	8	4261	8	4261	100
CHEVROLET	CHEV. TRUCK	5	4200	3	711	60
CHEVROLET	CHEVETTE	12	3742	9	3211	75
CHEVROLET	CHEVETTE SCOOTER	2	712	2	712	100
CHEVROLET	CITATION II	12	1555	11	1107	92
CHEVROLET	CORVETTE	10	10608	4	3314	40
CHEVROLET	IMPALA	11	3692	9	2849	82
CHEVROLET	MALIBU	71	6516	40	4287	56
CHEVROLET	MONTE CARLO	22	5524	11	2701	50
CHRYSLER	CORDOBA	3	3821	2	1069	67
*CHRYSLER	LEBARON	4	568	4	568	100
*CHRYSLER	NEW YORKER 5TH AVE	7	6919	6	5810	86
*CHRYSLER	NEW YORKER/GRAN LEBARON	1	480	1	480	100
*CHRYSLER	NEWPORT	1	216	1	216	100
DATSUN	200SX	24	5020	20	3924	83
DATSUN	210	22	2777	18	2281	82
DATSUN	280ZX	38	4707	32	3142	84

Table 4: Thefts and Recoveries During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Thefts		Recoveries		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
DATSUN	310	3	4037	3	4037	100
DATSUN	510	1	7196	1	7196	100
DATSUN	KING CAB	5	6903	2	4548	40
DATSUN	MAXIMA	18	4988	16	3888	89
DATSUN	PULSAR	4	544	4	544	100
DATSUN	SENTRA	10	4619	7	2889	70
DATSUN	STANZA	6	2293	6	2293	100
*DODGE	ARIES	1	1113	1	1113	100
*DODGE	ARIES/CHALLENGER	8	8091	4	6217	50
DODGE	CHARGER/OMNI/SHELBY TURBO	3	922	3	922	100
*DODGE	COLT/600	5	1809	4	780	86
*DODGE	COLT/COLT VISTA/DIPLOM	1	128	1	128	100
*DODGE	DIPLOMAT	1	6940	1	6940	100
DODGE	MIRADA	1	14042	1	14042	100
DODGE	RAM VAN	3	7980	1	3049	33
FIAT	SPIDER 2000	3	6174	2	4438	67
FIAT	X 1/9	2	7730	1	7974	50
FORD	ESCORT	30	3579	24	2695	80
FORD	EXP 3 DR HTCHBK TURBD	8	5130	6	4345	75
FORD	FAIRMONT (FUTURA) 2 DR SDN	1	5003	1	5003	100
FORD	FAIRMONT (FUTURA) 4 DR SDN	1	1589	1	1589	100
FORD	GRANADA 2 DR SDN	1	1351	1	1351	100
FORD	GRANADA 4 DR SDN	1	9286	1	9286	100
FORD	GRANADA 4 DR SW	1	3109	1	3109	100
FORD	LTD 4 DR SDN	1	10515	1	10515	100
FORD	LTD 4 DR WAGON SQUIRE	1	720	1	720	100
FORD	LTD 4 SEAT SW	1	490	1	490	100
FORD	LTD 5 4 DR HT	2	2880	1	948	50
*FORD	MUST 3 DR SDN HTBK/NTCHBK/GRANADA S	1	0	1	0	100
*FORD	MUSTANG & MUSTANG II 3 DR SDN HTBK	1	1444	1	1444	100
*FORD	THUNDERBIRD 2 DR HT	1	12809	0	0	0
GM OF CANADA	PONTIAC PARISIENNE BROUGHAM	1	14219	1	14219	100
GMC	INCOMPLETE	2	6211	2	6211	100
TOYOTA	TRUCK	4	7605	4	7605	100
HONDA	ACCORD	20	6711	12	4531	60
HONDA	CIVIC 1500 HTCHBK	1	3346	1	3346	100
HONDA	CIVIC 4 DR SDN	6	577	5	692	83
HONDA	CIVIC SW	2	1926	2	1926	100
HONDA	PRELUDE CPE	3	3704	3	3704	100
ISUZU	PICKUP 4X2	1	7082	0	0	0
*JAGUAR	XJ6L	1	2308	1	2308	100
JAGUAR	XJ5	1	21937	1	21937	100
JEEP	CHEROKEE MPV 2 DR WAGON/WT	1	12100	0	0	0
JEEP	WAGONEER MPV 4 DR WAGON	1	17196	0	0	0
LANCIA	BETA	1	9210	0	0	0
LANCIA	ZAGATO	2	6344	1	49	50
LINCOLN	CONTINENTAL 4 DR SDN MARK	4	6223	4	6223	100
LINCOLN	LINCOLN 4 DR SDN	1	1646	1	1646	100
*MAZDA	626	18	3274	17	2943	94
MAZDA	B2000 TRUCK	2	6793	1	5878	50
MAZDA	B2000/B2200 TRUCK	2	5336	2	5336	100
*MAZDA	GLC	4	5895	3	5167	75

Table 4: Thefts and Recoveries During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	----- Thefts -----		----- Recoveries -----		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
MAZDA	RX7	30	7263	24	6052	80
MERCEDES BENZ	240D 2 DR SDN	2	12489	1	3577	50
*MERCEDES BENZ	300 DT 4 DR SDN	4	24508	3	24109	75
*MERCEDES BENZ	300SD 4 DR SDN	2	487	2	487	100
*MERCEDES BENZ	300 SEC 2 DR CPE	1	66773	0		0
*MERCEDES BENZ	300SL 2 DR CPE	1	14081	1	14081	100
*MERCURY	CAPRI 3 DR HTCHK	9	5292	4	1965	44
*MERCURY	COUGAR 2 DR HT XR-7	1	0	1	0	100
*MERCURY	COUGAR 2 DR SDN	1	3143	1	3143	100
MERCURY	LYNX	16	3662	12	2655	75
MERCURY	MARQUIS BROUGHAM 4 DR SDN	1	10758	1	10758	100
MERCURY	TOPAZ 4 DR SDN GS	1	11062	0		0
MERCURY	ZEPHYR 4 DR SDN	1	4380	0		0
*MITSUBISHI	CORDIA/TREDIA	2	5822	2	5822	100
*OLDSMOBILE	98 REGENCY	17	5742	13	3307	76
*OLDSMOBILE	98 REGENCY BROUGHAM	7	8088	7	8088	100
OLDSMOBILE	CUSTOM CRUISER	4	4768	3	3063	75
OLDSMOBILE	CUTLASS CALAIS	12	4111	12	4111	100
OLDSMOBILE	CUTLASS CIERA	2	519	2	519	100
OLDSMOBILE	CUTLASS CIERA BROUGHAM	44	4252	37	3148	84
OLDSMOBILE	CUTLASS CIERA LS	3	3170	3	3170	100
OLDSMOBILE	CUTLASS SDN	3	2978	3	2978	100
+OLDSMOBILE	CUTLASS SUPREME	69	4875	49	3188	71
*OLDSMOBILE	DELTA 88	4	4783	3	3251	75
*OLDSMOBILE	DELTA 88 ROYALE	17	5557	12	3336	71
OLDSMOBILE	DELTA ROYALE BROUGHAM	10	3040	9	2097	90
OLDSMOBILE	OMEGA	4	5517	2	6828	50
OLDSMOBILE	OMEGA BROUGHAM	1	2870	1	2870	100
*OLDSMOBILE	TORONADO BROUGHAM	11	6251	10	5570	91
PEUGEAT	SDN	4	13366	1	4946	25
*PLYMOUTH	CARAVELLE	2	3968	1	778	50
PLYMOUTH	CHAMP	2	3837	1	715	50
PLYMOUTH	HORIZON & TC3 CUSTOM/TURISMO	3	1777	2	239	67
*PLYMOUTH	RELIANT SP ED CUSTO	9	1999	9	1999	100
PONTIAC	1000/CATALINA/PARISIENNE	1	0	1	0	100
PONTIAC	2000	1	6772	0		0
*PONTIAC	BONNEVILLE	5	4282	4	1890	80
*PONTIAC	BONNEVILLE BROUGHAM	5	7511	4	7417	80
*PONTIAC	FIREBIRD T/A	5	6067	4	5454	80
*PONTIAC	FIREBIRD/FIREBIRD SE	3	12087	0		0
*PONTIAC	FIREBIRD/FIREBIRD SE/BONNEVILLE LE	14	4995	9	2392	64
+PONTIAC	GRAN PRIX	19	4956	17	3963	89
+PONTIAC	GRAN PRIX BROUGHAM	10	2026	9	1286	90
+PONTIAC	GRAN PRIX LJ & LE	30	3305	27	2817	90
PONTIAC	GRAND LEMANS	2	8237	1	8584	50
PONTIAC	LEMANS	2	3343	1	0	50
PONTIAC	PHOENIX	4	1876	4	1876	100
*PORSCHE	911	2	2215	2	2215	100
*PORSCHE	924 & 928	1	0	0		0
PORSCHE	944	1	13936	1	13936	100
RENAULT	FUEGO 2 DR CPE	2	4750	1	0	50
RENAULT	LECAR 4 DR HTCHK	1	6481	1	6481	100

Table 4: Thefts and Recoveries During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Thefts		Recoveries		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
SAAB	BASE SERIES	2	3035	2	3035	100
SAAB	TURBO SERIES	3	5552	2	1947	67
SUBARU	GL	11	2834	9	1649	82
SUBARU	GLF	1	4584	1	4584	100
SUBARU	STANDARD	1	0	1	0	100
*TOYOTA	CAMRY	3	6371	3	6371	100
*TOYOTA	CELICA & SUPRA	37	6313	28	5063	76
*TOYOTA	COROLLA	59	4083	45	2816	76
TOYOTA	CURONA	3	3386	3	3386	100
TOYOTA	CRESSIDA	5	9242	2	1756	40
*TOYOTA	MR2	2	34	1	69	50
*TOYOTA	STARLET	2	5378	1	5159	50
TOYOTA	TERCEL	18	3593	13	2841	72
TOYOTA	TRUCK	8	3290	6	1750	75
TRIUMPH	TR7/TR8	1	620	1	620	100
*VOLKSWAGON	RABBIT CONV/CABRIOLET	2	10245	2	10245	100
*VOLKSWAGON	RABBIT GOLF	14	3918	10	2797	71
*VOLKSWAGON	SCIROCCO	2	6150	2	6150	100
VOLKSWAGON	VANAGON	1	153	1	153	100
VOLVO	2 DR	3	7491	3	7491	100
VOLVO	4 DR	7	5148	5	1285	71
VOLVO	5 DR	1	3079	1	3079	100
TOTALS :		1449	5597	1105	4025	76

- Model subject to the Theft Prevention Standard in 1987 only.

+ Model subject to the Theft Prevention Standard in 1988 only.

\* Model subject to the Theft Prevention Standard both in 1987 and 1988.

Table 5: Thefts and Recoveries During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	----- Thefts -----		----- Recoveries -----		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
AUDI	4000	2	537	2	537	100
AUDI	5000 & SW	4	10043	3	7069	75
*BMW	320I	12	8647	8	4811	67
*BMW	528E	5	9887	3	3631	60
*BMW	633CSI/533I	5	17197	3	6009	60
-BMW	733I	2	17667	1	3355	50
BUICK	CENTURY ESTATE	3	3618	3	3618	100
BUICK	CENTURY LTD	10	4056	10	4056	100
*BUICK	ELECTRA 225 & ESTATE	1	12453	0		0
*BUICK	ELECTRA LTD	2	1987	2	1987	100
*BUICK	ELECTRA PARK AVE	7	8559	6	7241	86
*BUICK	LESABRE	8	5777	5	2752	63
*BUICK	LESABRE ESTATE	1	2263	0		0
*BUICK	LESABRE LTD & CUSTO	15	4054	15	4054	100
*BUICK	REGAL	53	4863	41	3572	77
*BUICK	REGAL LTD	41	5863	31	4690	76
*BUICK	REGAL SPRT	2	2229	2	2229	100
*BUICK	RIVIERA LUXURY	32	5146	26	3732	81
BUICK	SKYHAWK	3	4338	3	4338	100
BUICK	SKYHAWK LT	1	8237	0		0
BUICK	SKYLARK	5	2277	4	1097	80
BUICK	SKYLARK LTD	3	2004	3	2004	100
CADILLAC	CIMARRON	7	6590	5	5783	71
*CADILLAC	DEVILLE	71	8612	58	7160	82
*CADILLAC	ELDORADO	44	8253	36	6006	82
CADILLAC	FLEETWOOD BROUGHAM	18	7695	16	6402	89
*CADILLAC	SEVILLE	8	20146	4	18996	50
*CHEVROLET	CAMARO BERLINETTA	15	3539	13	3301	87
*CHEVROLET	CAMARO SPRT CPE	23	3802	20	3095	87
CHEVROLET	CAPRICE CLASSI	11	2483	9	1960	82
CHEVROLET	CAVALIER	11	7639	4	3077	36
CHEVROLET	CAVALIER CS	78	5199	60	3434	77
CHEVROLET	CHEV. TRUCK	4	6917	3	3632	75
CHEVROLET	CHEVETTE	5	2410	4	3013	80
CHEVROLET	CHEVETTE SCOOTER	2	2286	2	2286	100
CHEVROLET	CITATION II	6	5117	4	4066	67
CHEVROLET	CITATION II CPE	1	469	1	469	100
CHEVROLET	CORVETTE	4	11456	3	8221	75
CHEVROLET	IMPALA	1	8132	0		0
CHEVROLET	MALIBU	105	6278	72	4597	69
CHEVROLET	MONTE CARLO	14	5840	8	3891	57
CHRYSLER	CORDOBA	1	0	1	0	100
*CHRYSLER	LASER/LASER XE/DAYTONA	1	4261	1	4261	100
*CHRYSLER	LEBARON	12	6616	8	3096	67
*CHRYSLER	NEW YORKER 5TH AVE	10	3378	9	2045	90
*CHRYSLER	NEW YORKER/GRAN LEBARON	4	6085	4	6085	100
DATSUN	200SX	17	3546	13	2698	88
DATSUN	210	16	2506	13	2327	81
DATSUN	280ZX	21	9528	18	8236	86
DATSUN	300ZX	3	13092	2	10000	67
DATSUN	310	1	1913	1	1913	100

Table 5: Thefts and Recoveries During 19 4  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Thefts		Recoveries		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
DATSUN	KING CAB	4	7886	3	8770	75
DATSUN	MAXIMA	40	5834	35	4703	88
DATSUN	PULSAR	8	4355	6	2670	75
DATSUN	SENTRA	23	2927	19	2035	83
DATSUN	STANZA	14	5671	11	5334	79
DATSUN	TRUCK REG. BED	2	6163	1	5248	50
*DODGE	400/600	5	5604	2	0	40
*DODGE	ARIES	2	7293	2	7293	100
*DODGE	ARIES/CHALLENGER	8	3183	6	2188	75
DODGE	CHARGER/OMNI/SHELBY TURBO	4	2729	4	2729	100
*DODGE	COLT/600	3	1848	2	0	67
*DODGE	COLT/DAYTONA/DAYTONA TURB	1	0	1	0	100
DODGE	MIRADA	1	8976	1	8976	100
DODGE	RAM 50 & ARROW	3	3247	2	329	67
DODGE	RAM CHARGER 4X4	1	16809	0	0	0
DODGE	RAM VAN	8	9926	4	4502	50
FORD	COUNTRY SQUIRE SW	2	5871	2	5871	100
FORD	ESCORT	55	4135	46	2691	84
FORD	EXP 3 DR HTCHBK TURBO	10	3011	6	1926	60
FORD	FAIRMONT (FUTURA) 4 DR SDN	4	857	4	857	100
FORD	FAIRMONT (FUTURA) SW	3	7245	2	5450	67
FORD	GRANADA 4 DR SW	2	76	2	76	100
FORD	LTD 4 DR SDN	1	535	1	535	100
FORD	LTD 4 SEAT SW	1	9203	0	0	0
FORD	LTD CROWN VICTORIA 2 DR SDN	2	7677	1	0	50
FORD	LTD S 4 DR HT	1	0	1	0	100
*FORD	MUST 3 DR SDN HTBK/NTCHBK/GRANADA S	2	5368	1	0	50
*FORD	MUSTANG & MUSTANG II 2 DR SDN	1	318	1	318	100
*FORD	MUSTANG & MUSTANG II 2 DR SDN LX	1	13389	0	0	0
*FORD	MUSTANG & MUSTANG II 3 DR SDN HTBK	2	3954	1	799	50
*FORD	MUSTANG/GRANADA 2 DR SDN	2	1197	2	1197	100
FORD	RANGER 4X2 P/U	6	1139	6	1139	100
FORD	TEMPO 2 DR SDN GL	3	1017	3	1017	100
FORD	TEMPO/LASER	3	433	3	433	100
*FORD	THUNDERBIRD 2 DR SDN	7	7254	5	5443	71
GM OF CANADA	PONTIAC PARISIENNE BROUGHAM	1	1235	1	1235	100
GMC	INCOMPLETE	1	2110	1	2110	100
GMC	MPV	3	11485	1	834	33
GMC	TRUCK	14	5475	10	3229	71
HONDA	ACCORD	34	5045	27	3574	79
HONDA	CIVIC 1300 HTCHBK	1	0	1	0	100
HONDA	CIVIC 1500 HTCHBK	3	6969	1	9580	33
HONDA	CIVIC 4 DR SDN	6	6160	2	2318	33
HONDA	CRX, HF, SI	1	1077	1	1077	100
HONDA	PRELUDE CPE	8	7556	4	2099	50
ISUZU	IMPULSE/PICKUP 4X4	1	10669	0	0	0
ISUZU	PICKUP 4X2	1	5993	1	5993	100
*JAGUAR	XJ6L	4	29273	3	30247	75
JEEP	CHEROKEE MPV 2 DR WAGON/WT	4	15325	1	17450	25
JEEP	CHEROKEE MPV 4 DR WAGON	1	14842	1	14842	100
JEEP	CJ-5 MPV 2 DR	1	0	1	0	100
JEEP	WAGONEER MPV 4 DR WAGON	5	9382	3	4351	60

Table 5: Thefts and Recoveries During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	----- Thefts -----		----- Recoveries -----		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
*LINCOLN	CONTINENTAL 4 DR SDN	3	7166	3	7166	100
*LINCOLN	CONTINENTAL 4 DR SDN MARK	4	13822	2	16721	50
LINCOLN	LINCOLN 4 DR SDN	1	15326	0		0
*MAZDA	626	37	5103	28	4066	76
MAZDA	B2000 TRUCK	2	3134	1	283	50
MAZDA	B2000/B2200 TRUCK	1	7972	0		0
*MAZDA	GLC	18	3543	14	3151	78
MAZDA	RX7	55	6349	46	5254	84
*MERCEDES BENZ	190D 4 DR SDN	1	27724	0		0
MERCEDES BENZ	240D 2 DR SDN	2	11492	1	142	50
*MERCEDES BENZ	300 DT 4 DR SDN	4	14782	3	9621	75
*MERCEDES BENZ	300SD 4 DR SDN	7	12220	6	7744	86
*MERCEDES BENZ	380 SEL 4 DR SDN	1	2338	1	2338	100
*MERCEDES BENZ	380SL 2 DR CPE	1	50591	0		0
*MERCURY	CAPRI 3 DR HTCHBK	5	5736	5	5736	100
*MERCURY	COUGAR 2 DR HT XR-7	1	1141	1	1141	100
*MERCURY	COUGAR 2 DR SDN	4	9037	3	8241	75
*MERCURY	COUGAR 4 DR SDN	1	97	1	97	100
MERCURY	GRAND MARQUIS 2 DR SDN LS	1	0	1	0	100
MERCURY	LYNX	5	1547	3	335	60
MERCURY	MARQUIS 4 DR SDN	3	12319	1	10335	33
MERCURY	MARQUIS BROUGHAM 4 DR SDN	2	5565	2	5565	100
MERCURY	ZEPHYR SPORTY CPE-7	1	8062	1	8062	100
*MITSUBISHI	CORDIA/TREDIA	4	2323	4	2323	100
*OLDSMOBILE	98 REGENCY	14	3342	12	2622	86
*OLDSMOBILE	98 REGENCY BROUGHAM	7	4725	6	3548	86
OLDSMOBILE	CUTLASS CALAIS	7	6021	6	4959	86
OLDSMOBILE	CUTLASS CIERA BROUGHAM	43	5289	36	4090	84
OLDSMOBILE	CUTLASS CIERA BROUGHAM/SUPR BROUGHAM	2	6137	1	890	50
OLDSMOBILE	CUTLASS CIERA LS	6	4364	5	3479	83
+OLDSMOBILE	CUTLASS SUPREME	82	5515	57	3678	70
*OLDSMOBILE	DELTA 88	3	8086	1	2521	33
*OLDSMOBILE	DELTA 88 ROYALE	27	3430	24	2312	89
*OLDSMOBILE	DELTA ROYALE BROUGHAM	8	6393	8	6393	100
OLDSMOBILE	FIRENZA	1	8025	0		0
OLDSMOBILE	FIRENZA BROUGHAM	2	1060	2	1060	100
OLDSMOBILE	OMEGA BROUGHAM	3	6184	3	6184	100
*OLDSMOBILE	TORONADO BROUGHAM	11	8049	9	6301	82
PEUGEAT	SDN	7	8657	5	5120	71
*PLYMOUTH	CARAVELLE	1	3975	1	3975	100
PLYMOUTH	CHAMP	2	4923	1	4737	50
PLYMOUTH	COLT EDL PREMIER	2	1462	2	1462	100
*PLYMOUTH	CONQUEST	1	15054	1	15054	100
*PLYMOUTH	GRAN FURY/CARAVELLE	1	702	1	702	100
PLYMOUTH	HORIZON & TC3 CUSTOM/TURISMO	2	3138	2	3138	100
*PLYMOUTH	RELIANT SP ED CUSTO	10	2309	8	2059	80
PLYMOUTH	SAPPORO	4	3160	2	1061	50
PLYMOUTH	VOYAGER WAGON/VAN	1	1033	1	1033	100
PONTIAC	1000/CATALINA/PARISIENNE	4	3663	3	2873	75
PONTIAC	2000	5	2771	5	2771	100
PONTIAC	6000 STE	1	17153	1	17153	100
*PONTIAC	BONNEVILLE	6	2898	4	2318	67

Table 5: Thefts and Recoveries During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	----- Thefts -----		----- Recoveries -----		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
*PONTIAC	BONNEVILLE BROUGHAM	3	7914	1	4657	33
*PONTIAC	FIERO 2M4 & SE CPE	2	5472	2	5472	100
*PONTIAC	FIREBIRD T/A	16	5783	13	4299	81
*PONTIAC	FIREBIRD/FIREBIRD SE	8	6066	7	5394	88
*PONTIAC	FIREBIRD/FIREBIRD SE/BONNEVILLE LE	27	6227	21	5337	78
+PONTIAC	GRAN PRIX	38	3404	31	2589	82
+PONTIAC	GRAN PRIX BROUGHAM	5	3925	4	2491	80
+PONTIAC	GRAN PRIX LJ & LE	13	3880	11	2669	85
PONTIAC	PHOENIX SE/PARISIENNE BROUGHAM	1	10034	1	10034	100
PONTIAC	PONTIAC 6000	3	1597	3	1597	100
PONTIAC	PONTIAC 6000 LE	4	8364	2	7921	50
*PORSCHE	911	1	36547	0	0	0
*PORSCHE	924 & 928	2	12161	1	7866	50
PORSCHE	944	1	6388	1	6388	100
RENAULT	181 4 DR SDN	3	1082	3	1082	100
RENAULT	ALLIANCE 2 DR SDN	1	8147	0	0	0
RENAULT	ALLIANCE 4 DR SDN	1	0	1	0	100
RENAULT	FUEGO 2 DR CPE	7	6170	5	4512	71
RENAULT	LECAR 2 DR HTCHBK	2	4503	0	0	0
*SAAB	900	1	1806	1	1806	100
SAAB	900S	1	0	1	0	100
SAAB	BASE SERIES	1	12060	0	0	0
SAAB	TURBO SERIES	1	4818	1	4818	100
SUBARU	51	12	947	11	1033	92
SUBARU	TURBO RX	1	8372	0	0	0
*TOYOTA	CAMRY	17	4214	14	2220	82
TOYOTA	CARGO VAN	3	5993	3	5993	100
*TOYOTA	CELICA & SUPRA	64	7091	49	5524	77
*TOYOTA	COROLLA	67	3748	53	2653	79
TOYOTA	CRESSIDA	18	5971	13	3186	72
*TOYOTA	MR2	1	738	1	738	100
*TOYOTA	STARLET	3	4368	2	3081	67
TOYOTA	TERCEL	25	2915	19	2086	76
TOYOTA	TRUCK	18	4953	13	3041	72
VOLKSWAGON	JETTA	6	5228	6	5228	100
VOLKSWAGON	QUANTUM 2 DR/4 DR	1	9611	0	0	0
*VOLKSWAGON	RABBIT CONV/CABRIOLET	2	14598	0	0	0
*VOLKSWAGON	RABBIT GOLF	15	5932	11	4558	73
*VOLKSWAGON	SCIROCCO	3	7111	2	5557	67
VOLVO	2 DR	1	12219	0	0	0
VOLVO	4 DR	11	8430	6	2505	55
VOLVO	5 DR	1	13396	0	0	0
TOTALS:		1893	5750	1457	4124	77

- Model subject to the Theft Prevention Standard in 1987 only.

+ Model subject to the Theft Prevention Standard in 1988 only.

\* Model subject to the Theft Prevention Standard in both 1987 and 1988.

- o Recovery rates which are higher than the 76-77% figure exhibited in 1983-1984
- o Average payments which are below the inflation adjusted figures of \$5,600-5,800, exhibited in 1983-1984

Recovery rates observed in the insurance claim sample are substantially higher than those recorded by the U.S. Department of Justice. As observed in Section 1.1 of this report, Justice Department figures suggest a recovery rate of 52.8% during 1983, whereas the insurance sample for the same period indicates a recovery rate of 76%. The difference between these figures reflect the following factors:

1. Justice Department figures include both insured and non-insured vehicles whereas the insurance claim figures include only vehicles with theft coverage.
2. Justice Department figures include data on vehicle thefts and recoveries regardless of the age of vehicle. The insurance claim sample expressly includes only thefts and recoveries of current model year, one and two-year old vehicles. Only vehicles in these age categories will be equipped with labelled parts at the time that NHTSA must evaluate the effectiveness of the labelling program.

These factors suggest that older vehicles and those without theft coverage exhibit a substantially poorer rate of recovery than newer vehicles with theft coverage. This result seems to suggest that older vehicles are more likely stolen and dismantled for their parts than newer vehicles since fewer older vehicles are recovered. Therefore any future increase in recovery rates which is observed in the insurance claim samples may be indicative of even greater increases in the population as a whole.

### 2.2.2 Examination of Intact, In-Whole/In-Part Recoveries

For this investigation, claims for stolen vehicles recovered either prior or after settlement were stratified into two classifications:

- Intact vehicle recoveries
- In-whole or in-part recoveries

For purposes of this examination, an intact recovery was defined as a claim, in which either the recovered vehicle exhibited no damage, or the cost to repair the recovered vehicle to its pre-theft state was under \$100 (based on 1988 costs). All other recovery claims were classified as in-whole/in-part recoveries.

Tables 6 and 7 present the results of these stratifications by model for the 1983 and 1984 samples respectively. These tables indicate the number of intact recoveries and number of in-whole/in-part recoveries by model as well as the average claim payment for each of these classifications. The tables also indicate the proportion of all vehicle recoveries which were classified as intact and the proportion of all vehicle recoveries classified as in-whole/in-part.

Of the 1,105 vehicle recoveries in the 1983 sample, (Table 6), 10% or 112 recoveries were classified as intact by the above definition with the remaining 90% or 993 recoveries classified as in-whole/in-part. There were no claims with intact recoveries for 106 of the 177 models in the sample. The average claim payment for intact recoveries was zero for 62 models. These models accounted for 80% of all claims with intact recoveries.

Of the 1,457 recoveries in the 1984 sample (Table 7), 10% or 146 recoveries were classified as intact with the remaining 90% or 1,311 recoveries classified as in-whole/in-part. Of the 197 models in the sample, payment for an intact recovery averaged zero for 63 models representing 68% of all claims in the sample with intact recoveries.

If the mandatory labelling of parts encourages a reduction in the number of automobiles stolen to provide parts, it might be expected that insurance claim samples for calendar years after 1986 would exhibit:

- o A higher proportion of intact recoveries than the 10% exhibited in the 1983 and 1984 samples
- o Lower repair costs (adjusted for inflation) than the \$4,500-4,600 observed in the 1983 and 1984 samples for claims involving recoveries in-whole/in-part.

