

ESTIMATING THE COST OF ACCIDENT INSURANCE AS A PART OF AUTOMOBILE LIABILITY INSURANCE

HERBERT E. WITTICK

In April 1960, a select committee was appointed by the Legislature of the Province of Ontario "to examine, investigate, enquire, study, and report on all matters relating to persons who suffer financial loss as the result of motor vehicle." In the first interim report made in March 1961, they dealt at considerable length with the various situations which exist in different provinces and states and in particular covered in detail the system used in Saskatchewan where certain basic payments for death, dismemberment and disability are made to persons injured in automobile accidents regardless of fault. The Saskatchewan system is compulsory and is administered by the government insurance office. The legal rights of injured persons to sue under the ordinary rules of negligence are preserved but suit may only be brought for any excess amount which may be recoverable over the amount already received under the basic compensation plan. Thus the system represents a compromise between the ordinary negligence system and a full Workmens' Compensation type plan. The Select Committee were attracted to some basis whereby injured persons would be compensated at least to a certain extent regardless of fault and the following is an excerpt from their report:

"The Committee is interested in the principle of compensation regardless of fault. Its departure from the traditional concept of fault-liability reflects a view, held in some quarters, that responsibility for automobile accidents rests on society as a whole, rather than on individuals, and that the task of establishing responsibility in this age of many complexities imposes too great a burden on those who settle or adjudicate claims. A compensation plan provides a measure of indemnification for a group who, under the traditional fault-liability system, are not entitled to indemnification. The normal third party liability insurance system provides nothing for the surviving dependents of the negligent party or for the negligent party himself when, as a result of his own injuries, he is disabled for life. There are other situations where the operations of the concept of negligence denies redress to individuals. It is rather surprising to the Committee that, over the years, the insurance industry has not reacted more positively in this particular area of concern."

Actually the companies and the provincial insurance superintendents were already in the process of redrafting the uniform automobile insurance act to permit the inclusion of accident benefits in the automobile policy. This was pointed out to the Select Committee and work on the new act was accelerated. A draft was submitted at the September 1961 Winnipeg meeting of the superintendents with provisions making it possible to include accident insurance for drivers, passengers and pedestrians under automobile liability policies. The insurance contemplated is not only for

medical expenses but also for death, dismemberment and weekly indemnity covering all persons injured in or by automobiles. Most importantly the proposed legislation is designed to prevent duplication of payments and thus keep down the additional cost of the universal benefit. Thus:

- a. The occupant of an automobile or a pedestrian struck by such automobile will receive the accident benefits from the insurer thereof.
- b. The injured person may not sue either the motorist with whom he is riding or by whom he is struck except for any amount which may be recoverable at law in excess of what he has already been paid.
- c. The injured occupant may not sue another motorist who carries the coverage except for such excess. Since the Canadian provinces all operate on a basis of comparative negligence and the liability of the driver is imputed to the passenger, it is expected that persons who are only entitled to collect a small percentage of their damage at law will make no claim except for accident benefits. If suit is brought and the amount of damages assessed is less than the accident benefits received, the action is deemed to have failed and the plaintiff is liable for all costs.
- d. There will be no subrogation on the part of the insurers against any person also carrying the accident coverage but subrogation is provided against out-of-province motorists and against persons other than motorists who may have caused the accident.

The act will provide that any claimant must disclose the name of the insurer of the automobile of which he was an occupant and the amount of accident benefits received. At the Winnipeg meeting there was considerable discussion of the proposals and agreement was reached on the general principles. In the fall of 1961 and the first part of 1962 various meetings were held by an extended all industry committee set up by the All Canada Insurance Federation working in conjunction with the insurance superintendents.

A revised draft bill was prepared for discussion at the meeting of the superintendents at Regina in September 1962 and this was distributed to all insurers in July. Prior to the meeting there was rather violent objection on the part of some United States companies who felt that this legislation was the opening wedge for a full compensation plan and should be strongly opposed. However because of the definite views of the Ontario Select Committee, the insurers generally agreed opposition was not a practical matter and that a neutral position was the only tenable one. Thus a report was prepared explaining the companies' stand which was that they

could not in principle recommend a program which would increase the cost of automobile insurance and that government would have to bear the responsibility for doing so. At the same time the companies made it clear that they were at all times willing and able to provide any form of protection which was required. With this explanation, the draft bill met with the general approval of the meeting and the superintendents likewise approved it in their own closed sessions. Certain changes in the act were still found necessary so final action was deferred for another year.

