

**TESTIMONY FOR HEARINGS RH 03026431 AND RH 03026432
BEFORE THE CALIFORNIA DEPARTMENT OF INSURANCE**

**Actuarial Analysis of the Rates for the
California Low Cost Insurance Program**

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Prepared by
AIS Risk Consultants, Inc.
4400 Route 9 South
Freehold, NJ 07728
732-780-0330

ACTUARIAL ANALYSIS OF THE 10/20/3 BI/PD; 10/20 UM AND 1,000 MP
RATES FOR THE CALIFORNIA LOW COST AUTOMOBILE INSURANCE PROGRAM

1. Summary

AIS Risk Consultants, Inc. was contacted by the Foundation for Taxpayer and Consumer Rights ("FTCR") to prepare an actuarial analysis related to California Department of Insurance ("CADOI") Notices of Hearing : (i) RH 03026431 "Notice of Proposed Action and Notice of Public Hearing Regarding Loss Cost Automobile Insurance Rates" and (ii) RH 03026432 "Notice of Proposed Action and Notice of Public Hearing Regarding Loss Cost Automobile Insurance Program Uninsured Motorists and Medical Payments Coverages". The first of these notices deal with rates for the bodily injury liability (BI or BIL) plus property damage liability (PD or PDL) coverage at limits of \$10,000 for liability for bodily injury or death to one person / \$20,000 for the cumulative liability for bodily injury or death in a one accident / \$3,000 for liability for damage to property ("10/20/3"). The second of these notices deal with rates for the uninsured motorists (UM) coverage at limits of \$10,000/\$20,000 ("10/20") and the medical payments (MP) coverage at a limit of \$1,000.

We have prepared an actuarial analysis of the indicated rates for each of these coverages. Set forth in the table below are the indicated rates from our analysis, along with the current rates.

Indicated and Current Rates Under the Low Cost Automobile Insurance Program

<u>Coverage</u>	<u>Indicated Rates</u>	<u>Current Rates</u>
10/20/3 BI : PD rate for Los Angeles	\$316	\$347
10/20/3 BI : PD rate for San Francisco	\$286	\$314
10/20 UM rate for Los Angeles	\$ 35	\$ 64
10/20 UM rate for San Francisco	\$ 32	\$ 39
\$1,000 MP rate for Los Angeles	\$ 27	\$ 26
\$1,000 MP rate for San Francisco	\$ 24	\$ 24

The values for the indicated rates are summarized in Schedule AIS-1.

The remainder of this report explains the methodology used to derive these values.

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2. Overall Ratemaking Methodology

The ratemaking technique used in this analysis to derive the BI/PD rate level indications is a modified version of the loss ratio method. The loss ratio method has been described as follows:

The loss ratio method develops indicated rate changes rather than indicated rates. Indicated rates are determined by application of an adjustment factor, the ratio of the experience loss ratio to a target loss ratio, to the current rates. The experience loss ratio is the ratio of the experience losses to the on-level earned premium - the earned premium which would have resulted for the experience period had the current rates been in effect for the entire period.

Foundations of Casualty Actuarial Science, Casualty Actuarial Society, p. 37

The modification I have used is to take into account the limited credibility of the reported experience under the Low Cost Automobile Insurance Program. This modification is a commonly used actuarial procedure which reflects that limited experience should not be given full weight in determining the appropriate rate level.

In algebraic terms, the actuarial rate formula (before reflecting credibility) would be as follows:

$$R = [L \times (1 + G)] / [1 - E - U]$$

or

$$R = [L \times (1 + G)] / P$$

Where :

L = Experience Losses plus Allocated Loss Adjustment Expenses

G = Factor to Include Unallocated Loss Adjustment Expenses

F = Expenses other than Loss Adjustment Expenses (e.g., commissions, salaries, rent, premium taxes, etc.)

U = Underwriting Profit Factor

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P = Permissible Loss plus Loss Adjustment Expense Ratio

R = Actuarial Rate Indication (Before Credibility)

In instances such as the current one, where the experience rate change is not fully credible, the overall rate level change is calculated according to the following formula.^{1,2}

$$RLCF = RLCI1 \times Z + RLCI2 \times (1 - Z)$$

Where :

- RLCF = Final rate level change
- RLCI1 = Rate level change indicated from the limited historical data
- Z = Credibility of the historical data
- RLCI2 = Rate level change indicated from adjusting the current rates forward for trend
- 1 - Z = Credibility assigned to RLCI2

¹ See for example "An Introduction to Credibility" by Curtis Gary Dean, Casualty Actuarial Society Forum, Winter 1997, which states (page 58),

The basic formula for calculating credibility weighted estimates is:

$$\text{Estimate} = Z \times [\text{Observation}] + (1-Z) \times [\text{Other Information}]$$

$$\text{and } 0 \leq Z \leq 1$$

...

Observation	Other Information
...	...
Indicated Rate Change for Entire State	Trend in loss ratio

² If we had not taken credibility consideration into account, the indicated rate level change would have been lower by about -16%. The indicated rate level change *before* credibility was -23.6% [Schedule AIS-2, Sheet 1, Line (18)] The indicated rate level change *after* credibility, which was the value used in our analysis, was -8.9% [Schedule AIS-2, Sheet 1, Line (21)]
 $-16\% = 100\% \times [(1 - .236) / (1 - .089) - 1]$

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The application of these formulas to derive the indicated rate level for 10/20/3 BI/PD coverage is set forth in Schedule AIS-2.

For the UM and MP coverages, no historical experience is available under the Low Cost Automobile Insurance Program. The indicated UM and MP rates are derived as a ratio of the indicated BI / PD rates.

The following sections of this report discuss the various factors that are used in the rate level formula.

3. Experience Period Data Base

The (i) premium, (ii) loss plus allocated loss adjustment expense and (iii) claim data used in this analysis covers the period from July 1, 2000 to September 30, 2002; evaluated as of September 30, 2002. These data were obtained from the AIPSO report entitled "California Automobile Assigned Risk Plan" dated December 27, 2002 dealing with the Low Cost Automobile Insurance Program. This represents the entire time period for the data base of experience available to us.