Table 6: Stratification of Recoveries: Intact, In-Whole / In-Part, During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries			Recoveries	
		NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES	NUMBER	PERCENT OF RECOVERIES
AMERICAN MOTORS	CONCORD	0			0	
AMERICAN MOTORS	EAGLE 30	0			2	100
AMERICAN MOTORS	SPIRIT	0			0	
AUDI	4000	0			1	100
*AUDI	4000 CPE OR QUATTRO 4 WD	0			1	100
AUDI	5000 & SW	0			5	100
*BMW	320I	1	0	9	10	91
*BMW	528E	2	0	50	2	50
*BMW	528I	0			0	
-BMW	733I	0			1	100
BUICK	CENTURY ESTATE	2	0	40	3	60
BUICK	CENTURY LTD	0			5	100
*BUICK	ELECTRA LTD	0			5	100
*BUICK	ELECTRA PARK AVE	0			8	100
*BUICK	LESABRE	0			3	100
*BUICK	LESABRE ESTATE	0			1	100
*BUICK	LESABRE LTD & CUSTO	0			7	100
+BUICK	REGAL	0			34	100
+BUICK	REGAL LTD	3	0	10	28	90
+BUICK	REGAL SPRT	0			1	100
BUICK	RIVIERA LUXURY	0			25	100
BUICK	SKYHAWK	0			1	100
BUICK	SKYLARK	1	0	50	1	50
BUICK	SKYLARK LTD	0			1	100
CADILLAC	CIMARRON	0			4	100
*CADILLAC	DEVILLE	3	0	6	46	94
*CADILLAC	ELDORADO	1	70	2	40	98
CADILLAC	FLEETWOOD BROUGHAM	1	0	9	10	91
*CADILLAC	SEVILLE	1	0	9	10	91
*CHEVROLET	CAMARO BERLINETTA	1	55	25	3	75
*CHEVROLET	CAMARO SPRT CPE	3	0	19	13	81
CHEVROLET	CAPRICE CLASSI	1	0	9	10	91
CHEVROLET	CAVALIER	0			3	100
CHEVROLET	CAVALIER 10	0			0	
CHEVROLET	CAVALIER CS	3	0	38	5	63
CHEVROLET	CHEV. TRUCK	0			3	100
CHEVROLET	CHEVETTE	3	0	33	6	67
CHEVROLET	CHEVETTE SCOOTER	1	0	50	1	50
CHEVROLET	CITATION II	2	0	18	9	82
CHEVROLET	CORVETTE	1	0	25	3	75
CHEVROLET.	IMPALA	1	0	11	8	89
CHEVROLET	MALIBU	3	0	8	37	93
CHEVROLET	MONTE CARLO	1	0	9	10	91
CHRYSLER	CORDOBA	0			2	100
*CHRYSLER	LEBARON	2	38	50	2	50
*CHRYSLER	NEW YORKER 5TH AVE	1	0	17	5	83
*CHRYSLER	NEW YORKER/GRAN LEBARON	0			1	100
*CHRYSLER	NEWPORT	0			1	100
DATSUN	200SX	1	0	5	19	95
DATSUN	210	2	0	11	16	89
DATSUN	280ZX	1	0	3	31	97

Table 6: Stratification of Recoveries: Intact, In-Whole / In-Part, During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	NUMBER	Recoveries Intact		Recoveries In-Whole / In-Part		
			AVERAGE PAYMENT	PERCENT OF RECOVERIES	NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES
DATSUN	310	0			3	4037	100
DATSUN	510	0			1	7196	100
DATSUN	KING CAB	0			2	4548	100
DATSUN	MAXIMA	3	0	19	13	4786	81
DATSUN	PULSAR	1	0	25	3	726	75
DATSUN	SENTRA	0			7	2889	100
DATSUN	STANZA	1	0	17	5	2751	83
*DODGE	Aries	0			1	1113	100
*DODGE	ARIES/CHALLENGER	0			4	6217	100
DODGE	CHARGER/OMNI/SHELBY TURBO	1	0	33	2	1383	67
*DODGE	COLT/600	1	0	25	3	1040	75
*DODGE	COLT/COLT VISTA/DIPLOM	0			1	128	100
*DODGE	DIPLOMAT	0			1	6940	100
DODGE	MIRADA	0			1	14042	100
DODGE	RAM VAN	0			1	3049	100
FIAT	SPIDER 2000	0			2	4438	100
FIAT	X 1/9	0			1	7974	100
FORD	ESCORT	4	37	17	20	3227	83
FORD	EXP 3 DR HTCHBK TURBO	0			6	4345	100
FORD	FAIRMONT (FUTURA) 2 DR SDN	0			1	5003	100
FORD	FAIRMONT (FUTURA) 4 DR SDN	0			1	1589	100
FORD	GRANADA 2 DR SDN	0			1	1351	100
FORD	GRANADA 4 DR SDN	0			1	9286	100
FORD	GRANADA 4 DR SW	0			1	3109	100
FORD	LTD 4 DR SDN	0			1	10515	100
FORD	LTD 4 DR WAGON SQUIRE	0			1	720	100
FORD	LTD 4 SEAT SW	0			1	490	100
FORD	LTD S 4 DR HT	0			1	948	100
*FORD	MUST 3 DR SDN HTBK/NTCHBK/GRANADA S	1	0	100			
*FORD	MUSTANG & MUSTANG II 3 DR SDN HTBK	0			1	1444	100
*FORD	THUNDERBIRD 2 DR HT	0			0		
GM OF CANADA	PONTIAC PARISIENNE BROUGHAM	0			1	14219	100
GMC	INCOMPLETE	0			2	6211	100
TOYOTA	TRUCK	0			4	7605	100
HONDA	ACCORD	1	0	8	11	4943	92
HONDA	CIVIC 1500 HTCHBK	0			1	3346	100
HONDA	CIVIC 4 DR SDN	1	0	20	4	866	80
HONDA	CIVIC SW	1	0	50	1	3852	50
HONDA	PRELUDE CPE	1	0	33	2	5556	67
ISUZU	PICKUP 4X2	0			0		
*JAGUAR	XJ6L	0			1	2308	100
JAGUAR	XJS	0			1	21937	100
JEEP	CHEROKEE MPV 2 DR WAGON/WT	0			0		
JEEP	WAGONEER MPV 4 DR WAGON	0			0		
LANCIA	BETA	0			0		
LANCIA	ZAGATO	0			1	49	100
LINCOLN	CONTINENTAL 4 DR SDN MARK	1	0	25	3	8297	75
LINCOLN	LINCOLN 4 DR SDN	0			1	1646	100
*MAZDA	626	2	0	12	15	3336	88
MAZDA	B2000 TRUCK	0			1	5878	100
MAZDA	B2000/B2200 TRUCK	0			2	5336	100
*MAZDA	GLC	0			3	5167	100

Table 6: Stratification of Recoveries: Intact, In-Whole / In-Part, During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries Intact			Recoveries In-Whole / In-Part		
		NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES	NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES
MAZDA	RX7	1	0	4	23	6315	96
MERCEDES BENZ	240D 2 DR SDN	0			1	3577	100
*MERCEDES BENZ	300 DT 4 DR SDN	0			3	24109	100
*MERCEDES BENZ	300SD 4 DR SDN	0			2	487	100
*MERCEDES BENZ	380 SEC 2 DR CPE	0			0		
*MERCEDES BENZ	380SL 2 DR CPE	0			1	14081	100
*MERCURY	CAPRI 3 DR HTCHBK	2	0	50	2	3930	50
*MERCURY	COUGAR 2 DR HT XR-7	1	0	100			
*MERCURY	COUGAR 2 DR SDN	0			1	3143	100
MERCURY	LYNX	2	0	17	10	3186	83
MERCURY	MARQUIS BROUGHAM 4 DR SDN	0			1	10758	100
MERCURY	TOPAZ 4 DR SDN GS	0			0		
MERCURY	ZEPHYR 4 DR SDN	0			0		
*MITSUBISHI	CORDIA/TREDIA	0			2	5822	100
*OLDSMOBILE	98 REGENCY	0			13	3307	100
*OLDSMOBILE	98 REGENCY BROUGHAM	1	0	14	6	9436	86
OLDSMOBILE	CUSTOM CRUISER	1	0	33	2	4594	67
OLDSMOBILE	CUTLASS CALAIS	0			12	4111	100
OLDSMOBILE	CUTLASS CIERA	1	0	50	1	1038	50
OLDSMOBILE	CUTLASS CIERA BROUGHAM	3	15	8	34	3424	92
OLDSMOBILE	CUTLASS CIERA LS	1	0	33	2	4755	67
OLDSMOBILE	CUTLASS SDN	1	0	33	2	4467	67
+OLDSMOBILE	CUTLASS SUPREME	3	0	6	46	3396	94
*OLDSMOBILE	DELTA 88	0			3	3251	100
*OLDSMOBILE	DELTA 88 ROYALE	0			12	3336	100
OLDSMOBILE	DELTA ROYALE BROUGHAM	1	0	11	8	2359	89
OLDSMOBILE	OMEGA	0			2	6828	100
OLDSMOBILE	OMEGA BROUGHAM	0			1	2870	100
*OLDSMOBILE	TORONADO BROUGHAM	0			10	5570	100
PEUGEAT	SDN	0			1	4946	100
*PLYMOUTH	CARAVELLE	0			1	778	100
PLYMOUTH	CHAMP	0			1	715	100
PLYMOUTH	HORIZON & TC3 CUSTOM/TURISMO	1	0	50	1	479	50
*PLYMOUTH	RELIANT SP ED CUSTO	2	0	22	7	2570	78
PONTIAC	1000/CATALINA/PARISIENNE	1	0	100			
PONTIAC	2000	0			0		
*PONTIAC	BONNEVILLE	2	15	50	2	3765	50
*PONTIAC	BONNEVILLE BROUGHAM	0			4	7417	100
*PONTIAC	FIREBIRD T/A	0			4	5454	100
*PONTIAC	FIREBIRD/FIREBIRD SE	0			0		
*PONTIAC	FIREBIRD/FIREBIRD SE/BONNEVILLE LE	1	0	11	8	2691	89
+PONTIAC	GRAN PRIX	0			17	3963	100
+PONTIAC	GRAN PRIX BROUGHAM	1	0	11	8	1447	89
+PONTIAC	GRAN PRIX LJ & LE	2	0	7	25	3043	93
PONTIAC	GRAND LEMANS	0			1	8584	100
PONTIAC	LEMANS	1	0	100			
PONTIAC	PHOENIX	0			4	1876	100
*PORSCH	911	1	0	50	1	4429	50
*PORSCH	924 & 928	0			0		
PORSCH	944	0			1	13936	100
RENAULT	FUEGO 2 DR CPE	1	0	100			
RENAULT	LECAR 4 DR HTCHBK	0			1	6481	100

Table 6: Stratification of Recoveries: Intact, In-Whole / In-Part, During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries Intact			Recoveries In-Whole / In-Part		
		NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES	NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES
SAAB	BASE SERIES	0			2	3035	100
SAAB	TURBO SERIES	0			2	1947	100
SUBARU	GL	2	0	22	7	2121	78
SUBARU	GLF	0			1	4584	100
SUBARU	STANDARD	1	0	100			
*TOYOTA	CAMRY	0			3	6371	100
*TOYOTA	CELICA & SUPRA	3	0	11	25	5670	89
*TOYOTA	COROLLA	5	11	11	40	3166	89
TOYOTA	CORONA	0			3	3386	100
TOYOTA	CRESSIDA	1	0	50	1	3512	50
*TOYOTA	MR2	1	69	100			
*TOYOTA	STARLET	0			1	5159	100
TOYOTA	TERCEL	1	0	8	12	3078	92
TOYOTA	TRUCK	1	0	17	5	2100	83
TRIUMPH	TR7/TR8	0			1	620	100
*VOLKSWAGON	RABBIT CONV/CABRIOLET	0			2	10245	100
*VOLKSWAGON	RABBIT GOLF	3	21	30	7	3987	70
*VOLKSWAGON	SCIROCCO	0			2	6150	100
VOLKSWAGON	VANAGON	0			1	153	100
VOLVO	2 DR	1	0	33	2	11237	67
VOLVO	4 DR	1	0	20	4	1606	80
VOLVO	5 DR	0			1	3079	100
TOTALS:		112	5	10	993	4479	90

- Model subject to the Theft Prevention Standard in 1987 only.

+ Model subject to the Theft Prevention Standard in 1988 only.

\* Model subject to the Theft Prevention Standard both in 1987 and 1988.

Table 7: Stratification of Recoveries: Intact, In-Whole / In-Part, During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries Intact			Recoveries In-Whole / In-Part		
		NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES	NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES
AUDI	4000	1	0	50	1	1075	50
AUDI	5000 & SW	1	0	33	2	10603	67
*BMW	320I	1	0	13	7	5498	88
*BMW	528E	0	0	0	3	3631	100
*BMW	633CS1/533I	0	0	0	3	6009	100
-BMW	733I	0	0	0	1	3355	100
BUICK	CENTURY ESTATE	1	0	33	2	5428	67
BUICK	CENTURY LTD	1	0	10	9	4506	90
*BUICK	ELECTRA 225 & ESTATE	0	0	0	0	0	0
*BUICK	ELECTRA LTD	0	0	0	2	1987	100
*BUICK	ELECTRA PARK AVE	1	0	17	5	8689	83
*BUICK	LESABRE	1	0	20	4	3440	80
*BUICK	LESABRE ESTATE	0	0	0	0	0	0
*BUICK	LESABRE LTD & CUSTO	2	47	13	13	4671	87
*BUICK	REGAL	1	0	2	40	3661	98
*BUICK	REGAL LTD	2	0	6	29	5013	94
*BUICK	REGAL SPRT	0	0	0	2	2229	100
*BUICK	RIVIERA LUXURY	0	0	0	26	3732	100
BUICK	SKYHAWK	0	0	0	3	4338	100
BUICK	SKYHAWK LT	0	0	0	0	0	0
BUICK	SKYLARK	2	0	50	2	2194	50
BUICK	SKYLARK LTD	1	0	33	2	3007	67
CADILLAC	CIMARRON	1	0	20	4	7229	80
*CADILLAC	DEVILLE	5	0	9	53	7835	91
*CADILLAC	ELDORADO	1	0	3	35	6177	97
CADILLAC	FLEETWOOD BROUGHAM	0	0	0	16	6402	100
*CADILLAC	SEVILLE	0	0	0	4	18996	100
*CHEVROLET	CAMARO BERLINETTA	0	0	0	13	3301	100
*CHEVROLET	CAMARO SPRT CPE	1	0	5	19	3258	95
CHEVROLET	CAPRICE CLASSI	0	0	0	9	1960	100
CHEVROLET	CAVALIER	0	0	0	4	3077	100
CHEVROLET	CAVALIER CS	5	17	8	55	3744	92
CHEVROLET	CHEV. TRUCK	1	0	33	2	5449	67
CHEVROLET	CHEVETTE	0	0	0	4	3013	100
CHEVROLET	CHEVETTE SCOOTER	1	0	50	1	4573	50
CHEVROLET	CITATION II	0	0	0	4	4066	100
CHEVROLET	CITATION II CPE	0	0	0	1	469	100
CHEVROLET	CORVETTE	0	0	0	3	8221	100
CHEVROLET	IMPALA	0	0	0	0	0	0
CHEVROLET	MALIBU	8	0	11	64	5172	89
CHEVROLET	MONTE CARLO	1	0	13	7	4447	88
CHRYSLER	CORDOBA	1	0	100	0	0	0
*CHRYSLER	LASER/LASER XE/DAYTONA	0	0	0	1	4261	100
*CHRYSLER	LEBARON	1	0	13	7	3538	88
*CHRYSLER	NEW YORKER 5TH AVE	3	0	33	6	3067	67
*CHRYSLER	NEW YORKER/GRAN LEBARON	0	0	0	4	6085	100
DATSUN	200SX	0	0	0	15	2698	100
DATSUN	210	3	0	23	10	3025	77
DATSUN	280ZX	1	0	6	17	8720	94
DATSUN	300ZX	0	0	0	2	10000	100
DATSUN	310	0	0	0	1	1913	100

Table 7: Stratification of Recoveries: Intact, In-Whole / In-Part, During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries			Recoveries		
		NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES	NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES
DATSUN	KING CAB	0		0	3	8770	100
DATSUN	MAXIMA	2	0	6	33	4988	94
DATSUN	PULSAR	0		0	6	2670	100
DATSUN	SENTRA	2	64	11	17	2267	89
DATSUN	STANZA	0		0	11	5334	100
DATSUN	TRUCK REG. BED	0		0	1	5248	100
*DODGE	400/600	2	0	100	0		0
*DODGE	ARIES	1	0	50	1	14587	50
*DODGE	ARIES/CHALLENGER	0		0	6	2188	100
DODGE	CHARGER/OMNI/SHELBY TURBO	1	0	25	3	3639	75
*DODGE	COLT/600	2	0	100	0		0
*DODGE	COLT/DAYTONA/DAYTONA TURB	1	0	100	0		0
DODGE	MIRADA	0		0	1	8976	100
DODGE	RAM 50 & ARROW	0		0	2	329	100
DODGE	RAM CHARGER 4X4	0		0	0		0
DODGE	RAM VAN	0		0	4	4502	100
FORD	COUNTRY SQUIRE SW	0		0	2	5871	100
FORD	ESCORT	7	0	15	39	3174	85
FORD	EXP 3 DR HTCHBK TURBO	0		0	6	1926	100
FORD	FAIRMONT (FUTURA) 4 DR SDN	3	0	75	1	3428	25
FORD	FAIRMONT (FUTURA) SW	0		0	2	5450	100
FORD	GRANADA 4 DR SW	1	0	50	1	151	50
FORD	LTD 4 DR SDN	0		0	1	535	100
FORD	LTD 4 SEAT SW	0		0	0		0
FORD	LTD CROWN VICTORIA 2 DR SDN	1	0	100	0		0
FORD	LTD S 4 DR HT	0		0	1	0	100
*FORD	MUST 3 DR SDN HTBK/NTCHBK/GRANADA S	1	0	100	0		0
*FORD	MUSTANG & MUSTANG II 2 DR SDN	0		0	1	318	100
*FORD	MUSTANG & MUSTANG II 2 DR SDN LX	0		0	0		0
*FORD	MUSTANG & MUSTANG II 3 DR SDN HTBK	0		0	1	799	100
*FORD	MUSTANG/GRANADA 2 DR SDN	0		0	2	1197	100
FORD	RANGER 4X2 P/U	0		0	6	1139	100
FORD	TEMPO 2 DR SDN GL	0		0	3	1017	100
FORD	TEMPO/LASER	1	34	33	2	633	67
*FORD	THUNDERBIRD 2 DR SDN	0		0	5	5443	100
GM OF CANADA	PONTIAC PARISIENNE BROUGHAM	0		0	1	1235	100
GMC	INCOMPLETE	0		0	1	2110	100
GMC	MPV	0		0	1	834	100
GMC	TRUCK	1	0	10	9	3588	90
HONDA	ACCORD	7	7	26	20	4822	74
HONDA	CIVIC 1300 HTCHBK	1	0	100	0		0
HONDA	CIVIC 1500 HTCHBK	0		0	1	9580	100
HONDA	CIVIC 4 DR SDN	0		0	2	2318	100
HONDA	CRX, HF, SI	0		0	1	1077	100
HONDA	PRELUDE CPE	1	0	25	3	2798	75
ISUZU	IMPULSE/PICKUP 4X4	0		0	0		0
ISUZU	PICKUP 4X2	0		0	1	5993	100
*JAGUAR	XJ6L	0		0	3	30247	100
JEEP	CHEROKEE MPV 2 DR WAGON/WT	0		0	1	17450	100
JEEP	CHEROKEE MPV 4 DR WAGON	0		0	1	14842	100
JEEP	CJ-5 MPV 2 DR	0		0	1	0	100
JEEP	WAGONEER MPV 4 DR WAGON	0		0	3	4351	100

Table 7: Stratification of Recoveries: Intact, In-Whole / In-Part, During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries			Recoveries		
		NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES	NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES
*LINCOLN	CONTINENTAL 4 DR SDN	1	0	33	2	10749	67
*LINCOLN	CONTINENTAL 4 DR SDN MARK	0		0	2	16721	100
LINCOLN	LINCOLN 4 DR SDN	0		0	0		0
*MAZDA	626	1	54	4	27	4214	96
MAZDA	B2000 TRUCK	0		0	1	283	100
MAZDA	B2000/B2200 TRUCK	0		0	0		0
*MAZDA	GLC	1	0	7	13	3393	93
MAZDA	RX7	1	0	2	45	5319	96
*MERCEDES BENZ	190D 4 DR SDN	0		0	0		0
MERCEDES BENZ	240D 2 DR SDN	0		0	1	142	100
*MERCEDES BENZ	300 DT 4 DR SDN	1	0	33	2	14431	67
*MERCEDES BENZ	300SD 4 DR SDN	2	0	33	4	11617	67
*MERCEDES BENZ	380 SEL 4 DR SDN	0		0	1	2338	100
*MERCEDES BENZ	380SL 2 DR CPE	0		0	0		0
*MERCURY	CAPRI 3 DR HTCHBK	0		0	5	5736	100
*MERCURY	COUGAR 2 DR HT XR-7	0		0	1	1141	100
*MERCURY	COUGAR 2 DR SDN	0		0	3	8241	100
*MERCURY	COUGAR 4 DR SDN	1	97	100	0		0
MERCURY	GRAND MARQUIS 2 DR SDN LS	0		0	1	0	100
MERCURY	LYNX	1	0	33	2	502	67
MERCURY	MARQUIS 4 DR SDN	0		0	1	10335	100
MERCURY	MARQUIS BROUGHAM 4 DR SDN	0		0	2	5565	100
MERCURY	ZEPHYR SPORTY CPE-7	0		0	1	8062	100
*MITSUBISHI	CORDIA/TREDIA	1	67	25	3	3075	75
*OLDSMOBILE	98 REGENCY	1	0	8	11	2860	92
*OLDSMOBILE	98 REGENCY BROUGHAM	0		0	6	3548	100
OLDSMOBILE	CUTLASS CALAIS	0		0	6	4959	100
OLDSMOBILE	CUTLASS CIERA BROUGHAM	2	30	6	34	4329	94
OLDSMOBILE	CUTLASS CIERA BROUGHAM/SUPR BROUGHM	0		0	1	890	100
OLDSMOBILE	CUTLASS CIERA LS	2	0	40	3	5798	60
+OLDSMOBILE	CUTLASS SUPREME	3	12	5	54	3881	95
*OLDSMOBILE	DELTA 88	0		0	1	2521	100
*OLDSMOBILE	DELTA 88 ROYALE	1	0	4	23	2412	96
*OLDSMOBILE	DELTA ROYALE BROUGHAM	0		0	8	6393	100
OLDSMOBILE	FIRENZA	0		0	0		0
OLDSMOBILE	FIRENZA BROUGHAM	0		0	2	1060	100
OLDSMOBILE	OMEGA BROUGHAM	0		0	3	6184	100
*OLDSMOBILE	TORONADO BROUGHAM	0		0	9	6301	100
PEUGEAT	SDN	0		0	5	5120	100
*PLYMOUTH	CARAVELLE	0		0	1	3975	100
PLYMOUTH	CHAMP	0		0	1	4737	100
PLYMOUTH	COLT EDL PREMIER	0		0	2	1462	100
*PLYMOUTH	CONQUEST	0		0	1	15054	100
*PLYMOUTH	GRAN FURY/CARAVELLE	0		0	1	702	100
PLYMOUTH	HORIZON & TC3 CUSTOM/TURISMO	0		0	2	3138	100
*PLYMOUTH	RELIANT SP ED CUSTO	2	0	25	6	2745	75
PLYMOUTH	SAPPORO	0		0	2	1061	100
PLYMOUTH	VOYAGER WAGON/VAN	0		0	1	1033	100
PONTIAC	1000/CATALINA/PARISIENNE	0		0	3	2873	100
PONTIAC	2000	1	0	20	4	3464	80
PONTIAC	6000 STE	0		0	1	17153	100
*PONTIAC	BONNEVILLE	1	0	25	3	3091	75

Table 7: Stratification of Recoveries: Intact, In-Whole / In-Part, During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries			Recoveries		
		NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES	NUMBER	AVERAGE PAYMENT	PERCENT OF RECOVERIES
*PONTIAC	BONNEVILLE BROUGHAM	0		0	1	4657	100
*PONTIAC	FIERO 2M4 & SE CPE	0		0	2	5472	100
*PONTIAC	FIREBIRD T/A	0		0	13	4299	100
*PONTIAC	FIREBIRD/FIREBIRD SE	0		0	7	5394	100
*PONTIAC	FIREBIRD/FIREBIRD SE/BONNEVILLE LE	1	0	5	20	5604	95
+PONTIAC	GRAN PRIX	1	0	3	30	2676	97
+PONTIAC	GRAN PRIX BROUGHAM	1	69	25	3	3298	75
+PONTIAC	GRAN PRIX LJ & LE	0		0	11	2669	100
PONTIAC	PHOENIX SE/PARISIENNE BROUGHAM	0		0	1	10034	100
PONTIAC	PONTIAC 6000	1	0	33	2	2395	67
PONTIAC	PONTIAC 6000 LE	0		0	2	7921	100
*PORSCHE	911	0		0	0		0
*PORSCHE	924 & 928	0		0	1	7866	100
PORSCHE	944	0		0	1	6388	100
RENAULT	181 4 DR SDN	1	0	33	2	1624	67
RENAULT	ALLIANCE 2 DR SDN	0		0	0		0
RENAULT	ALLIANCE 4 DR SDN	1	0	100	0		0
RENAULT	FUEGO 2 DR CPE	1	0	20	4	5640	80
RENAULT	LECAR 2 DR HTCHBK	0		0	0		0
*SAAB	900	0		0	1	1806	100
SAAB	900S	1	0	100	0		0
SAAB	BASE SERIES	0		0	0		0
SAAB	TURBO SERIES	0		0	1	4818	100
SUBARU	GL	2	0	18	9	1263	82
SUBARU	TURBO RX	0		0	0		0
*TOYOTA	CAMRY	4	0	29	10	3108	71
TOYOTA	CARGO VAN	1	0	33	2	8990	67
*TOYOTA	CELICA & SUPRA	4	23	8	45	6013	92
*TOYOTA	COROLLA	9	7	17	44	3194	83
TOYOTA	CRESSIDA	1	0	8	12	3451	92
*TOYOTA	MR2	0		0	1	738	100
*TOYOTA	STARLET	0		0	2	3081	100
TOYOTA	TERCEL	6	2	32	13	3048	68
GM	TRUCK	2	0	15	11	3594	85
VOLKSWAGON	JETTA	0		0	6	5228	100
VOLKSWAGON	QUANTUM 2 DR/4 DR	0		0	0		0
*VOLKSWAGON	RABBIT CONV/CABRIOLET	0		0	0		0
*VOLKSWAGON	RABBIT GOLF	1	0	9	10	5014	91
*VOLKSWAGON	SCIROCCO	0		0	2	5557	100
VOLVO	2 DR	0		0	0		0
VOLVO	4 DR	2	49	33	4	3734	67
VOLVO	5 DR	0		0	0		0
TOTALS:		146	7	10	1311	4581	90

- Model subject to Theft Prevention Standard in 1987 only.
- + Model subject to Theft Prevention Standard in 1988 only.
- \* Model subject to Theft Prevention Standard both in 1987 and 1988.

### 2.2.3 Examination of Total Loss Recoveries

This analysis examined theft claims which were considered total losses by the insurer where the stolen vehicle was recovered either prior or subsequent to payment. These claims constitute a subset of the claims for in-whole/in-part recoveries examined in Tables 6 and 7.

Tables 8 and 9 present the number of total loss recovery claims by model for the 1983 and 1984 samples, respectively. These tables also indicate the average claim payment by model for total loss recoveries and the proportion of all recoveries which were total losses by model. Aggregate statistics for each sample are shown at the end of each table.

To facilitate comparisons between claims for total loss recoveries and all other in-whole/in-part recoveries, the number of claims and average payment for in-whole/in-part recoveries, shown in Tables 6 and 7 are reproduced in Tables 8 and 9.

As shown in Table 8, 22% of all recoveries were classified as total losses in the 1983 sample. Total loss recoveries accounted for approximately 25% of all in-whole/in-part recoveries. The average claim cost for a total loss recovery was \$11,062 in 1988 dollars. This figure compares with payments of \$4,025 (Table 4) for an average claim with recovery (including intact recoveries) and payments of \$4,479 (Table 8) for an average claim with a recovery in-whole or in-part. Thus, the average payment for a claim involving a total loss recovery was over \$7,000 more than the average payment for a recovered vehicle and almost \$6,600 more than the average cost of a claim involving an in-whole/in-part recovery.

The average claim payment by model for total loss recovery claims reflects the age and value of the model and ranged from a low of \$3,512 for a Toyota Cressida to \$35,037 for a Mercedes Benz 300 DT in the 1983 sample. These payments are expressed in 1988 dollars.

In the 1984 sample, 21% of all recoveries were classified as total losses (Table 9). These total loss recoveries represented approximately 23% of all 1984 in-whole/in-part recoveries. The average payment for a total loss recovery claim was \$11,275 in this sample. Thus, costs for 1984 total loss recovery claims were approximately \$7,151 more than the average cost of a claim with recovery (Table 5).

If the Theft Prevention Standard has a positive influence on the problem of theft and dismantling of vehicles then it could be expected that proportion of recovery claims classified as total losses might decrease below the 21-22% range observed in 1983-1984.