At this same time the Select Committee approached the All Canada Insurance Federation and asked that the companies estimate the additional cost of providing the basic automobile accident coverage, both on a voluntary basis and on a basis whereby it would become a mandatory part of automobile liability insurance.

The problem was unique because ordinary accident insurance is based on a cost per person and what we had to determine was the cost per automobile. In considering the problem it was evident that the cost of accident benefits would vary by class of risk and territory in the same manner as Third Party Liability costs, since it is largely the frequency of accidents which accounts for the experience differentials. Thus we decided that what we wanted to establish was the additional cost of the accident coverage in terms of a percentage of the standard \$35,000 inclusive limit liability premiums. A definite advantage of this approach would be that if accident frequency and severity increased between the time of calculation and the time of application, the insurers would not be bound, to dollar figures but only to percentages. Actually there has been an almost unbelievable 40% increase in persons injured in automobile accidents in Ontario since 1961 and the wisdom of this approach has been clearly demonstrated.

In Ontario, the Department of Transport publishes excellent and detailed statistics of automobile accidents and it is thus possible to quite accurately determine what the cost would have been if all persons had received the benefits proposed under the new legislation. The primary interest of the Select Committee was with respect to private passenger automobiles so we limited our study accordingly. Therefore, what we set out to do was to estimate the total cost of the benefits, separately by drivers, passengers and others, which would have been payable on the actual 1961 accidents. Once the gross cost was determined we could estimate the amounts already being paid under Third Party Liability and so arrive at an increased net percentage cost. We had no precedent for this approach but it did seem to provide a reasonable basis for estimating the extra cost of the benefits. We did consider approaching the problem from the cost

of individual accident insurance but this seemed to involve the wide use of unsupported estimates. The total cost basis therefore seemed the best available. The committee agreed that the amount of benefits to be used in calculating the costs would be as follows:

1. Medical Expenses with a limit of \$2,000 (except for Funerals) but for hospital amounts only in excess of the provincial plans.
2. Funeral Benefit with a flat amount of \$350.
3. Death Benefit:

Age	Sex and Marital Status		
	Married Male	Married Female	Unmarried
4 yrs and under	\$ —	\$ —	\$ 250
over 4 but under 18	5,000	2,500	500
18 but under 60	5,000	2,500	1,000
60 but under 70	3,000	1,500	1,000
70 and over	2,000	1,000	1,000

In addition \$1,000 would be payable for each child under age 18 or a child over 18 wholly dependent because of physical or mental infirmity. For the death of a widow or widower the same benefits would be paid as for a married male of equal age. The amount for the death of other unmarried persons over 18 is payable only if there is a wholly dependent parent.

4. Dismemberment Benefit (major losses only):
 - \$5,000 for loss of two legs, arms or eyes or one of each.
 - 3,750 for loss of one arm or one leg.
 - 2,500 for loss of one hand or one foot.
5. Weekly Disability Benefit for Employed Persons:

Subject to a 7 day waiting period, \$5 per day would be payable for 26 weeks total disability based on inability to carry on *his* occupation, then for a further 78 weeks based on inability to carry on *any* occupation and then a further 2 years if total and permanent disability exists. Thus the maximum would be \$7,245. Also housewives not otherwise employed are to receive \$3.50 per day for 12 weeks if confined to a hospital. No payments whatsoever are to be made to other persons who are not employed.

The persons to whom benefits are payable are (1) the driver and passengers in the insured car, and (2) pedestrians, cyclists, and others while not occupants of an automobile who are struck by the insured car. Also the insured and his dependent relatives residing with him are insured as

occupants of automobiles other than those owned in his household and as pedestrians but only for any amounts by which the insured's coverage exceeds that of any other similar insurance.

The first information we decided was necessary for the calculation of the gross cost was as follows:

1. The number of persons killed as (a) Drivers, (b) Passengers, and (c) Pedestrians, cyclists, and others, with each group subdivided by age group and sex.
2. The same break down for persons non-fatally injured.

