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AN INTRODUCTION TO INSURANCE  
AND THEIR  
COSTS IN CONTRACTING

Thesis for the Degree of B. S.  
MICHIGAN STATE COLLEGE

J. W. Moran

1946

AN INTRODUCTION TO INSURANCE  
AND THEIR  
COSTS IN CONTRACTING

A Thesis Submitted to

The Faculty of  
MICHIGAN STATE COLLEGE  
of  
AGRICULTURE AND APPLIED SCIENCE  
by

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Candidate for the Degree of  
Bachelor of Science

June 1946

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## CONTENTS

	Page
Introduction	1
Workmen's Compensation Insurance	2
Social Security Act	5
Federal Old-Age and Survivors Insurance	5
State-Federal Unemployment Insurance	7
Public Liability Insurance	8
Fire Insurance	14
Contingent Insurance	17
Product Insurance (Completed Operations)	20
Automobile and Vehicle Insurance	21



It has been the tendency of more and more states in the past few years to require increased protection for the workmen especially in regards to compensation and personal liability. This along with the Social-Security and State Unemployment taxes have been causing the overhead costs in contracting to increase every year. The modern contractor has had to depend a great deal on the protection which is available to him through the medium of the insurance companies to absorb his losses and liabilities. It is for that reason this paper has been written to give an approximate idea of the cost of carrying the different types of insurance most used by construction firms.

It is impossible to give the exact premiums of these policies due to variations in the different contractors ratings. The premiums that are paid vary with the risks, classes of work, and individual contractors ratings; therefore, contractors with poor safety and accident records will have premiums above the basic rates, while companies with good records will receive a lower than average rate. In a field with as keen competition as contracting it is of definite advantage to a company to be able to credit those lower premiums in their bids. It not only allows them to reduce their bid to a place where they have a better chance of being awarded the contract, but also enables them to increase the companies profits.

An insurance policy regardless of how many interests may eventually be involved, is essentially a two party instrument — that is, an agreement on the part of the insurer to reimburse the insured in case of loss caused by a designated contingency. No matter how complicated, every insurance pol-

icy can be reduced to this situation.

Therefore, let us consider the two types of insurance needed by contractors; those required of him by Federal and State law, and those of his own choosing as are needed for loss and liability arising from the work engaged in. The required insurances will first be considered.

### "WORKMEN'S COMPENSATION INSURANCE"

The Workmen's Compensation Law enforced in the State of Michigan is known as "Act No. 10, Public Acts of 1912, First Extra Session". In general states: "An act to the welfare of the people of this state, relating to the liability of employers for injuries or death sustained by their employes, providing compensation for the disability or death resulting from occupational injury to or death of employes and methods for payment, and apportionment of same, establishing an industrial accident board, defining its powers, providing for a review of its awards, making an appropriation to carry out the provisions of this act, and restricting the right to compensation or damages in such cases to such as are provided by this act".

#### How the Contractor is Effected

Of the 47 states having workmen's compensation laws 36 of them impose upon the principal or contractor liability for compensation to employes of contractors or sub-contractors. This is likewise true in the District of Columbia and the Territory of Hawaii. From this it can be seen that a contractor who does not have the protection of insurance for himself, and thus protect his client is gambling - and perhaps for high stakes.

### Cost to the Contractor

It is impossible to give the exact cost of this type of insurance; because the rate is based on the individual employers experience rating as rated by the rating bureau for the State of Michigan. In general a rating is made up by considering the complete data of the payroll by classification for a period of six years accompanied by a loss record for a similar period. Medical expenses are separated from compensation payments, the number of claims for each year, and any large ones stated separated with proper explanation. With such information at hand the matter of a special rating may be given consideration.

Premiums of the policy are determined from the following factors.

- I. Amount of employers payroll.
- II. Class of work that is performed.
  - A. Each class has a classification code number.
- III. Rates for each coding are published for Michigan by the National Insurance Association.
- IV. Basic rates are subject to an experience rating given by the Michigan Experience Rating Bureau to the construction firm.
- V. Premiums of less than \$500.00 are not experience rated.