4. Adjustment of Premium to Current Rate Level

The purpose of ratemaking is to test the adequacy of current rates. Therefore, the historical premiums need to be adjusted to the premiums that would have been charged based upon the current rates.³ This premium adjustment factor is used in Schedule AIS-2, Sheet 1, Line (10). The value for this factor is derived in Schedule AIS-3.

5. Loss Development

Loss development enters into the calculation by converting the actual reported losses (plus allocated loss adjustment expenses) for BI and PD to a projected ultimate basis. The loss development factors used are shown in Schedule AIS-2, Sheet 1, Line (11). The values for these factors are derived in Schedule AIS-4.

³ Effective March 1, 2003, the 10/20/3 BI/PD rate changed from \$450 to \$347 in Los Angeles and from \$410 to \$314 in San Francisco.

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Loss development takes into account that the losses (plus allocated loss adjustment expenses) established by insurance companies at a given point in time are not those that will ultimately be paid out by the insurers. The aggregate ultimate loss is the cost of all claims for the historical time period under consideration (e.g., accident year ending 12/31/01), after all occurrences have been reported and settled. The case incurred losses at any given point in time consist of the amount paid, plus case reserves on known claims. A case reserve is the estimated value of the unpaid loss on an individual open claim, taking into account the information known at a particular point in time. Different insurance companies can employ different practices in setting case reserves. Mathematically, incurred losses, paid losses and case reserves are related [both on individual claims and aggregated across groups of claims] as follows:

$$\text{Case Incurred Losses} = \text{Paid Losses} + \text{Case Reserves}$$

Reported case incurred losses change over time for two reasons.

First, as more information becomes known about claims, the reserves may change and/or the amount paid may differ from the reserve. The difference between the previous reserve and the revised reserve or actual settlement will cause the reported incurred losses to change over time.

Second, some occurrences may have already taken place which will lead to claims, but they have not yet been reported to the insurance company. These claims are referred to as incurred but not reported (IBNR). These latter reported claims will not be included in earlier evaluations of the case incurred losses which reflect only known claims. As these IBNR claims are reported, the losses known to the insurer will change.

The loss development factors used in our analysis are based upon the loss development experience for the California Automobile Assigned Risk Plan (CAARP).

6. Loss Trend

Loss trend enters into the calculation by converting the historical losses for BI and PD to a prospective cost basis. The loss trend factors used are shown in Schedule AIS-2, Sheet 1, Line (12). The values for these factors are derived in Schedules AIS-5 and AIS-6.

In very general terms, the need to use trend in the ratemaking process results from the fact that the experience used to evaluate rates is from an historical period, whereas the rates under consideration will actually be implemented in the future. The common analogy for trend is inflation. That is, it measures the change in the cost of an item during a period of time.

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However, whereas inflation in the general economy has just one component (i.e., price per unit), trend for insurance purposes has many components. The two main components are (a) claim severity and (b) claim frequency.

Actuaries measure trend by examining the historical movement of costs for insurance losses. The total trend factor is obtained by adjusting the annual trend for the length of the trend period in years.

In our analysis of trend, we examined the historic annual changes in California private passenger automobile insurance costs over various periods of time, for both BI and PD. This analysis is set forth in Schedule AIS-6. A summary of the results is set forth in Schedule AIS-6, Sheet 1. Based upon this analysis, we selected annual insurance cost trends of -1.8% per year for BI and +4.1% per year for PD. These values are reasonably reflective of the actual change in insurance costs for these coverages over time.

These annual changes in insurance costs were combined with the length of the trend period, in Schedule AIS-5, to derive the total loss trend factor.

The length of the trend period is derived using the following procedure. The average date of loss during the historic experience period is December 14, 2001.⁴ We assumed that the rates from this proceeding would become effective July 1, 2003; stay in place for one year until June 30, 2004; and be based upon annual policies. Under these conditions, these rates will apply to policies written from 7/1/2003 and 6/30/2004, the last policy which will expire on 6/30/2005. The average date of loss covered during the rate period is therefore 7/1/2004 (halfway between 7/1/2003 to 6/30/2005). Hence, there is a time lag of 2.55 years ($= 7/1/2004 - 12/14/01$) between the rate period and the average of the experience period.

Adjusting the annual trend in insurance costs by the length of the trend period gives the total trend factor.

7. Unallocated Loss Adjustment Expenses

Unallocated loss adjustment expenses (ULAE) enter into the calculation by converting the historical losses plus allocated loss adjustment expenses (ALAE) for BI and PD to a basis that includes all loss adjustment expenses (ALAE). The ULAE factors used are shown in Schedule AIS-2, Sheet 1, Line (13). The values for these factors are derived in Schedule AIS-7.

⁴ Schedule AIS-5, Line (1) and Schedule AIS-2, Sheet 1, Column (2)

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Loss adjustment expenses (LAE) are costs incurred by insurance companies in settling claims. Examples of these would include attorney fees, court costs, independent claim adjusters, outside experts, appraisals, salaries of staff claim adjusters and related overhead (e.g., rent, utilities, etc.).

ALAE can be associated with a particular claim (an example being legal fees). ULAE by contrast, cannot be associated with individual claims, but is more the general overhead of the insurer in investigating and settling claims (an example being salaries).

The loss experience reported for the Low Cost Automobile Insurance Program already includes ALAE. Hence, only a provision for ULAE needs to be added.

The ULAE factors used in our analysis are based upon experience for private passenger automobile insurance for the property casualty insurance industry, as set forth in the most recent CAARP filing.⁵

8. Permissible Loss & LAE Ratio

The permissible loss & LAE ratio is compared to the projected loss & LAE ratio based upon the historic experience to determine the indicated rate level change (before credibility). The permissible loss & LAE ratio used is shown in Schedule AIS-2, Sheet 1, Line (17). The value for this factor is derived in Schedules AIS-8 and AIS-9.