This information was readily available in the *Accident Facts* publication of the Ontario Department of Transport and the extracts therefrom are shown as Exhibits A and B. A total split only was available by sex so we used the percentages by age group for passengers and pedestrians, and modified slightly the split for drivers. Exhibits C and D show our calculations for the number of persons killed and injured in each group.

The next problem was to determine the average cost of the death or injury of a person of each age group and sex. We first considered the cost of fatal accidents for which the amount payable depended on four factors as follows: (1) sex, (2) age, (3) marital status, and (4) number of dependents. Our calculations are shown on Exhibit E and admittedly there was a considerable margin of judgement used. We had the Canadian Government Statistics to guide us but unfortunately there was not enough detail along some of the lines in which we were particularly interested. In the case of non-fatal injuries, the factors affecting the cost of a claim are: (a) whether the injured person was employed or in the case of an unemployed female, whether she was a housewife, and (b) the average length of disability. Our calculations are shown on Exhibit F.

Our basis for estimating the cost of medical payments was somewhat different because we had insurance statistics which gave the pure premium for coverage as respects drivers and passengers. We applied this pure premium to the total number of private passenger automobiles and arrived at the average cost of claims. By applying this cost to the number of accidents we calculated the total cost for drivers, passengers and others. Exhibit G shows the details. Funeral expense costs were calculated separately under Exhibit H. Having established average values for the cost of fatal and non-fatal injuries to persons of each sex and age group, and medical costs, we proceeded to complete Exhibits H and I.

The final summary involved the combination of the information shown under Exhibits H and I and gave us the estimate of the total gross cost of

the accident benefits divided as to drivers, passengers and pedestrians. However it is obvious that a substantial part of these amounts are already being paid under the present negligence system. Since amounts received under the accident plan may not be included in any claim based on negligence, the amount of third party liability claims will be reduced. This was an area in which there was little to guide the Committee except pure judgement. The province of Ontario operates on a comparative negligence system so in theory the average recovery of drivers should be 50% in cases where two automobiles are involved. In practise the percentage of out-of-pocket expenses paid is probably closer to 75% since in settling personal injury claims the discussion of splits of negligence is minimized in order to reach agreement on the amount payable. Also some 23% of the accidents involve collision with fixed objects, railway trains or street cars, or just the upset of the automobile, and in these cases there are no payments being made today under Third Party Liability. As a compromise we decided to use a figure of 40% as the amount by which the gross benefit costs to drivers would be offset by savings under Third Party Liability. Since gratuitous passengers have no rights of recovery in Ontario against the motorist with whom they are riding and may recover against another motorist only to the percentage by which their driver was not negligent, we used the same 40% reduction for passengers. For pedestrians we used a reduction figure of 95% because we agreed that with the onus of disproving negligence lying with the motorist, it was the practise to pay out-of-pocket expenses to pedestrians in practically every case. In total then we estimated that the net cost of providing the benefits would be just slightly over 50% (52% to be exact) of the gross cost.

The only remaining problem was to relate the net cost to the premiums for Third Party Liability insurance. This calculation is shown on Exhibit J along with the summary of the gross and net costs. The final percentage reached was 12.6% of the standard \$35,000 inclusive limit premium. This may seem more in line when we realize that of the inclusive limit premium 55% applies to property damage and that in relation to bodily injury charges we are talking about a 28% increase. In 1963 our latest rates vary from \$22 for a claim-free farmer to \$177 for an unmarried, underage male driver with a claim in the last year. Thus the cost of the accident benefits would be from approximately \$3 to \$22. The ordinary claim-free class B risk (that is a risk with no underage male driver where the automobile is driven to work less than 10 miles) is now paying around \$40 so the extra cost to him would be about \$5. Naturally any increase in claim frequency will increase these dollars costs. The 40% increase in the number of per-

sons injured in Ontario during the first quarter of 1963 over the same period of 1961 makes the dollar figures quite obsolete.

All of our costing related to private passenger automobiles and it is recognized that the cost with respect to commercial automobiles will not be the same either in dollars or in percentage. In the first place most drivers and passengers in commercial vehicles receive the benefits of the workmens compensation law and are thus excluded from coverage under the accident plan. Secondly the average number of passengers is much less than in private passenger cars and this will reduce costs per vehicle even when compensation does not apply. Therefore a separate calculation will be necessary. Our calculations were submitted to the Select Committee and it was pointed out that the estimated 12.6% additional cost was for mandatory coverage with benefits offset against Third Party Liability. It was explained that costs on a voluntary basis would be at least twice that of a mandatory plan because there could be no offset and that probably it would be even higher because of a selection of risks against the insurers.