### "Michigan Workmen's Compensation Insurance Rates"

Classification of Work	Rates / \$100 of payroll
Wrecking buildings or demolition	\$31.09
Excavating, earth or common	2.18

Excavation rock	4.69
Concrete work, engineering structures	6.13
Concrete work, bldgs. not over 2 stories	1.13
"        "        "        over 2 stories	3.75
"        "        reinforced floors	1.25
"        "        pavements	1.25
Carpentry, Concrete form construction	3.55
"        , bldgs. 2 stories and under	3.55
"        , bldgs. 3 stories and over	3.55
"        , interior trim buildings	1.83
Structural-iron and steel erection	18.45
Ornamental-iron erection	11.85
Roofing	8.10
Waterproofing by brushing	2.68
"        "        trowelling (masonry)	1.73
Lathing	1.81
Bricklaying	1.61
Sheet-metal work	1.85
Plumbing, heating, gas fitting	1.28
Glazing	3.46
Electrical equipment installing	2.30
Electrical wiring installing	1.55
Painting structural steel in field engr. structures	18.45
Painting buildings	2.68
Sewer construction	6.46
Watermain construction	3.06
Officers and superintendents supervising	0.29
Office workers	0.06



## "THE SOCIAL SECURITY ACT"

The Social Security Act is a national law. Its purpose is to prevent and to relieve the misfortunes that come when earnings are cut off by lack of work, old age, blindness, or death; when children are left with no one to support them or when they lack necessary care; and when the health of the community is not properly protected. This act was passed by Congress and approved by the President on August 14, 1935 and amended in August 1939.

The Social Security Act is made up of nine distinct but related programs. These may be grouped under three main heads.

### I. Social Insurances:

- (a) Old-age and Survivors Insurance
- (b) Unemployment Insurance

### II. Public Assistance:

- (a) Old-age Assistance
- (b) Aid to the Needy Blind
- (c) Aid to Dependent Children

### III. Health and Welfare Services:

- (A) Child Welfare Services
- (b) Services for Crippled Children
- (c) Maternal and Child-health Services
- (d) Public Health Services

The Social Security Act provides for two insurance systems.

#### I. Federal Old-age and Survivors Insurance Program.

The old-age and survivors insurance system is designed to provide a regular monthly income for the worker and his family when he is too old to work, and for his family when he dies. The cost of paying the insurance benefits is met by tax-

es which are levied at equal rates on both employers and employees under the Federal Insurance Contribution Act.

Because the benefits are based on wages the successful operation of the system depends very largely on the employers. It is the employers responsibility to deduct the employees' social security tax from their wages; and four times a year to send his own tax and the employees' tax to the collector of internal revenue for his district, together with a report of wages paid.

The old-age and survivors insurance program applies to every employer who has one or more employees in covered employment in the United States.

#### Cost of Tax:

This tax is divided equally between the employees, and the employers. The tax applies to the total wages paid each employee up to \$3000 for services in each calendar year, and is paid to the collector of internal revenue every three months. It imposes an employers' tax of 1% upon wages paid by employer and, in addition, an employees tax of 1% upon wages received by each employee. for the period from 1942 to 1945. The rate will increase in the period 1946 to 1948 to 1.25% for both employer and employee, and thereafter it will be 1.5% for each making it 3% of all wages.

# "STATE\*FEDERAL UNEMPLOYMENT INSURANCE PROGRAM"

The unemployment insurance system is designed to provide a worker who is unemployed through no fault of his own with weekly payments to tide him over between jobs. The cost of paying unemployment benefits is met by the State tax on employers' payroll, and in some states by a tax on employees also. There is also a Federal Unemployment Tax Act, but in Michigan an employer can credit his State tax up to 90% against his Federal tax.

The federal unemployment tax applies only to those employers who have eight or more employees in covered employment in the United States on each of 20 or more days during the calendar year, each such day being in a different calendar week. While the State unemployment tax applies to everyone having workers in Michigan.

The cost of both federal and state unemployment insurance is met only by the employer and is paid on the first \$3,000 of taxable wages to each employee. The federal excise tax on employers of eight or more individuals under the federal unemployment tax act is 3% of the total taxable wages under \$3,000. Less: Credit for contributions paid into state funds, plus any additional credit that might as a result of experience rating be added. Total credit limited to 90% of tax.