The permissible loss & LAE is numerically equal to 100% - expense ratio - underwriting profit factor. The permissible loss & LAE ratio is the proportion of the premium dollar that can be (or is permitted or targeted to be) paid out in losses plus loss adjustment expenses, and still allow insurance companies the opportunity to earn a fair profit after expenses are paid. If the projected proportion of the premium dollar expected to be paid out is more than the permissible amount, then a rate increase is needed to bring revenue up to the level of outgo. Similarly, if the projected proportion of the premium dollar expected to be paid out is less than the permissible amount, then a rate decrease should be implemented in order to bring income and outgo into balance. The amount of the rate change is determined by dividing the projected ratio by the permissible ratio.

In the current situation for the California Low Cost Automobile Insurance Program, the projected loss & LAE ratio is less than the permissible loss & LAE. Therefore, a decrease in rates from the current level is indicated.

⁵ CAARP filing for private passenger automobile insurance rates dated April 17, 2002

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The initial (before credibility) indicated rate level change of -23.6% [Schedule AIS-2, Sheet 1, Line (18)] is calculated by dividing the projected loss & LAE ratio of 63.1% [Schedule AIS-2, Sheet 1, Line (16)] by the permissible loss & LAE of 82.5% [Schedule AIS-2, Sheet 1, Line (17)].⁶

The expense values used in the calculation of the permissible loss & LAE ratio were derived based upon an examination of historic expenses for the property casualty insurance industry for California private passenger automobile insurance (Schedule AIS-9).

The underwriting profit factor was derived using the following standard actuarial formula:

$$\text{Underwriting Profit} = \text{Operating Profit} - \text{Investment Income on Reserves}$$

In accordance with past practices of the California Department of Insurance for CAARP rates, we used a value for the operating profit of 0%. The value for investment income on reserves was based upon an examination of historic investment income results for the property casualty insurance industry for California private passenger automobile insurance (Schedule AIS-9).

9. Credibility

As previously discussed, the experience for the Low Cost Automobile Insurance Program is not fully credible. The credibility of the experience was calculated according to the following standard actuarial formula :

$$Z = \text{square root (number of claims in the experience base / full credibility standard)}$$

A common and accepted full credibility standard for overall rate level indications is 1,084 claims.⁷

⁶ -23.6% = [63.1% / 82.5% - 1] X 100%

⁷ The December 27, 2002 report prepared by AIPSO regarding the California Low Cost Automobile Insurance Program states (page 1), "A claim count of 1,084 is a standard utilized to ascertain that prior loss history is a good predictor of future losses."

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The Low Cost Automobile Insurance Program experience data base had 153 claims. Applying the credibility formula gives a credibility value of 37.6%.⁸ [Schedule AIS-2, Sheet 1, Line (20)]

The indicated rate level change before credibility is -23.6% [Schedule AIS-2, Sheet 1, Line (18)]. Applying the credibility factor of 37.6% to this, gives an indicated rate level change after credibility of -8.9%.⁹ [Schedule AIS-2, Sheet 1, Line (21)].

10. Rate Relativity for UM and MP

Historical experience is not available for the California Low Cost Automobile Insurance Program for the coverages of uninsured motorists and medical payments. In order to determine rates for these coverages, we derived a rate relativity for both UM and MP to the rate for BI & PD combined.

We examined California private passenger automobile insurance cost data collected by the National Association of Insurance Commissioners ("NAIC") for the coverages of BI, PD, UM and MP. These are summarized in Schedule AIS-10, Sheet 1. The UM and MP costs were then compared to the BI & PD costs to derive an indicated relationship between these coverages. That relativity was then applied to the indicated BI & PD rate for the California Low Cost Automobile Insurance Program to derive rates for the UM and MP coverages.

In performing this analysis, an adjustment had to be made to both the UM and MP data collected by the NAIC.

The uninsured motorists (UM) coverage cost data collected by the NAIC also includes the cost of underinsured motorists (UIM) coverage. UIM coverage, however, is not applicable to the California Low Cost Automobile Insurance Program. Hence, the cost of UIM coverage included in the NAIC data needed to be removed. We did this based upon a distribution between UM and UIM costs using data collected by the Insurance Research Council (IRC).¹⁰

⁸ $37.6\% = 100\% \times \text{square root} (153 / 1,084)$,

⁹ $-8.9\% = -23.6\% \times 37.6\%$

The current rates just recently became effective on March 1, 2003. In addition, the annual loss trend for BI plus PD combined is close to 0%. Hence, it is reasonable to use a value of 0% for the second term of the "RLCF" equation discussed in Section 2.

¹⁰ The data used from the IRC study was based upon countrywide experience.

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For medical payments, the NAIC data reflects total limits of coverage. Common limits of medical payments coverage are \$5,000 and above.¹¹ The NAIC data reflects an average medical payments claim severity of over \$3,000. However, the Low Cost Automobile Insurance Program has a limit for medical payments coverage of only \$1,000. In order to correct for this mismatch between the limits of coverage in the NAIC database, and the limits of coverage available in the Low Cost Automobile Insurance Program, we adjusted the NAIC database by limiting the average medical cost per claim.¹²

11. Conclusion

Based upon our analysis we derived indicated rates for the BI/PD, UM and MP coverages set forth in the CADOI Notices of Hearing RH 03026431 and RH 03026432. These indicated rate, along with the current rates are set forth in the following table.

Indicated and Current Rates Under the Low Cost Automobile Insurance Program

<u>Coverage</u>	<u>Indicated Rates</u>	<u>Current Rates</u>
10/20/3 BI : PD rate for Los Angeles	\$316	\$347
10/20/3 BI : PD rate for San Francisco	\$286	\$314
10/20 UM rate for Los Angeles	\$ 35	\$ 64
10/20 UM rate for San Francisco	\$ 32	\$ 39
\$1,000 MP rate for Los Angeles	\$ 27	\$ 26
\$1,000 MP rate for San Francisco	\$ 24	\$ 24

These indicated rates are actuarially sound and are in compliance with our understanding of the applicable statutes.