The Select Committee was enthusiastic about the proposed plan and at a meeting with them one member told us that he felt this was the finest plan in existence for providing payments to the victims of automobile accidents. A substantial secondary benefit to the insurers in their approval of this plan was the Select Committee's definite rejection of a proposal to change the guest passenger law. They felt that the extra premium dollars involved in the cost of either a full or gross negligence passenger hazard law would be better spent for accident insurance benefits.

The Ontario Select Committee made their final report in March 1963 and unanimously recommended the adoption of the accident plan as a mandatory part of Third Party Liability insurance. No definite date has been set but it is expected to be effective by January 1, 1965. The insurance companies are now drafting a new standard automobile policy with a special section covering the accident benefits.

In general, the companies in Canada welcome this new approach to automobile bodily injury insurance because the feeling is that it will serve to improve their relationship with the public. With basic benefits paid promptly to everyone injured in an automobile accident by his own insurance company, it is expected that automobile insurance will be viewed in a new and better light. Also it is thought that there will be less litigation with a consequent saving in legal expenses. It will be very interesting to see how this accident plan does work in practise and whether it will spread to other jurisdictions. It will also be interesting to see how close our estimates come to the actual cost of the accident benefits.

AUTOMOBILE ACCIDENTS

PERSONS FATALLY INJURED, BY CLASS AND AGE GROUP

Exhibit A

ONTARIO 1961

	Totals		Driver		Passenger		Pedestrian		Bicyclist		Motorcycle Driver		Motorcycle Pass.		Others	
		%		%		%		%		%		%		%		%
0-4 Years	59	4.7	-	-	15	3.8	44	14.1	-	-	-	-	-	-	-	-
5-14 "	122	9.6	-	-	29	7.4	68	21.8	23	72.0	-	-	-	-	2	15.4
15-19 "	136	10.7	44	8.8	64	16.3	16	5.1	3	9.4	7	43.7	-	-	2	15.4
20-24 "	159	12.5	97	19.3	50	12.8	5	1.6	-	-	6	37.5	1	-	-	-
25-34 "	188	14.8	105	20.9	62	15.8	14	4.5	2	6.2	3	18.8	-	-	2	15.4
35-44 "	147	11.6	89	17.7	41	10.4	15	4.8	-	-	-	-	-	-	2	15.4
45-54 "	160	12.6	77	15.3	52	13.3	27	8.7	1	3.1	-	-	-	-	3	23.0
55-64 "	122	9.6	50	10.0	36	9.2	32	10.2	2	6.2	-	-	-	-	2	15.4
65 & Over	175	13.8	40	8.0	43	11.0	91	29.2	1	3.1	-	-	-	-	-	-
Not Stated	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1,268	100.0	502	100.0	392	100.0	312	100.0	32	100.0	16	100.0	1	-	13	100.0

PERSONS NON-FATALLY INJURED, BY CLASS AND AGE GROUP

	Totals		Driver		Passenger		Pedestrian		Bicyclist		Motorcycle Driver		Motorcycle Pass.		Other	
		%		%		%		%		%		%		%		%
0-4 Years	1,951	5.3	-	-	900	5.8	1,051	18.5	-	-	-	-	-	-	-	-
5-14 "	4,876	13.1	10	0.07	1,561	10.2	2,283	40.2	1,001	78.1	1	0.2	6	5.6	14	20.9
15-19 "	4,958	13.3	1,595	11.20	2,644	17.3	294	5.2	160	12.5	191	40.4	68	62.4	6	9.0
20-24 "	5,290	14.2	2,678	18.80	2,248	14.7	187	3.3	16	1.2	133	28.1	24	22.0	4	6.0
25-34 "	6,844	18.4	3,955	27.77	2,432	15.9	317	5.6	24	1.9	99	20.9	7	6.4	10	14.9
35-44 "	5,121	13.8	2,827	19.85	1,925	12.6	321	5.6	14	1.1	23	4.9	1	0.9	10	14.9
45-54 "	3,592	9.7	1,755	12.32	1,451	9.5	335	5.9	26	2.0	15	3.2	1	0.9	9	13.4
55-64 "	2,251	6.1	946	6.64	913	6.0	356	6.3	22	1.7	7	1.5	-	-	7	10.4
65 & Over	1,632	4.4	448	3.15	686	4.5	477	8.4	11	0.9	3	0.6	-	-	7	10.4
Not Stated	631	1.7	28	0.20	531	3.5	62	1.0	7	0.6	1	0.2	2	1.8	-	-
Total	37,146	100.0	14,242	100.0	15,291	100.0	5,683	100.0	1,281	100.0	473	100.0	109	100.0	67	100.0