Table 2: Stratification of In-Whole / In-Part Recoveries: Total Loss Recoveries During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries - In-Whole / In-Part -		Recoveries ----- Total Losses -----		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT OF ALL RECOVERIES
AMERICAN MOTORS	CONCORD	0		0		0
AMERICAN MOTORS	EAGLE 30	2	5810	1	10788	50
AMERICAN MOTORS	SPIRIT	0		0		0
AUDI	4000	1	3182	0		0
*AUDI	4000 CPE OR QUATTRO 4 WD	1	14442	1	14442	100
AUDI	5000 & SW	5	7720	2	15788	40
*BMW	320I	10	12581	7	16763	64
*BMW	528E	2	1748	0		0
*BMW	528I	0		0		0
-BMW	733I	1	4951	0		0
BUICK	CENTURY ESTATE	3	3425	0		0
BUICK	CENTURY LTD	5	2024	0		0
*BUICK	ELECTRA LTD	5	2261	0		0
*BUICK	ELECTRA PARK AVE	8	5333	2	15469	25
*BUICK	LESABRE	3	4256	1	9188	33
BUICK	LESABRE ESTATE	1	3051	0		0
*BUICK	LESABRE LTD & CUSTO	7	3166	1	11990	14
+BUICK	REGAL	34	3414	5	10750	15
+BUICK	REGAL LTD	28	1805	0		0
+BUICK	REGAL SPRT	1	2735	0		0
BUICK	RIVIERA LUXURY	25	5089	7	13402	28
BUICK	SKYHAWK	1	660	0		0
BUICK	SKYLARK	1	322	0		0
BUICK	SKYLARK LTD	1	1652	0		0
CADILLAC	CIMARRON	4	3675	0		0
*CADILLAC	DEVILLE	46	6985	10	14696	20
*CADILLAC	ELDORADO	40	8921	13	18237	32
CADILLAC	FLEETWOOD BROUGHAM	10	4349	0		0
*CADILLAC	SEVILLE	10	14102	5	23478	45
*CHEVROLET	CAMARO BERLINETTA	3	2762	0		0
*CHEVROLET	CAMARO SPRT CPE	13	4630	4	11289	25
CHEVROLET	CAPRICE CLASSI	10	3607	2	9044	18
CHEVROLET	CAVALIER	3	3911	1	9274	33
CHEVROLET	CAVALIER 10	0		0		0
CHEVROLET	CAVALIER CS	5	6818	4	8405	50
CHEVROLET	CHEV. TRUCK	3	711	0		0
CHEVROLET	CHEVETTE	6	4816	3	8088	33
CHEVROLET	CHEVETTE SCOOTER	1	1424	0		0
CHEVROLET	CITATION II	9	1352	1	5199	9
CHEVROLET	CORVETTE	3	4419	1	11038	25
CHEVROLET	IMPALA	8	3205	1	7440	11
CHEVROLET	MALIBU	37	4635	10	10757	25
CHEVROLET	MONTE CARLO	10	2971	3	6951	27
CHRYSLER	CORDOBA	2	1069	0		0
*CHRYSLER	LEBARON	2	1098	0		0
*CHRYSLER	NEW YORKER 5TH AVE	5	6972	1	15105	17
*CHRYSLER	NEW YORKER/GRAN LEBARON	1	480	0		0
*CHRYSLER	NEWPORT	1	216	0		0
DATSUN	200SX	19	4131	6	9005	30
DATSUN	210	16	2566	4	6150	22
DATSUN	280ZX	31	3243	2	15851	6

Table 8: Stratification of In-Whole / In-Part Recoveries: Total Loss Recoveries During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries - In-Whole / In-Part -		Recoveries ----- Total Losses -----		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT OF ALL RECOVERIES
DATSUN	310	3	4037	2	5714	67
DATSUN	510	1	7196	1	7196	100
DATSUN	KING CAB	2	4548	1	4847	50
DATSUN	MAXIMA	13	4786	3	13621	19
DATSUN	PULSAR	3	726	0		0
DATSUN	SENTRA	7	2889	2	7690	29
DATSUN	STANZA	5	2751	1	9924	17
*DODGE	ARIES	1	1113	0		0
*DODGE	ARIES/CHALLENGER	4	6217	2	10324	50
DODGE	CHARGER/OMNI/SHELBY TURBO	2	1383	0		0
*DODGE	COLT/600	3	1040	0		0
*DODGE	COLT/COLT VISTA/DIPLOM	1	128	0		0
*DODGE	DIPLOMAT	1	6940	1	6940	100
DODGE	MIRADA	1	14042	1	14042	100
DODGE	RAM VAN	1	3049	0		0
FIAT	SPIDER 2000	2	4438	1	8101	50
FIAT	X 1/9	1	7974	1	7974	100
FORD	ESCORT	20	3227	6	5730	25
FORD	EXP 3 DR HTCHBK TURBO	6	4345	3	6971	50
FORD	FAIRMONT (FUTURA) 2 DR SDN	1	5003	1	5003	100
FORD	FAIRMONT (FUTURA) 4 DR SDN	1	1589	0		0
FORD	GRANADA 2 DR SDN	1	1351	0		0
FORD	GRANADA 4 DR SDN	1	9286	1	9286	100
FORD	GRANADA 4 DR SW	1	3109	0		0
FORD	LTD 4 DR SDN	1	10515	1	10515	100
FORD	LTD 4 DR WAGON SQUIRE	1	720	0		0
FORD	LTD 4 SEAT SW	1	490	0		0
FORD	LTD S 4 DR HT	1	948	0		0
*FORD	MUST 3 DR SDN HTBK/NTCHBK/GRANADA 5			0		0
*FORD	MUSTANG & MUSTANG II 3 DR SDN HTBK	1	1444	0		0
*FORD	THUNDERBIRD 2 DR HT	0		0		0
GM OF CANADA	PONTIAC PARISIENNE BROUGHAM	1	14219	1	14219	100
GMC	INCOMPLETE	2	6211	1	11078	50
TOYOTA	TRUCK	4	7605	3	8850	75
HONDA	ACCORD	11	4943	3	9203	25
HONDA	CIVIC 1500 HTCHBK	1	3346	0		0
HONDA	CIVIC 4 DR SDN	4	866	0		0
HONDA	CIVIC SW	1	3852	0		0
HONDA	PRELUDE CPE	2	5556	1	8273	33
ISUZU	PICKUP 4X2	0		0		0
*JAGUAR	XJ6L	1	2308	0		0
JAGUAR	XJS	1	21937	1	21937	100
JEEP	CHEROKEE MPV 2 DR WAGON/WT	0		0		0
JEEP	WAGONEER MPV 4 DR WAGON	0		0		0
LANCIA	BETA	0		0		0
LANCIA	ZAGATO	1	49	0		0
LINCOLN	CONTINENTAL 4 DR SDN MARK	3	8297	1	19918	25
LINCOLN	LINCOLN 4 DR SDN	1	1646	0		0
*MAZDA	626	15	3336	4	9121	24
MAZDA	B2000 TRUCK	1	5878	1	5878	100
MAZDA	B2000/B2200 TRUCK	2	5336	1	10186	50
*MAZDA	GLC	3	5167	2	7423	67

Table 8: Stratification of In-Whole / In-Part Recoveries: Total Loss Recoveries During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries - In-Whole / In-Part -		Recoveries ----- Total Losses -----		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT OF ALL RECOVERIES
MAZDA	RX7	23	6315	9	11729	38
MERCEDES BENZ	240D 2 DR SDN	1	3577	0		0
*MERCEDES BENZ	300 DT 4 DR SDN	3	24109	2	35037	67
*MERCEDES BENZ	300SD 4 DR SDN	2	487	0		0
*MERCEDES BENZ	380 SEC 2 DR CPE	0		0		0
*MERCEDES BENZ	380SL 2 DR CPE	1	14081	0		0
*MERCURY	CAPRI 3 DR HTCHBK	2	3930	2	3930	50
*MERCURY	COUGAR 2 DR HT XR-7			0		0
*MERCURY	COUGAR 2 DR SDN	1	3143	0		0
MERCURY	LYNX	10	3186	4	6156	33
MERCURY	MARQUIS BROUGHAM 4 DR SDN	1	10758	1	10758	100
MERCURY	TOPAZ 4 DR SDN GS	0		0		0
MERCURY	ZEPHYR 4 DR SDN	0		0		0
*MITSUBISHI	CORDIA/TREDIA	2	5822	1	11645	50
*OLD MOBILE	98 REGENCY	13	3307	0		0
*OLD MOBILE	98 REGENCY BROUGHAM	6	9436	3	15928	43
OLDSMOBILE	CUSTOM CRUISER	2	4594	0		0
OLDSMOBILE	CUTLASS CALAIS	12	4111	3	12272	25
OLDSMOBILE	CUTLASS CIERA	1	1038	0		0
OLDSMOBILE	CUTLASS CIERA BROUGHAM	34	3424	6	10911	16
OLDSMOBILE	CUTLASS CIERA LS	2	4755	1	9352	33
OLDSMOBILE	CUTLASS SDN	2	4467	1	7673	33
+OLDSMOBILE	CUTLASS SUPREME	46	3396	9	8924	18
*OLDSMOBILE	DELTA 88	3	3251	0		0
*OLDSMOBILE	DELTA 88 ROYALE	12	3336	1	11468	8
OLDSMOBILE	DELTA ROYALE BROUGHAM	8	2359	0		0
OLDSMOBILE	OMEGA	2	6828	2	6828	100
OLDSMOBILE	OMEGA BROUGHAM	1	2870	0		0
*OLDSMOBILE	TORONADO BROUGHAM	10	5570	3	13816	30
PEUGEAT	SDN	1	4946	0		0
*PLYMOUTH	CARAVELLE	1	778	0		0
PLYMOUTH	CHAMP	1	715	0		0
PLYMOUTH	HORIZON & TC3 CUSTOM/TURISMO	1	479	0		0
*PLYMOUTH	RELIANT SP ED CUSTO	7	2570	1	7684	11
PONTIAC	1000/CATALINA/PARISIENNE			0		0
PONTIAC	2000	0		0		0
*PONTIAC	BONNEVILLE	2	3765	0		0
*PONTIAC	BONNEVILLE BROUGHAM	4	7417	2	9851	50
*PONTIAC	FIREBIRD T/A	4	5454	1	13188	25
*PONTIAC	FIREBIRD/FIREBIRD SE	0		0		0
*PONTIAC	FIREBIRD/FIREBIRD SE/BONNEVILLE LE	8	2691	1	8395	11
+PONTIAC	GRAN PRIX	17	3963	5	9096	29
+PONTIAC	GRAN PRIX BROUGHAM	8	1447	0		0
+PONTIAC	GRAN PRIX LJ & LE	25	3043	4	10032	15
PONTIAC	GRAND LEMANS	1	8584	1	8584	100
PONTIAC	LEMANS			0		0
PONTIAC	PHOENIX	4	1876	1	5698	25
*PORSCHE	911	1	4429	0		0
*PORSCHE	924 & 928	0		0		0
PORSCHE	944	1	13936	0		0
RENAULT	FUEGO 2 DR CPE			0		0
RENAULT	LECAR 4 DR HTCHBK	1	6481	1	6481	100

Table 8: Stratification of In-Whole / In-Part Recoveries; Total Loss Recoveries During 1988  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries - In-Whole / In-Part -		Recoveries ----- Total Losses -----		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT OF ALL RECOVERIES
SAAB	BASE SERIES	2	3035	0		0
SAAB	TURBO SERIES	2	1947	0		0
SUBARU	GL	7	2121	1	9530	11
SUBARU	GLF	1	4584	0		0
SUBARU	STANDARD			0		0
*TOYOTA	CAMRY	3	6371	1	8188	33
*TOYOTA	CELICA & SUPRA	25	5670	9	10064	32
*TOYOTA	COROLLA	40	3166	9	7881	20
TOYOTA	CORDONA	3	3386	1	7476	33
TOYOTA	CRESSIDA	1	3512	1	3512	50
*TOYOTA	MR2			0		0
*TOYOTA	STARLET	1	5159	1	5159	100
TOYOTA	TERCEL	12	3078	3	7703	23
TOYOTA	TRUCK	5	2100	1	7091	17
TRIUMPH	TR7/TR8	1	620	0		0
*VOLKSWAGON	RABBIT CONV/CABRIOLET	2	10245	2	10245	100
*VOLKSWAGON	RABBIT GOLF	7	3987	3	7454	30
*VOLKSWAGON	SCIROCCO	2	6150	1	11771	50
VOLKSWAGON	VANAGON	1	153	0		0
VOLVO	2 DR	2	11237	2	11237	67
VOLVO	4 DR	4	1606	0		0
VOLVO	5 DR	1	3079	0		0
TOTALS:		993	4479	245	11062	22

- Model subject to the Theft Prevention Standard in 1987 only.
- + Model subject to the Theft Prevention Standard in 1988 only.
- \* Model subject to the Theft Prevention Standard both in 1987 and 1988.

Table 9: Stratification of In-Whole / In-Part Recoveries: Total Loss Recoveries During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries - In-Whole / In-Part -		Recoveries ----- Total Losses -----		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT OF ALL RECOVERIES
AUDI	4000	1	1075	0		0
AUDI	5000 & SW	2	10603	1	18929	33
*BMW	320I	7	5498	1	14825	13
*BMW	528E	3	3631	0		0
*BMW	633CSI/533I	3	6009	1	13633	33
-BMW	733I	1	3355	1	3355	100
BUICK	CENTURY ESTATE	2	5428	1	10395	33
BUICK	CENTURY LTD	9	4506	2	10775	20
*BUICK	ELECTRA 225 & ESTATE	0		0		0
*BUICK	ELECTRA LTD	2	1987	0		0
*BUICK	ELECTRA PARK AVE	5	8689	2	13167	33
*BUICK	LESABRE	4	3440	1	9930	20
*BUICK	LESABRE ESTATE	0		0		0
*BUICK	LESABRE LTD & CUSTO	13	4671	4	11790	27
*BUICK	REGAL	40	3661	11	7610	27
*BUICK	REGAL LTD	29	5013	10	10353	32
*BUICK	REGAL SPRT	2	2229	0		0
*BUICK	RIVIERA LUXURY	26	3732	1	12696	4
BUICK	SKYHAWK	3	4338	0		0
BUICK	SKYHAWK LT	0		0		0
BUICK	SKYLARK	2	2194	0		0
BUICK	SKYLARK LTD	2	3007	0		0
CADILLAC	CIMARRON	4	7229	3	8820	60
*CADILLAC	DEVILLE	53	7835	13	17257	22
*CADILLAC	ELDORADO	35	6177	5	21184	14
CADILLAC	FLEETWOOD BROUGHAM	16	6402	4	9398	25
*CADILLAC	SEVILLE	4	18996	3	22976	75
*CHEVROLET	CAMARO BERLINETTA	13	3301	2	8735	15
*CHEVROLET	CAMARO SPRT CPE	19	3258	2	12215	10
CHEVROLET	CAPRICE CLASSI	9	1960	0		0
CHEVROLET	CAVALIER	4	3077	1	10189	25
CHEVROLET	CAVALIER CS	55	3744	9	9467	15
CHEVROLET	CHEV. TRUCK	2	5449	1	8298	33
CHEVROLET	CHEVETTE	4	3013	3	4017	75
CHEVROLET	CHEVETTE SCOOTER	1	4573	1	4573	50
CHEVROLET	CITATION II	4	4066	2	6233	50
CHEVROLET	CITATION II CPE	1	469	0		0
CHEVROLET	CORVETTE	3	8221	2	12156	67
CHEVROLET	IMPALA	0		0		0
CHEVROLET	MALIBU	64	5172	19	12379	26
CHEVROLET	MONTE CARLO	7	4447	3	8775	38
CHRYSLER	CORDOBA	0		0		0
*CHRYSLER	LASER/LASER XE/DAYTONA	1	4261	0		0
*CHRYSLER	LEBARON	7	3538	1	14177	13
*CHRYSLER	NEW YORKER 5TH AVE	6	3067	0		0
*CHRYSLER	NEW YORKER/GRAN LEBARON	4	6085	1	14432	25
DATSUN	200SX	15	2698	3	6465	20
DATSUN	210	10	3025	5	5337	38
DATSUN	280ZX	17	8720	7	16576	39
DATSUN	300ZX	2	10000	1	19007	50
DATSUN	310	1	1913	0		0

Table 9: Stratification of In-Whole / In-Part Recoveries: Total Loss Recoveries During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries - In-Whole / In-Part -		Recoveries ----- Total Losses -----		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT OF ALL RECOVERIES
DATSUN	KING CAB	3	8770	2	10696	67
DATSUN	MAXIMA	33	4988	8	11528	23
DATSUN	PULSAR	6	2670	1	8343	17
DATSUN	SENTRA	17	2267	3	7407	16
DATSUN	STANZA	11	5334	4	10657	36
DATSUN	TRUCK REG. BED	1	5248	1	5248	100
*DODGE	400/600	0		0		0
*DODGE	ARIES	1	14587	1	14587	50
*DODGE	ARIES/CHALLENGER	6	2188	0		0
DODGE	CHARGER/OMNI/SHELBY TURBO	3	3639	1	8488	25
*DODGE	COLT/600	0		0		0
*DODGE	COLT/DAYTONA/DAYTONA TURB	0		0		0
DODGE	MIRADA	1	8976	1	8976	100
DODGE	RAM 50 & ARROW	2	329	0		0
DODGE	RAM CHARGER 4X4	0		0		0
DODGE	RAM VAN	4	4502	1	10760	25
FORD	COUNTRY SQUIRE SW	2	5871	1	10673	50
FORD	ESCORT	39	3174	7	10041	15
FORD	EXP 3 DR HTCHBK TURBO	6	1926	0		0
FORD	FAIRMONT (FUTURA) 4 DR SDN	1	3428	0		0
FORD	FAIRMONT (FUTURA) SW	2	5450	1	10832	50
FORD	GRANADA 4 DR SW	1	151	0		0
FORD	LTD 4 DR SDN	1	535	0		0
FORD	LTD 4 SEAT SW	0		0		0
FORD	LTD CROWN VICTORIA 2 DR SDN	0		0		0
FORD	LTD 5 4 DR HT	1	0	0		0
*FORD	MUST 3 DR SDN HTBK/NTCHBK/GRANADA 5	0		0		0
*FORD	MUSTANG & MUSTANG II 2 DR SDN	1	318	0		0
*FORD	MUSTANG & MUSTANG II 2 DR SDN LX	0		0		0
*FORD	MUSTANG & MUSTANG II 3 DR SDN HTBK	1	799	0		0
*FORD	MUSTANG/GRANADA 2 DR SDN	2	1197	0		0
FORD	RANGER 4X2 P/U	6	1139	0		0
FORD	TEMPO 2 DR SDN GL	3	1017	0		0
FORD	TEMPO/LASER	2	633	0		0
*FORD	THUNDERBIRD 2 DR SDN	5	5443	1	13106	20
GM OF CANADA	PONTIAC PARISIENNE BROUGHAM	1	1235	0		0
GMC	INCOMPLETE	1	2110	0		0
GMC	MPV	1	834	0		0
GMC	TRUCK	9	3588	2	9457	20
HONDA	ACCORD	20	4822	6	8676	22
HONDA	CIVIC 1300 HTCHBK	0		0		0
HONDA	CIVIC 1500 HTCHBK	1	9580	1	9580	100
HONDA	CIVIC 4 DR SDN	2	2318	0		0
HONDA	CRX, HF, SI	1	1077	0		0
HONDA	PRELUDE CPE	3	2798	0		0
ISUZU	IMPULSE/PICKUP 4X4	0		0		0
ISUZU	PICKUP 4X2	1	5993	1	5993	100
*JAGUAR	XJ6L	3	30247	3	30247	100
JEEP	CHEROKEE MPV 2 DR WAGON/WT	1	17450	1	17450	100
JEEP	CHEROKEE MPV 4 DR WAGON	1	14842	1	14842	100
JEEP	CJ-5 MPV 2 DR	1	0	0		0
JEEP	WAGONEER MPV 4 DR WAGON	3	4351	0		0

Table 7: Stratification Of In-Whole / In-Part Recoveries: Total Loss Recoveries During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries - In-Whole / In-Part -		Recoveries ----- Total Losses -----		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT OF ALL RECOVERIES
*LINCOLN	CONTINENTAL 4 DR SDN	2	10749	1	19513	33
*LINCOLN	CONTINENTAL 4 DR SDN MARK	2	16721	2	16721	100
LINCOLN	LINCOLN 4 DR SDN	0		0		0
*MAZDA	626	27	4214	6	9160	21
MAZDA	B2000 TRUCK	1	283	0		0
MAZDA	B2000/B2200 TRUCK	0		0		0
*MAZDA	GLC	13	3393	3	7419	21
MAZDA	5X7	45	5319	11	12852	24
*MERCEDES BENZ	190D 4 DR SDN	0		0		0
MERCEDES BENZ	240D 2 DR SDN	1	142	0		0
*MERCEDES BENZ	300 DT 4 DR SDN	2	14431	1	27943	33
*M.ERCEDES BENZ	300SD 4 DR SDN	4	11617	1	39505	17
*MERCEDES BENZ	380 SEL 4 DR SDN	1	2338	0		0
*MERCEDES BENZ	380SL 2 DR CPE	0		0		0
*MERCURY	CAPRI 3 DR HTCHBK	5	5736	3	8725	60
*MERCURY	COUGAR 2 DR HT XR-7	1	1141	0		0
MERCURY	COUGAR 2 DR SDN	3	8241	2	11075	67
*MERCURY	COUGAR 4 DR SDN	0		0		0
MERCURY	GRAND MARQUIS 2 DR SDN LS	1	0	0		0
MERCURY	LYNX	2	502	0		0
MERCURY	MARQUIS 4 DR SDN	1	10335	1	10335	100
MERCURY	MARQUIS BROUGHAM 4 DR SDN	2	5565	0		0
MERCURY	ZEPHYR SPORTY CPE-7	1	8062	1	8062	100
*MITSUBISHI	CURDIA/TREDIA	3	3075	1	6809	25
*OLDSMOBILE	98 REGENCY	11	2860	0		0
*OLDSMOBILE	98 REGENCY BROUGHAM	6	3548	1	14440	17
OLDSMOBILE	CUTLASS CALAIS	6	4959	2	10384	33
OLDSMOBILE	CUTLASS CIERA BROUGHAM	34	4329	10	10265	28
OLDSMOBILE	CUTLASS CIERA BROUGHAM/SUPR BROUGHM	1	890	0		0
OLDSMOBILE	CUTLASS CIERA LS	3	5798	1	11323	20
+OLDSMOBILE	CUTLASS SUPREME	54	3881	13	8620	23
*OLDSMOBILE	DELTA 88	1	2521	0		0
*OLDSMOBILE	DELTA 88 ROYALE	23	2412	1	10092	4
*OLDSMOBILE	DELTA ROYALE BROUGHAM	8	6393	3	11718	38
OLDSMOBILE	FIRENZA	0		0		0
OLDSMOBILE	FIRENZA BROUGHAM	2	1060	0		0
OLDSMOBILE	OMEGA BROUGHAM	3	6184	2	7573	67
*OLDSMOBILE	TORONADO BROUGHAM	9	6301	1	14590	11
PEUGEAT	SDN	5	5120	1	15936	20
*PLYMOUTH	CARAVELLE	1	3975	1	3975	100
PLYMOUTH	CHAMP	1	4737	1	4737	100
PLYMOUTH	COLT EDL PREMIER	2	1462	0		0
*PLYMOUTH	CONQUEST	1	15054	0		0
*PLYMOUTH	GRAN FURY/CARAVELLE	1	702	0		0
PLYMOUTH	HORIZON & TC3 CUSTOM/TURISMO	2	3138	0		0
*PLYMOUTH	RELIANT SP ED CUSTO	6	2745	0		0
PLYMOUTH	SAPPORO	2	1061	0		0
PLYMOUTH	VOYAGER WAGON/VAN	1	1033	0		0
PONTIAC	1000/CATALINA/PARISIENNE	3	2873	0		0
PONTIAC	2000	4	3464	2	5508	40
PONTIAC	6000 STE	1	17153	1	17153	100
*PONTIAC	BONNEVILLE	3	3091	0		0

Table 9: Stratification of In-Whole / In-Part Recoveries: Total Loss Recoveries During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	Recoveries - In-Whole / In-Part -		Recoveries ----- Total Losses -----		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT OF ALL RECOVERIES
*PONTIAC	BONNEVILLE BROUGHAM	1	4657	0		0
*PONTIAC	FIERO 2M4 & SE CPE	2	5472	0		0
*PONTIAC	FIREBIRD T/A	13	4299	1	11519	8
*PONTIAC	FIREBIRD/FIREBIRD SE	7	5394	1	13884	14
*PONTIAC	FIREBIRD/FIREBIRD SE/BONNEVILLE LE	20	5604	8	10161	38
+PONTIAC	GRAN PRIX	30	2676	2	9516	6
+PONTIAC	GRAN PRIX BROUGHAM	3	3298	1	8050	25
+PONTIAC	GRAN PRIX LJ & LE	11	2669	2	10860	18
PONTIAC	PHOENIX SE/PARISIENNE BROUGHAM	1	10034	0		0
PONTIAC	PONTIAC 6000	2	2395	0		0
PONTIAC	PONTIAC 6000 LE	2	7921	1	12592	50
*PORSCH	911	0		0		0
*PORSCH	924 & 928	1	7866	0		0
PORSCH	944	1	6388	0		0
RENAULT	181 4 DR SDN	2	1624	0		0
RENAULT	ALLIANCE 2 DR SDN	0		0		0
RENAULT	ALLIANCE 4 DR SDN	0		0		0
RENAULT	FUEGO 2 DR CPE	4	5640	2	8102	40
RENAULT	LECAR 2 DR HTCHBK	0		0		0
*SAAB	900	1	1806	0		0
SAAB	900S	0		0		0
SAAB	BASE SERIES	0		0		0
SAAB	TURBO SERIES	1	4818	0		0
SUBARU	GL	9	1263	0		0
SUBARU	TURBO RX	0		0		0
*TOYOTA	CAMRY	10	3108	1	13844	7
TOYOTA	CARGO VAN	2	8990	1	15595	33
*TOYOTA	CELICA & SUPRA	45	6013	16	11474	33
*TOYOTA	COROLLA	44	3194	9	8309	17
TOYOTA	CRESSIDA	12	3451	1	15880	8
*TOYOTA	MR2	1	738	0		0
*TOYOTA	STARLET	2	3081	1	4917	50
TOYOTA	TERCEL	13	3048	2	8171	11
GMC	TRUCK	11	3594	2	9488	15
VOLKSWAGON	JETTA	6	5228	3	10098	50
VOLKSWAGON	QUANTUM 2 DR/4 DR	0		0		0
*VOLKSWAGON	RABBIT CONV/CABRIOLET	0		0		0
*VOLKSWAGON	RABBIT GOLF	10	5014	3	9532	27
*VOLKSWAGON	SCIROCCO	2	5557	1	10423	50
VOLVO	2 DR	0		0		0
VOLVO	4 DR	4	3734	1	13492	17
VOLVO	5 DR	0		0		0
TOTALS:		1311	4581	307	11275	21

- Model subject to the Theft Prevention Standard in 1987 only.
- + Model subject to the Theft Prevention Standard in 1988 only.
- \* Model subject to the Theft Prevention Standard both in 1987 and 1988.

#### 2.2.4 Examination of Recoveries Prior to Settlement

This investigation examined claims for cases of theft where a recovery was made prior to the insurance payment. This was identified in the claim data since both the recovery date and settlement date were provided.

Tables 10 and 11 present the number of claims and average payment by model for recoveries prior to settlement in the 1983 and 1984 samples, respectively. These tables also identify the proportion of all recoveries which occurred prior to settlement, by model. To facilitate comparisons, the number and average payments of all recovery claims are reproduced from Table 4 and 5 in Tables 10 and 11. Aggregate statistics for each sample appear at the bottom of these tables.

Table 10 indicates that 1,012 or 92% of all recoveries in the 1983 sample occurred before the claim was paid. The average payment for a recovery prior to settlement was \$3,512 in 1988 dollars. This was \$513 less than the cost of an average claim with recovery. Based on the sample sizes, the average payment for a claim with recovery prior to settlement was \$6,095 less than the average payment for a claim where recovery occurred after settlement.

A total of 1,362 out of 1,457 recoveries or 93% of the recoveries in the 1984 sample occurred prior to claim payment. Based on the sample sizes, the average payment in the 1984 sample for a claim with recovery prior to settlement was \$5,061 less than the average payment for a claim where recovery occurred after settlement.

The high proportion of recoveries prior to settlement reflects the operation of the insurance company which supplied these samples and their time frame for settling theft claims. Approximately 50% of the claims with recovery prior to settlement were settled within 30 days of the report of vehicle theft. Roughly 75% of these claims were settled within 60 days, while approximately 85%-90% of the claims were settled within 90 days.