In computing the state tax the basic rate is 3%, but this is subject to the employers record of stabilizing employment during the previous three years. The rate may vary from 1% to 4% depending upon the experience rating of the employer.

## "PUBLIC LIABILITY INSURANCE"

Public Liability insurance offers the only means of protection for a contractor against claims for damages on account of personal injuries or death of others than his employes, and for property damage of others. any contractor at any time may be confronted with such a claim.

To show the importance of the contractors need for such insurance let us consider a case inwhich the contractor was held accountable for a circumstance over which he had no control whatsoever. "In 1925, in the course of the erection of a building, an Ohio contractor placed a box of lime on the premises. One night after working hours some boys threw lime out of the box at a street car, striking a passenger in the eye, destroying his sight. In 1933, eight years after the accident, the contractor was held liable, the amount of the judgment and interest being \$34914.00. The contractor carried Public Liability insurance with a limit of \$10,000.00. The contractor had to pay the additional \$24914.00 all of it a complete loss to himself".

Such an accident might easily happen in the course of the work of any contractor. Any contractor may well ask himself whether he is prepared to pay such sums of money.

Public Liability Insurance covers both bodily injuries, and property damage. The rates for these two differ on the same type of work depending on the insurance companies past experience. The rates are usually written to cover 5/10 thousand dollar policy, but the rate goes up on a percentage bases so that when coverage of 25/50 thousand is taken out the cost only goes up on bodily injuries 27 %. It can be seen

from this that it would be to the contractors safety to have the higher coverage for the small increase to take care of unusual claims that may arise.

A 5/10 thousand dollar policy means that the company will not pay any more than five thousand dollars to any one person, and more than ten thousand to an number of people involved in the suit. The same is true of the 25/50 thousand dollar policy only higher values will be given. Under the ordinary bodily injury policy there is no limit to the number of accidents that may occur in the course of the policy. On the other hand in the case of the property damage policy say 1/10 thousand dollar policy the most that will be paid for a any one accident is one thousand dollars. The total that will be paid in any one year is ten thousand; after that a new policy must be drawn up. This is called the aggregate limit that will be paid, but in the case of larger policies these sums will be correspondingly larger.

Public Liability Rates Based on 5/10 Policy (Bodily Injuries)

Classification	Rate/\$100 payroll
Wrecking, buildings or demolition	\$ 2.33
Excavation, earth or common	0.79
Excavation rock	0.79
Concrete work, engineering structures	0.29
Concrete work, bldgs. not over 2 stories	0.44
Concrete work, bldgs. over 2 stories	0.69
Concrete work, reinforced floors	0.69
Concrete work, pavements	0.59
Carpentry, concrete form construction	0.69
Carpentry, bldgs. 2 stories and under	0.20

Carpentry, bldgs. 2 stories and over	\$ 0.69
Carpentry, interior trim bldgs.	0.23
Structural-iron and steel erection	0.82
Structural-iron dwellings not over 2 stories	0.41
Ornamental-iron erection	2.21
Roofing	0.35
Waterproofing	0.12
Lathing	0.10
Bricklaying	0.44
Sheet-metal work	0.11
Plumbing, heating, gas fitting	0.18
Glazing	0.23
Electrical wiring, installing	0.13
Electrical equipment, installing	0.21
Painting structural steel in field engr. struct.	0.82
Painting bldgs.	0.12
Sewer construction	1.00
Water main construction	1.00
Officers and superintendants, supervising	0.21
Office work	0.01

Public Liability Rates Based on 1/10 Policy (Property Damage)

Classification	Rate/\$100 pay roll
Wrecking, bldgs. or demolitions	Company rated
Excavation, earth or common	\$ 1.00
Excavation rock	1.00
Concrete work, engineering structures	0.25
Concrete work, bldgs. not over 3 stories	0.20
Concrete work, bldgs. over 3 stories	0.25
Concrete work, reinforced floors	0.25
Concrete work, pavements	0.20