AUTOMOBILE ACCIDENTS - ONTARIO 1961

Exhibit B

<u>VICTIMS, BY AGE GROUP AND SEX</u>	Total	0-4	5-14	15-19	20-24	25-34	35-44	45-54	55-64	65 and over	Not Stated
PERSONS FATALLY INJURED											
1. Male	935	35	88	103	134	150	111	115	76	125	
2. Female	331	24	34	33	25	38	36	45	46	50	
Total	1268	59	122	136	159	188	147	160	122	175	
Persons Non-fatally injured											
1. Male	23514	1169	3134	3187	3738	4728	3101	2025	1274	878	280
2. Female	13632	782	1742	1771	1552	2116	2020	1567	977	754	351
Total	37146	1951	4876	4958	5290	6844	5121	3592	2251	1632	631

ACCIDENT INSURANCE

FATALS

1961

NUMBER OF PERSONS KILLED ONTARIO HIGHWAY ACCIDENT STATISTICS

	ALL		(2) MALE		(2) FEMALE	
	AUTOMOBILES	PRIVATE (1) PASSENGER	%	NUMBER	%	NUMBER
<u>DRIVERS</u>		<u>89%</u>				
4 and under	-			-	40%	-
5-14	-			-	28	-
15-19	52	46		34	24	12
20-24	105	94		77	16	17
25-54	284	252		181	25	71
55-64	50	45		26	38	19
65 and over	40	36		24	30	12
TOTAL	531	473		342		131
<u>PASSENGERS</u>		<u>25%</u>				
4 and under	15	14	60%	8	40%	6
5-14	29	28	72	20	28	8
15-19	64	61	76	46	24	15
20-24	51	48	84	40	16	8
25-54	155	148	75	111	25	37
55-64	36	34	62	21	38	13
65 and over	43	41	70	29	30	12
TOTAL	393	374		275		99
<u>PEDESTRIANS & CYCLISTS</u>		<u>89%</u>				
4 and under	43	39	60%	23	40%	16
5-14	93	82	72	59	28	23
15-19	20	18	76	14	24	4
20-24	4	4	84	3	16	1
25-54	56	50	75	38	25	12
55-64	36	32	62	20	38	12
65 and over	92	81	70	57	30	24
TOTAL	344	306		214		92
GRAND TOTAL	1268	1153		831		322

NOTE (1) MOTORCYCLES are treated as NON PASSENGER Automobiles.

(2) See note (2) for NON FATAL accidents concerning adjustment in split for DRIVERS.

Exhibit D

NON FATAL1961 NUMBER OF PERSONS INJURED ONTARIO HIGHWAY ACCIDENT STATISTICS

	ALL	PRIV. (1)	PRIV. PASS.	(2) MALE	NUMBER	(2) FEMALE	NUMBER
	AUTOMOBILES	PASS.	+15% (3)	%		%	
<u>DRIVERS</u>		<u>89%</u>					
4 and under	-				-	40%	-
5-14	11	10	11	7	35		4
15-19	1786	1590	1829	1090	36		739
20-24	2811	2502	2877	1907	30		970
25-54	8703	7745	8907	5204	37		3703
55-64	953	848	975	504	43		471
65 and over	451	401	461	222	46		239
TOTAL	14715	13096	15060		8934		6126
<u>PASSENGERS</u>		<u>95%</u>					
4 and under	900	855	983	60%	590	40%	393
5-14	1567	1487	1710	65	1111	35	599
15-19	2712	2577	2963	64	1896	36	1067
20-24	2272	2156	2482	70	1737	30	745
25-54	6350	6034	6939	63	4372	37	2567
55-64	913	867	997	57	568	43	429
65 and over	686	652	750	54	405	46	345
TOTAL	15400	14630	16824		10679		6145
<u>PEDESTRIANS AND CYCLISTS</u>		<u>86%</u>					
4 and under	1051	903	1038	60%	623	40%	415
5-14	3298	2832	3257	65	2117	35	1140
15-19	460	396	455	64	291	36	164
20-24	207	178	205	70	143	30	62
25-54	1142	981	1128	63	711	37	417
55-64	378	325	374	57	213	43	161
65 and over	495	426	490	54	265	46	225
TOTAL	7031	6041	6947		4363		2584
GRAND TOTAL	37146	33767	38831		23976		14855