Table 10: Stratification of Recoveries: Recoveries Prior to Settlement During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	All Recoveries		Recoveries Prior to Settlement		PCT OF ALL RECOVERIES
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	
AMERICAN MOTORS	CONCORD	0		0		
AMERICAN MOTORS	EAGLE 30	2	5810	2	5810	100
AMERICAN MOTORS	SPIRIT	0		0		
AUDI	4000	1	3182	1	3182	100
*AUDI	4000 CPE OR QUATTRO 4 WD	1	14442	1	14442	100
AUDI	5000 & SW	5	7720	3	2341	60
*BMW	320I	11	11437	9	9983	82
*BMW	528E	4	874	4	874	100
*BMW	528I	0		0		
-BMW	733I	1	4951	1	4951	100
BUICK	CENTURY ESTATE	5	2055	5	2055	100
BUICK	CENTURY LTD	5	2024	5	2024	100
*BUICK	ELECTRA LTD	5	2261	5	2261	100
*BUICK	ELECTRA PARK AVE	8	5333	7	3981	88
*BUICK	LESABRE	3	4256	3	4256	100
*BUICK	LESABRE ESTATE	1	3051	1	3051	100
*BUICK	LESABRE LTD & CUSTO	7	3166	5	1891	71
+BUICK	REGAL	34	3414	31	3056	91
+BUICK	REGAL LTD	31	1630	29	1520	94
+BUICK	REGAL SPRT	1	2735	1	2735	100
BUICK	RIVIERA LUXURY	25	5089	25	5089	100
BUICK	SKYHAWK	1	660	1	660	100
BUICK	SKYLARK	2	161	2	161	100
BUICK	SKYLARK LTD	1	1652	1	1652	100
CADILLAC	CIMARRON	4	3675	4	3675	100
*CADILLAC	DEVILLE	49	6557	47	6280	96
*CADILLAC	ELDORADO	41	8705	38	7958	93
CADILLAC	FLEETWOOD BROUGHAM	11	3954	11	3954	100
*CADILLAC	SEVILLE	11	12820	9	10194	82
*CHEVROLET	CAMARO BERLINETTA	4	2085	4	2085	100
*CHEVROLET	CAMARO SPRT CPE	16	3762	14	3332	88
CHEVROLET	CAPRICE CLASSI	11	3279	10	3257	91
CHEVROLET	CAVALIER	3	3911	2	1230	67
CHEVROLET	CAVALIER 10	0		0		
CHEVROLET	CAVALIER CS	8	4261	4	117	50
CHEVROLET	CHEV. TRUCK	3	711	3	711	100
CHEVROLET	CHEVETTE	9	3211	8	2948	89
CHEVROLET	CHEVETTE SCOOTER	2	712	2	712	100
CHEVROLET	CITATION II	11	1107	11	1107	100
CHEVROLET	CORVETTE	4	3314	4	3314	100
CHEVROLET	IMPALA	9	2849	9	2849	100
CHEVROLET	MALIBU	40	4287	35	3664	88
CHEVROLET	MONTE CARLO	11	2701	9	2281	82
CHRYSLER	CORDOBA	2	1069	1	165	50
*CHRYSLER	LEBARON	4	568	4	568	100
*CHRYSLER	NEW YORKER 5TH AVE	6	5810	6	5810	100
*CHRYSLER	NEW YORKER/GRAN LEBARON	1	480	1	480	100
*CHRYSLER	NEWPORT	1	216	1	216	100
DATSUN	200SX	20	3924	18	3815	90
DATSUN	210	18	2281	15	1400	83
DATSUN	280ZX	32	3142	30	2295	94

Table 10: Stratification of Recoveries: Recoveries Prior to Settlement During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	ALL Recoveries		Recoveries Prior to Settlement		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PCT OF ALL RECOVERIES
DATSUN	310	3	4037	3	4037	100
DATSUN	510	1	7196	0		
DATSUN	KING CAB	2	4548	2	4548	100
DATSUN	MAXIMA	16	3838	15	3838	94
DATSUN	PULSAR	4	544	4	544	100
DATSUN	SENTRA	7	2889	6	1930	85
DATSUN	STANZA	6	2298	5	767	33
*DODGE	ARIES	1	1113	1	1113	100
*DODGE	ARIES/CHALLENGER	4	6717	2	2110	50
DODGE	CHARGER/OMNI/SHELBY TURBO	3	922	3	922	100
*DODGE	COLY/600	4	780	4	780	100
*DODGE	CULT/CULT VISTA/DIPLOM	1	128	0		
*DODGE	DIPLOMAT	1	6940	0		
DODGE	HIRADA	1	14042	1	14042	100
DODGE	RAM VAN	1	3049	1	3049	100
FIAT	SCIDER 2600	2	4438	2	4438	100
FIAT	X 179	1	7974	1	7974	100
FORD	ESCORT	24	2695	21	2434	83
FORD	EXP 3 DR HATCHBACK TURBO	6	4345	6	4345	100
FORD	FALCONET (FUTURA) 2 DR SDN	1	5003	1	5003	100
FORD	FALCONET (FUTURA) 4 DR SDN	1	1389	1	1389	100
FORD	GRANADA 2 DR SDN	1	1351	1	1351	100
FORD	GRANADA 4 DR SDN	1	9286	1	9286	100
FORD	GRANADA 4 DR SW	1	3109	1	3109	100
FORD	LTD 4 DR SDN	1	10515	1	10515	100
FORD	LTD 4 DR WAGON SQUINE	1	720	1	720	100
FORD	LTD 4 SEAT SW	1	490	1	490	100
FORD	LTD S 4 DR HT	1	948	1	948	100
*FORD	MUST 3 DR SDN HATCHBACK/GRANADA S	1	0	1	0	100
*FORD	MUSTANG & MUSTANG II 3 DR SDN HATCHBACK	1	1444	1	1444	100
*FORD	THUNDERBIRD 2 DR HT	0		0		
GM OF CANADA	PONTIAC PARISLENNE BROUGHAM	1	14219	1	14219	100
GM	INCOMPLETE	2	6211	1	1344	50
TOYOTA	TRUCK	4	7605	4	7605	100
HONDA	ACCORD	12	4531	10	3480	83
HONDA	CIVIC 1500 HATCHBACK	1	3346	1	3346	100
HONDA	CIVIC 4 DR SDN	5	692	5	692	100
HONDA	CIVIC SW	2	1926	2	1926	100
HONDA	PRELUDE CPE	3	3704	2	1419	67
ISUZU	PICKUP 4X2	0		0		
*JAGUAR	XJ6L	1	2308	1	2308	100
JAGUAR	XJS	1	21937	1	21937	100
JEEP	CHEROKEE MPV 2 DR WAGON/WT	0		0		
JEEP	WAGONEER MPV 4 DR WAGON	0		0		
LANCIA	BETA	0		0		
LANCIA	ZAGATO	1	49	1	49	100
LINCOLN	CONTINENTAL 4 DR SDN MARK	4	6223	3	1658	75
LINCOLN	LINCOLN 4 DR SDN	1	1646	1	1646	100
*MAZDA	C76	17	2943	16	2598	94
MAZDA	B2000 TRUCK	1	5878	1	5878	100
MAZDA	B2000/B2200 TRUCK	2	5336	1	486	50
*MAZDA	GLC	3	5167	2	3973	67

Table 10: Stratification of Recoveries: Recoveries Prior to Settlement During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	All Recoveries		Recoveries Prior to Settlement		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PCT OF ALL RECOVERIES
MAZDA	RX7	24	6052	22	5499	92
MERCEDES BENZ	240D 2 DR SDN	1	3577	1	3577	100
*MERCEDES BENZ	300 DT 4 DR SDN	3	24109	1	2252	33
*MERCEDES BENZ	300SD 4 DR SDN	2	487	2	487	100
*MERCEDES BENZ	380 SEC 2 DR CPE	0		0		
*MERCEDES BENZ	380SL 2 DR CPE	1	14081	1	14081	100
*MERCURY	CAPRI 3 DR HTCHBK	4	1965	4	1965	100
*MERCURY	COUGAR 2 DR HT XR-7	1	0	1	0	100
*MERCURY	COUGAR 2 DR SDN	1	3143	1	3143	100
MERCURY	LYNX	12	2655	11	2386	92
MERCURY	MARQUIS BROUGHAM 4 DR SDN	1	10758	1	10758	100
MERCURY	TOPAZ 4 DR SDN GS	0		0		
MERCURY	ZEPHYR 4 DR SDN	0		0		
*MITSUBISHI	CORDIA/TREDIA	2	5822	2	5822	100
*OLDSMOBILE	98 REGENCY	13	3307	13	3307	100
*OLDSMOBILE	98 REGENCY BROUGHAM	7	8088	6	5784	86
OLDSMOBILE	CUSTOM CRUISER	3	3063	3	3063	100
OLDSMOBILE	CUTLASS CALAIS	12	4111	11	3628	92
OLDSMOBILE	CUTLASS CIERA	2	519	2	519	100
OLDSMOBILE	CUTLASS CIERA BROUGHAM	37	3148	33	3049	89
OLDSMOBILE	CUTLASS CIERA LS	3	3170	1	0	33
OLDSMOBILE	CUTLASS SDN	3	2978	3	2978	100
+OLDSMOBILE	CUTLASS SUPREME	49	3188	47	3026	96
*OLDSMOBILE	DELTA 88	3	3251	2	4387	67
*OLDSMOBILE	DELTA 88 ROYALE	12	3336	12	3336	100
OLDSMOBILE	DELTA ROYALE BROUGHAM	9	2097	9	2097	100
OLDSMOBILE	OMEGA	2	6828	2	6828	100
OLDSMOBILE	OMEGA BROUGHAM	1	2870	1	2870	100
*OLDSMOBILE	TORONADO BROUGHAM	10	5570	9	4103	90
PEUGEAT	SDN	1	4946	1	4946	100
*PLYMOUTH	CARAVELLE	1	778	1	778	100
PLYMOUTH	CHAMP	1	715	1	715	100
PLYMOUTH	HORIZON & TC3 CUSTOM/TURISMO	2	239	2	239	100
*PLYMOUTH	RELIANT SP ED CUSTO	9	1999	8	1970	89
PONTIAC	1000/CATALINA/PARISIENNE	1	0	1	0	100
PONTIAC	2000	0		0		
*PONTIAC	BONNEVILLE	4	1890	4	1890	100
*PONTIAC	BONNEVILLE BROUGHAM	4	7417	3	6364	75
*PONTIAC	FIREBIRD T/A	4	5454	3	2876	75
*PONTIAC	FIREBIRD/FIREBIRD SE	0		0		
*PONTIAC	FIREBIRD/FIREBIRD SE/BONNEVILLE LE	9	2392	9	2392	100
+PONTIAC	GRAN PRIX	17	3963	16	4086	94
+PONTIAC	GRAN PRIX BROUGHAM	9	1286	9	1286	100
+PONTIAC	GRAN PRIX LJ & LE	27	2817	27	2817	100
PONTIAC	GRAND LEMANS	1	8584	0		
PONTIAC	LEMANS	1	0	1	0	100
PONTIAC	PHOENIX	4	1876	4	1876	100
*PORSCH	911	2	2215	2	2215	100
*PORSCH	924 & 928	0		0		
PORSCH	944	1	13936	1	13936	100
RENAULT	FUEGO 2 DR CPE	1	0	1	0	100
RENAULT	LECAR 4 DR HTCHBK	1	6481	1	6481	100

Table 10: Stratification of Recoveries: Recoveries Prior to Settlement During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	All Recoveries		Recoveries Prior to Settlement		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PCT OF ALL RECOVERIES
SAAB	BASE SERIES	2	3035	2	3035	100
SAAB	TURBO SERIES	2	1947	2	1947	100
SUBARU	GL	9	1649	9	1649	100
SUBARU	GLF	1	4584	1	4584	100
SUBARU	STANDARD	1	0	1	0	100
*TOYOTA	CAMRY	3	6371	3	6371	100
*TOYOTA	CELICA & SUPRA	28	5063	25	4458	89
*TOYOTA	COROLLA	45	2816	44	2835	98
TOYOTA	CORONA	3	3386	3	3386	100
TOYOTA	CRESSIDA	2	1756	2	1756	100
*TOYOTA	MR2	1	69	1	69	100
*TOYOTA	STARLET	1	5159	0		
TOYOTA	TERCEL	13	2841	13	2841	100
TOYOTA	TRUCK	6	1750	5	682	83
TRIUMPH	TR7/TR8	1	620	1	620	100
*VOLKSWAGON	RABBIT CONV/CABRIOLET	2	10245	2	10245	100
*VOLKSWAGON	RABBIT GOLF	10	2797	7	802	70
*VOLKSWAGON	SCIROCCO	2	6150	2	6150	100
VOLKSWAGON	VANAGON	1	153	1	153	100
VOLVO	2 DR	3	7491	3	7491	100
VOLVO	4 DR	5	1285	5	1285	100
VOLVO	5 DR	1	3079	1	3079	100
TOTALS:		1105	4025	1012	3512	92

- Model subject to the Theft Prevention Standard in 1987 only.

+ Model subject to the Theft Prevention Standard in 1988 only.

\* Model subject to the Theft Prevention Standard both in 1987 and 1988.

Table 11: Stratification of Recoveries: Recoveries Prior to Settlement During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	All Recoveries		Recoveries Prior to Settlement		
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PCT OF ALL RECOVERIES
AUDI	4000	2	537	2	537	100
AUDI	5000 & SW	3	7069	3	7069	100
*BMW	320I	8	4811	8	4811	100
*BMW	528E	3	3631	3	3631	100
*BMW	633CSI/533I	3	6009	3	6009	100
-BMW	733I	1	3355	0		
BUICK	CENTURY ESTATE	3	3618	2	230	67
BUICK	CENTURY LTD	10	4056	9	3360	90
*BUICK	ELECTRA 225 & ESTATE	0		0		
*BUICK	ELECTRA LTD	2	1987	2	1987	100
*BUICK	ELECTRA PARK AVE	6	7241	5	6718	83
*BUICK	LESABRE	5	2752	5	2752	100
*BUICK	LESABRE ESTATE	0		0		
*BUICK	LESABRE LTD & CUSTO	15	4054	13	3020	87
*BUICK	REGAL	41	3572	40	3445	98
*BUICK	REGAL LTD	31	4690	27	3857	87
*BUICK	REGAL SPRT	2	2229	2	2229	100
*BUICK	RIVIERA LUXURY	26	3732	24	3192	92
BUICK	SKYHAWK	3	4338	3	4338	100
BUICK	SKYHAWK LT	0		0		
BUICK	SKYLARK	4	1097	4	1097	100
BUICK	SKYLARK LTD	3	2004	3	2004	100
CADILLAC	CIMARRON	5	5783	5	5783	100
*CADILLAC	DEVILLE	58	7160	57	6927	98
*CADILLAC	ELDORADO	36	6006	33	5175	92
CADILLAC	FLEETWOOD BROUGHAM	16	6402	15	6577	94
*CADILLAC	SEVILLE	4	18996	3	18460	75
*CHEVROLET	CAMARO BERLINETTA	13	3301	13	3301	100
*CHEVROLET	CAMARO SPRT CPE	20	3095	19	2961	95
CHEVROLET	CAPRICE CLASSI	9	1960	8	1798	89
CHEVROLET	CAVALIER	4	3077	4	3077	100
CHEVROLET	CAVALIER CS	60	3434	56	3602	93
CHEVROLET	CHEV. TRUCK	3	3632	3	3632	100
CHEVROLET	CHEVETTE	4	3013	3	2666	75
CHEVROLET	CHEVETTE SCOOTER	2	2286	2	2286	100
CHEVROLET	CITATION II	4	4066	3	3393	75
CHEVROLET	CITATION II CPE	1	469	1	469	100
CHEVROLET	CORVETTE	3	8221	2	1429	67
CHEVROLET	IMPALA	0		0		
CHEVROLET	MALIBU	72	4597	68	4332	94
CHEVROLET	MONTE CARLO	8	3891	7	3121	88
CHRYSLER	CORDOBA	1	0	1	0	100
*CHRYSLER	LASER/LASER XE/DAYTONA	1	4261	1	4261	100
*CHRYSLER	LEBARON	8	3096	8	3096	100
*CHRYSLER	NEW YORKER 5TH AVE	9	2045	9	2045	100
*CHRYSLER	NEW YORKER/GRAN LEBARON	4	6085	4	6085	100
DATSUN	200SX	15	2698	14	2348	93
DATSUN	210	13	2327	11	1719	85
DATSUN	280ZX	18	8236	15	6959	83
DATSUN	300ZX	2	10000	2	10000	100
DATSUN	310	1	1913	1	1913	100

Table 11: Stratification of Recoveries: Recoveries Prior to Settlement During 1994  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	All Recoveries		Recoveries Prior to Settlement		PCT OF ALL RECOVERIES
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	
DATSUN	KING CAB	3	8776	3	8776	100
DATSUN	MAXIMA	35	4763	33	4178	94
DATSUN	PULSAR	6	2670	5	1535	83
DATSUN	SENTRA	19	2035	18	2148	95
DATSUN	STANZA	11	5334	11	5334	100
DATSUN	TRUCK REG. BED	1	5248	1	5248	100
*DODGE	400/600	2	0	2	0	100
*DODGE	ARIES	2	7293	1	0	50
*DODGE	ARIES/CHALLENGER	6	2188	5	1836	83
DODGE	CHARGER/CRANT/SHELBY TURBO	4	2729	4	2729	100
*DODGE	COLT/600	2	0	2	0	100
*DODGE	COLT/DAYTONA/DAYTONA TURB	1	0	1	0	100
DODGE	MIRADA	1	8976	1	8976	100
DODGE	RAM 50 & ARROW	2	329	2	329	100
DODGE	RAM CHARGER 4X4	0		0		
DODGE	RAM VAN	4	4502	4	4502	100
FORD	COUNTRY SQUIRE SW	2	5871	1	1070	50
FORD	ESLORT	46	2691	44	2616	96
FORD	EXP 3 DR HTCHBK TURBO	6	1926	6	1926	100
FORD	FAIRMONT (FUTURA) 4 DR SDN	4	857	4	857	100
FORD	FAIRMONT (FUTURA) SW	2	5450	2	5450	100
FORD	GRANADA 4 DR SW	2	76	2	76	100
FORD	LTD 4 DR SDN	1	535	1	535	100
FORD	LTD 4 SEAT SW	0		0		
FORD	LTD CROWN VICTORIA 2 DR SDN	1	0	1	0	100
FORD	LTD 5 4 DR HT	1	0	1	0	100
*FORD	MUST 3 DR SDN HTBK/NTCHBK/GRANADA 5	1	0	1	0	100
*FORD	MUSTANG & MUSTANG II 2 DR SDN	1	318	1	318	100
*FORD	MUSTANG & MUSTANG II 2 DR SDN LX	0		0		
*FORD	MUSTANG & MUSTANG II 3 DR SDN HTBK	1	799	1	799	100
*FORD	MUSTANG/GRANADA 2 DR SDN	2	1197	2	1197	100
FORD	RANGER 4X2 P/U	6	1139	6	1139	100
FORD	TEMPO 2 DR SDN GL	3	1017	3	1017	100
FORD	TEMPO/LASER	3	433	3	433	100
*FORD	THUNDERBIRD 2 DR SDN	5	5443	5	5443	100
GM OF CANADA	PONTIAC PARISIENNE BROUGHAM	1	1235	1	1235	100
GMC	INCOMPLETE	1	2110	1	2110	100
GMC	MPV	1	834	1	834	100
GMC	TRUCK	10	3229	7	2346	70
HONDA	ACCORD	27	3574	27	3574	100
HONDA	CIVIC 1500 HTCHBK	1	0	1	0	100
HONDA	CIVIC 1500 HTCHBK	1	9530	0		
HONDA	CIVIC 4 DR SDN	2	2318	2	2318	100
HONDA	CRX, HF, SI	1	1077	1	1077	100
HONDA	PRELUDE CPE	4	2099	4	2099	100
ISUZU	IMPULSE/PICKUP 4X4	0		0		
ISUZU	PICKUP 4X2	1	5993	0		
*JAGUAR	XJ6L	3	30247	2	33093	67
JEEP	CHEROKEE MPV 2 DR WAGON/WT	1	17450	0		
JEEP	CHEROKEE MPV 4 DR WAGON	1	14842	1	14842	100
JEEP	CJ-5 MPV 2 DR	1	0	1	0	100
JEEP	WAGONEER MPV 4 DR WAGON	3	4351	3	4351	100

Table 11: Stratification of Recoveries: Recoveries Prior to Settlement During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	All Recoveries		Recoveries Prior to Settlement		PCT OF ALL RECOVERIES
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	
*LINCOLN	CONTINENTAL 4 DR SDN	3	7166	3	7166	100
*LINCOLN	CONTINENTAL 4 DR SDN MARK	2	16721	2	16721	100
LINCOLN	LINCOLN 4 DR SDN	0		0		
*MAZDA	626	28	4066	24	3222	86
MAZDA	B2000 TRUCK	1	283	1	283	100
MAZDA	B2000/B2200 TRUCK	0		0		
*MAZDA	GLC	14	3151	13	2623	93
MAZDA	RX7	46	5254	45	5357	98
*MERCEDES BENZ	190D 4 DR SDN	0		0		
MERCEDES BENZ	240D 2 DR SDN	1	142	1	142	100
*MERCEDES BENZ	300 DT 4 DR SDN	3	9621	3	9621	100
*MERCEDES BENZ	300SD 4 DR SDN	6	7744	6	7744	100
*MERCEDES BENZ	300 SEL 4 DR SDN	1	2338	1	2338	100
*MERCEDES BENZ	300SL 2 DR CPE	0		0		
*MERCURY	CAPRI 3 DR HATCHBK	5	5736	4	4924	80
*MERCURY	COUGAR 2 DR HT XR-7	1	1141	1	1141	100
*MERCURY	COUGAR 2 DR SDN	3	8241	3	8241	100
*MERCURY	COUGAR 4 DR SDN	1	97	1	97	100
MERCURY	GRAND MARQUIS 2 DR SDN LS	1	0	1	0	100
MERCURY	LYNX	3	335	3	335	100
MERCURY	MARQUIS 4 DR SDN	1	10335	1	10335	100
MERCURY	MARQUIS BROUGHAM 4 DR SDN	2	5565	2	5565	100
MERCURY	ZEPHYR SPORTY CPE-7	1	8062	1	8062	100
*MITSUBISHI	CORDIA/TREDIA	4	2323	4	2323	100
*OLDSMOBILE	98 REGENCY	12	2622	12	2622	100
*OLDSMOBILE	98 REGENCY BROUGHAM	6	3548	6	3548	100
OLDSMOBILE	CUTLASS CALAIS	6	4959	6	4959	100
OLDSMOBILE	CUTLASS CIERA BROUGHAM	36	4090	33	3504	92
OLDSMOBILE	CUTLASS CIERA BROUGHAM/SUPR BROUGHAM	1	890	1	890	100
OLDSMOBILE	CUTLASS CIERA LS	5	3479	5	3479	100
+OLDSMOBILE	CUTLASS SUPREME	57	3678	55	3603	96
*OLDSMOBILE	DELTA 88	1	2521	1	2521	100
*OLDSMOBILE	DELTA 88 ROYALE	24	2312	24	2312	100
*OLDSMOBILE	DELTA ROYALE BROUGHAM	8	6393	8	6393	100
OLDSMOBILE	FIRENZA	0		0		
OLDSMOBILE	FIRENZA BROUGHAM	2	1060	2	1060	100
OLDSMOBILE	OMEGA BROUGHAM	3	6184	2	5333	67
*OLDSMOBILE	TORONADO BROUGHAM	9	6301	9	6301	100
PEUGEAT	SDN	5	5120	4	2416	80
*PLYMOUTH	CARAVELLE	1	3975	0		
PLYMOUTH	CHAMP	1	4737	1	4737	100
PLYMOUTH	COLT EDL PREMIER	2	1462	2	1462	100
*PLYMOUTH	CONQUEST	1	15054	1	15054	100
*PLYMOUTH	GRAN FURY/CARAVELLE	1	702	1	702	100
PLYMOUTH	HORIZON & TC3 CUSTOM/TURISMO	2	3138	2	3138	100
*PLYMOUTH	RELIANT SP ED CUSTO	8	2059	8	2059	100
PLYMOUTH	SAPPORO	2	1061	2	1061	100
PLYMOUTH	VOYAGER WAGON/VAN	1	1033	1	1033	100
PONTIAC	1000/CATALINA/PARISIENNE	3	2873	3	2873	100
PONTIAC	2000	5	2771	4	1781	80
PONTIAC	6000 STE	1	17153	1	17153	100
*PONTIAC	BONNEVILLE	4	2318	4	2318	100

Table 11: Stratification of Recoveries: Recoveries Prior to Settlement During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	All Recoveries		Recoveries Prior to Settlement		PCT OF ALL RECOVERIES
		NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	
*PONTIAC	BONNEVILLE BROUGHAM	1	4657	1	4657	100
*PONTIAC	FIERO 2M4 & SE CPE	2	5472	2	5472	100
*PONTIAC	FIREBIRD T/A	13	4299	13	4299	100
*PONTIAC	FIREBIRD/FIREBIRD SE	7	5394	6	5156	86
*PONTIAC	FIREBIRD/FIREBIRD SE/BONNEVILLE LE	21	5337	18	4462	86
+PONTIAC	GRAN PRIX	31	2589	30	2428	97
+PONTIAC	GRAN PRIX BROUGHAM	4	2491	4	2491	100
+PONTIAC	GRAN PRIX LJ & LE	11	2669	8	896	73
PONTIAC	PHOENIX SE/PARISIENNE BROUGHAM	1	10034	1	10034	100
PONTIAC	PONTIAC 6000	3	1597	3	1597	100
PONTIAC	PONTIAC 6000 LE	2	7921	2	7921	100
*PONTIAC	911	0	0	0	0	0
*PORSCHE	924 & 928	1	7866	1	7866	100
PORSCHE	944	1	6388	1	6388	100
RENAULT	181 4 DR SDN	3	1082	3	1082	100
RENAULT	ALLIANCE 2 DR SDN	0	0	0	0	0
RENAULT	ALLIANCE 4 DR SDN	1	0	1	0	100
RENAULT	FUEGO 2 DR CPE	5	4512	4	3528	80
RENAULT	LECAR 2 DR HTCHBK	0	0	0	0	0
*SAAB	900	1	1806	1	1806	100
SAAB	900S	1	0	1	0	100
SAAB	BASE SERIES	0	0	0	0	0
SAAB	TURBO SERIES	1	4818	1	4818	100
SUBARU	GL	11	1033	11	1033	100
SUBARU	TURBO RX	0	0	0	0	0
*TOYOTA	CAMRY	14	2220	13	2391	93
TOYOTA	CARGO VAN	3	5993	2	1192	67
*TOYOTA	CELICA & SUPRA	49	5524	47	5467	96
*TOYOTA	COROLLA	53	2653	49	2269	92
TOYOTA	CRESSIDA	13	3186	13	3186	100
*TOYOTA	MR2	1	738	1	738	100
*TOYOTA	STARLET	2	3081	2	3081	100
TOYOTA	TERCEL	19	2036	18	1738	95
GMC	TRUCK	13	3041	11	2039	85
VOLKSWAGON	JETTA	6	5228	4	2683	67
VOLKSWAGON	QUANTUM 2 DR/4 DR	0	0	0	0	0
*VOLKSWAGON	RABBIT CONV/CABRIOLET	0	0	0	0	0
*VOLKSWAGON	RABBIT GOLF	11	4558	10	4079	91
*VOLKSWAGON	SCIROCCO	2	5557	2	5557	100
VOLVO	2 DR	0	0	0	0	0
VOLVO	4 DR	6	2505	5	2828	83
VOLVO	5 DR	0	0	0	0	0
TOTALS:		1457	4124	1362	3794	93

- Model subject to the Theft Prevention Standard in 1987 only.  
+ Model subject to the Theft Prevention Standard in 1988 only.  
\* Model subject to the Theft Prevention Standard both in 1987 and 1988.

#### 2.2.5 Examination of Intact Recoveries Prior to Settlement

This analysis examined claims for cases in which a stolen vehicle was recovered intact prior to the insurance settlement. These claims form a subset of:

- All claims with intact recoveries (Section 2.2.2)
- All claims with recoveries prior to settlement (Section 2.2.4).

This analysis employed the same definition of an intact recovery as was employed previously in Section 2.2.2.

Tables 12 and 13 identify the number of claims and average payment by model for theft claims involving an intact recovery of a vehicle prior to settlement for the 1983 and 1984 samples respectively. These tables also indicate the proportion of all vehicles recovered prior to settlement which were recovered intact.

This information is provided both by model and for the sample in aggregate.

Similar data for all claims with recoveries prior to settlement is reproduced in Tables 12 and 13 from Tables 10 and 11.

Table 12 indicates that a total of 111 out of 1012 recoveries or 11% of all 1983 recoveries prior to settlement were intact recoveries. A comparison of Table 6 and Table 12 indicates that 111 out of 112 intact recoveries or 99% of all 1983 intact recoveries occurred prior to settlement.

Based on the sample sizes and average costs shown in Table 12, it is estimated that the average claim cost for a case in which a vehicle was recovered either in-whole or in-part (i.e. non-intact) prior to settlement is \$3,944 expressed in 1988 dollars. This would reflect cases where the condition of the recovered vehicle was known prior to settlement and the vehicle was either repaired to its pre-theft state or treated as a total loss by the insurer. This occurred in 901 cases in the 1983 sample.

Table 13 indicates that 140 out of 1,362 recoveries or 10% of all 1984 recoveries prior to settlement were intact recoveries. This proportion is similar to that observed in the 1983 sample. Comparing Tables 7 and 13, 140 out of 146 intact recoveries or 96% of all 1984 intact recoveries occurred prior to settlement.