¹¹ Injuries in Auto Accidents, An Analysis of Auto Insurance Claims, IRC, June 1999, page 105, Table A-7

¹² In our analysis, we used a medical payments claim severity cost limit of \$1,500. We used a value higher than the \$1,000 limit applicable to the California Low Cost Automobile Insurance Program to take into account that the BI and PD data in the NAIC database are at higher limits than the 10/20/3 coverage limits available in the Low Cost Automobile Insurance Program.

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Summary of Proposed Rates for
\$10,000/\$20,000/\$3,000 Bodily Injury Liability (BI) / Property Damage Liability (PD)
\$10,000/\$20,000 Uninsured Motorists (UM) and \$1,000 Medical Payments (MP)

(1)	Proposed 10/20/3 Rate - Los Angeles	\$316
(2)	Proposed 10/20/3 Rate - San Francisco	\$286
(3)	Proposed 10/20 UM Rate - Los Angeles	\$35
(4)	Proposed 10/20 UM Rate - San Francisco	\$32
(5)	Proposed \$1,000 MP Rate - Los Angeles	\$27
(6)	Proposed \$1,000 MP Rate - San Francisco	\$24

Notes :

- (1) Schedule AIS-2, Sheet , Line (22)
- (2) Schedule AIS-2, Sheet , Line (23)
- (3) (1) X UM Rate Relativity from Schedule AIS-10, Sheet 1
- (4) (2) X UM Rate Relativity from Schedule AIS-10, Sheet 1
- (5) (1) X MP Rate Relativity from Schedule AIS-10, Sheet 1
- (6) (2) X MP Rate Relativity from Schedule AIS-10, Sheet 1

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Derivation of BI / PD Indicated Rate Level Change and Rates

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Accident Period	Average Date of Loss	Evaluation Date	Years Developed	Earned Premium	Incurred Losses & ALAE		Total	Loss & ALAE Ratio
					B.I.	P.D.		
07/01/00 to 12/31/00	09/30/00	09/30/02	2.00	\$119,953	\$24,000	\$26,703	\$50,703	42.3%
01/01/01 to 12/31/01	07/02/01	09/30/02	1.25	\$249,008	\$28,500	\$38,913	\$67,413	27.1%
01/01/02 to 09/30/02	05/17/02	09/30/02	0.37	\$612,295	\$147,845	\$121,169	\$269,014	43.9%
Combined	12/14/01	09/30/02	0.79	\$981,256	\$200,345	\$186,785	\$387,130	39.5%
(10) Factor to Adjust Premium to a Current Rate Level				0.771				
(11) Loss Development Factor					0.978	1.122		
(12) Trend Factor					0.954	1.105		
(13) Unallocated Loss Adjustment Expense Factor					1.147	1.134		
(14) Projected Premiums				\$756,548				
(15) Projected Losses and Loss Adjustment Expenses					\$214,402	\$262,609	\$477,012	
(16) Projected Loss & Loss Adjustment Expense Ratio								63.1%
(17) Permissible Loss and LAE Ratio								82.5%
(18) Initial Indicated Rate Level Change								-23.6%
(19) Number of Claims								153
(20) Credibility								37.6%
(21) Credibility Weighted Rate Level Change								-8.9%
(22) Proposed 10/20/3 Rate - Los Angeles								\$316
(23) Proposed 10/20/3 Rate - San Francisco								\$286

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Notes For Derivation of Indicated Rate Level Change

Notes:

- (1) : AIPSO Analysis dated December 27, 2002; Exhibit 1
- (2) : Average time period in (1)
- (3) : AIPSO Analysis dated December 27, 2002; Exhibit 1
- (4) : (3) - (2) in years
- (5) : AIPSO Analysis dated December 27, 2002; Exhibit 1 for LA & SF combined
- (6) : AIPSO Analysis dated December 27, 2002; Exhibit 1 for LA & SF combined
- (7) : AIPSO Analysis dated December 27, 2002; Exhibit 1 for LA & SF combined
- (8) : AIPSO Analysis dated December 27, 2002; Exhibit 1 for LA & SF combined
- (9) : (8) / (5)
- (10) : Schedule AIS-3, Column (5) Combined
- (11) : Schedule AIS-4, interpolated between values for 0.75 and 1.75 years developed
- (12) : Schedule AIS-5, Line (5)
- (13) : Schedule AIS-7, Line (4)
- (14) : (5) [Combined] X (10)
- (15) : (6) [Combined] X (11) X (12) X (13)
- (16) : (15 Total) / (14)
- (17) : Schedule AIS-8, Line (6)
- (18) : [(16) / (17) - 1] X 100%
- (19) : AIPSO Analysis dated December 27, 2002; Exhibit 1 for LA & SF combined
- (20) : Square root [(19) / 1,084]
- (21) : (19) X (20)
- (22) : [1 + (21)] X Current Rate { see Schedule AIS-3, Column (3) }
- (23) : [1 + (21)] X Current Rate { see Schedule AIS-3, Column (3) }

CALIFORNIA LOW COST PRIVATE PASSENGER AUTOMOBILE INSURANCE POLICY

Derivation of Factor to Adjust Premiums to Current Level

(1) <u>Territory</u>	(2) <u>Exposures</u>	(3) Rate Level		(4) <u>On Level Premium Factor</u>
		<u>Prior to 3/1/03</u>	<u>After 3/1/03</u>	
Los Angeles	2069.89	\$450.00	\$347.00	0.771
San Francisco	56.49	\$410.00	\$314.00	0.766
Combined	2126.38	\$448.94	\$346.12	0.771

Notes :

(2) : California Low Cost Automobile Policy Call Data, Evaluated as of 9/30/02
From AISPO report for CAARP dated December 27, 2002; Exhibit 1

(3) : Statutory Provision

(4) : Statutory Provision

(5) : (4) / (3)

CALIFORNIA LOW COST PRIVATE PASSENGER AUTOMOBILE INSURANCE POLICY

Deviation of Loss Development Factors

<u>Evaluation Date</u>	<u>Years Developed</u>	<u>Total Limits Loss Development Factor to Ultimate</u>	
		<u>Bodily Injury</u>	<u>Property Damage</u>
15 Months	0.75	0.977	1.126
27 Months	1.75	0.996	1.025
39 Months	2.75	0.995	1.006
51 Months	3.75	1.004	1.000
63 Months	4.75	1.002	0.999
75 Months	5.75	1.001	0.999
87 Months	6.75	1.000	1.000