NOTE (1) MOTORCYCLES are treated as NON PASSENGER automobiles.

(2) Since commercial drivers are very largely MALE, the split for DRIVERS was adjusted by using for FEMALES the ordinary percentages of the figures for ALL AUTOMOBILES plus a 15% adjustment for non reported injuries, and the figures for MALE was taken as the balance of the adjusted PRIVATE PASSENGER figures.

(3) All figures were increased 15% to cover injuries not shown on the police reports. The Department of Transport statistician concurred in the use of this adjustment.

ACCIDENT COST SUMMARY SHEETFATALS (Exc. Funeral Costs)

<u>AGE</u>	<u>SINGLE WITH DEP. PARENT</u>		<u>MALE SINGLE OTHER</u>		<u>MARRIED</u>	<u>AVERAGE VALUE</u>
			<u>%</u>	<u>%</u>		
4 and under			100	\$ 250.		\$ 250.
5 - 14			100	500.		500.
15 - 19	2	\$1000.	96	300.(a)	2	\$5000.
20 - 24	4	1000.	20	-	76	6000.
25 - 54	6	1000.	10	1200.(b)	84	7000.
55 - 64	1	1000.	17	-	82	42000.
65 and over			27	-	73	2300.(c)

<u>AGE</u>	<u>SINGLE WITH DEP. PARENT</u>		<u>FEMALE SINGLE OTHER</u>		<u>MARRIED</u>	<u>AVERAGE VALUE</u>
			<u>%</u>	<u>%</u>		
4 and under			100	\$ 250.		\$ 250.
5 - 14			100	500.		500.
15 - 19	2	\$1000.	94	300.(a)	4	\$2500.
20 - 24	4	1000.	16	-	80	2500.
25 - 54	6	1000.	10	1200.(b)	84	2500.
55-64	6	1000.	19	-	80	2000.
65 and over			40	-	60	1150.(c)

(a) No payments for ages 18 or 19 except to a DEPENDANT parent.

(b) 20% of SINGLE-OTHER in this age group are calculated as having on the average two dependent children (20% of \$6,000 = \$1200.)

(c) Principal sum is reduced to 60% at age 60 and to 40% at age 70.

Government population statistics were used to estimate percentages of married and single and the number of children per household.

ACCIDENT INSURANCE

117

Exhibit F

	% OF CLAIMS	EMPLOYED PERSONS				HOUSEHOLDS			
		NO. WEEKS	AMOUNT	VALUE	NO. WEEKS	AMOUNT	VALUE		
MEDICAL ONLY	71.5%								
TEMPORARY TOTAL	27.0	7	\$35.	\$245.	66.15	7	\$25.	\$175.	\$47.25
PERM: & SERIOUS	1.5	52	35.	1820.	27.30				
				93.45					
			USE	\$93.			USE	\$47.	

Splits for Medical only, Temporary total and serious were based on figures of the Ontario Workmen's Compensation Board but average length of temporary disability was taken as 8 weeks instead of 4 weeks.

AGE	MALE				FEMALE						
	EMPLOYED		UNEMPLOYED		EMPLOYED		UNEMPLOYED		AVERAGE VALUE		
	%	%	%	%	%	%	%				
4 and under	0				0						
5 - 14	0				0						
15 - 19	62	93.	38	-	\$57.66	42	93.	50	8	\$47.	\$42.82
20 - 24	92	93.	8	-	85.56	56	93.	2	42	47.	71.82
25 - 54	98	93.	2	-	91.14	30	93.	4	66	47.	58.92
55 - 64	90	93.	10	-	83.70	24	93.	6	70	47.	55.22
65 and over	24	93.	76	-	22.32	4	93.	40	56	47.	30.04

Percentages of persons employed by age groups were obtained from Canadian Government statistics. Persons in the labor force but temporarily unemployed were treated as "Employed".