Based on Table 13, it is estimated that the average claim cost for a non-intact recovery prior to settlement in 1984 was \$4,228 expressed in 1988 dollars. This appears somewhat higher than the \$3,944 cost estimated in 1983. Thus, settlement costs for claims

Table 12: Stratification of Recoveries Prior to Settlement: Intact Recoveries During 1985  
(Payments Expressed in 1980 Dollars)

MAKE	MODEL	All Recoveries			Intact Recoveries		
		NUMBER	AVERAGE PAYMENT	PCT (IF ALL RECOVERIES)	NUMBER	AVERAGE PAYMENT	PCT OF ALL PRIOR RECOVERIES
AMERICAN MOTORS	CONCORD	0			0		
AMERICAN MOTORS	EAGLE 30	2	3810	100	0		
AMERICAN MOTORS	SPIRIT	0			0		
AUDI	4000	1	3182	100	0		
*AUDI	4000 CPE OR QUATTRO 4 WD	1	14442	100	0		
AUDI	5000 & 5W	3	2341	60	0		
*BMW	320I	9	9283	82	1	0	9
*BMW	520E	4	874	100	2	0	50
*BMW	520I	0			0		
-BMW	730I	1	4951	100	0		
BUICK	CENTURY ESTATE	5	2035	100	2	0	40
BUICK	CENTURY LTD	5	2024	100	0		
*BUICK	ELECTRA LTD	5	2261	100	0		
*BUICK	ELECTRA PARK AVE	7	3381	88	0		
*BUICK	LESABRE	3	4236	100	0		
*BUICK	LESABRE ESTATE	1	3051	100	0		
*BUICK	LESABRE LTD & CUSTO	5	1091	71	0		
+BUICK	REGAL	31	3056	91	0		
+BUICK	REGAL LTD	29	1520	94	3	0	10
+BUICK	REGAL SPAY	1	2735	100	0		
BUICK	RIVIERA LUXURY	25	5089	100	0		
BUICK	SKYHAWK	1	660	100	0		
BUICK	SKYLARK	2	161	100	1	0	50
BUICK	SKYLARK LTD	1	1652	100	0		
CADILLAC	CIMARRON	4	3675	100	0		
*CADILLAC	DEVILLE	47	6280	96	3	0	6
*CADILLAC	EL DORADO	38	7958	93	1	70	2
CADILLAC	FLEETWOOD BROUGHAM	11	3954	100	1	0	9
*CADILLAC	SEVILLE	9	10194	82	1	0	9
*CHEVROLET	CAMARO BERLINETTA	4	2085	100	1	50	25
*CHEVROLET	CAMARO SPRT CPE	14	3332	88	3	0	19
CHEVROLET	CAPRICE CLASSI	10	3257	91	1	0	9
CHEVROLET	CAVALIER	2	1230	67	0		
CHEVROLET	CAVALIER 10	0			0		
CHEVROLET	CAVALIER CS	4	117	50	3	0	38
CHEVROLET	CHEV. TRUCK	3	711	100	0		
CHEVROLET	CHEVETTE	8	2948	89	3	0	33
CHEVROLET	CHEVETTE SCOOTER	2	712	100	1	0	50
CHEVROLET	CITATION II	11	1107	100	2	0	18
CHEVROLET	CORVETTE	4	3314	100	1	0	25
CHEVROLET	IMPALA	9	2849	100	1	0	11
CHEVROLET	MALIBU	35	3664	88	3	0	8
CHEVROLET	MONTA CARLO	9	2281	82	1	0	9
CHRYSLER	CORDOBA	1	165	50	0		
*CHRYSLER	LEBARON	4	563	100	2	38	50
*CHRYSLER	NEW YORKER 5TH AVE	6	5810	100	1	0	17
*CHRYSLER	NEW YORKER/GRAN LEBARON	1	480	100	0		
*CHRYSLER	NEWPORT	1	216	100	0		
DATSUN	200SX	18	3815	90	0		
DATSUN	210	15	1400	83	2	0	11
DATSUN	280ZX	30	2295	94	1	0	3

Table 12: Stratification of Recoveries Prior to Settlement: Intact Recoveries During 1983  
(Payments Expressed in 1983 Dollars)

MAKE	MODEL	All Recoveries			Intact Recoveries		
		NUMBER	AVERAGE PAYMENT	PCT QF ALL RECOVERIES	NUMBER	AVERAGE PAYMENT	PCT OF ALL PRIOR RECOVERIES
DATSUN	310	3	4037	100	0		
DATSUN	510	0			0		
DATSUN	KING CAB	2	4548	100	0		
DATSUN	MAXIMA	15	3230	94	3	0	19
DATSUN	PULSAR	4	544	100	1	0	25
DATSUN	SENTRA	6	1930	86	0		
DATSUN	STANZA	5	767	83	1	0	17
*DODGE	ARIES	1	1113	100	0		
*DODGE	ARIES/CHALLENGER	2	2110	50	0		
DODGE	CHARGER/OMNI/SHELBY TURBO	3	922	100	1	0	33
*DODGE	COLT/600	4	780	100	1	0	25
*DODGE	COLT/COLT VISTA/DIPLOM	0			0		
*DODGE	DIPLOMAT	0			0		
DODGE	MIRADA	1	14042	100	0		
DODGE	RAM VAN	1	3049	100	0		
FIAT	SPIDER 2000	2	4438	100	0		
FIAT	X 1/9	1	7974	100	0		
FORD	ESCORT	21	2434	88	4	37	17
FORD	EXP 3 DR HTCHBK TURBO	6	4345	100	0		
FORD	FAIRMONT (FUTURA) 2 DR SDN	1	5003	100	0		
FORD	FAIRMONT (FUTURA) 4 DR SDN	1	1589	100	0		
FORD	GRANADA 2 DR SDN	1	1351	100	0		
FORD	GRANADA 4 DR SDN	1	9286	100	0		
FORD	GRANADA 4 DR SW	1	3109	100	0		
FORD	LTD 4 DR SDN	1	10515	100	0		
FORD	LTD 4 DR WAGON SQUIRE	1	720	100	0		
FORD	LTD 4 SEAT SW	1	490	100	0		
FORD	LTD S 4 DR HT	1	948	100	0		
*FORD	MUST 3 DR SDN HTBK/NTCHBK/GRANADA S	1	0	100	1	0	100
*FORD	MUSTANG & MUSTANG II 3 DR SDN HTBK	1	1444	100	0		
*FORD	THUNDERBIRD 2 DR HT	0			0		
GM OF CANADA	PONTIAC PARISIENNE BROUGHAM	1	14219	100	0		
GMC	INCOMPLETE	1	1344	50	0		
TOYOTA	TRUCK	4	7605	100	0		
HONDA	ACCORD	10	3480	83	1	0	8
HONDA	CIVIC 1500 HTCHBK	1	3346	100	0		
HONDA	CIVIC 4 DR SDN	5	632	100	1	0	20
HONDA	CIVIC SW	2	1926	100	1	0	50
HONDA	PRELUDE CPE	2	1419	67	1	0	33
ISUZU	PICKUP 4X2	0			0		
*JAGUAR	XJ6L	1	2308	100	0		
JAGUAR	XJS	1	21937	100	0		
JEEP	CHEROKEE MPV 2 DR WAGON/WT	0			0		
JEEP	WAGONEER MPV 4 DR WAGON	0			0		
LANCIA	BETA	0			0		
LANCIA	ZAGATO	1	49	100	0		
LINCOLN	CONTINENTAL 4 DR SDN MARK	3	1658	75	1	0	25
LINCOLN	LINCOLN 4 DR SDN	1	1646	100	0		
*MAZDA	626	16	2598	94	2	0	12
MAZDA	B2000 TRUCK	1	5878	100	0		
MAZDA	B2000/B2200 TRUCK	1	486	50	0		
*MAZDA	GLC	2	3973	67	0		

Table 12: Stratification of Recoveries Prior to Settlement: Intact Recoveries During 1983  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	All Recoveries			Intact Recoveries		PCT OF ALL PRIOR RECOVERIES
		NUMBER	AVERAGE PAYMENT	PCT OF ALL RECOVERIES	NUMBER	AVERAGE PAYMENT	
MAZDA	RX7	22	5499	92	1	0	4
MERCEDES BENZ	240D 2 DR SDN	1	3577	100	0		
*MERCEDES BENZ	300 DT 4 DR SDN	1	2252	33	0		
*MERCEDES BENZ	300SD 4 DR SDN	2	487	100	0		
*MERCEDES BENZ	380 SEC 2 DR CPE	0			0		
*MERCEDES BENZ	380SL 2 DR CPE	1	14081	100	0		
*MERCURY	CAPRI 3 DR HTCHK	4	1965	100	2	0	50
*MERCURY	CONDOR 2 DR HT XR-7	1	0	100	1	0	100
*MERCURY	COUGAR 2 DR SDN	1	3143	100	0		
MERCURY	LYNX	11	2386	92	2	0	17
MERCURY	MARQUIS BROUGHAM 4 DR SDN	1	10758	100	0		
MERCURY	TOPAZ 4 DR SDN GS	0			0		
MERCURY	ZEPHYR 4 DR SDN	0			0		
*MITSUBISHI	CORDIA/TREDIA	2	5822	100	0		
*OLDSMOBILE	98 REGENCY	13	3307	100	0		
*OLDSMOBILE	98 REGENCY BROUGHAM	6	5784	86	1	0	14
OLDSMOBILE	CUSTOM CRUISER	3	3063	100	1	0	33
OLDSMOBILE	CUTLASS CALAIS	11	3628	92	0		
OLDSMOBILE	CUTLASS CIERA	2	519	100	1	0	50
OLDSMOBILE	CUTLASS CIERA BROUGHAM	33	3049	89	3	15	8
OLDSMOBILE	CUTLASS CIERA LS	1	0	33	1	0	33
OLDSMOBILE	CUTLASS SDN	3	2978	100	1	0	33
+OLDSMOBILE	CUTLASS SUPREME	47	3026	96	3	0	6
*OLDSMOBILE	DELTA 88	2	4387	67	0		
*OLDSMOBILE	DELTA 88 ROYALE	12	3336	100	0		
OLDSMOBILE	DELTA ROYALE BROUGHAM	9	2097	100	1	0	11
OLDSMOBILE	OMEGA	2	6828	100	0		
OLDSMOBILE	OMEGA BROUGHAM	1	2870	100	0		
*OLDSMOBILE	TORONADO BROUGHAM	9	4103	90	0		
PEUGEAT	SDN	1	4946	100	0		
*PLYMOUTH	CARAVELLE	1	778	100	0		
PLYMOUTH	CHAMP	1	715	100	0		
PLYMOUTH	HORIZON & TC3 CUSTOM/TURISMO	2	239	100	1	0	50
*PLYMOUTH	RELIANT SP ED CUSTO	8	1970	89	2	0	22
PONTIAC	1000/CATALINA/PARISIENNE	1	0	100	1	0	100
PONTIAC	2000	0			0		
*PONTIAC	BONNEVILLE	4	1890	100	2	15	50
*PONTIAC	BONNEVILLE BROUGHAM	3	6364	75	0		
*PONTIAC	FIREBIRD T/A	3	2876	75	0		
*PONTIAC	FIREBIRD/FIREBIRD SE	0			0		
*PONTIAC	FIREBIRD/FIREBIRD SE/BONNEVILLE LE	9	2392	100	1	0	11
+PONTIAC	GRAN PRIX	16	4086	94	0		
+PONTIAC	GRAN PRIX BROUGHAM	9	1286	100	1	0	11
+PONTIAC	GRAN PRIX LJ & LE	27	2817	100	2	0	7
PONTIAC	GRAND LEMANS	0			0		
PONTIAC	LEMANS	1	0	100	1	0	100
PONTIAC	PHOENIX	4	1876	100	0		
*PORSCHE	911	2	2215	100	1	0	50
*PORSCHE	924 & 928	0			0		
PORSCHE	944	1	13936	100	0		
RENAULT	FUEGO 2 DR CPE	1	0	100	1	0	100
RENAULT	LECAR 4 DR HTCHK	1	6481	100	0		

Table 12: Stratification of Recoveries Prior to Settlement: Intact Recoveries During 1988  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	All Recoveries			Intact Recoveries		
		NUMBER	AVERAGE PAYMENT	PCT OF ALL RECOVERIES	NUMBER	AVERAGE PAYMENT	PCT OF ALL PRIOR RECOVERIES
SAAB	BASE SERIES	2	3035	100	0		
SAAB	TURBO SERIES	2	1947	100	0		
SUBARU	GL	9	1649	100	2	0	22
SUBARU	GLF	1	4584	100	0		
SUBARU	STANDARD	1	0	100	1	0	100
*TOYOTA	CAMRY	3	6371	100	0		
*TOYOTA	CELICA & SUPRA	25	4458	89	3	0	11
*TOYOTA	COROLLA	44	2835	98	5	11	11
TOYOTA	CORONA	3	3386	100	0		
TOYOTA	CRESSIDA	2	1756	100	1	0	50
*TOYOTA	MR2	1	69	100	1	69	100
*TOYOTA	STARLET	0			0		
TOYOTA	TERCEL	13	2841	100	1	0	8
TOYOTA	TRUCK	5	682	83	1	0	17
TRIUMPH	TR7/TR8	1	620	100	0		
*VOLKSWAGON	RABBIT CONV/CABRIOLET	2	10245	100	0		
*VOLKSWAGON	RABBIT GOLF	7	802	70	3	21	30
*VOLKSWAGON	SCIROCCO	2	6150	100	0		
VOLKSWAGON	VANAGON	1	153	100	0		
VOLVO	2 DR	3	7491	100	1	0	33
VOLVO	4 DR	5	1285	100	1	0	20
VOLVO	5 DR	1	3079	100	0		
TOTALS:		1012	3512	92	111	6	11

- Model subject to the Theft Prevention Standard in 1987 only.
- + Model subject to the Theft Prevention Standard in 1988 only.
- \* Model subject to the Theft Prevention Standard both in 1987 and 1988.

Table 19: Stratification of Recoveries Prior to Settlement: Intact Recoveries During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	All Recoveries			Intact Recoveries		
		NUMBER	AVERAGE PAYMENT	PCT OF ALL RECOVERIES	NUMBER	AVERAGE PAYMENT	PCT OF ALL PRIOR RECOVERIES
AUDI	4000	2	537	100	1	0	50
AUDI	5000 & SW	3	7069	100	1	0	33
*BMW	320I	8	4811	100	1	0	13
*BMW	528E	3	3631	100	0		0
*BMW	633CSI/533I	3	6009	100	0		0
-BMW	733I	0		0	0		0
BUICK	CENTURY ESTATE	2	230	67	1	0	50
BUICK	CENTURY LTD	9	3360	90	1	0	11
*BUICK	ELECTRA 225 & ESTATE	0		0	0		0
*BUICK	ELECTRA LTD	2	1987	100	0		0
*BUICK	ELECTRA PARK AVE	5	6718	83	1	0	20
*BUICK	LESABRE	5	2752	100	0		0
*BUICK	LESABRE ESTATE	0		0	0		0
*BUICK	LESABRE LTD & CUSTO	13	3020	87	2	47	15
*BUICK	REGAL	40	3445	98	2	0	5
*BUICK	REGAL LTD	27	3857	87	2	0	7
*BUICK	REGAL SPRT	2	2329	100	0		0
*BUICK	RIVIERA LUXURY	24	3192	92	0		0
BUICK	SKYHAWK	3	4338	100	0		0
BUICK	SKYHAWK LT	0		0	0		0
BUICK	SKYLARK	4	1097	100	2	0	50
BUICK	SKYLARK LTD	3	2004	100	1	0	33
CADILLAC	CIMARRON	5	5783	100	1	0	20
*CADILLAC	DEVILLE	57	6927	98	5	0	9
*CADILLAC	ELDORADO	33	5175	92	1	0	3
CADILLAC	FLEETWOOD BROUGHAM	15	6577	94	0		0
*CADILLAC	SEVILLE	3	18460	75	0		0
*CHEVROLET	CAMARO BERLINETTA	13	3301	100	0		0
*CHEVROLET	CAMARO SPRT CPE	19	2961	95	1	0	5
CHEVROLET	CAPRICE CLASSI	8	1798	89	0		0
CHEVROLET	CAVALIER	4	3077	100	0		0
CHEVROLET	CAVALIER CS	56	3602	93	5	17	9
CHEVROLET	CHEV. TRUCK	3	3632	100	1	0	33
CHEVROLET	CHEVETTE	3	2666	75	0		0
CHEVROLET	CHEVETTE SCOUTER	2	2206	100	1	0	50
CHEVROLET	CITATION II	3	3393	75	0		0
CHEVROLET	CITATION II CPE	1	469	100	0		0
CHEVROLET	CORVETTE	2	1429	67	0		0
CHEVROLET	IMPALA	0		0	0		0
CHEVROLET	WALDOU	08	4332	94	8	0	12
CHEVROLET	MONTE CARLO	7	3121	88	1	0	14
CHRYSLER	CORDOBA	1	0	100	1	0	100
*CHRYSLER	LASER/LASER XE/DAYTONA	1	4261	100	0		0
*CHRYSLER	LEBARON	8	3096	100	1	0	13
*CHRYSLER	NEW YORKER 5TH AVE	9	2045	100	3	0	33
*CHRYSLER	NEW YORKER/GRAN LEBARON	4	6085	100	0		0
DATSUN	200SX	14	2348	93	0		0
DATSUN	210	11	1719	85	3	0	27
DATSUN	280ZX	15	6959	83	1	0	7
DATSUN	300ZX	2	10000	100	0		0
DATSUN	310	1	1913	100	0		0

Table 13: Stratification of Recoveries Prior to Settlement: Intact Recoveries During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	All Recoveries			Intact Recoveries		
		NUMBER	AVERAGE PAYMENT	PCT OF ALL RECOVERIES	NUMBER	AVERAGE PAYMENT	PCT OF ALL PRIOR RECOVERIES
DATSUN	KING CAB	3	8770	100	0	0	
DATSUN	MAXIMA	33	4178	94	2	6	
DATSUN	PULSAR	5	1535	83	0	0	
DATSUN	SENTRA	18	2148	95	2	64	
DATSUN	STANZA	11	5334	100	0	0	
DATSUN	TRUCK REG. BED	1	5248	100	0	0	
*DODGE	400/600	2	0	100	2	100	
*DODGE	ARIES	1	0	50	1	100	
*DODGE	ARIES/CHALLENGER	5	1836	83	0	0	
DODGE	CHARGER/OMNI/SHELBY TURBO	4	2729	100	1	0	
*DODGE	COLT/600	2	0	100	2	100	
*DODGE	COLT/DAYTONA/DAYTONA TURB	1	0	100	1	100	
DODGE	MIRADA	1	8976	100	0	0	
DODGE	RAM 50 & ARROW	2	329	100	0	0	
DODGE	RAM CHARGER 4X4	0	0	0	0	0	
DODGE	RAM VAN	4	4502	100	0	0	
FORD	COUNTRY SQUIRE SW	1	1070	50	0	0	
FORD	ESCORT	44	2616	96	7	16	
FORD	EXP 3 DR HTCHBK TURBO	6	1926	100	0	0	
FORD	FAIRMONT (FUTURA) 4 DR SDN	4	857	100	2	50	
FORD	FAIRMONT (FUTURA) SW	2	5450	100	0	0	
FORD	GRANADA 4 DR SW	2	76	100	1	50	
FORD	LTD 4 DR SDN	1	535	100	0	0	
FORD	LTD 4 SEAT SW	0	0	0	0	0	
FORD	LTD CROWN VICTORIA 2 DR SDN	1	0	100	1	100	
FORD	LTD S 4 DR HT	1	0	100	0	0	
*FORD	MUST 3 DR SDN HTBK/NTCHBK/GRANADA S	1	0	100	1	100	
*FORD	MUSTANG & MUSTANG II 2 DR SDN	1	318	100	0	0	
*FORD	MUSTANG & MUSTANG II 2 DR SDN LX	0	0	0	0	0	
*FORD	MUSTANG & MUSTANG II 3 DR SDN HTBK	1	799	100	0	0	
*FORD	MUSTANG/GRANADA 2 DR SDN	2	1197	100	0	0	
FORD	RANGER 4X2 P/U	6	1139	100	0	0	
FORD	TEMPO 2 DR SDN GL	3	1017	100	0	0	
FORD	TEMPO/LASER	3	433	100	1	34	
*FORD	THUNDERBIRD 2 DR SDN	5	5443	100	0	0	
GM OF CANADA	PONTIAC PARISIENNE BROUGHAM	1	1235	100	0	0	
GMC	INCOMPLETE	1	2110	100	0	0	
GMC	MPV	1	834	100	0	0	
GMC	TRUCK	7	2346	70	1	14	
HONDA	ACCORD	27	3574	100	7	26	
HONDA	CIVIC 1300 HTCHBK	1	0	100	1	100	
HONDA	CIVIC 1500 HTCHBK	0	0	0	0	0	
HONDA	CIVIC 4 DR SDN	2	2318	100	0	0	
HONDA	CRX, HF, SI	1	1077	100	0	0	
HONDA	PRELUDE CPE	4	2399	100	1	0	
ISUZU	IMPULSE/PICKUP 4X4	0	0	0	0	0	
ISUZU	PICKUP 4X2	0	0	0	0	0	
*JAGUAR	XJ6L	2	33093	67	0	0	
JEEP	CHEROKEE MPV 2 DR WAGON/WT	0	0	0	0	0	
JEEP	CHEROKEE MPV 4 DR WAGON	1	14842	100	0	0	
JEEP	CJ-5 MPV 2 DR	1	0	100	0	0	
JEEP	WAGONEER MPV 4 DR WAGON	3	4351	100	0	0	

Table 13: Stratification of Recoveries Prior to Settlement: Intact Recoveries During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	All Recoveries			Intact Recoveries		
		NUMBER	AVERAGE PAYMENT	PCT OF ALL RECOVERIES	NUMBER	AVERAGE PAYMENT	PCT OF ALL PRIOR RECOVERIES
*LINCOLN	CONTINENTAL 4 DR SDN	3	7166	100	1	0	33
*LINCOLN	CONTINENTAL 4 DR SDN MARK	2	16721	100	0		0
LINCOLN	LINCOLN 4 DR SDN	0		0	0		0
*MAZDA	626	24	3222	86	1	54	4
MAZDA	B2000 TRUCK	1	283	100	0		0
MAZDA	B2000/B2200 TRUCK	0		0	0		0
*MAZDA	617	13	2623	93	1	0	8
MAZDA	RX7	45	5357	98	1	0	2
*MERCEDES BENZ	190D 4 DR SDN	0		0	0		0
MERCEDES BENZ	240D 2 DR SDN	1	142	100	0		0
*MERCEDES BENZ	300 DT 4 DR SDN	3	9621	100	1	0	33
*MERCEDES BENZ	300SD 4 DR SDN	6	7744	100	2	0	33
*MERCEDES BENZ	300 SEL 4 DR SDN	1	2338	100	0		0
*MERCEDES BENZ	380SL 2 DR CPE	0		0	0		0
*MERCURY	CAPRI 3 DR HTCHBK	4	4924	80	0		0
*MERCURY	COUGAR 2 DR HT XR-7	1	1141	100	0		0
*MERCURY	COUGAR 2 DR SDN	3	8241	100	0		0
*MERCURY	COUGAR 4 DR SDN	1	97	100	0		0
MERCURY	GRAND MARQUIS 2 DR SDN LS	1	0	100	0		0
MERCURY	LYNX	3	335	100	1	0	33
MERCURY	MARQUIS 4 DR SDN	1	10335	100	0		0
MERCURY	MARQUIS BROUGHAM 4 DR SDN	2	5565	100	0		0
MERCURY	ZETA HYR SPORTY CPE-7	1	8062	100	0		0
*MITSUBISHI	CORDIA/TREDIA	4	2323	100	1	67	25
*OLDSMOBILE	98 REGENCY	12	2622	100	1	0	8
*OLDSMOBILE	98 REGENCY BROUGHAM	6	3548	100	0		0
OLDSMOBILE	CUTLASS CALAIS	6	4959	100	0		0
OLDSMOBILE	CUTLASS CIERA BROUGHAM	33	3504	92	2	30	6
OLDSMOBILE	CUTLASS CIERA BROUGHAM/SUPR BROUGHAM	1	890	100	0		0
OLDSMOBILE	CUTLASS CIERA LS	5	3479	100	2	0	40
+OLDSMOBILE	CUTLASS SUPREME	55	3603	96	3	12	5
*OLDSMOBILE	DELTA 88	1	2521	100	0		0
*OLDSMOBILE	DELTA 88 ROYALE	24	2312	100	1	0	4
*OLDSMOBILE	DELTA ROYALE BROUGHAM	8	6393	100	0		0
OLDSMOBILE	FIRENZA	0		0	0		0
OLDSMOBILE	FIRENZA BROUGHAM	2	1060	100	0		0
OLDSMOBILE	OMEGA BROUGHAM	2	5333	67	0		0
*OLDSMOBILE	TORONADO BROUGHAM	9	6301	100	0		0
PEUGEAT	SDN	4	2416	80	0		0
*PLYMOUTH	CARAVELLE	0		0	0		0
PLYMOUTH	CHAMP	1	4737	100	0		0
PLYMOUTH	COLT EDL PREMIER	2	1462	100	0		0
*PLYMOUTH	CONQUEST	1	15054	100	0		0
*PLYMOUTH	GRAN FURY/CARAVELLE	1	702	100	0		0
PLYMOUTH	HORIZON & TC3 CUSTOM/TURISMO	2	3138	100	0		0
*PLYMOUTH	RELIANT SP ED CUSTO	8	2059	100	3	0	38
PLYMOUTH	SAPPORO	2	1061	100	0		0
PLYMOUTH	VOYAGER WAGON/VAN	1	1033	100	0		0
PONTIAC	1000/CATALINA/PARISIENNE	3	2873	100	0		0
PONTIAC	2000	4	1781	80	1	0	25
PONTIAC	6000 STE	1	17153	100	0		0
*PONTIAC	BONNEVILLE	4	2318	100	1	0	25

Table 13: Stratification of Recoveries Prior to Settlement: Intact Recoveries During 1984  
(Payments Expressed in 1988 Dollars)

MAKE	MODEL	All Recoveries			Intact Recoveries		
		NUMBER	AVERAGE PAYMENT	PCT OF ALL RECOVERIES	NUMBER	AVERAGE PAYMENT	PCT OF ALL PRIOR RECOVERIES
*PONTIAC	BONNEVILLE BROUGHAM	1	4657	100	0	0	
*PONTIAC	FIERO 2M4 & SE CPE	2	5472	100	0	0	
*PONTIAC	FIREBIRD T/A	13	4299	100	0	0	
*PONTIAC	FIREBIRD/FIREBIRD SE	6	5156	86	0	0	
*PONTIAC	FIREBIRD/FIREBIRD SE/BONNEVILLE LE	18	4462	86	1	6	
+PONTIAC	GRAN PRIX	30	2428	97	1	3	
+PONTIAC	GRAN PRIX BROUGHAM	4	2491	100	0	0	
+PONTIAC	GRAN PRIX LJ & LE	8	896	73	0	0	
PONTIAC	PHOENIX SE/PARISIENNE BROUGHAM	1	10034	100	0	0	
PONTIAC	PONTIAC 6000	3	1597	100	1	33	
PONTIAC	PONTIAC 6000 LE	2	7921	100	0	0	
*PORSCH	911	0	0	0	0	0	
*PORSCH	924 & 928	1	7866	100	0	0	
PORSCH	944	1	6388	100	0	0	
RENAULT	18I 4 DR SDN	3	1082	100	1	33	
RENAULT	ALLIANCE 2 DR SDN	0	0	0	0	0	
RENAULT	ALLIANCE 4 DR SDN	1	0	100	1	100	
RENAULT	FUEGO 2 DR CPE	4	3528	80	1	25	
RENAULT	LECAR 2 DR HTCHBK	0	0	0	0	0	
*SAAB	900	1	1806	100	0	0	
SAAB	900S	1	0	100	1	100	
SAAB	BASE SERIES	0	0	0	0	0	
SAAB	TURBO SERIES	1	4818	100	0	0	
SUBARU	GL	11	1033	100	2	18	
SUBARU	TURBO RX	0	0	0	0	0	
*TOYOTA	CAMRY	13	2391	93	2	15	
TOYOTA	CARGO VAN	2	1192	67	1	50	
*TOYOTA	CELICA & SUPRA	47	5467	96	4	9	
*TOYOTA	COROLLA	49	2269	92	8	16	
TOYOTA	CRESSIDA	13	3186	100	1	8	
*TOYOTA	MR2	1	738	100	0	0	
*TOYOTA	STARLET	2	3081	100	0	0	
TOYOTA	TERCEL	18	1738	95	6	33	
GMC	TRUCK	11	2039	85	1	9	
VOLKSWAGON	JETTA	4	2683	67	0	0	
VOLKSWAGON	QUANTUM 2 DR/4 DR	0	0	0	0	0	
*VOLKSWAGON	RABBIT CONV/CABRIOLET	0	0	0	0	0	
*VOLKSWAGON	RABBIT GOLF	10	4079	91	1	10	
*VOLKSWAGON	SCIROCCO	2	5557	100	0	0	
VOLVO	2 DR	0	0	0	0	0	
VOLVO	4 DR	5	2828	83	2	40	
VOLVO	5 DR	0	0	0	0	0	
TOTALS:		1362	3794	93	140	10	

- Model subject to the Theft Prevention Standard in 1987 only.
- + Model subject to the Theft Prevention Standard in 1988 only.
- \* Model subject to the Theft Prevention Standard both in 1987 and 1988.

involving damaged vehicles recovered prior to settlement increased faster than the inflation rate between 1983 and 1984.

## 2.2.6 Examination of Distribution of Theft Losses

In this investigation, theft claims were stratified on the basis of their payment amount. For purposes of this stratification, dollar ranges were constructed in \$1,000 increments from 0 to \$15,000. A final range of claims with values exceeding \$15,000 was also constructed. The number of theft claims with payouts in each cost range was identified by model for the 1983 and 1984 samples. These model specific distributions are represented in Tables 15 and 16 respectively.

The name associated with each model number shown in these tables is identified in Table 14. A total of 234 unique model names are identified in this table. Some of these models were produced in only one of the two calendar years. These models are included in Tables 15 and 16 and appear with some claims in one table and zero claims in the other.

Tables 15 and 16 also provide the distribution of claims by dollar value for each sample in aggregate. This is shown at the bottom of each table. These aggregate sample distributions are represented graphically as bar charts in Figures 1 and 2.

Figure 1 indicates the proportion of 1983 and 1984 theft claims in each cost range. As shown in this figure, the distributions for both samples are similar. The number of claims with payments between \$1-1,000 exceeded the number of claims in any other cost range. This range accounted for almost 18% of the claims in the 1983 sample and 17% of the claims in the 1984 sample. Over 8% of the 1983 claims and over 10% of the 1984 claims exhibited costs within the deductible value of the policy and resulted in zero payments.