Source : CAARP Private Passenger Automobile Insurance Filing Dated April 17, 2002
Pages 23 and 24, Five Point Average

CALIFORNIA LOW COST PRIVATE PASSENGER AUTOMOBILE INSURANCE POLICY

Derivation of Loss Trend Factor

	Bodily Injury <u>Liability</u>	Property Damage <u>Liability</u>
(1) Average Date of Loss in Experience Period	12/14/01	12/14/01
(2) Average Date of Loss in Rate Level Period	07/01/04	07/01/04
(3) Length of Trend Period	2.55	2.55
(4) Annual Trend Factor	-1.8%	4.1%
(5) Total Trend Factor	0.954	1.105

Notes :

- (1) : Schedule AIS-2, Sheet 1, Column (2)
- (2) : Based upon a 7/1/03 effective date and a policy period of one year
- (3) : (2) - (1) in years
- (4) Schedule AIS-6, Sheet 1
- (5) : $1 + (3) \times (4)$

CALIFORNIA LOW COST PRIVATE PASSENGER AUTOMOBILE INSURANCE POLICY

Derivation of Annual Loss Trend Factor

<u>Coverage</u>	<u>Annual Pure Premium Loss Trend Covering *</u>					<u>Average</u>	<u>Selected</u>
	<u>16 Points</u>	<u>12 Points</u>	<u>9 Points</u>	<u>8 Points</u>	<u>6 Points</u>		
Bodily Injury Liability	-2.0%	-2.5%	-2.2%	-1.7%	-0.7%	-1.8%	-1.8%
Property Damage Liability	4.0%	4.3%	4.3%	4.3%	3.5%	4.1%	4.1%

* Based upon quarterly year ending data through December 30, 2002
Linear Trend Calculations

Source : Calculations based upon Fast Track data for California Private Passenger Automobile Insurance
See Schedule AIS-6, Sheets 2 to 5

CALIFORNIA LOW COST AUTOMOBILE

Bodily Injury Liability Loss Trend - Fast Track Data

Calendar Year Ended	(1)	(2)				
	Paid Pure Premium	Fitted Pure Premium - Linear				
		<u>16 Points</u>	<u>12 Points</u>	<u>9 Points</u>	<u>8 Points</u>	<u>6 Points</u>
03/31/99	\$122.29	\$123.00				
06/30/99	\$121.72	\$122.43				
09/30/99	\$121.35	\$121.84				
12/31/99	\$120.73	\$121.26				
03/31/00	\$121.60	\$120.69	\$121.66			
06/30/00	\$121.82	\$120.11	\$120.94			
09/30/00	\$120.23	\$119.53	\$120.22			
12/31/00	\$120.44	\$118.95	\$119.50	\$119.08		
03/31/01	\$119.23	\$118.38	\$118.79	\$118.45	\$117.77	
06/30/01	\$116.81	\$117.80	\$118.08	\$117.82	\$117.29	
09/30/01	\$116.12	\$117.22	\$117.35	\$117.18	\$116.79	\$115.92
12/31/01	\$115.55	\$116.64	\$116.63	\$116.54	\$116.30	\$115.71
03/31/02	\$115.37	\$116.07	\$115.93	\$115.91	\$115.82	\$115.51
06/30/02	\$115.56	\$115.49	\$115.21	\$115.28	\$115.33	\$115.30
09/30/02	\$114.67	\$114.91	\$114.49	\$114.64	\$114.83	\$115.09
12/31/02	\$115.15	\$114.33	\$113.77	\$114.00	\$114.34	\$114.88
Annual Percent Change		-2.0%	-2.5%	-2.2%	-1.7%	-0.7%
Correlation Coefficient		-0.9458	-0.9465	-0.8765	-0.8368	-0.8071
T-Statistic		-10.9011	-9.2742	-4.8167	-3.7442	-2.7341
Constant		352.2565	409.2256	375.6684	316.0453	200.5879
Slope		-0.0063	-0.0079	-0.0070	-0.0054	-0.0023
R Squared		0.8946	0.8958	0.7682	0.7003	0.6514
Standard Error of Y Estimat		0.9772	0.9245	1.0208	0.8478	0.3182
Standard Error of Coefficient		0.00058	0.00085	0.00144	0.00143	0.00083

Source: Insurance Services Office, Fast Track Trend Data (See Schedule AIS-6, Sheet 3)
Schedule AIS-6, Sheet 2