MEDICAL PAYMENTS

<u>From Gov't Auto Insurance Statistics</u>			<u>Number of Private Passenger Cars</u>
Number of car years earned (87% of written)	Farm	93,858	
	Other	<u>1,170,115</u>	
		1,263,973	
Car years insured (100%)			1,452,842
Since 91% of autos were insured total was			1,596,530
Plus 3% for priv. pass. autos insured under fleets, gov't etc.			<u>1,644,426</u>
Medical Payment Pure Prem. from Insurance Statistics		\$1.72	
Total losses if all cars insured		\$ 2,828,413.00	
Deduct \$500. each for 847 fatalities		<u>423,500.00</u>	
Total cost for DRIVERS AND PASSENGERS		<u>2,404,913.00</u>	
Number of accidents to Drivers & Passengers (per exhibit D)		31,884	
Cost per claim		<u>\$75.43</u>	
DRIVERS		(15,060	\$1,135,975.
PASSENGERS	31,884	(16,824	1,269,034.
OTHERS		6,947	<u>524,012.</u>
GRAND TOTAL MEDICAL (EX. FUNERAL)			\$2,929,021.

ACCIDENT INSURANCE

119

COST SHEET

Exhibit H

FATALS

AGE	NUMBER KILLED	MALE		NUMBER KILLED	FEMALE		M & F TOTAL COST
		VALUE	TOTAL COST		VALUE	TOTAL COST	
<u>DRIVERS</u>							
4 and under	-	\$ 250.	-	-	\$ 250.	-	-
5 - 14	-	500.	-	-	500.	-	-
15 - 19	34	408.	13,872.	12	396.	4,752.	-
20 - 24	77	4600.	354,200.	17	2040.	34,680.	-
25 - 54	181	6060.	1,096,860.	71	2280.	161,880.	-
55 - 64	26	3454.	89,804.	19	1610.	30,590.	-
65 and over	24	1679.	40,296.	12	690.	8,280.	-
TOTAL	342		1,595,032.	131		240,182.	1,835,214.

<u>PASSENGERS</u>							
4 and under	8	\$ 250.	2,000.	6	\$ 250.	1,500.	-
5 - 14	20	500.	10,000.	8	500.	4,000.	-
15 - 19	46	408.	18,768.	15	396.	5,940.	-
20 - 24	40	4600.	184,000.	8	2040.	16,320.	-
25 - 54	111	6060.	672,660.	37	2280.	84,360.	-
55 - 64	21	3454.	72,534.	13	1610.	20,930.	-
65 and over	29	1679.	48,691.	12	690.	8,280.	-
TOTAL	275		1,008,653.	99		141,330.	1,149,983.

<u>PEDESTRIAN AND CYCLISTS</u>							
4 and under	23	\$ 250.	5,750.	16	\$ 250.	4,000.	-
5 - 14	59	500.	29,500.	23	500.	11,500.	-
15 - 19	14	408.	5,712.	4	396.	1,584.	-
20 - 24	3	4600.	13,800.	1	2040.	2,040.	-
25 - 54	38	6060.	230,280.	12	2280.	27,360.	-
55 - 64	20	3454.	69,080.	12	1610.	19,320.	-
65 and over	57	1679.	92,703.	24	690.	16,560.	-
TOTAL	214		449,825.	92		82,364.	532,189.

GRAND TOTAL 1153 \$ 3,053,510. \$463,876. 3,517,386.

	DEATH *DISMEMBERMENT		D & D	FUNERALS
	5%			\$350. EACH
DRIVERS	1,835,214.	91,761.	1,926,975.	165,550.
PASSENGERS	1,149,983.	57,499.	1,207,482.	130,900.
PEDESTRIANS ETC.	532,189.	26,609.	558,798.	107,100.
	3,517,386.	175,869.	3,693,255.	403,550.

* The cost of Major Dismemberments was taken as 5% of the cost of FATALS based on ordinary accident cost relationships.