Figure 2 presents the cumulative cost distribution for the 1983 and 1984 samples. This figure indicates that more than 50% of the claims in each sample exhibited payouts under \$4,000 expressed in 1988 dollars. Ninety percent of the claims in each sample exhibited payouts under \$13,000. The average payment for each sample was shown in Tables 4 and 5 to be \$5,597 for 1983 and \$5,750 for 1984. Approximately 60% of the claims in each sample exhibit claim costs below the average value while 40% of the claims in each sample exhibit claim costs above the average value. Thus as might be expected, while there are many more claims with relatively low-payouts, a smaller number of expensive claims causes the average theft claim cost to increase.

Table 14: Make/Model Identification Codes  
for Payout Distribution Tables

MAKE	MODEL	NUMBER
AMERICAN MOTORS	CONCORD	1
AMERICAN MOTORS	EAGLE 30	2
AMERICAN MOTORS	SPIRIT	3
AUDI	4000	4
AUDI	4000 CPE OR QUATTRO 4 WD	5
AUDI	5000 & SW	6
BMW	320I	7
BMW	528E	8
BMW	528I	9
BMW	633CSI/533I	10
BMW	733I	11
BUICK	CENTURY ESTATE	12
BUICK	CENTURY LTD	13
BUICK	ELECTRA 225 & ESTATE	14
BUICK	ELECTRA LTD	15
BUICK	ELECTRA PARK AVE	16
BUICK	LESABRE	17
BUICK	LESABRE ESTATE	18
BUICK	LESABRE LTD & CUSTO	19
BUICK	REGAL	20
BUICK	REGAL LTD	21
BUICK	REGAL SPRT	22
BUICK	RIVIERA LUXURY	23
BUICK	SKYHAWK	24
BUICK	SKYHAWK LT	25
BUICK	SKYLARK	26
BUICK	SKYLARK LTD	27
CADILLAC	CIMARRON	28
CADILLAC	DEVILLE	29
CADILLAC	ELDORADO	30
CADILLAC	FLEETWOOD BROUGHAM	31
CADILLAC	SEVILLE	32
CHEVROLET	CAMARO BERLINETTA	33
CHEVROLET	CAMARO SPRT CPE	34
CHEVROLET	CAPRICE CLASSI	35
CHEVROLET	CAVALIER	36
CHEVROLET	CAVALIER 10	37
CHEVROLET	CAVALIER CS	38
CHEVROLET	CHEV. TRUCK	39
CHEVROLET	CHEVETTE	40
CHEVROLET	CHEVETTE SCOOTER	41
CHEVROLET	CITATION II	42
CHEVROLET	CITATION II CPE	43
CHEVROLET	CORVETTE	44
CHEVROLET	IMPALA	45
CHEVROLET	MALIBU	46
CHEVROLET	MONTE CARLO	47
CHRYSLER	CORDOBA	48
CHRYSLER	LASER/LASER XE/DAYTONA	49
CHRYSLER	LEBARON	50
CHRYSLER	NEW YORKER 5TH AVE	51
CHRYSLER	NEW YORKER/GRAN LEBARON	52
CHRYSLER	NEWPORT	53

Table 14: Make/Model Identification Codes  
for Payout Distribution Tables

MAKE	MODEL	NUMBER
DATSUN	200SX	54
DATSUN	210	55
DATSUN	280ZX	56
DATSUN	300ZX	57
DATSUN	310	58
DATSUN	510	59
DATSUN	KING CAB	60
DATSUN	MAXIMA	61
DATSUN	PULSAR	62
DATSUN	SENTRA	63
DATSUN	STANZA	64
DATSUN	TRUCK REG. BED	65
DODGE	400/600	66
DODGE	ARIES	67
DODGE	ARIES/CHALLENGER	68
DODGE	CHARGER/OMNI/SHELBY TURBO	69
DODGE	COLT/600	70
DODGE	COLT/COLT VISTA/DIPLOM	71
DODGE	COLT/DAYTONA/DAYTONA TURB	72
DODGE	DIPLOMAT	73
DODGE	MIRADA	74
DODGE	RAM 50 & ARROW	75
DODGE	RAM CHARGER 4X4	76
DODGE	RAM VAN	77
FIAT	SPIDER 2000	78
FIAT	X 1/9	79
FORD	COUNTRY SQUIRE SW	80
FORD	ESCORT	81
FORD	EXP 3 DR HTCHBK TURBO	82
FORD	FAIRMONT (FUTURA) 2 DR SDN	83
FORD	FAIRMONT (FUTURA) 4 DR SDN	84
FORD	FAIRMONT (FUTURA) SW	85
FORD	GRANADA 2 DR SDN	86
FORD	GRANADA 4 DR SDN	87
FORD	GRANADA 4 DR SW	88
FORD	LTD 4 DR SDN	89
FORD	LTD 4 DR WAGON SQUIRE	90
FORD	LTD 4 SEAT SW	91
FORD	LTD CROWN VICTORIA 2 DR SDN	92
FORD	LTD S 4 DR HT	93
FORD	MUST 3 DR SDN HTBK/NTCHBK/GRANADA S	94
FORD	MUSTANG & MUSTANG II 2 DR SDN	95
FORD	MUSTANG & MUSTANG II 2 DR SDN LX	96
FORD	MUSTANG & MUSTANG II 3 DR SDN HTBK	97
FORD	MUSTANG/GRANADA 2 DR SDN	98
FORD	RANGER 4X2 P/U	99
FORD	TEMPO 2 DR SDN GL	100
FORD	TEMPO/LASER	101
FORD	THUNDERBIRD 2 DR HT	102
FORD	THUNDERBIRD 2 DR SDN	103
GM OF CANADA	PONTIAC PARISIENNE BROUGHAM	104
GMC	INCOMPLETE	105
GMC	MFV	106
GMC	TRUCK	107

Table 14: Make/Model Identification Codes  
for Payout Distribution Tables

MAKE	MODEL	NUMBER
HONDA	ACCORD	108
HONDA	CIVIC 1300 HTCHBK	109
HONDA	CIVIC 1500 HTCHBK	110
HONDA	CIVIC 4 DR SDN	111
HONDA	CIVIC SW	112
HONDA	CIX, HF, SI	113
HONDA	PRELUDE CPE	114
ISUZU	IMPULSE/PICKUP 4X4	115
ISUZU	PICKUP 4X2	116
JAGUAR	XJ6L	117
JAGUAR	XJS	118
JEEP	CHEROKEE MPV 2 DR WAGON/WT	119
JEEP	CJ-5 MPV 2 DR	120
JEEP	WAGONEER MPV 4 DR WAGON	121
LANCIA	BETA	122
LANCIA	ZAGATO	123
LINCOLN	CONTINENTAL 4 DR SDN	124
LINCOLN	CONTINENTAL 4 DR SDN MARK	125
LINCOLN	LINCOLN 4 DR SDN	126
MAZDA	626	127
MAZDA	B2000 TRUCK	128
MAZDA	B2000/B2200 TRUCK	129
MAZDA	GLC	130
MAZDA	RX7	131
MERCEDES BENZ	190D 4 DR SDN	132
MERCEDES BENZ	240D 2 DR SDN	133
MERCEDES BENZ	300 DT 4 DR SDN	134
MERCEDES BENZ	300SD 4 DR SDN	135
MERCEDES BENZ	380 SEC 2 DR CPE	136
MERCEDES BENZ	380 SEL 4 DR SDN	137
MERCEDES BENZ	380SL 2 DR CPE	138
MERCURY	CAPRI 3 DR HTCHBK	139
MERCURY	COUGAR 2 DR HT XR-7	140
MERCURY	COUGAR 2 DR SDN	141
MERCURY	COUGAR 4 DR SDN	142
MERCURY	GRAND MARQUIS 2 DR SDN LS	143
MERCURY	LYNX	144
MERCURY	MARQUIS 4 DR SDN	145
MERCURY	MARQUIS BROUGHAM 4 DR SDN	146
MERCURY	TOPAZ 4 DR SDN GS	147
MERCURY	ZEPHYR 4 DR SDN	148
MERCURY	ZEPHYR SPORTY CPE-7	149
MINIBUSHI	CORDIA/TREDIA	150
OLDSMOBILE	98 REGENCY	151
OLDSMOBILE	98 REGENCY BROUGHAM	152
OLDSMOBILE	CUSTOM CRUISER	153
OLDSMOBILE	CUTLASS CALAIS	154
OLDSMOBILE	CUTLASS CIERA	155
OLDSMOBILE	CUTLASS CIERA BROUGHAM	156
OLDSMOBILE	CUTLASS CIERA BROUGHAM/SUPR BROUGHAM	157
OLDSMOBILE	CUTLASS CIERA LS	158
OLDSMOBILE	CUTLASS SDN	159
OLDSMOBILE	CUTLASS SUPREME	160
OLDSMOBILE	DELTA 88	161

Table 14: Make/Model Identification Codes  
for Payout Distribution Tables

MAKE	MODEL	NUMBER
OLDSMOBILE	DELTA 88 ROYALE	162
OLDSMOBILE	DELTA ROYALE BROUGHAM	163
OLDSMOBILE	FIRENZA	164
OLDSMOBILE	FIRENZA BROUGHAM	165
OLDSMOBILE	OMEGA	166
OLDSMOBILE	OMEGA BROUGHAM	167
OLDSMOBILE	TORNADO BROUGHAM	168
PEUGEAT	SDN	169
PLYMOUTH	CARAVELLE	170
PLYMOUTH	CHAMP	171
PLYMOUTH	COLT EDL PREMIER	172
PLYMOUTH	CONQUEST	173
PLYMOUTH	GRAN FURY/CARAVELLE	174
PLYMOUTH	HORIZON & TC3 CUSTOM/TURISMO	175
PLYMOUTH	RELIANT SP ED CUSTO	176
PLYMOUTH	SAPPORO	177
PLYMOUTH	VOYAGER WAGON/VAN	178
PONTIAC	1000/CATALINA/PARISIENNE	179
PONTIAC	2000	180
PONTIAC	BONNEVILLE	181
PONTIAC	BONNEVILLE BROUGHAM	182
PONTIAC	FIERO 2M4 & SE CPE	183
PONTIAC	FIREBIRD T/A	184
PONTIAC	FIREBIRD/FIREBIRD SE	185
PONTIAC	FIREBIRD/FIREBIRD SE/BONNEVILLE LE	186
PONTIAC	GRAN PRIX	187
PONTIAC	GRAN PRIX BROUGHAM	188
PONTIAC	GRAN PRIX LJ & LE	189
PONTIAC	GRAND LEMANS	190
PONTIAC	LEMANS	191
PONTIAC	PHOENIX	192
PONTIAC	PHOENIX SE/PARISIENNE BROUGHAM	193
PONTIAC	PONTIAC 6000	194
PONTIAC	PONTIAC 6000 LE	195
PONTIAC	6000 STE	196
PORSCHE	911	197
PORSCHE	924 & 928	198
PORSCHE	944	199
RENAULT	181 4 DR SDN	200
RENAULT	ALLIANCE 2 DR SDN	201
RENAULT	ALLIANCE 4 DR SDN	202
RENAULT	FUEGO 2 DR CPE	203
RENAULT	LECAR 2 DR HTCHBK	204
RENAULT	LECAR 4 DR HTCHBK	205
SAAB	900	206
SAAB	900S	207
SAAB	BASE SERIES	208
SAAB	TURBO SERIES	209
SUBARU	GL	210
SUBARU	GLF	211
SUBARU	STANDARD	212
SUBARU	TURBO RX	213
TOYOTA	CAMRY	214
TOYOTA	CARGO VAN	215

Table 14: Make/Model Identification Codes  
for Payout Distribution Tables

MAKE	MODEL	NUMBER
TOYOTA	CELICA & SUPRA	216
TOYOTA	COROLLA	217
TOYOTA	CORONA	218
TOYOTA	CRESSIDA	219
TOYOTA	MR2	220
TOYOTA	STARLET	221
TOYOTA	TERCEL	222
TOYOTA	TRUCK	223
TRIUMPH	TR7/TR8	224
VOLKSWAGON	JETTA	225
VOLKSWAGON	QUANTUM 2 DR/4 DR	226
VOLKSWAGON	RABBIT CONV/CABRIOLET	227
VOLKSWAGON	RABBIT GOLF	228
VOLKSWAGON	SCIROCCO	229
VOLKSWAGON	VANAGON	230
VOLVO	2 DR	231
VOLVO	4 DR	232
VOLVO	5 DR	233
JEEP	CHEROKEE MPV 4 DR WAGON	234

Table 15: Distribution of Theft Losses by Dollar Values (EXPRESSED IN 1988 DOLLARS) During 1983

MAKE/ MODEL	0	1- 1000	1001- 2000	2001- 3000	3001- 4000	4001- 5000	5001- 6000	6001- 7000	7001- 8000	8001- 9000	9001- 10000	10001- 11000	11001- 12000	12001- 13000	13001- 14000	14001- 15000	TOTAL
1					1												1
2		1							1			1					3
3								1									1
4					1												1
* 5																1	1
6			2		1								1				6
* 7	2		1	1	1										2	2	13
* 8	2		2														2
* 9																	1
10																	0
-11						1											1
12	2		1			2					1						6
13		2		2	1					1	1						7
*14																	0
*15		1	3						1								5
*16		3		1	3										1	3	11
*17	0		1	1							1						3
*18					1												1
*19		3	2				1					1	1	1			9
+20	0	10	5	3	8	1	2			6	2	3	1	2	1		44
+21	3	10	8	5	2	1	2			3	1	1	2				38
+22				1													1
23	0	7	7	2	1	1	2							2	3	1	5
24		1															1
25																	0
26	1	1						1	1								4
27			1														1
28		1		1	1				1				1				5
*29	3	3	3	4	3	10	3	2	3	1	2	1	2	3	2		14
*30	1	8	2	2	1	5		3	3	3	1	1	1		1	2	13
31	2			1	3	2		1	1	1						2	4
*32	1		2	1	1				1		1						9
*33		1		3					1		1		1				7
*34	3	5	2		1		1			3		1	1	1	1		19
35	1	2	2	1	3					2	1	2	2				16
36	0	1		1					1	1	1				1		6
37								1									1
38	3	1	1					2									1
39		2	1	1													1
40	3	1	1	1			4			1		1					12
41	1		1														2
42	2	5	2	1			1	1									12
43																	0
44	1	1	1								1		2				4
45	1	2		2	1	2			3								11
46	4	7	7	5	3	3	1	7	9	5	3	3	5	1	3	2	3
47	2	3	1	2	1		1		3	5	3	1					22
48		1	1							1							3
49																	0
*50	1	2	1														4

Table 15: Distribution of Theft Losses by Dollar Values (EXPRESSED IN 1968 DOLLARS) During 1968

MAKE/ MODEL	0	1- 1000	1001- 2000	2001- 3000	3001- 4000	4001- 5000	5001- 6000	6001- 7000	7001- 8000	8001- 9000	9001- 10000	10001- 11000	11001- 12000	12001- 13000	13001- 14000	14001- 15000	15000	TOTAL
*51	1		1			1		1	1						1		1	7
*52		1																1
*53		1																1
54	1	4	4	1	4			1	1	1	3	1	3					24
55	2	6	3	1	2	4	2	1		1								22
56	2	12	5	2	3	4	1	1	1							1	6	38
57																		0
58		1				1			1									3
59									1									1
60						2				2	1							5
61	3	5		1	2		2								4	1		18
62	1	2	1															4
63	0	4		1					1	3	1							10
64	1	2	2								1							6
65																		0
66																		0
*67	0		1															1
*68		1			1				1	2	1			1		1		8
69	1		2															3
*70	1	1	2				1											5
*71		1																1
72																		0
*73									1									1
74																1		1
75																		0
76																		0
77					1					1				1				3
78	0	1								1	1							3
79									2									2
80																		0
81	4	7	4	1		3	3	1	2	2	3							30
82		2			1	0		4	1									8
83							1											1
84			1															1
85	1																	1
86			1															1
87											1							1
88					1													1
89													1					1
90		1																1
91		1																1
92																		0
93		1				1												2
*94	1																	1
*95																		0
96																		0
97			1															1
98																		0
99																		0
100																		0

Table 15: Distribution of Theft Losses by Dollar Values (EXPRESSED IN 1988 DOLLARS) During 1983

MAKE/ MODEL	0	1- 1000	1001- 2000	2001- 3000	3001- 4000	4001- 5000	5001- 6000	6001- 7000	7001- 8000	8001- 9000	9001- 10000	10001- 11000	11001- 12000	12001- 13000	13001- 14000	14001- 15000	15000	TOTAL
101																		0
*102	0													1				1
103																		0
104																1		1
105			1										1					2
106																		0
107					1					2	1							4
108	1		2	2	1	1	2	1		4	1	1	3			1		20
109	1																	1
110					1													1
111	2	2	2															6
112	1				1													2
113																		0
114	1			1						1								3
115																		0
116								1										1
*117				1														1
118																	1	1
119														1				1
120																		0
121																	1	1
122											1							1
123		1												1				2
124																		0
125	1			2													1	4
126			1															1
*127	2	5	5	1						3	1	1						18
128							1		1									2
129		1										1						2
*130		1							2	1								4
131	1	3	5	2	1	2	2	1			1		3	2	4		3	30
132																		0
133					1												1	2
*134				1													3	4
*135	0	2																2
*136																	1	1
137																		0
*138																1		1
*139	2		1					3	2				1					9
*140	1																	1
*141					1													1
142																		0
144																		0
*145	2	2	4				3	2	3									16
146																		0
147											1							1
148													1					1
149						1												1
150																		0
*151	1												1					2

Table 15: Distribution of Theft Losses by Dollar Values (EXPRESSED IN 1988 DOLLARS) During 1983

MAKE/ MODEL	0	1- 1000	1001- 2000	2001- 3000	3001- 4000	4001- 5000	5001- 6000	6001- 7000	7001- 8000	8001- 9000	9001- 10000	10001- 11000	11001- 12000	12001- 13000	13001- 14000	14001- 15000	15000	TOTAL
*152		2	4	2	1	2				1		1		1	1	1	1	17
*153	1	1			1	1							1			1	1	7
154	1					2					1							4
155		5	2		2						2						1	12
156	1		1															2
157	2	12	6	5	5			1	1	3	3	2		2		2		44
158																		0
159	1	1									1							3
160	1		1						1									3
+161	4	12	8	6	5	4	1	1	2	11	6	5	4					69
*162		1			1	1						1						4
*163	0	3	2	3	1	1				1	2	1	2		1			17
164	1	4	2		1						1		1					10
165																		0
166	1																	1
167	1		0					1	1	1								4
168				1														1
*169		3	1	2					1			1		1	1		1	11
170						1										1	2	4
171		1							1									2
172		1							1									2
173																		0
174																		0
175																		0
176	1	1				1												3
*177	2	1	3	1	1				1									9
178																		0
179																		0
180	1																	1
181									1									1
*182	1	2							1									5
*183			1						2		1	1						5
184																		0
*185			2				1				1							5
*186													1	2				3
*187	1	3	2		1	1			1	1	2	2						14
+188		3	5	4			1		0	1		1	1	1	2			19
+189	1	3	4		1					1								10
+190	4	3	9	1				1	1	2	1	1		1				30
191									1	1								2
192	1							1										2
193	1	1	1				1											4
194																		0
195																		0
196																		0
197																		0
*198	1					1												2
*199	1																	1
200															1			1
201																		0

Table 15: Distribution of Theft Losses by Dollar Values (EXPRESSED IN 1988 DOLLARS) During 1983

MAKE/ MODEL	0	1- 1000	1001- 2000	2001- 3000	3001- 4000	4001- 5000	5001- 6000	6001- 7000	7001- 8000	8001- 9000	9001- 10000	10001- 11000	11001- 12000	12001- 13000	13001- 14000	14001- 15000	15000	TOTAL
202																		0
203																		0
204	1										1							2
205																		0
206								1										1
207																		0
208																		0
209				1	1													2
210			1	1									1					3
211	2	3	3				1				1	1						11
212						1												1
213	1																	1
214																		0
*215					1				1	1								3
216																		0
*217	4	5		5	3	1	2	1		2		5	2	3	2	2	0	37
*218	5	13	4	9	2	1	2	5	5	11		2						59
219			2						1									3
220	1				1								1	1			1	5
*221	1	1																2
*222							2											2
223	2	2	5	1	1			3	2	2								18
224	1	2	2				1		1			1						6
225		1																1
226																		0
227																		0
*228										1			1					2
*229	2	3	1		1	1	1	2	1	1	1							14
*230		1											1					2
231		1																1
232	1											1	1					3
233	1	2	1	1									1				1	7
234					1													1
235																		0
TOTS:	122	258	183	102	91	67	52	56	71	98	63	46	49	31	34	25	101	1449

- Model subject to the Theft Prevention Standard in 1987 only.

+ Model subject to the Theft Prevention Standard in 1988 only.

\* Models subject to the Theft Prevention Standard both in 1987 and 1988.

Table 6: Distribution of Theft Losses by Dollar Values (Expressed in 1988 Dollars) During 1994.

MAKE/ MODEL	0- 1000	1001- 2000	2001- 3000	3001- 4000	4001- 5000	5001- 6000	6001- 7000	7001- 8000	8001- 9000	9001- 10000	10001- 11000	11001- 12000	12001- 13000	13001- 14000	14001- 15000	15000	TOTAL
1																	0
2																	0
3																	0
4	1		1														2
* 5																	0
6	1			1												2	4
* 7	1	1		2	1	1					1			1	2	2	12
* 8				1	1	1										2	5
* 9																	0
*10				2										1		2	5
-11					1											1	2
12	1	1									1						3
13	1	1	2	3				1			1	1					10
*14														1			1
*15		1			1												2
*16	1			1				1		1	1					2	7
*17	1	1	2								1	2		1			8
*18				1													1
*19	1	5	1	3	1						2	1			1		15
+20	3	8	9	5	5	2		1	2	4	6	4	3		1		53
+21	1	11	2	3	3		1	1	1		4	6	5	1	1	1	41
+22		1				1											2
*23	1	2	5	9	1	4	2	1	1	1			1	1		3	32
24	0				1	1	1										3
25										1							1
26	1	1	1		1			1									5
27	1	1					1										3
28	1			1				1	1	1		2					7
*29	6	3	4	3	9	7	3	3	3	1	3	1	1		2	1	21
*30	2	8	4	3	3	2	2	3	1	2	1		1				12
31	0		1	2	4	2	1	1	1			1		1		2	18
*32	1								1								7
*33	0	3	4	1	1	1		1	1		1	2					15
*34	2	5	4	3	2		2	1			1			3			23
35	1	4	1	1	2		1				1						11
36	1	1	1								3	4	1				11
37																	0
38	5	18	9	6	6	2	6	1	3	1	2	2	5	4	4	1	3
39	1			1						1							1
40	2			1		1	1										5
41	1				1												2
42	0		1	1			1	2		1							6
43		1															1
44		1		1												2	4
45										1							1
46	16	16	9	5	3	6	2	1	6	4	4	10	11	5	1	3	3
47	1	1	2	1				1		6	2						14
48	1																1
+49						1											1
*50	3	2	1		0	1					1	1		1	1	1	12
*51	3		2	2	1				1								1
*52		1			1		1								1		4
*53																	0



Table 16: Distribution of Theft Losses by Dollar Values (Expressed in 1988 Dollars) During 1984.

MAKE/ MODEL	0	1- 1000	1001- 2000	2001- 3000	3001- 4000	4001- 5000	5001- 6000	6001- 7000	7001- 8000	8001- 9000	9001- 10000	10001- 11000	11001- 12000	12001- 13000	13001- 14000	14001- 15000	15000	TOTAL
107	2	1	3		1	1			1		2	1	1			1		14
108	7	2	3	3	2	2	3	1			3	5	1	1		1		34
109	1																	1
110	0						1	1			1							3
111		1				1			2	2								6
112																		0
113			1															1
114	1	1		1			1						2	2				8
115											1							1
116							1											1
*117																	4	4
118																		0
119															2		2	4
120	1																	1
121			1			1		1								1	1	5
122																		0
123																		0
*124	1		1														1	3
*125							1										3	4
126																	1	1
*127	1	6	1	6	5	1	2		3	6	2	1	2		1			37
128		1					1						2					2
129									1									1
*130	2	4		3	2	1	2	2		1		1						18
131	2	11	4	3	5	5	3	2		1	2	1	1	5	5	2	3	55
*132																		1
133		1																1
*134	1	1																2
*135	3	1						1										2
*136																		0
*137				1														1
*138																		1
*139	0	1		1			1			1			1					5
*140			1															1
*141				1							1	2						4
*142		1																1
143	1																	1
144	2	2						1										5
145	1										1		1	1				4
146	1											1						2
147																		0
148																		0
149	0									1								1
*150		2		1				1										4
*151	2	3	2	2	1		2	1									1	14
*152		4				1							1			1		7
153																		0
154		2		1		1					1		1	1				7
155																		0
156	1	12	3	5	2	1	2	2		1	5	2	1	1	3	2		43
157		1											1					2
158	1		1	1	1					1			1					6
159																		0

Table 16: Distribution of Theft Losses by Dollar Values (Expressed in 1988 Dollars) During 1984.

MAKE/ MODEL	0	1- 1000	1001- 2000	2001- 3000	3001- 4000	4001- 5000	5001- 6000	6001- 7000	7001- 8000	8001- 9000	9001- 10000	10001- 11000	11001- 12000	12001- 13000	13001- 14000	14001- 15000	15000	TOTAL
+160	4	16	7	8	2	3	5	1	1	11	8	5	8	2	1			82
*161				1								1	1					3
*162	2	6	7	3	2	1	1	1				1	1		2			27
*163		1	1		1	1	1				1			1	1			8
164									1									1
165		1	1															2
166	1																	1
167					1			2										3
*168		1		2	1		1	1		1	1				1	1	1	11
169		1	1	1			1										3	7
*170					1													1
171						1	1											2
172	1	1		1														3
*173																	0	0
*174		1																1
175		1					1											2
*176	5			2	1			2										10
177		2	1								1							4
178			1															1
179			1	1	1			1										4
180	1	1		1		1		1										5
*181	2		1	1			1			1								6
*182					1					1		1						3
*183							2											2
*184	1	3	1	1		1	1		1	1		1	1	2	1			15
*185	0		1	2	1			2				1			1			8
*186	3	3	3	3	1	3				1	3	4	3	2				29
+187	5	7	6	7	3	4			1		4		2					39
+188		2	1							1	1							5
+189	1	8	2								1	1	2					15
190																		0
191																		0
192																		0
193												1						1
194	1			2														3
195					1					1	1			1				4
196																	1	1
*197																	1	1
*198								1									1	2
199								1										1
200	1		1	1														3
201										1								1
202	1																	1
203	2							1	1	1			2					7
204					1		1											2
205																		0
*206			0													1		1
207	1																	1
208														1				1
209							1											1
210	2	5	3	1		1												12
211																		0
212																		0

Table 16: Distribution of Theft Losses by Dollar Values (Expressed in 1986 Dollars) During 1984.

MAKE/ MODEL	0	1- 1000	1001- 2000	2001- 3000	3001- 4000	4001- 5000	5001- 6000	6001- 7000	7001- 8000	8001- 9000	9001- 10000	10001- 11000	11001- 12000	12001- 13000	13001- 14000	14001- 15000	15000	TOTAL
213										1								1
*214	3	5	1	2	1	1								2	1		1	17
215	1			1														3
*216	3	8	4	5	5	3		1	4	2	7	4	2	4	4	3	5	64
*217	12	14	6	7	4	1	1	2	7	6	5	1	1					67
218																		0
219	2	4	2	1	1	3									1		4	18
*220		1																1
*221			1			1		1										3
222	5	5	2	2	4			4	2	1								25
223	2	2	3	3				1	2		3			1		1		18
224																		0
225		3									2		1					6
226											1							1
*227															1		1	2
*228	1	2		1	3			1	1	1	2	2	1					15
*229		1										2						3
230																		0
231														1				1
232	6	4	1												1	2	3	11
233															1			1
234																1		1
TOTS:	198	327	190	170	115	95	77	62	61	80	97	98	74	50	48	37	127	1904

- Model subject to the Theft Prevention Standard in 1987 only.  
+ Model subject to the Theft Prevention Standard in 1988 only.  
\* Model subject to the Theft Prevention Standard both in 1987 and 1988.