FAST TRACK MONITORING SYSTEM
CLAIM COST AND FREQUENCY

04 - CALIFORNIA

PRIVATE PASSENGER LIABILITY

BI TOTAL LIMITS LOSSES

YR	QTR	EARNED CAR YEARS	NO. OF PAID CLAIMS	NO. OF CLAIMS ARISING	PAID LOSSES	PAID CLAIM FREQ.	PCT. CHANGE FROM SAME QTR PRIOR YEAR	AVERAGE LOSS	PCT. CHANGE FROM SAME QTR PRIOR YEAR	PURE PREMIUM	PCT. CHANGE FROM SAME QTR PRIOR YEAR	ARISING CLAIM FREQ.	PCT. CHANGE FROM SAME QTR PRIOR YEAR
98	1ST	2,090,597	35,867	52,553	241,149,617	1.72	*****	6,723	*****	115.35	*****	2.51	*****
98	2ND	2,116,225	39,375	50,305	269,216,106	1.86	*****	6,837	*****	127.22	*****	2.38	*****
98	3RD	2,149,151	37,405	48,249	266,054,898	1.74	*****	7,113	*****	123.80	*****	2.25	*****
98	4TH	2,170,859	35,714	49,910	265,110,788	1.65	*****	7,423	*****	122.12	*****	2.30	*****
99	1ST	2,181,454	35,404	48,268	253,467,688	1.62	-5.8	7,159	6.5	116.19	0.7	2.21	-12.0
99	2ND	2,216,090	36,572	47,981	276,445,974	1.65	-11.3	7,559	10.6	124.74	-1.9	2.17	-8.8
99	3RD	2,247,699	35,872	47,183	274,774,376	1.60	-8.0	7,660	7.7	122.25	-1.3	2.10	-6.7
99	4TH	2,261,713	35,613	48,889	270,683,363	1.57	-4.8	7,601	2.4	119.68	-2.0	2.16	-6.1
00	1ST	2,271,225	35,915	50,704	272,100,202	1.58	-2.5	7,576	5.8	119.80	3.1	2.23	0.9
00	2ND	2,292,213	34,886	49,276	287,703,739	1.52	-7.9	8,247	9.1	125.51	0.6	2.15	-0.9
00	3RD	2,320,840	33,345	47,412	269,158,328	1.44	-10.0	8,072	5.4	115.97	-5.1	2.04	-2.9
00	4TH	2,339,783	34,597	49,115	282,008,490	1.48	-5.7	8,151	7.2	120.53	0.7	2.10	-2.8
01	1ST	2,347,173	33,983	52,316	270,009,346	1.45	-8.2	7,945	4.9	115.04	-4.0	2.23	0.0
01	2ND	2,362,258	33,384	48,874	273,368,609	1.41	-7.2	8,189	-0.7	115.72	-7.8	2.07	-3.7
01	3RD	2,378,358	33,190	48,481	269,299,833	1.40	-2.8	8,114	0.5	113.23	-2.4	2.04	0.0
01	4TH	2,372,357	34,325	50,232	280,448,493	1.45	-2.0	8,170	0.2	118.22	-1.9	2.12	1.0
02	1ST	2,344,940	33,207	49,490	268,089,682	1.42	-2.1	8,073	1.6	114.33	-0.6	2.11	-5.4
02	2ND	2,338,661	33,005	48,203	272,416,365	1.41	0.0	8,254	0.8	116.48	0.7	2.06	-0.5
02	3RD	2,338,105	30,758	46,121	256,219,781	1.32	-5.7	8,330	2.7	109.58	-3.2	1.97	-3.4
02	4TH	2,322,162	31,578	47,894	279,253,296	1.36	-6.2	8,843	8.2	120.26	1.7	2.06	-2.8
PRIOR 4 QTRS ENDING													
98	4TH	8,526,832	148,361	201,017	1,041,531,409	1.74	*****	7,020	*****	122.15	*****	2.36	*****
99	1ST	8,617,689	147,898	196,732	1,053,849,480	1.72	*****	7,126	*****	122.29	*****	2.28	*****
99	2ND	8,717,554	145,095	194,408	1,061,079,348	1.66	*****	7,313	*****	121.72	*****	2.23	*****
99	3RD	8,816,102	143,562	193,342	1,069,798,826	1.63	*****	7,452	*****	121.35	*****	2.19	*****
99	4TH	8,906,956	143,461	192,321	1,075,371,401	1.61	-7.5	7,496	6.8	120.73	-1.2	2.16	-8.5
00	1ST	8,996,727	143,972	194,757	1,094,003,915	1.60	-7.0	7,599	6.6	121.60	-0.6	2.16	-5.3
00	2ND	9,072,850	142,286	196,052	1,105,261,680	1.57	-5.4	7,768	6.2	121.82	0.1	2.16	-3.1
00	3RD	9,145,991	139,759	196,281	1,099,645,632	1.53	-6.1	7,868	5.6	120.23	-0.9	2.15	-1.8
00	4TH	9,224,061	138,743	196,507	1,110,970,759	1.50	-6.8	8,007	6.8	120.44	-0.2	2.13	-1.4
01	1ST	9,300,009	136,811	198,119	1,108,879,903	1.47	-8.1	8,105	6.7	119.23	-1.9	2.13	-1.4
01	2ND	9,370,054	135,309	197,717	1,094,544,773	1.44	-8.3	8,089	4.1	116.81	-4.1	2.11	-2.3
01	3RD	9,427,572	135,154	198,786	1,094,686,278	1.43	-6.5	8,100	2.9	116.12	-3.4	2.11	-1.9
01	4TH	9,460,146	134,882	199,903	1,093,126,281	1.43	-4.7	8,104	1.2	115.55	-4.1	2.11	-0.9
02	1ST	9,457,913	134,106	197,077	1,091,206,617	1.42	-3.4	8,137	0.4	115.37	-3.2	2.08	-2.3
02	2ND	9,434,316	133,727	196,406	1,090,254,373	1.42	-1.4	8,153	0.8	115.56	-1.1	2.08	-1.4
02	3RD	9,394,063	131,295	194,046	1,077,174,321	1.40	-2.1	8,204	1.3	114.67	-1.2	2.07	-1.9
02	4TH	9,343,868	128,548	191,708	1,075,979,124	1.38	-3.5	8,370	3.3	115.15	-0.3	2.05	-2.8

CALIFORNIA LOW COST AUTOMOBILE

Property Damage Liability Loss Trend - Fast Track Data :