Carpentry, concrete form construction	\$ 0.25
Carpentry, bldgs. 2 stories and under	0.15
Carpentry, bldgs. 3 stories and over	0.25
Carpentry, interior trim - bldgs.	0.20
Structural-iron and steel erection	1.00
Structural-iron, dwellings not over 2 stories	0.20
Ornamental- iron erection	0.75
Roofing	0.50
Waterproofing	0.35
Lathing	0.15
Bricklaying	0.20
Sheet-metal work	0.20
Plumbing, heating, gas fitting	0.25
Glazing	0.20
Electrical wiring, installing	0.15
Electrical equipment, installing	0.25
Painting structural steel in field engr. structural	1.00
Painting buildings	0.35
Sewer construction	1.25
Officers and superendants, supervising	0.25
Office work	0005

Tables for computing the percentage of increase for policies other than 5/10 for both bodily injuries, and property damage.

Bodily Injuries

Upper Limit	Lower Limit													
	5	7.5	10	15	20	25	30	40	50	100	150	200	250	300
10	100	107	110											
15	104	111	113	116										
20	106	113	115	118	120									
25	107	114	116	120	121	122								
30	108	115	117	121	122	123	124							
35	109	116	118	122	123	124	125							
40	110	117	119	123	124	125	126	127						
45	111	118	120	124	125	126	127	128						
50	112	119	121	125	126	127	128	129	130					
70	113	120	122	126	127	128	129	130	131					
100	114	121	123	127	128	129	130	131	132	133				
150	115	122	124	128	129	130	131	132	133	134	135			
200	116	123	125	129	130	131	132	133	134	135	136	137		
250	117	124	126	130	131	132	133	134	135	136	137	138	139	
300	118	125	127	131	132	133	134	135	136	137	138	139	140	141

Property Damage

Aggregate Limit	Lower Limit													
	1	1.5	2	3	4	5	7.5	10	15	20	25	30	40	50
10	100	110	115											
15	101	111	116	122										
20	102	112	117	123	128									
25	103	113	118	124	129	133	140	145	149	153	157			
30	104	114	119	125	130	134	141	146	150	154	158	160		
35	105	115	120	126	131	135	142	147	151	155	159	161		
40	106	116	121	127	132	136	143	148	152	156	160	162	166	
50	107	117	122	128	133	137	144	149	153	157	161	163	167	170
60	108	118	123	129	134	138	145	150	154	158	162	164	168	171
70	109	119	124	130	135	139	146	151	155	159	163	165	169	172
80	110	120	125	131	136	140	147	152	156	160	164	166	170	173
90	111	121	126	132	137	141	148	153	157	161	165	167	171	174
100	112	122	127	133	138	142	149	154	158	162	166	168	172	175
250	115	125	130	136	141	145	152	157	161	165	169	171	175	178
500	118	128	133	137	144	148	155	160	164	168	172	174	178	181
1000	123	133	138	144	149	153	160	165	169	173	177	179	183	186

## "FIRE INSURANCE"

### Builders' or Carpenters' Risks

Rates for fire insurance are determined from the type of construction, location with respect to surrounding buildings, and the municipal protection rating.

The National Board point system of grading towns' fire protection is being applied in the State of Michigan. This Grading Schedule is based upon the plan of assigning to the various features of fire defense, points of deficiency, depending upon the extent of variance from the standard requirements; the natural and structural conditions which increase the general hazard, and the lack of laws or their enforcement for control of unsatisfactory conditions, are graded in the same manner. The Water supply, Fire Department, Fire Alarm, Police, Building Laws, Hazards and the Structural Conditions are the items which enter into the grading. Questions with reference to town classification and also questions pertaining to contemplated improvements or changes in town Fire Protection should be referred to the Michigan Inspection Bureau's Detroit office, where complete files on these topics are maintained for all protected towns in the State.

The classification of Municipal Protection are rated from 1 to 10. The lower the number the better the protection; most cities come under numbers from 1 to 6, town 7 to 8, and country 9 to 10.

The contractor is only interested in Fire Insurance during the period of erection and the period of time after completion; before the owner has accepted the work. It is for that reason only the construction rates will be discussed.