# DISTRIBUTION OF NUMBER OF THEFT LOSSES

BY CLAIM VALUE(1983 VS 1984)

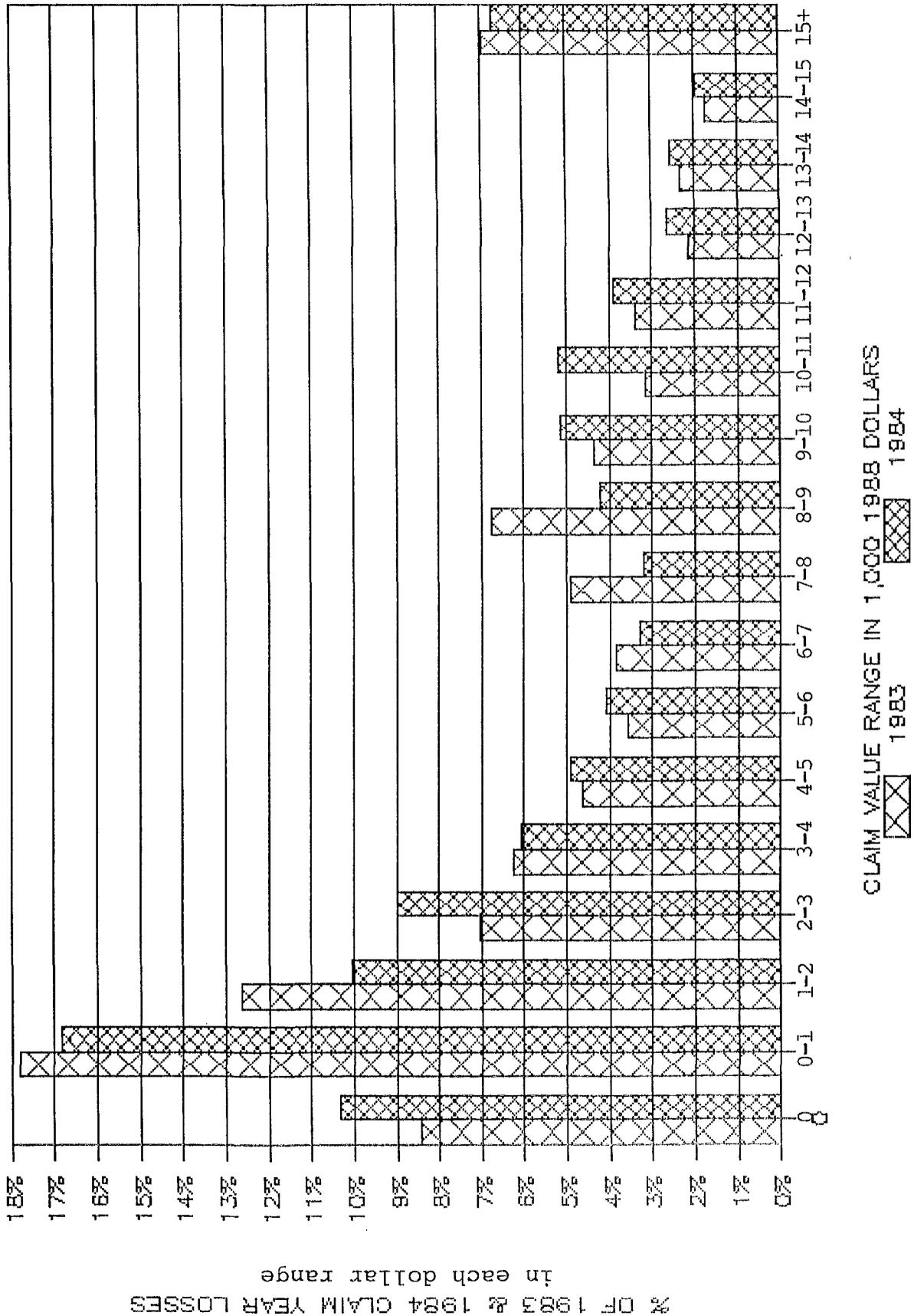


Figure 1. Distribution of theft claims by dollar values

# CUMULATIVE DISTRIBUTION OF THEFT LOSSES

1983 VS 1984

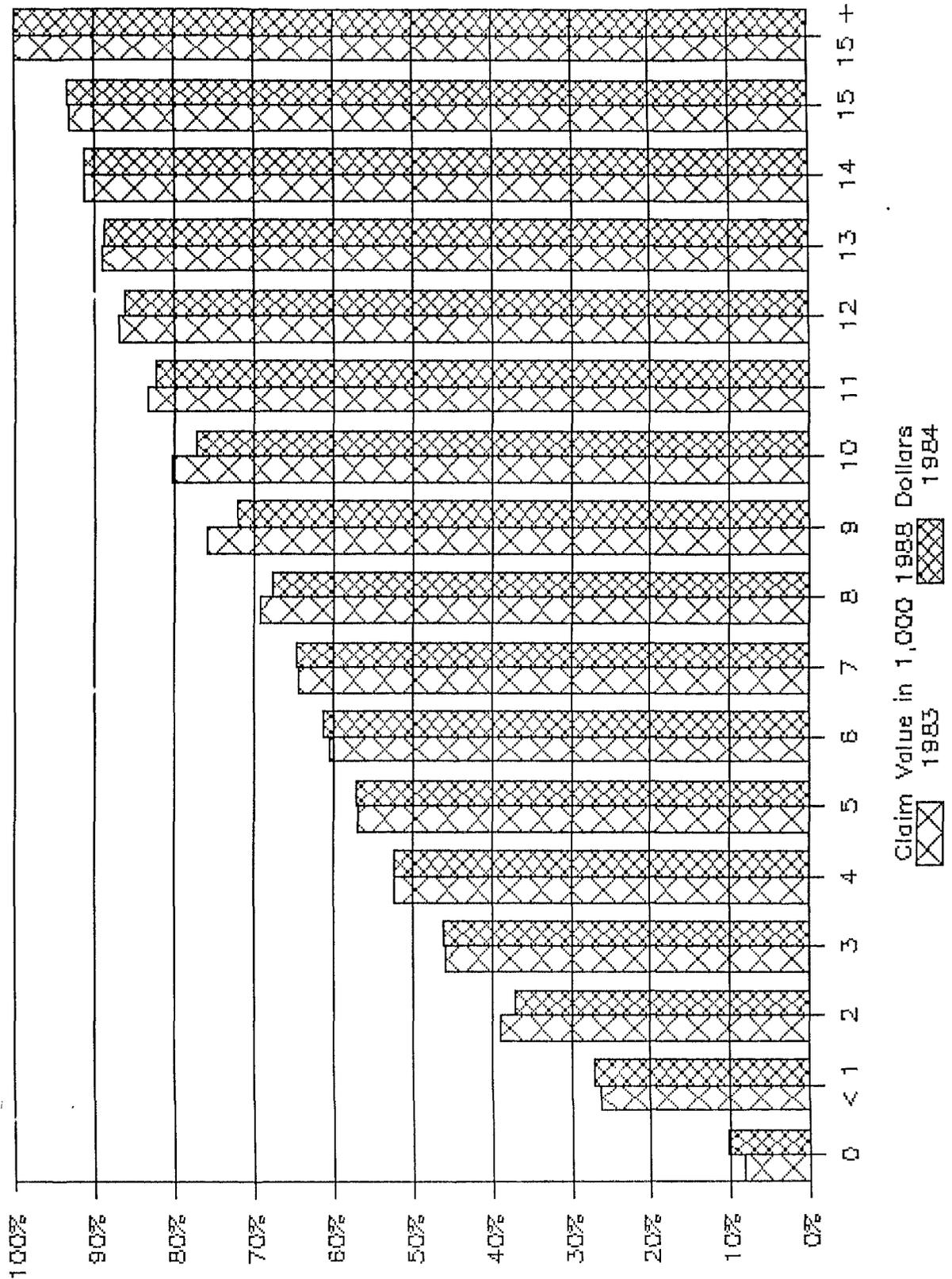


Figure 2. Cumulative distribution of theft claims by dollar values

## 2.2.7 Statistical Analyses of Recovery and Payout Data

The 1987 car lines subject to the parts labelling requirements of the Theft Prevention Standard were selected on the basis of their 1983 and 1984 theft rates. Therefore, it is generally expected that the models comprising the lines subject to the standard in 1987 had higher theft rates in 1983 and 1984 than models which were excluded from the standard.

What is not known is whether there was any difference in the recovery rate between the 1983-1984 high theft rate ancestors of 1987 models subject to the standard and the 1983-1984 lower theft rate ancestors of 1987 models excluded from the standard.

It is also not known what if any difference existed in the average theft claim payouts between these two ancestor groups.

This information is important to calibrate analyses of future insurance data to identify the extent that any changes in theft claim trends are attributable to the Theft Prevention Standard.

Therefore, the 1983 and 1984 claim samples were each stratified into two groups:

- Claims for models comprising lines which were subject to the Theft Prevention Standard in 1987
- Claims for models comprising lines which were not subject to the Theft Prevention Standard in 1987.

Theft and recovery data is presented for these groupings in Tables 17 and 18 for the 1983 sample and Tables 19 and 20 for the 1984 sample. The model specific information presented in these tables was extracted from Table 4 for the 1983 sample and Table 5 for the 1984 sample. These tables also indicate the average purchase price of each model expressed in 1988 dollars. These prices were obtained from 1983 and 1984 issues of Automobile News.

In addition to this model specific information, the average new car price for each sample, aggregate number of thefts and recoveries, average theft claim payment, average recovery claim payment and percent recoveries are presented for each grouping at the bottom of each of the tables.

For the 1983 sample, Tables 17 and 18 indicate that the recovery rate was 77% for ancestors of lines subject to the standard and 76% for ancestors of lines excluded from the standard. The sample sizes for these two groupings were 531 and 892 claims respectively. The proportions test was applied to determine whether any statistical difference existed between these claim proportions. No statistically significant difference was detected between these proportions at the 95% confidence level.

Table 17: New Car Prices, Thefts and Recoveries During 1983 - Models Subject to the Standard in 1987  
(All costs expressed in 1988 dollars)

MAKE	MODEL	AVERAGE PURCHASE PRICE	----- Thefts -----		----- Recoveries -----		
			NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
AUDI	4000 CPE DR QUATTRO 4 WD	40666	1	14442	1	14442	100
BMW	3201	15442	22	13173	11	11437	50
BMW	528E	27868	6	9432	4	874	67
BMW	528I	27222	1	18869	0		0
BMW	733T	39853	1	4951	1	4951	100
BUICK	ELECTRA LTD	14525	5	2261	5	2261	100
BUICK	ELECTRA PARK AVE	16464	11	7350	8	5333	73
BUICK	LESABRE	10856	3	4256	3	4256	100
BUICK	LESABRE ESTATE	12998	1	3051	1	3051	100
BUICK	LESABRE LTD & CUSTO	11518	9	5072	7	3166	78
BUICK	RIVIERA LUXURY	21729	31	6665	25	5089	81
CADILLAC	DEVILLE	18830	59	8368	49	6557	83
CADILLAC	ELDORADO	22464	47	9744	41	8705	87
CADILLAC	SEVILLE	24911	16	13992	11	12820	69
CHEVROLET	CAMARO BERLINETTA	11481	7	5164	4	2035	57
CHEVROLET	CAMARO SPRT CPE	10673	19	4630	16	3762	84
CHRYSLER	LEBARON	13211	4	563	4	563	100
CHRYSLER	NEW YORKER 5TH AVE	15328	7	6919	6	5810	86
CHRYSLER	NEW YORKER/GRAN LEBARON	13013	1	480	1	480	100
CHRYSLER	NEWPORT	11131	1	216	1	216	100
DODGE	ARIES	8481	1	1113	1	1113	100
DODGE	ARIES/CHALLENGER	8481	8	8091	4	6217	50
DODGE	COLT/600	10698	5	1809	4	780	80
DODGE	COLT/COLT VISTA/DIPLOM	10698	1	128	1	128	100
DODGE	DIPLOMAT	10235	1	6940	1	6940	100
FORD	MUST 3 DR SDN HTBK/NTCHK/GRANADA 3	9677	1	0	1	0	100
FORD	MUSTANG & MUSTANG II 3 DR SDN HTBK	9677	1	1444	1	1444	100
FORD	THUNDERBIRD 2 DR HT	12065	1	12009	0		0
JAGUAR	XJ6L	35438	1	2308	1	2308	100
LINCOLN	CONTINENTAL 4 DR SDN MARK	26389	18	3274	17	2943	94
MAZDA	626	11054	4	5895	3	5167	75
MAZDA	GLC	7278	4	24508	3	24109	75
MERCEDES BENZ	300 DT 4 DR SDN	39845	2	487	2	487	100
MERCEDES BENZ	300SD 4 DR SDN	44117	1	66773	0		0
MERCEDES BENZ	330 SEC 2 DR CPE	62243	1	14081	1	14081	100
MERCEDES BENZ	330SL 2 DR CPE	49996	9	5292	4	1965	44
MERCURY	CAPRI 3 DR HTCHK	9451	1	0	1	0	100
MERCURY	COUGAR 2 DR HT XR-7	11835	1	3143	1	3143	100
MERCURY	COUGAR 2 DR SDN	11835	2	5822	2	5822	100
MITSUBISHI	CORDIA/TREDIA	9407	17	5742	13	3307	76
OLDSMOBILE	98 REGENCY	15142	2	5822	2	5822	100
OLDSMOBILE	98 REGENCY BROUGHAM	16464	4	4783	3	3251	75
OLDSMOBILE	DELTA 88	10555	17	5557	12	3336	71
OLDSMOBILE	DELTA 88 ROYALE	10786	11	6251	10	5570	91
OLDSMOBILE	TORNADO BROUGHAM	17721	2	3968	1	778	50
PLYMOUTH	RELIANT SP ED CUSTO	8527	9	1999	9	1999	100
PONTIAC	BONNEVILLE	10458	5	4282	4	1890	80

Table 17: New Car Prices, Thefts and Recoveries During 1983 - Models Subject to the Standard in 1987  
 (All costs expressed in 1988 dollars)

MAKE	MODEL	AVERAGE PURCHASE PRICE	---- Thefts ----		----- Recoveries -----		
			NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
PONTIAC	BONNEVILLE BROUGHAM	10921	5	7511	4	7417	80
PONTIAC	FIREBIRD T/A	12079	5	6067	4	5454	80
PONTIAC	FIREBIRD/FIREBIRD SE	10877	3	12087	0		0
PONTIAC	FIREBIRD/FIREBIRD SE/BONNEVILLE LE	10877	14	4995	9	2392	64
PORSCHE	911	34799	2	2215	2	2215	100
PORSCHE	924 & 928	49962	1	0	0		0
TOYOTA	CAMRY	10339	3	6371	3	6371	100
TOYOTA	CELICA & SUPRA	10393	37	6313	28	5063	76
TOYOTA	COROLLA	7731	59	4083	45	2816	76
TOYOTA	STARLET	6760	2	5378	1	5159	50
VOLKSWAGON	RABBIT CONV/CABRIOLET	12558	2	10245	2	10245	100
VOLKSWAGON	RABBIT GOLF	9284	14	3918	10	2797	71
VOLKSWAGON	SCIROCCO	12041	2	6150	2	6150	100
TOTALS:		15771	531	6834	411	5174	77

Table 18: New Car Prices, Thefts and Recoveries During 1983 - Models Not Subject to the Standard in 1987  
(All costs expressed in 1988 dollars)

MAKE	MODEL	AVERAGE PURCHASE PRICE	----- Thefts -----		----- Recoveries -----		
			NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
AMERICAN MOTORS	CONCORD	8892	1	3023	0		0
AMERICAN MOTORS	EAGLE 30	10515	3	6536	2	5810	67
AMERICAN MOTORS	SPIRIT	7235	1	5947	0		0
AUDI	4000	11857	1	3182	1	3182	100
AUDI	5000 & SW	19270	6	8373	5	7720	83
BUICK	CENTURY ESTATE	9864	6	3316	5	2055	83
BUICK	CENTURY LTD	10856	7	3992	5	2024	71
BUICK	REGAL	10678	44	4822	34	3414	77
BUICK	REGAL LTD	11374	38	3127	31	1630	82
BUICK	REGAL SPRT	11639	1	2735	1	2735	100
BUICK	SKYHAWK	8642	1	660	1	660	100
BUICK	SKYLARK	9529	4	3509	2	161	50
BUICK	SKYLARK LTD	9375	1	1652	1	1652	100
CADILLAC	CIMARRON	14193	5	5239	4	3675	80
CADILLAC	FLEETWOOD BROUGHAM	22000	17	8865	11	3954	65
CHEVROLET	CAPRICE CLASSI	10643	16	5539	11	3279	69
CHEVROLET	CAVALIER	6982	6	6688	3	3911	50
CHEVROLET	CAVALIER 10	7713	1	6560	0		0
CHEVROLET	CAVALIER CS	7560	8	4261	8	4261	100
CHEVROLET	CHEVETTE	6731	12	3742	9	3211	75
CHEVROLET	CHEVETTE SCOOTER	6001	2	712	2	712	100
CHEVROLET	CITATION II	7767	12	1555	11	1107	92
CHEVROLET	CORVETTE	25329	10	10608	4	3314	40
CHEVROLET	IMPALA	9680	11	3692	9	2849	82
CHEVROLET	MALIBU	9471	71	6516	40	4287	56
CHEVROLET	MONTE CARLO	9937	22	5524	11	2701	50
CHRYSLER	CORDOBA	11131	3	3821	2	1069	67
DATSUN	200SX	10131	24	5020	20	3924	83
DATSUN	210	7064	22	2777	18	2281	82
DATSUN	280ZX	19402	38	4707	32	3142	84
DATSUN	310	7448	3	4037	3	4037	100
DATSUN	510	9435	1	7196	1	7196	100
DATSUN	KING CAB	8923	5	6983	2	4548	40
DATSUN	MAXIMA	13732	18	4988	16	3888	89
DATSUN	PULSAR	7822	4	544	4	544	100
DATSUN	SENTRA	7153	10	4619	7	2889	70
DATSUN	STANZA	8771	6	2293	6	2293	100
DODGE	CHARGER/OMNI/SHELBY TURBO	7874	3	922	3	922	100
DODGE	MIRADA	10470	1	14042	1	14042	100
DODGE	OMNI	6920	1	652	1	652	100
FIAT	SPIDER 2000	14280	3	6174	2	4438	67
FIAT	X 1/9	12769	2	7730	1	7974	50
FORD	ESCORT	7616	30	3579	24	2695	80
FORD	EXP 3 DR HATCHBK TURBO	8875	8	5130	6	4345	75
FORD	FAIRMONT (FUTURA) 2 DR SDN	7616	1	5003	1	5003	100
FORD	FAIRMONT (FUTURA) 4 DR SDN	7657	1	1589	1	1589	100
FORD	GRANADA 2 DR SDN	8366	1	1351	1	1351	100

Table 18: New Car Prices, Thefts and Recoveries During 1983 - Models Not Subject to the Standard in 1987  
(All costs expressed in 1988 dollars)

MAKE	MODEL	AVERAGE PURCHASE PRICE	---- Thefts ----		----- Recoveries -----		
			NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
FORD	GRANADA 4 DR SDN/MUST 2 DR SDN CONV	8460	1	9286	1	9286	100
FORD	GRANADA 4 DR SW	9411	1	3109	1	3109	100
FORD	LTD 4 DR SDN	9036	1	10515	1	10515	100
FORD	LTD 4 DR WAGON SQUIRE	11913	1	720	1	720	100
FORD	LTD 4 SEAT SW	9966	1	490	1	490	100
FORD	LTD S 4 DR HT	9966	2	2880	1	948	50
GM OF CANADA	PONTIAC PARISIENNE BROUGHAM	10227	1	14219	1	14219	100
HONDA	ACCORD	9660	20	6711	12	4531	60
HONDA	CIVIC 1500 HTCHBK	7164	1	3346	1	3346	100
HONDA	CIVIC 4 DR SDN	8074	6	577	5	692	83
HONDA	CIVIC SW	8074	2	1926	2	1926	100
HONDA	PRELUDE CPE	11807	3	3704	3	3704	100
ISUZU	PICKUP 4X2	8079	1	7082	0	1	1
JAGUAR	XJS	39504	1	21937	1	21937	100
LANCIA	BETA	14236	1	9210	0	1	1
LANCIA	ZAGATO	16502	2	6344	1	49	50
LINCOLN	LINCOLN 4 DR SDN	21220	1	1646	1	1646	100
MAZDA	B2000 TRUCK	7210	2	6793	1	5878	50
MAZDA	B2000/B2200 TRUCK	7910	2	5336	2	5336	100
MAZDA	RX7	12591	30	7263	24	6052	80
MERCEDES BENZ	2400 2 DR SDN	26108	2	12489	1	3577	50
MERCURY	LYNX	8007	16	3662	12	2655	75
MERCURY	MARQUIS BROUGHAM 4 DR SDN	9530	1	10758	1	10758	100
MERCURY	TOPAZ 4 DR SDN GS	8678	1	11062	0	1	1
MERCURY	ZEPHYR 4 DR SDN	8050	1	4380	0	1	1
OLDSMOBILE	CUSTOM CRUISER	10900	4	4768	3	3063	75
OLDSMOBILE	CUTLASS CALAIS	11442	12	4111	12	4111	100
OLDSMOBILE	CUTLASS CIERA	10222	2	519	2	519	100
OLDSMOBILE	CUTLASS CIERA BROUGHAM	10787	44	4252	37	3148	84
OLDSMOBILE	CUTLASS CIERA LS	10222	3	3170	3	3170	100
OLDSMOBILE	CUTLASS SDN	9772	3	2978	3	2978	100
OLDSMOBILE	CUTLASS SUPREME	10852	69	4875	49	3188	71
OLDSMOBILE	DELTA ROYALE BROUGHAM	11290	10	3040	9	2097	90
OLDSMOBILE	OMEGA	8804	4	5517	2	6828	50
OLDSMOBILE	OMEGA BROUGHAM	9130	1	2870	1	2870	100
PEUGEAT	SDN	13786	4	13366	1	4946	25
PLYMOUTH	CHAMP	7088	2	3837	1	715	50
PLYMOUTH	HORIZON & TC3 CUSTOM/TURISMO	7435	3	1777	2	239	67
PONTIAC	1000/CATALINA/PARISIENNE	6604	1	0	1	0	100
PONTIAC	2000	8744	1	6772	0	0	0
PONTIAC	GRAN PRIX	10106	19	4956	17	3963	89
PONTIAC	GRAN PRIX BROUGHAM	11364	10	2026	9	1286	90
PONTIAC	GRAN PRIX LJ & LE	10650	30	3305	27	2817	90
PONTIAC	GRAND LEMANS	8949	2	8237	1	8584	50
PONTIAC	LEMANS	8527	2	3343	1	0	50
PONTIAC	PHOENIX	9107	4	1876	4	1876	100
PORSCHE	944	22928	1	13936	1	13936	100

Table 18: New Car Prices, Thefts and Recoveries During 1983 - Models Not Subject to the Standard in 1987  
 (All costs expressed in 1988 dollars)

MAKE	MODEL	AVERAGE PURCHASE PRICE	---- Thefts ----		----- Recoveries -----		
			NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
RENAULT	FUEGO 2 DR CPE	11497	2	4750	1	0	50
RENAULT	LECAR 4 DR HTCHBK	5842	1	6481	1	6481	100
SAAB	BASE SERIES	12665	2	3035	2	3035	100
SAAB	TURBO SERIES	19415	3	5552	2	1947	67
SUBARU	GL	8642	11	2834	9	1649	82
SUBARU	GLF	8642	1	4584	1	4584	100
SUBARU	STANDARD	5877	1	0	1	0	100
TOYOTA	COROLLA	9976	3	3386	3	3386	100
TOYOTA	CRESSIDA	15673	5	9242	2	1756	40
TOYOTA	TERCEL	7505	18	3593	13	2841	72
TOYOTA	TRUCK	8773	8	3290	6	1750	75
TRIUMPH	TR7/TR8	12609	1	620	1	620	100
VOLKSWAGON	VANAGON	12938	1	153	1	153	100
VOLVO	2 DR	16320	3	7491	3	7491	100
VOLVO	4 DR	17853	7	5148	5	1285	71
VOLVO	5 DR	17323	1	3079	1	3079	100
TOTALS:		10746	892	4815	675	3266	76

Table 19: New Car Prices, Thefts and Recoveries During 1984 - Models Subject to the Standard in 1987  
 (All costs expressed in 1988 dollars)

MAKE	MODEL	AVERAGE PURCHASE PRICE	---- Thefts ----		----- Recoveries -----		
			NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
BMW	320I	15439	12	8647	8	4811	67
BMW	528E	27734	5	9887	3	3631	60
BMW	633CSI/533I	34215	5	17197	3	6009	60
BMW	733I	41023	2	17667	1	3355	50
BUICK	ELECTRA 225 & ESTATE	16352	1	12453	0		0
BUICK	ELECTRA LTD	14953	2	1987	2	1987	100
BUICK	ELECTRA PARK AVE	16897	7	8559	6	7241	86
BUICK	LESABRE	11807	8	5777	5	2752	63
BUICK	LESABRE ESTATE	12998	1	2263	0		0
BUICK	LESABRE LTD & CUSTO	12261	15	4054	15	4054	100
BUICK	RIVIERA LUXURY	22147	32	5146	26	3732	81
CADILLAC	DEVILLE	19612	71	8612	58	7160	82
CADILLAC	ELDORADO	29131	44	8253	36	6006	82
CADILLAC	SEVILLE	25353	8	20146	4	18996	50
CHEVROLET	CAMARO BERLINETTA	12289	15	3539	13	3301	87
CHEVROLET	CAMARO SPRT CPE	10496	23	3802	20	3095	87
CHRYSLER	LASER/LASER XE/DAYTONA	10824	1	4261	1	4261	100
CHRYSLER	LEBARON	13457	12	6616	8	3096	67
CHRYSLER	NEW YORKER 5TH AVE	15781	10	3378	9	2045	90
CHRYSLER	NEW YORKER/GRAN LEBARON	14047	4	6085	4	6085	100
DODGE	400/600	11369	5	5604	2	0	40
DODGE	ARIES	8416	2	7293	2	7293	100
DODGE	ARIES/CHALLENGER	8416	8	3183	6	2188	75
DODGE	COLT/600	11369	3	1848	2	0	67
DODGE	COLT/DAYTONA/DAYTONA TURB	11369	1	0	1	0	100
FORD	MUST 3 DR SDN HTBK/NTCHBK/GRANADA S	11625	2	5368	1	0	50
FORD	MUSTANG & MUSTANG II 2 DR SDN	11625	1	318	1	318	100
FORD	MUSTANG & MUSTANG II 2 DR SDN LX	11625	1	13389	0		0
FORD	MUSTANG & MUSTANG II 3 DR SDN HTBK	11625	2	3954	1	799	50
FORD	MUSTANG/GRANADA 2 DR SDN	11625	2	1197	2	1197	100
FORD	THUNDERBIRD 2 DR SDN	10865	7	7254	5	5443	71
JAGUAR	XJ6L	36862	4	29273	3	30247	75
LINCOLN	CONTINENTAL 4 DR SDN	24564	3	7166	3	7166	100
LINCOLN	CONTINENTAL 4 DR SDN MARK	24564	4	13822	2	16721	50
MAZDA	626	10785	37	5103	28	4066	76
MAZDA	6LC	6983	18	3543	14	3151	78
MERCEDES BENZ	190D 4 DR SDN	26216	1	27724	0		0
MERCEDES BENZ	300 DT 4 DR SDN	39866	4	14782	3	9621	75
MERCEDES BENZ	300SD 4 DR SDN	44596	7	12220	6	7744	86
MERCEDES BENZ	380 SEL 4 DR SDN	55620	1	2338	1	2338	100
MERCEDES BENZ	380SL 2 DR CPE	49474	1	50591	0		0
MERCURY	CAPRI 3 DR HTCHBK	10232	5	5736	5	5736	100
MERCURY	COUGAR 2 DR HT XR-7	12914	1	1141	1	1141	100
MERCURY	COUGAR 2 DR SDN	12914	4	9037	3	8241	75
MERCURY	COUGAR 4 DR SDN	10230	1	97	1	97	100
MITSUBISHI	CORDIA/TREDIA	9396	4	2323	4	2323	100
OLDSMOBILE	98 REGENCY	15973	14	3342	12	2622	86

Table 19: New Car Prices, Thefts and Recoveries During 1984 - Models Subject to the Standard in 1987  
 (All costs expressed in 1988 dollars)

MAKE	MODEL	AVERAGE PURCHASE PRICE	---- Thefts ----		----- Recoveries -----		
			NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
OLDSMOBILE	98 REGENCY BROUGHAM	17218	7	4725	6	3548	86
OLDSMOBILE	DELTA 88	10594	3	8086	1	2521	33
OLDSMOBILE	DELTA 88 ROYALE	11531	27	3430	24	2312	89
OLDSMOBILE	TORONADO BROUGHAM	18173	11	8049	9	6301	82
PLYMOUTH	CONQUEST	13716	1	15054	1	15054	100
PLYMOUTH	GRAN FURY/CARAVELLE	10352	1	702	1	702	100
PLYMOUTH	RELIANT SP ED CUSTO	8567	10	2309	8	2059	80
PONTIAC	BONNEVILLE	10426	6	2898	4	2318	67
PONTIAC	BONNEVILLE BROUGHAM	11093	3	7914	1	4657	33
PONTIAC	FIERO 2M4 & SE CPE	9810	2	5472	2	5472	100
PONTIAC	FIREBIRD T/A	12068	16	5783	13	4299	81
PONTIAC	FIREBIRD/FIREBIRD SE	12012	8	6066	7	5394	88
PONTIAC	FIREBIRD/FIREBIRD SE/BONNEVILLE LE	10713	27	6227	21	5337	78
PORSCHE	911	38330	1	36547	0		0
PORSCHE	924 & 928	49677	2	12161	1	7866	50
SAAB	900	12713	1	1806	1	1806	100
TOYOTA	CAMRY	10517	17	4214	14	2220	82
TOYOTA	CELICA & SUPRA	10476	64	7091	49	5524	77
TOYOTA	COROLLA	7992	67	3748	53	2653	79
TOYOTA	STARLET	6686	3	4368	2	3081	67
VOLKSWAGON	RABBIT CONV/CABRIOLET	12637	2	14598	0		0
VOLKSWAGON	RABBIT GOLF	9427	15	5932	11	4558	73
VOLKSWAGON	SCIROCCO	12513	3	7111	2	5557	67
TOTALS:		15783	726	6443	570	4699	79

Table 20: New Car Prices, Thefts and Recoveries During 1984 - Models Not Subject to the Standard in 1987  
(All costs expressed in 1988 dollars)