Calendar Year Ended	(1) Paid Pure Premium	(2) Fitted Pure Premium - Linear				
		<u>16 Points</u>	<u>12 Points</u>	<u>9 Points</u>	<u>8 Points</u>	<u>6 Points</u>
03/31/99	\$91.74	\$90.52				
06/30/99	\$91.97	\$91.54				
09/30/99	\$92.39	\$92.56				
12/31/99	\$93.27	\$93.59				
03/31/00	\$94.63	\$94.61	\$94.06			
06/30/00	\$95.11	\$95.63	\$95.16			
09/30/00	\$95.56	\$96.65	\$96.27			
12/31/00	\$97.20	\$97.68	\$97.38	\$97.39		
03/31/01	\$98.09	\$98.69	\$98.47	\$98.48	\$98.58	
06/30/01	\$99.39	\$99.70	\$99.57	\$99.58	\$99.66	
09/30/01	\$101.01	\$100.73	\$100.68	\$100.70	\$100.75	\$101.32
12/31/01	\$102.33	\$101.76	\$101.79	\$101.81	\$101.84	\$102.24
03/31/02	\$103.34	\$102.77	\$102.88	\$102.90	\$102.91	\$103.13
06/30/02	\$104.30	\$103.78	\$103.98	\$104.00	\$104.00	\$104.03
09/30/02	\$104.98	\$104.81	\$105.09	\$105.12	\$105.09	\$104.95
12/31/02	\$105.58	\$105.84	\$106.20	\$106.23	\$106.18	\$105.86
Annual Percent Change		4.0%	4.3%	4.3%	4.3%	3.5%
Correlation Coefficient		0.9929	0.9939	0.9911	0.9875	0.9897
T-Statistic		31.2880	28.4161	19.6774	15.3168	13.8219
Constant		-314.5263	-348.2962	-349.3568	-341.0277	-267.5443
Slope		0.0112	0.0121	0.0121	0.0119	0.0099
R Squared		0.9859	0.9878	0.9822	0.9751	0.9795
Standard Error of Y Estim		0.6015	0.4642	0.4351	0.4595	0.2742
Standard Error of Coefficie		0.00036	0.00043	0.00062	0.00078	0.00072

Source : Insurance Services Office, Fast Track Trend Data (See Schedule AIS-6, Sheet 5
Schedule AIS-6, Sheet 4

FAST TRACK MONITORING SYSTEM
CLAIM COST AND FREQUENCY

04 - CALIFORNIA

PRIVATE PASSENGER LIABILITY

PROPERTY DAMAGE

YR	QTR	EARNED CAR YEARS	NO. OF PAID CLAIMS	PAID LOSSES	PAID CLAIM FREQ.	PCT. CHANGE	AVERAGE	PCT. CHANGE	PURE	PCT. CHANGE
						FROM SAME QTR PRIOR YEAR		LOSS		FROM SAME QTR PRIOR YEAR
98	1ST	2,090,597	94,916	195,410,722	4.54	*****	2,059	*****	93.47	*****
98	2ND	2,116,225	95,335	198,335,196	4.50	*****	2,080	*****	93.72	*****
98	3RD	2,149,151	93,121	192,586,837	4.33	*****	2,068	*****	89.61	*****
98	4TH	2,170,859	90,874	190,090,741	4.19	*****	2,092	*****	87.56	*****
99	1ST	2,181,454	97,170	209,607,852	4.45	-2.0	2,157	4.8	96.09	2.8
99	2ND	2,216,090	97,304	209,439,610	4.39	-2.4	2,152	3.5	94.51	0.8
99	3RD	2,247,699	96,300	205,343,203	4.28	-1.2	2,132	3.1	91.36	2.0
99	4TH	2,261,713	95,877	206,345,406	4.24	1.2	2,152	2.9	91.23	4.2
00	1ST	2,271,225	103,769	230,205,622	4.57	2.7	2,218	2.8	101.36	5.5
00	2ND	2,292,213	99,302	221,011,646	4.33	-1.4	2,226	3.4	96.42	2.0
00	3RD	2,320,840	96,797	216,451,540	4.17	-2.6	2,236	4.9	93.26	2.1
00	4TH	2,339,783	98,834	228,910,848	4.22	-0.5	2,316	7.6	97.83	7.2
01	1ST	2,347,173	105,787	245,823,671	4.51	-1.3	2,324	4.8	104.73	3.3
01	2ND	2,362,258	103,296	240,128,406	4.37	0.9	2,325	4.4	101.65	5.4
01	3RD	2,378,358	101,808	237,444,141	4.28	2.6	2,332	4.3	99.84	7.1
01	4TH	2,372,357	103,121	244,643,072	4.35	3.1	2,372	2.4	103.12	5.4
02	1ST	2,344,940	107,326	255,161,913	4.58	1.6	2,377	2.3	108.81	3.9
02	2ND	2,338,661	103,249	246,749,085	4.41	0.9	2,390	2.8	105.51	3.8
02	3RD	2,338,105	99,591	239,595,597	4.26	-0.5	2,406	3.2	102.47	2.6
02	4TH	2,322,162	99,354	244,987,468	4.28	-1.6	2,466	4.0	105.50	2.3
PRIOR										
4 QTRS										
ENDING										
98	4TH	8,526,832	374,246	776,423,496	4.39	*****	2,075	*****	91.06	*****
99	1ST	8,617,689	376,500	790,620,626	4.37	*****	2,100	*****	91.74	*****
99	2ND	8,717,554	378,469	801,725,040	4.34	*****	2,118	*****	91.97	*****
99	3RD	8,816,102	381,648	814,481,406	4.33	*****	2,134	*****	92.39	*****
99	4TH	8,906,956	386,651	830,736,071	4.34	-1.1	2,149	3.6	93.27	2.4
00	1ST	8,996,727	393,250	851,333,841	4.37	0.0	2,165	3.1	94.63	3.2
00	2ND	9,072,850	395,248	862,905,877	4.36	0.5	2,183	3.1	95.11	3.4
00	3RD	9,145,991	395,745	874,014,214	4.33	0.0	2,209	3.5	95.56	3.4
00	4TH	9,224,061	398,702	896,579,656	4.32	-0.5	2,249	4.7	97.20	4.2
01	1ST	9,300,009	400,720	912,197,705	4.31	-1.4	2,276	5.1	98.09	3.7
01	2ND	9,370,054	404,714	931,314,465	4.32	-0.9	2,301	5.4	99.39	4.5
01	3RD	9,427,572	409,725	952,307,066	4.35	0.5	2,324	5.2	101.01	5.7
01	4TH	9,460,146	414,012	968,039,290	4.38	1.4	2,338	4.0	102.33	5.3
02	1ST	9,457,913	415,551	977,377,532	4.39	1.9	2,352	3.3	103.34	5.4
02	2ND	9,434,316	415,504	983,998,211	4.40	1.9	2,368	2.9	104.30	4.9
02	3RD	9,394,063	413,287	986,149,667	4.40	1.1	2,386	2.7	104.98	3.9
02	4TH	9,343,868	409,520	986,494,063	4.38	0.0	2,409	3.0	105.58	3.2