ACCIDENT INSURANCE

Exhibit I

Passenger Cars		COST SHEET					
		NON FATALS					
AGE	MALE		TOTAL COST	FEMALE		TOTAL COST	TOTAL
	NUMBER INJURED	VALUE		NUMBER INJURED	VALUE INC. H'WIVES		
<u>DRIVERS</u>							
4 and under	-	-	-	-	-	-	-
5 - 14	7	-	-	4	-	-	-
15 - 19	1090	5766.	\$ 62,849.	739	4282.	31,644.	
20 - 24	1907	8556.	163,163.	970	7182.	69,665.	
25 - 54	5204	9114.	474,293.	3703	5892.	218,181.	
55 - 64	504	8370.	42,185.	471	5522.	26,009.	
65 and over	222	2232.	4,955.	239	3004.	7,180.	
TOTAL	8934		747,445.	6126		352,679.	1,100,124.
<u>PASSENGERS</u>							
4 and under	590	-	-	393	-	-	-
5 - 14	1111	-	-	599	-	-	-
15 - 19	1896	5766.	109,323.	1067	4282.	45,689.	
20 - 24	1737	8556.	148,618.	745	7182.	53,506.	
25 - 54	4372	9114.	398,464.	2567	5892.	151,248.	
55 - 64	568	8370.	47,542.	429	5522.	23,689.	
65 and over	405	2232.	9,040.	345	3004.	10,364.	
TOTAL	10679		712,987.	6145		284,496.	997,483.
<u>PEDESTRIANS AND CYCLISTS</u>							
4 and under	623	-	-	415	-	-	-
5 - 14	2117	-	-	1140	-	-	-
15 - 19	291	5766.	16,779.	164	4282.	7,022.	
20 - 24	143	8556.	12,235.	62	7182.	4,453.	
25 - 54	711	9114.	64,801.	417	5892.	24,570.	
55 - 64	213	8370.	17,828.	161	5522.	8,890.	
65 and over	265	2232.	5,915.	225	3004.	6,759.	
TOTAL	4363		117,558.	2584		51,694.	169,252.
GRAND TOTAL	23976		1,577,990.	14855		688,869.	2,266,859.
		<u>WEEKLY INDEMNITY</u>		<u>MEDICAL</u>			
DRIVERS			1,100,124.		1,135,975.		
PASSENGERS			997,483.		1,269,034.		
PEDESTRIANS ETC.			169,252.		524,012.		
			2,266,859.		2,929,021.		

1961 COSTS
ONTARIO BASIS AUTOMOBILE ACCIDENT BENEFIT SUMMARY
PASSENGER CARS

	DEATH & DIS.	FUNERAL	MEDICAL	WEEKLY INDEMNITY	GROSS TOTAL	EST. NOW PAID *	NET COST
DRIVERS	1,926,975.	154,550.	1,135,975.	1,100,124.	4,328,624.	1,731,450.	2,597,174.
PASSENGERS	1,207,482.	130,900.	1,269,034.	997,483.	3,604,899.	1,441,960.	2,162,939.
PEDESTRIANS AND CYC.	558,798.	107,100.	524,012.	169,252.	1,359,162.	1,291,204.	67,958.
TOTAL	3,693,255.	403,550.	2,929,021.	2,266,859.	9,292,685.	4,464,614.	4,828,071.

1961 PRIVATE PASSENGER THIRD PARTY PREMIUMS

87% EARNED	\$52,071,000.
WRITTEN (INC. ADJ. OF +3% FOR CARS INSURED UNDER FLEETS AND GARAGES AND GOV'T CARS)	\$61,647,000.
ADJ. TO 100% (ACTUAL INSURED 91%) TOTAL	\$67,744,000.
LOSSES AT 6% - LIMITS	\$42,678,000.
\$35,000. Inc. (90% of above)	\$38,410,000.
1,644,400 car years.	

ACCIDENT COST AS A % OF

<u>THIRD PARTY LOSSES (\$35M.)</u>	
GROSS	24.2%
NET	12.6%

AVERAGE PURE PREMIUM
PER AUTO. (1961)

GROSS	\$5.65
NET	\$2.94

(DRIVERS 40%
*(PASSENGERS 40%
(PEDESTRIANS 95%

ACCIDENT INSURANCE