MAKE	MODEL	AVERAGE PURCHASE PRICE	---- Thefts ----		----- Recoveries -----		
			NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
AUDI	4000	11522	2	537	2	537	100
AUDI	5000 & SW	18725	4	10043	3	7069	75
BUICK	CENTURY ESTATE	9864	3	3618	3	3618	100
BUICK	CENTURY LTD	11056	10	4056	10	4056	100
BUICK	REGAL	10815	53	4863	41	3572	77
BUICK	REGAL LTD	11509	41	5863	31	4690	76
BUICK	REGAL SPRT	11639	2	2229	2	2229	100
BUICK	SKYHAWK	8696	3	4338	3	4338	100
BUICK	SKYHAWK LT	8737	1	8237	0	10000	0
BUICK	SKYLARK	9344	5	2277	4	1097	80
BUICK	SKYLARK LTD	9259	3	2004	3	2004	100
CADILLAC	CIMARRON	14231	7	6590	5	5783	71
CADILLAC	FLEETWOOD BROUGHAM	22789	18	7695	16	6402	89
CHEVROLET	CAPRICE CLASSI	10849	11	2483	9	1960	82
CHEVROLET	CAVALIER	7253	11	7639	4	3077	36
CHEVROLET	CAVALIER CS	7605	78	5199	60	3434	77
CHEVROLET	CHEVETTE	6048	5	2410	4	3013	80
CHEVROLET	CHEVETTE SCOOTER	6023	2	2286	2	2286	100
CHEVROLET	CITATION II	7664	6	5117	4	4066	67
CHEVROLET	CITATION II CPE	7664	1	469	1	469	100
CHEVROLET	CORVETTE	26358	4	11456	3	8221	75
CHEVROLET	IMPALA	10030	1	8132	0	2691	0
CHEVROLET	MALIBU	9392	105	6278	72	4597	69
CHEVROLET	MONTE CARLO	11072	14	5840	8	3891	57
CHRYSLER	CORDOBA	11172	1	0	1	0	100
DATSUN	200SX	10973	17	3546	15	2698	88
DATSUN	210	7243	16	2506	13	2327	81
DATSUN	280ZX	19473	21	9528	18	8236	86
DATSUN	300ZX	22692	3	13092	2	10000	67
DATSUN	310	7637	1	1913	1	1913	100
DATSUN	KING CAB	9206	4	7886	3	8770	75
DATSUN	MAXIMA	13584	40	5834	35	4703	88
DATSUN	PULSAR	8946	8	4355	6	2670	75
DATSUN	SENTRA	8005	23	2927	19	2035	83
DATSUN	STANZA	9943	14	5671	11	5334	79
DATSUN	TRUCK REG. BED	7856	2	6163	1	5248	50
DODGE	CHARGER/OMNI/SHELBY TURBO	7830	4	2729	4	2729	100
DODGE	MIRADA	10508	1	8976	1	8976	100
DODGE	RAM 50 & ARROW	10088	3	3247	2	329	67
FORD	COUNTRY SQUIRE SW	12531	2	5871	2	5871	100
FORD	ESCORT	7666	55	4135	46	2691	84
FORD	EXP 3 DR HTCHBK TURBO	9074	10	3011	6	1926	60
FORD	FAIRMONT (FUTURA) 4 DR SDN	7685	4	857	4	857	100
FORD	FAIRMONT (FUTURA) SW	8336	3	7245	2	5450	67
FORD	GRANADA 4 DR SW	9411	2	76	2	76	100
FORD	LTD 4 DR SDN	9705	1	535	1	535	100
FORD	LTD 4 SEAT SW	10266	1	9203	0	16721	0

Table 20: New Car Prices, Thefts and Recoveries During 1984 - Models Not Subject to the Standard in 1987  
(All costs expressed in 1988 dollars)

MAKE	MODEL	AVERAGE PURCHASE PRICE	---- Thefts ----		----- Recoveries -----		
			NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
FORD	LTD CROWN VICTORIA 2 DR SDN	12320	2	7677	1	0	50
FORD	LTD S 4 DR HT	10266	1	0	1	0	100
FORD	TEMPO 2 DR SDN GL	8074	6	1139	6	1139	100
FORD	TEMPO/LASER	8182	3	1017	3	1017	100
GM OF CANADA	PONTIAC PARISIENNE BROUGHAM	10387	3	433	3	433	100
HONDA	ACCORD	9417	1	1235	1	1235	100
HONDA	CIVIC 1300 HTCHBK	5918	34	5045	27	3574	79
HONDA	CIVIC 1500 HTCHBK	7423	1	0	1	0	100
HONDA	CIVIC 4 DR SDN	8176	3	6969	1	9580	33
HONDA	CRX, HF, SI	7386	6	6160	2	2318	33
HONDA	PRELUDE CPE	11473	1	1077	1	1077	100
ISUZU	IMPULSE/PICKUP 4X4	12067	8	7556	4	2099	50
ISUZU	PICKUP 4X2	7551	1	10669	0	2323	0
LINCOLN	LINCOLN 4 DR SDN	23552	1	5993	1	5993	100
MAZDA	B2000 TRUCK	7006	1	15326	0	2312	0
MAZDA	B2000/B2200 TRUCK	7686	2	3134	1	283	50
MAZDA	RX7	12235	1	7972	0	1060	0
MERCEDES BENZ	240D 2 DR SDN	26107	55	6349	46	5254	84
MERCURY	GRAND MARQUIS 2 DR SDN LS	13684	2	11492	1	142	50
MERCURY	LYNX	7665	1	0	1	0	100
MERCURY	MARQUIS 4 DR SDN	9843	5	1547	3	335	60
MERCURY	MARQUIS BROUGHAM 4 DR SDN	10185	3	12319	1	10335	33
MERCURY	ZEPHYR SPORTY CPE-7	7946	2	5565	2	5565	100
OLDSMOBILE	CUTLASS CALAIS	11588	1	8062	1	8062	100
OLDSMOBILE	CUTLASS CIERA BROUGHAM	10851	7	6021	6	4959	86
OLDSMOBILE	CUTLASS CIERA BROUGHAM/SUPR BROUGHM	10851	43	5289	36	4090	84
OLDSMOBILE	CUTLASS CIERA LS	10274	2	6137	1	890	50
OLDSMOBILE	CUTLASS SUPREME	11015	6	4364	5	3479	83
OLDSMOBILE	DELTA ROYALE BROUGHAM	11790	82	5515	57	3678	70
OLDSMOBILE	FIRENZA	8631	1	8025	0	7866	0
OLDSMOBILE	FIRENZA BROUGHAM	8631	2	1060	2	1060	100
OLDSMOBILE	OMEGA	8721	3	6184	3	6184	100
OLDSMOBILE	OMEGA BROUGHAM	9038	7	8657	5	5120	71
PEUGEAT	SDN	18424	2	4923	1	4737	50
PLYMOUTH	CHAMP	7088	2	1462	2	1462	100
PLYMOUTH	COLT EDL PREMIER	6367	2	3138	2	3138	100
PLYMOUTH	HORIZON & TCS CUSTOM/TURISMO	7262	4	3160	2	1061	50
PLYMOUTH	SAFFORD	9670	1	1033	1	1033	100
PONTIAC	1000/CATALINA/PARISIENNE	6453	4	3663	3	2873	75
PONTIAC	2000	8428	5	2771	5	2771	100
PONTIAC	6000 STE	16289	1	17153	1	17153	100
PONTIAC	GRAN PRIX	10585	38	3404	31	2589	82
PONTIAC	GRAN PRIX BROUGHAM	11616	5	3925	4	2491	80
PONTIAC	GRAN PRIX LJ & LE	10854	13	3880	11	2669	85
PONTIAC	PHOENIX SE/PARISIENNE BROUGHAM	10913	1	10034	1	10034	100
PONTIAC	PONTIAC 6000	11628	3	1597	3	1597	100
PONTIAC	PONTIAC 6000 LE	10552	4	8364	2	7921	50
PORSCHE	944	24488	1	6388	1	6388	100
RENAULT	181 4 DR SDN	9754	3	1082	3	1082	100

Table 20: New Car Prices, Thefts and Recoveries During 1984 - Models Not Subject to the Standard in 1987  
 (All costs expressed in 1988 dollars)

MAKE	MODEL	AVERAGE PURCHASE PRICE	---- Thefts ----		----- Recoveries -----		
			NUMBER	AVERAGE PAYMENT	NUMBER	AVERAGE PAYMENT	PERCENT
RENAULT	ALLIANCE 2 DR SDN	7334	1	8147	0		0
RENAULT	ALLIANCE 4 DR SDN	8320	1	0	1	0	100
RENAULT	FUEGO 2 DR CPE	11510	7	6170	5	4512	71
RENAULT	LECAR 2 DR HTCHBK	5863	2	4503	0		0
SAAB	900S	15897	1	0	1	0	100
SAAB	BASE SERIES	12713	1	12060	0		0
SAAB	TURBO SERIES	19645	1	4818	1	4818	100
SUBARU	GL	9234	12	947	11	1033	92
TOYOTA	CARGO VAN	11288	3	5993	3	5993	100
TOYOTA	CRESSIDA	15936	18	5971	13	3186	72
TOYOTA	TERCEL	7463	25	2915	19	2086	76
TOYOTA	TRUCK	9003	18	4953	13	3041	72
VOLKSWAGON	JETTA	9084	6	5228	6	5228	100
VOLKSWAGON	QUANTUM 2 DR/4 DR	15682	1	9611	0		0
VOLVO	2 DR	15463	1	12219	0		0
VOLVO	4 DR	21802	11	8430	6	2505	55
VOLVO	5 DR	17529	1	13396	0		0
TOTALS:		11285	1122	5200	860	3740	77

There was also no statistical difference in recovery rates between these two groupings in the 1984 sample. Tables 19 and 20 indicate that the recovery rate was 79% for ancestors of lines subject to the standard and 77% for ancestors of lines excluded from the standard. The sample sizes for these two groups were 726 and 1,122 claims respectively.

Thus both samples indicate that there is no difference in the aggregate recovery rates between ancestors of the lines subject to the Theft Prevention Standard and ancestors of the lines excluded from the standard.

No statistical differences were observed between recovery rates in the two calendar years. Three sets of comparisons were performed:

- 1983 aggregate recovery rate (76%, Table 4) vs. 1984 aggregate recovery rate (77%, Table 5)
- 1983 average recovery rate for ancestors of lines subject to the standard (77%, Table 17) vs 1984 average recovery rate for ancestors of lines subject to the standard (79%, Table 19)
- 1983 average recovery rate for ancestors of lines excluded from the standard (76%, Table 18) vs 1984 average recovery rate for ancestors of lines excluded from the standard (77%, Table 20).

In each case, no statistical differences were found between the 1983 and 1984 recovery rates.

A separate investigation was performed to identify differences in average theft claim payments between ancestors of lines subject to the standard and ancestors of lines excluded from the standard. The difference in average theft claim payments was \$2,019 between these two groups in the 1983 sample expressed in 1988 dollars, (i.e. \$6,834 (Table 17) - \$4,815 (Table 18)). A smaller difference of \$1,243 (i.e. \$6,443 (Table 19) - \$5,200 (Table 20)) was found in average theft payments between these two groups in the 1984 sample.

Thus, the average theft claim for an ancestor of vehicles excluded from the standard was 30% less in the 1983 sample and 19% less in the 1984 sample than the average theft claim cost for an ancestor of vehicles included in the standard. Both of these differences were found to be statistically significant at the 95% confidence level.

The analysis of Tables 17-20 also revealed that the average original price for ancestors of vehicles excluded from the standard was 30% less in 1983 and 32% less in 1984 than the average new car

price for ancestors of vehicles included in the standard. These differences were also found to be statistically significant at the 95% level.

Therefore, the models that were selected for the standard not only exhibited higher theft rates in 1983 and 1984 than the models excluded from the standard, they also exhibited a substantially higher average cost to the insurer for each theft claim. These higher insurance payments reflected the fact that the high theft lines selected for the standard were also more expensive to purchase than models excluded from the standard. These results suggest that any decrease in theft rates for the models subject to the standard may cause even greater proportion decreases in insurance payouts.

### 3. RESULTS AND CONCLUSIONS

The analyses described in the previous sections were intended to investigate theft claim patterns for vehicles stolen during 1983 and 1984. Ultimately, these investigations can provide a basis for utilizing insurance claim data to identify effects of the Theft Prevention Standard.

Analyses on 1983-1984 claim data offer an opportunity to identify the variation in theft claim patterns that existed prior to the implementation of the Theft Prevention Standard and are thus independent of the influence of the standard.

The investigations identified consistent results in both the 1983 and 1984 samples. For example, the proportion of claims involving the theft and subsequent recovery of an insured vehicle was found to be 76% in the 1983 sample and 77% in the 1984 sample. Both claim year samples also indicated that average recovery rates were the same for ancestors of models subject to VIN marking and those excluded from the standard.

Both samples also indicated that theft claims for ancestors of 1987 vehicles subject to the Theft Prevention Standard exhibited substantially higher average claim payments than similar payments for ancestors of vehicles excluded from the standard. Each model year sample also indicated that high theft lines chosen for the part labelling requirements were on average more expensive to purchase than other lines excluded from the standard.

These investigations examined theft, payout and recovery trends in the insurance samples. Special emphasis was placed on examining data on vehicle recoveries considering the following factors:

- Condition of vehicle upon recovery (intact, total loss, etc.)
- Time of recovery (Post, prior to settlement).

The percentage breakdown of recovery claims by vehicle condition at time of recovery is depicted in Figure 3. Similarly, the breakdown of recovery claims by time of recovery (prior, post settlement) is illustrated in Figure 4.

The results presented in these Figures and other major results identified in Section 2 of this report may be summarized as follows.

An investigation of the aggregate characteristics of each claim sample indicated that:

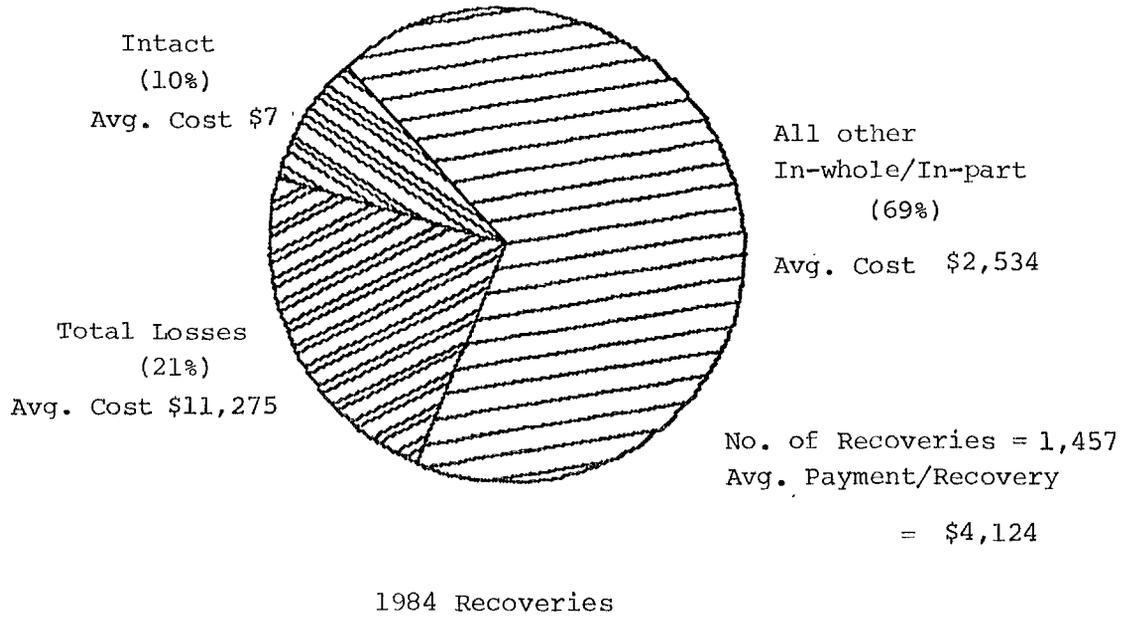
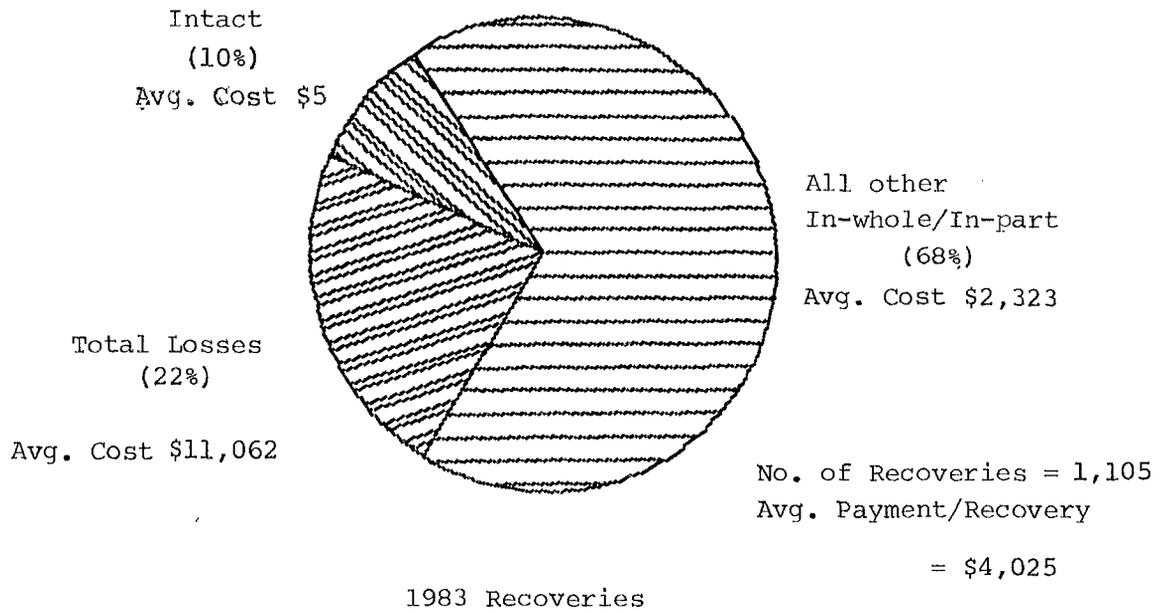


Figure 3: Percentage Breakdown of Recoveries

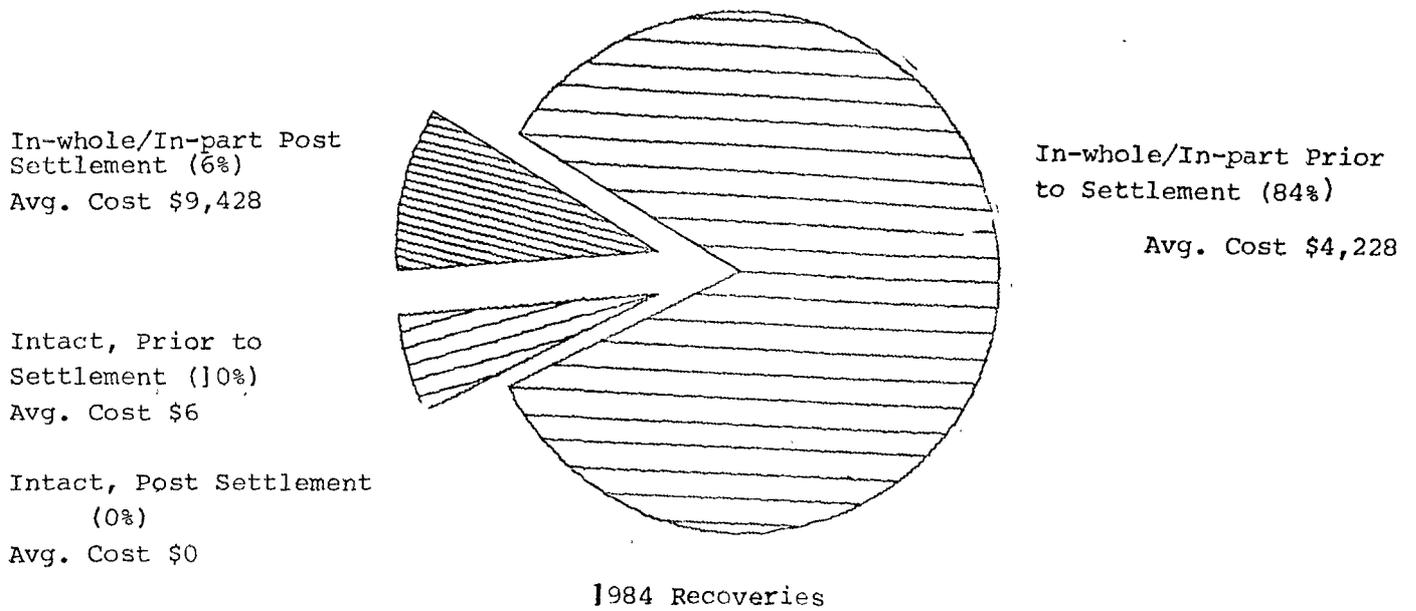
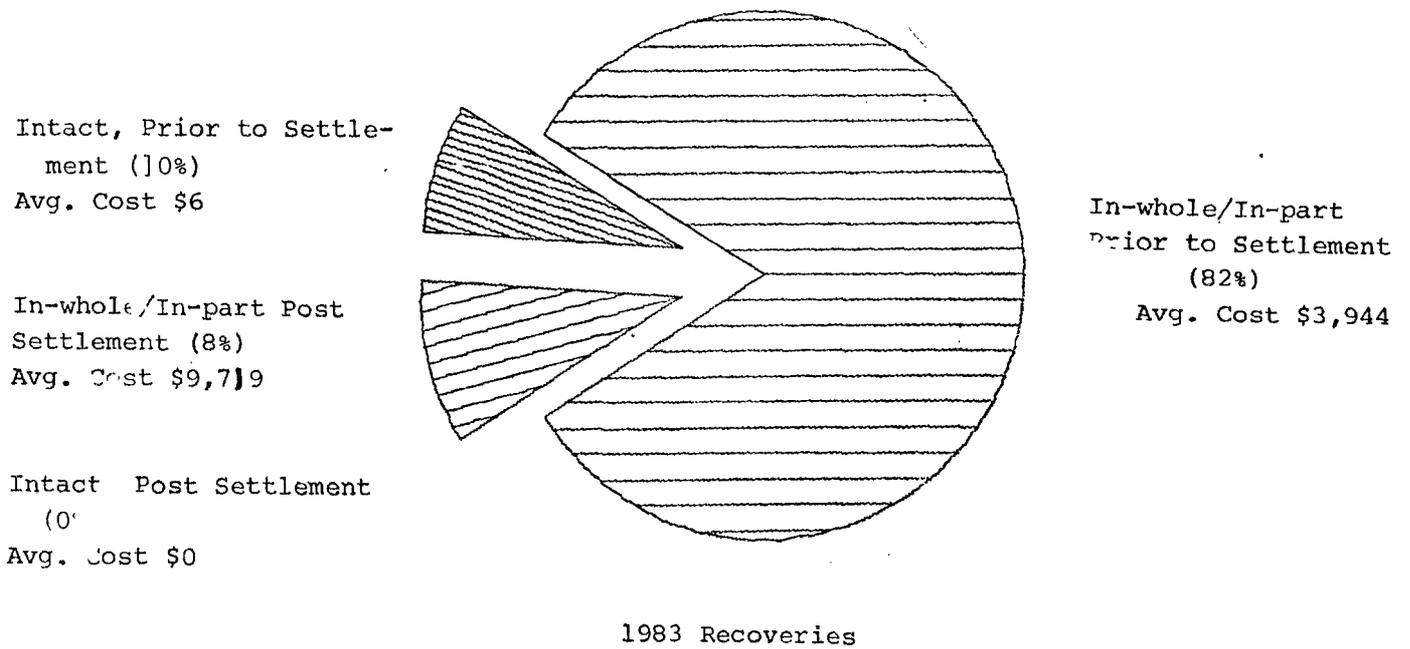


Figure 4. Percentage Breakdown of Recoveries by Settlement Date

- The rate of recovery for stolen insured vehicles averaged 76% in the 1983 claim sample (Table 4) and 77% in the 1984 claim sample (Table 5). There is no statistically significant difference between these recovery rates.
- The average payment for a theft claim was found to be \$5,597 in the 1983 sample (Table 4) and \$5,750 in the 1984 sample (Table 5) expressed in 1988 dollars. Approximately 60% of the claims in each sample exhibited claim costs below the average while 52% of the claims exhibited payouts under \$4,000 (Figure 2).

An investigation of a subset of the samples including only claims for stolen vehicles which were recovered, led to the following observations:

- In cases where a stolen insured vehicle was recovered either prior or subsequent to payment on the claim, the average insurance payment was \$4,025 based on the 1983 sample (Table 4) and \$4,124 based on the 1984 sample (Table 5). Costs for both samples are expressed in 1988 dollars. These payments averaged \$6,622 less in the 1983 sample and \$7,060 less in the 1984 sample than the average payment for claims in which the stolen vehicle was never recovered.
- Twenty-two percent of all recoveries in the 1983 sample and 21% of all recoveries in the 1984 sample were total losses. Payout for these claims averaged \$7,037 and \$7,151 more than the average cost of a claim with recovery in the 1983 and 1984 samples respectively expressed in 1988 dollars (Figure 3, Tables 8 and 9).
- Intact vehicle recoveries represented 10% of all recoveries in each calendar year sample (Figure 3, Tables 6 and 7). For purposes of this analysis, a recovery was classified as intact if the vehicle exhibited no damage or the cost to repair the vehicle to its pre-theft state (after deductible) was less than \$100 expressed in 1988 dollars.
- In 68% of the recoveries in the 1983 sample and 69% of the recoveries in the 1984 sample, the recovered vehicle sustained appreciable damage though insufficient to be considered a total loss. The average insurance costs for such claims was \$2,323 based on the 1983 sample and \$2,534 based on the 1984 sample (Figure 3, Tables 8 and 9).

Recovery claims were further stratified as to whether payment occurred prior or subsequent to recovery. An investigation of these claims indicated that:

- Recoveries which occurred prior to settlement accounted for 92% of all recoveries in the 1983 sample and 93% of

all recoveries in the 1984 sample. Only 50% of these claims were settled within 30 days while 85%-90% were settled within 90 days. Average payouts for theft claims involving recoveries prior to settlement were \$6,095 less in the 1983 sample and \$5,061 less in the 1984 sample than average payouts for claims in which recoveries occurred after settlement. These figures are expressed in 1988 dollars (Figure 4, Tables 10 and 11).

- In cases where a stolen vehicle was recovered prior to settlement and the vehicle was not recovered intact, the average cost to repair the vehicle to its pre-theft state or treat the damage as a total loss was estimated at \$3,944 in the 1983 sample and \$4,228 in the 1984 sample expressed in 1988 dollars. These recoveries accounted for 82% of all recoveries in the 1983 sample and 84% of all recoveries in the 1984 sample (Figure 4, Tables 12 and 13).

The claim samples were also stratified into groups of claims for models which were ancestors of those vehicles subject to the Theft Prevention Standard in 1987 and claims for models which were ancestors of vehicles excluded from the Theft Prevention Standard in 1987. Comparisons of these samples led to the following results:

- No statistical difference was detected between the average recovery rates of ancestors of lines subject to the Theft Prevention Standard (Tables 17 and 19) and ancestors of lines excluded from the standard (Tables 18 and 20).
- The average theft claim payout for an ancestor of vehicles excluded from the Theft Prevention Standard was 30% less in the 1983 sample and 19% less in the 1984 sample than the average theft claim payout for an ancestor of vehicles included in the standard.
- The fact that ancestors of lines subject to the standard exhibited significantly higher theft claim costs than ancestors of lines excluded from the standard appears to be directly related to the fact that the ancestors of lines chosen for the standard were significantly more expensive to purchase than lines excluded from the standard (Tables 17-20).
- These results suggest that any decrease in theft rates for the models subject to the standard may cause even greater proportion decreases in insurance payouts (Tables 17-20).

It should be noted that recovery rates observed in the insurance claim samples are substantially higher than those recorded by the U.S. Department of Justice. Justice Department

figures suggest a recovery rate of 52.8% during 1983, whereas the insurance sample for the same period indicates a recovery rate of 76%. The difference between these figures reflect the following factors:

1. Justice Department figures include both insured and non-insured vehicles whereas the insurance claim figures include only vehicles with theft coverage.
2. Justice Department figures include thefts and recoveries regardless of the age of the vehicle. The insurance claim sample expressly includes only thefts and recoveries of current model year, one and two-year old vehicles. Only vehicles in these age categories will be equipped with labelled parts at the time that NHTSA must evaluate the effectiveness of the labelling program.

These factors suggest that older vehicles and those without theft coverage exhibit a substantially poorer rate of recovery than newer vehicles and those with theft coverage. This result seems to suggest that older vehicles are more likely to be stolen and dismantled for their parts than newer vehicles. Therefore, any future increase in recovery rates which is observed in the insurance claim samples may be indicative of even greater increases in the population as a whole.

If the mandatory labelling of parts encourages a reduction in the number of automobiles stolen to provide parts, it might be expected that insurance claim samples for calendar years after the implementation of the parts labelling requirements (i.e. after 1986) would exhibit:

- A higher proportion of intact recoveries than the 1983 and 1984 samples.
- Lower repair costs for non-intact recoveries than those exhibited in 1983 and 1984.
- Higher recovery rates than the 76% - 77% range exhibited in 1983-1984.
- Average theft claim payments (adjusted for inflation) which are less than the \$5,600-\$5,800 figures exhibited in 1983-1984 claim samples.

Claim samples from later calendar years must be obtained and compared with the results of this study to discern any impacts of the Theft Prevention Standard on insurance claim patterns.

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