CALIFORNIA LOW COST PRIVATE PASSENGER AUTOMOBILE INSURANCE POLICY

Derivation of Unallocated Loss Adjustment Expense Provision

(1) <u>Year</u>	(2) <u>Bodily Injury</u>	(3) <u>Property Damage</u>
1998	1.142	1.131
1999	1.152	1.136
2000	1.147	1.135
(4) : Average	1.147	1.134

Source : CAARP Private Passenger Automobile Insurance Filing Dated April 17, 2002, Page 20

CALIFORNIA LOW COST PRIVATE PASSENGER AUTOMOBILE INSURANCE POLICY

Derivation of Permissible Loss & LAE Ratio

	<u>Overhead Component</u>	<u>Value</u>
(1)	General Expenses	5.1%
(2)	Selling Expenses	16.4%
(3)	Premium Taxes, Licenses and Fees	2.5%
(4)	Investment Income on Reserves	6.5%
(5)	Combined	17.5%
(6)	Permissible Loss & LAE Ratio	82.5%

Notes:

- (1) Schedule AIS-9, Column (2) Average
- (2) Schedule AIS-9, Column (3) Average
- (3) Schedule AIS-9, Column (4) Average
- (4) Schedule AIS-9, Column (5) Average
- (5) (1) + (2) + (3) - (4)
- (6) 100% - (5)

CALIFORNIA LOW COST PRIVATE PASSENGER AUTOMOBILE INSURANCE POLICY

Derivation of Overhead Provisions

(1) <u>Year</u>	(2) <u>General Expense</u>	(3) <u>Selling Expense</u>	(4) <u>Taxes, Licenses and Fees</u>	(5) <u>Investment Income on Reserves</u>
1997	4.5%	14.8%	2.4%	6.8%
1998	4.7%	15.4%	2.4%	6.8%
1999	5.0%	16.6%	2.5%	6.2%
2000	6.4%	18.5%	2.5%	6.6%
2001	5.1%	16.5%	2.6%	6.1%
(6) : Average	5.1%	16.4%	2.5%	6.5%

Source : NAIC Profitability Studies - California Private Passenger Automobile Liability Data

* Ratio to Premium

CALIFORNIA LOW COST PRIVATE PASSENGER AUTOMOBILE INSURANCE POLICY

Deviation of UM and MP to BI/PD Rate Relativity

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Year</u>	<u>California Pure Premium for</u>				<u>Ratio to BI + PD Pure Premium of</u>	
	<u>Bodily</u>	<u>Property</u>	<u>Uninsured /</u>	<u>Medical</u>	<u>UM</u>	<u>MP</u>
	<u>Liability (BI)</u>	<u>Damage</u>	<u>Motorists (UM)</u>	<u>Payments (MP)</u>		
	<u>Liability (PD)</u>					
1994	\$190.40	\$77.64	\$32.97	\$21.75	12.3%	8.1%
1995	\$176.33	\$84.98	\$29.93	\$21.45	11.5%	8.2%
1996	\$149.52	\$87.38	\$26.33	\$20.25	11.1%	8.5%
1997	\$125.40	\$90.32	\$20.20	\$18.60	9.4%	8.6%
Combined	\$159.11	\$85.28	\$27.23	\$20.55	11.1%	8.4%

Notes :

- (1) : NAIC Auto Insurance Database, 1998
- (2) : NAIC Auto Insurance Database, 1998
- (3) : NAIC Auto Insurance Database, 1998, Adjusted to Reflect Unisured Motorists Only
: Calculated as UM/ UIM Pure Premium from NAIC data 55% to adjust to a UM only basis
: 55% Value from Schedule AIS-10, Sheet 2, Line (8)
- (4) : NAIC Auto Insurance Database, 1998, Adjusted to Reflected a Claim Severity of \$1,000
: Calculated as Frequency from NAIC data X \$1,500 claim severity
: A \$1,500 value used to reflect that the BI and PD values from the NAIC report are on a total limits basis.
- (5) : (4) / [(2) + (3)]
- (6) : (5) / [(2) + (3)]

CALIFORNIA LOW COST PRIVATE PASSENGER AUTOMOBILE INSURANCE POLICY

Deviation of UM Costs as a Percent of UM & UIM

(1) <u>Type of Disability</u>	(2) Uninsured Motorists			(6) Underinsured Motorists		
	(2) <u>Number of Claims</u>	(3) <u>Average Payment</u>	(4) <u>Total Payment</u>	(5) <u>Number of Claims</u>	(6) <u>Average Payment</u>	(7) <u>Total Payment</u>
None	3,273	\$4,831	\$15,811,863	298	\$14,473	\$4,312,954
Temporary	1,137	\$13,167	\$14,970,879	420	\$26,678	\$11,204,760
Permanent Partial	333	\$25,848	\$8,607,384	333	\$39,770	\$13,243,410
Permanent Total	23	\$154,925	\$3,563,275	36	\$138,178	\$4,974,408
Fatality	24	\$72,172	\$1,732,128	46	\$62,676	\$2,883,096
Total	4,790	\$9,329	\$44,685,529	1,133	\$32,320	\$36,618,628

(8) Ratio of UM to UM & UIM Paymen 55%

Notes :

- (2) : Injuries in Auto Accidents, An Analysis of Auto Insurance Claims, IRC, June 1999, Page 116, Table A-28
- (3) : Injuries in Auto Accidents, An Analysis of Auto Insurance Claims, IRC, June 1999, Page 116, Table A-28
- (4) : (2) X (3)
- (5) : Injuries in Auto Accidents, An Analysis of Auto Insurance Claims, IRC, June 1999, Page 116, Table A-28
- (6) : Injuries in Auto Accidents, An Analysis of Auto Insurance Claims, IRC, June 1999, Page 116, Table A-28
- (7) : (5) X (6)
- (8) : (7 Total) / [(7 Total) + (8 Total)]