Classification	Protection		
	Classes	Classes	Classes
	1-6	7-8	9-10
Per \$100 valuation			
1. On all frame, iron-sheathed frame, skeleton iron-clad and brick-veneered buildings, charge short rate of.....	\$1.50	\$1.65	\$1.75
2. On all buildings with exterior walls of masonry, concrete, metal, metal lath and plaster or similar incombustible materials on incombustible supports and with combustible floors and roof, charge short rate of .....	1.00	1.15	1.25

Note: This class includes one story buildings with combustible roof with or without basement.

3. On all buildings with exterior walls of metal, metal lath and plaster or other incombustible materials on combustible supports (except masonry or concrete) and with floors and roof constructed of incombustible supports.....	0.65	0.75	0.85
4. On all buildings with exterior walls of masonry or concrete and with floors and roof construction of incombustible materials on incombustible supports.....	0.60	0.65	0.75

Note: When a building is of more than one of the types of construction described under Items 1,2,3 and 4, or when a building is of a type of construction not embraced by any of the foregoing rules, or where buildings described under Items 3

or 4 have combustible roofs, refer to Michigan Inspection Bureau for specific rate.

When the insurance on construction work is taken out it is computed on the full completed price of the work, and then half premiums are paid. The theory being that the average of the structure exposed from the start to finish is one half. Also the rates listed are per hundred dollars of valuation for one year, and are therefore subject to a pro-rating for that portion of a year it takes to complete the work.

#### "EXTENDED COVERAGE ENDORSEMENT"

The Extended Coverage Endorsement may be attached to the Fire Insurance Policy to cover perils of windstorm, hail, explosion, riot, riot attending a strike, civil commotion, aircraft, vehicle, and smoke. It must be for the same term as the Fire insurance to which it is attached. Also it is not permissible to cancel the Extended Coverage Endorsement unless the entire Fire Insurance Policy to which it is attached be cancelled.

When considering this type of endorsement the premiums are determined after the risks have been specially rated.



## "CONTINGENT INSURANCE"

Contingent insurance that applies to construction work are of two types - one for the protection of the owner during the process of construction, and the other protecting the contractor against claims caused as a result of any act of his sub-contractors.

First let us consider the owner's insurance, Owners Protective or Contingent Public Liability insurance is the proper coverage for an owner who employs an independent contractor to erect a building on a fixed price basis. This protects the owner against liability which may be charged against him because of an act of an independent contractor and, against liability based upon omissions or supervisory acts of the insured in connection with the work of independent contractors.

If the work is done on a cost plus or a percentage basis, an Owners Protective Liability policy does not apply. Under these conditions, the contractor becomes the agent of the owner and hence the owner can be protected only by being added as an additional insured under the Public Liability policy of the contractor. If the work is done by employees of the owner, then a Contractors Public Liability policy should be issued to the owner.

### Owners Protective Liability Rates.

These rates are for 5/10 bodily injuries, and 1/10 property damage.

Wrecking: Is classified as an "A" rated policy, and the rates for this type of policy are established by the company after consideration of the conditions the work is to be performed under.

10

Construction: These rates are listed on a flat rate depending on the total amount of the construction work involved.

	B.I.	P.D.
First \$500,000.00	\$ 0.05	\$ 0.02
Second \$500,000.00	0.03	0.01
Above \$1,000,000.00	0.01	0.01

The second type of contingent insurance is that taken out by the contractor, Contractors' Protective Liability insurance is the proper coverage when an injured person makes an effort to fasten the responsibility upon the general contractor; because of some negligent act of a sub-contractor. Every contractor who has occasion to sub-let any of his work should carry this Contractors' Protective Liability insurance. Even one small sub-let job without such protection might result in disastrous loss to the general contractor. For a person may become just as badly injured because of a very small job as on or about extensive construction work.

The circumstances under which a general contractor may be held liable for acts of a sub-contractor are most important. They are many times overlooked by contractors, and may be stated briefly as follows:

1. Where the work is unlawful in itself.
2. Where the injury is caused by violation of some absolute nondelegatable duty which the general contractor was bound at his peril to discharge.
3. Where the injury was a necessary consequence of executing the work in the manner provided for in the contract or subsequently subscribed by the general contractor.
4. Where the performance of the work is inherently dangerous.

A specific example that gives the application of these principles where a general contractor has been held liable for an accident caused not by their own workmen nor by their own equipment but by the operations of a sub-contractor was handed down by Michigan courts, in the case of White v. H.G. Christman Company. Christman was the general contractor. The excavation was sub-let to a sub-contractor, who used a steam shovel sparks from which were blown by the wind and set the house of the plaintiff, White, on fire. In the suit by White against the general contractor, Christman, the court held Christman responsible. In doing so the court said that where one owes a duty to another he cannot acquit himself of liability by delegating performance of duty to an independent contractor. In this case damage to property and not personal injury was involved, but the principal upon which the general contractor was held would apply with equal force to personal injury.

#### Contractors' Protective Liability Insurance Rates

The premium for which this insurance is based is upon the cost of the work sublet.

Building wrecking premiums are based on an "A" rating which the insurance company establishes from its past experience.

Construction operations - based on 5/10 policy for bodily injuries, and 1/10 policy for property damages:

Total construction cost		Rates	
		B.I.	P.D.
First	\$500,000.00	\$ 0.06	\$ 0.03
Second	\$500,000.00	0.03	0.02
Above	\$1,000,000.00	0.01	0.01

## "PRODUCT LIABILITY INSURANCE"

### (Completed Operations)

On certain types of work it is advisable for contractors to insure their work after it has been completed. Contractors liability policies cover accidents occurring after completion or abandonment of operations, provided they are caused by pickup or delivery operations or existence of tools, uninstalled equipment and abandoned or unused material. It does not however cover accidents caused by negligence in the work itself, after operations have been completed.

Many contractors feel that they are automatically relieved of liability once the owner of the premises accepts the work. This is not true as may be shown in the case of Murphy vs. Barlow Realty Co.. "Here a contractor repaired a building which had been damaged by fire. After the work was completed and accepted by the owner of the property, a portion of the floor collapsed, injuring an employe of a tenant. the contractor was held liable on the grounds that the defect was caused by his negligence and could not readily be detected by a member of the public.

### Rates

The premium for this Productive Liability policy may be obtained from the company after the risks have been submitted for special consideration and rating. The rates for this type of insurance are rather high.

## "AUTOMOBILE AND VEHICLE INSURANCE"

Contractors should carry insurance on all the vehicles they operate of their own, and they also should cover the ones they use that are owned by others. In the use of hired trucks there are three types of coverages offered to the principle contractor for his protection:

1. Non-ownership liability insurance, covering operation of passenger cars by anyone in the insured's business and the occasional and infrequent use of commercial automobiles (trucks) by the insured's employees.

2. Hired Car Coverage, protecting the insured against liability from the use of hired automobiles operated by trucking firms and other independent contractors.

There is no standard form of policy in the last type of coverage and the risks must be referred to the company for premium. Most companies will write this type on request, however if all three are taken out they should be with the same company.

Contractors trucks would be listed under truckmen's rates for hauling materials or commodities for another. The fact that he advertises as a contractor, building material dealer, sand and gravel hauler, or some other name does not remove it from the truckmen's classification.

### Steps in Rating:

1. Class of work engaged in - Construction under (5)
2. Classified as to territory - Each has a different schedule rating.

3. Age of vehicle - New under 18 months after that classified as old.

4. As to weight; whether the weight is over or under 9500 pounds.

5. Distance of haul: local (50 miles or under), intermediate (50 to 150 miles), long (over 150 miles).

Rates:

Public Liability;	B.I.	P.D.
(CA) not over 9500 pounds	\$15.00	\$18.00
(CB) over 9500 pounds	\$31.00	\$43.00
Fire:	New	Old
Local	\$0.60/100	\$0.90/100
Intermediate	\$1.20/ "	\$1.80/ "
Long	\$1.80/ "	\$2.75/ "

Tornado:

Flat rate of \$0.10 per hundred of valuation.

Collision:

Local	Entire State With Exception of Detroit		
Orig. cost	Full coverage	\$50.00 Deductible	\$100.00 Deductible
\$ 0- 600	\$65.00	\$10.00	\$8.00
601- 750	78.00	14.00	12.00
751- 900	90.00	21.00	17.00
901-1050	101.00	26.00	20.00
1051-1300	111.00	31.00	23.00
1301-1600	120.00	35.00	26.00
1601-1900	128.00	40.00	30.00
1901-2400	133.00	44.00	33.00
2401-3000	138.00	48.00	36.00
3001-3700	142.00	54.00	40.00
3701-4600	146.00	59.00	43.00
4600-6000	151.00	65.00	46.00



## Intermediate:

Orig. cost	Full coverage	\$50 Deductible	\$100 Deductible	\$250 Deduct.
\$ 0- 600	134.00	21.00	12.00	3.00
601- 750	164.00	32.00	26.00	6.00
751- 900	191.00	51.00	29.00	7.00
901-1050	212.00	60.00	35.00	10.00
1051-1300	229.00	68.00	41.00	11.00
1301-1600	247.00	79.00	49.00	12.00
1601-1900	261.00	86.00	54.00	16.00
1901-2400	275.00	96.00	61.00	17.00
2401-3000	283.00	111.00	68.00	20.00
3001-3700	289.00	122.00	72.00	23.00
3701-4600	297.00	129.00	77.00	24.00
4601-6000	304.00	142.00	84.00	26.00

## Long Distant

Orig. cost	Full	Deductible				
		\$25	\$50	\$100	\$250	\$500
\$ 0- 600	198.00	113.00	70.00	51.00	33.00	23.00
601- 750	253.00	167.00	124.00	92.00	60.00	40.00
751- 900	298.00	214.00	171.00	127.00	83.00	55.00
901-1050	324.00	246.00	206.00	152.00	99.00	66.00
1051-1300	354.00	277.00	239.00	179.00	118.00	78.00
1301-1600	389.00	312.00	274.00	207.00	135.00	90.00
1601-1900	412.00	337.00	299.00	227.00	148.00	99.00
1901-2400	434.00	359.00	322.00	244.00	159.00	106.00
2401-3000	451.00	378.00	343.00	260.00	170.00	113.00
3001-3700	463.00	389.00	352.00	269.00	175.00	118.00
3701-4600	476.00	403.00	366.00	278.00	181.00	121.00
4601-6000	486.00	415.00	378.00	289.00	188.00	126.00

To determine the cost of policies of different limits multiply the cost of the 5/10 policy by the following percentages to obtain bodily injury premiums.

Upper limit	Lower limits												
	5	7.5	10	15	20	25	30	40	50	100	150	200	
10	100	107	110										
15	104	111	113	116									
20	106	113	115	118	120								
25	107	114	116	120	121	122							
30	108	115	117	121	122	123	124						
35	109	116	118	122	123	124	125						
40	110	117	119	123	124	125	126	127					
45	111	118	120	124	125	126	127	128					
50	112	119	121	125	126	127	128	129	130				
70	113	120	122	126	127	128	129	130	131				
100	114	121	123	127	128	129	130	131	132	133			
150	115	122	124	128	129	130	131	132	133	134	135		
200	116	123	125	129	130	131	132	133	134	135	136	137	
250	117	124	126	130	131	132	133	134	135	136	137	138	139
300	118	125	127	131	132	133	134	135	136	137	138	139	140

To find increase in cost for higher property damage use these percentages.

Coverage		% increase
\$ 5000.00	--	100%
10,000.00	-	110%
15,000.00	-	115%
20,000.00	-	118%
25,000.00	-	120%
30,000.00	-	121%
35,000.00	-	122%
40,000.00	-	123%
45,000.00	-	124%
50,000.00	-	125%
60,000.00	-	126%
70,000.00	-	127%
80,000.00	-	128%
90,000.00	-	129%
100,000.00	-	130%
110,000.00	-	131%
120,000.00	-	132%
130,000.00	-	133%
140,000.00	-	134%
150,000.00	-	135%
175,000.00	-	136%
200,000.00	-	137%
225,000.00	-	138%
250,000.00	-	139%
275,000.00	-	140%
300,000.00	-	141%
350,000.00	-	142%
400,000.00	-	143%
450,000.00	-	144%
500,000.00	-	145%
750,000.00	-	150%
1,000,000.00	-	155%

~~Room 101~~

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13-Aug-59

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MICHIGAN STATE UNIVERSITY LIBRARIES



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