



**THE WORKERS' COMPENSATION
RATING AND INSPECTION BUREAU OF MASSACHUSETTS**

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CIRCULAR LETTER NO. 1518

To All Members and Subscribers of the Bureau:

All Risk Adjustment Program (ARAP) - Experience Rating Plan

The Division of Insurance has approved an All Risk Adjustment Program (ARAP) which will surcharge experience rated risks, voluntary and assigned risk, with a record of losses greater than expected under the Experience Rating Plan, to become effective 12:01 A.M., January 1, 1990, on new and renewal business only.

The purpose of this program is to provide a revised pricing mechanism for experience rated risks to share in the underwriting losses they generate. While this program will be applied to all risks, a majority of the risks impacted are currently in the residual market.

The attached filing memorandum (EXHIBIT 1) outlines the background and impact of the program and contains Administration Rules and Procedures.

The Bureau will calculate the ARAP adjustment, and identify such as a separate percentage figure on the Experience Rating Calculation sheet (EXHIBIT 2). The Experience Rating Modification will continue to be shown as present. Distribution of these sheets to carriers will continue without change.

EXHIBIT 3 is a sample Information Page indicating the proper method for calculating premium when there is an All Risk Adjustment.

The Workers' Compensation Insurance Plan Application is being revised accordingly.

The National Council on Compensation Insurance will distribute Manual pages reflecting the changes required in the Experience Rating Plan Manual.

NORMAN R. FONTAINE
Vice President

NRF/jd

ALL RISK ADJUSTMENT PROGRAM (ARAP)

- PURPOSE:** The purpose of this filing is to provide a revised pricing mechanism for experience rated risks to share in the underwriting losses that they generate. This proposal will surcharge risks with a record of losses greater than expected under the experience rating plan. While this program will be applied to all risks, a majority of the risks actually impacted are currently in the residual market.
- BACKGROUND:** The residual market is intended to serve as the market of last resort to ensure the availability of workers compensation and employers liability insurance to all employers required by law to provide this coverage but unable to obtain it through the voluntary market.
- Over the last four years combined, the residual market suffered an operating loss of approximately \$440 million in Massachusetts. Carriers writing voluntary insurance continue to absorb the increased burden being placed on it by the rapid expansion of the residual market. In Massachusetts, the subsidy has grown over the last few years and is currently estimated to be approximately 22%. (In other words, for every dollar of voluntary market, \$.22 must be used to subsidize the increased loss experience in the residual market.) These subsidies are causing severe financial hardships to insurance carriers. As a result, competition among voluntary carriers has diminished.
- The residual market has evolved into more than a market of last resort. The number of risks and the amount of premium have grown significantly in the past five years.

Massachusetts Workers' Compensation Percentage of Premium Written in the Residual Market

<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
10.4%	14.7%	20.4%	25.0%	29.5%

- PROPOSAL:** It is proposed that the attached All Risk Adjustment Program (ARAP) be implemented effective January 1, 1990.
- IMPACT:** The proposed surcharge will range from 0 to a maximum of +49 percent of standard premium.

<u>ARAP Surcharge</u>	Distribution of Number <u>Risks</u>	Distribution of Standard <u>Premium</u>
None	76.8%	65.6%
Less than or equal to 10%	7.6	17.1
More than 10%, but not more than 20%	7.2	7.2
More than 20%, but not more than 30%	4.9	4.7
More than 30%, but not more than 40%	2.2	2.8
More than 40%	1.3	2.6

ARAP would generate for risks subject to Experience Rating about 5.2% more premium. For assigned risks subject to Experience Rating ARAP would generate 8.6% more premium.

IMPLEMENTATION: In order to implement this proposal, the attached exhibit illustrates the changes required in the Experience Rating Plan Manual.

ADMINISTRATION RULES AND PROCEDURES

1. Eligibility - A risk shall be eligible for the All Risk Adjustment Program if it is eligible for an experience rating modification. The application of this program is mandatory for all eligible insureds and shall apply to all policies written for such insureds.

2. ARAP Surcharge Formula -

- a. After the calculation of the experience modification factor (M) for a particular risk, the weighted test ratio (R) is calculated.

$$R = \frac{(0.5 - 0.5W) A_p}{M \cdot E_p} + \frac{(0.5 + 0.5W) A}{M \cdot E}$$

where:

W is the weighting value

A is the actual losses, as limited on a per accident basis

A_p is the actual primary losses

E is the total expected losses

E_p is the expected primary losses

M is the normal experience modification

All values are those used in the experience modification calculation.

- b. If R is greater than 1.0 a surcharge factor will be calculated using the following formula:

$$S = 1 + \left[\frac{(.08) E (R-1)^{1.25}}{(E + 3)^{0.5}} \right]$$

where:

E is the total expected losses of the particular insured (in thousands), (limited to 40),

R is the weighted test ratio (calculated in 2A), (limited to 2)

- c. The Surcharge factor S will appear on all rating forms. This surcharge factor will be applied to standard premium (i.e. after experience rating) developed in the state(s) where effective.
3. Inherent in the rules above is a limit on the surcharge of 49% of standard premium. Only insureds with expected losses equal to or greater than \$40,000 will be subject to the maximum surcharge. The following table shows sample maximum surcharges by risk expected loss size.

<u>Risk Expected Losses</u>	<u>Maximum Surcharge</u>
2,500	9%
5,000	14%
10,000	22%
25,000	38%
40,000 and over	49%

4. Definitions

For the purposes of this program the following definitions apply.

- a. Weighted Test Ratio: A comparison of the risk's actual losses to the modified expected losses. A ratio greater than 1.00 is subject to the ARAP surcharge. This test ratio is limited to 2.00.
- b. ARAP Surcharge Factor: The factor is applied to the normal standard premium. This factor is determined by a formula using the weighted test ratio.

5. Experience rated risks with Multi-state operations shall be subject to the ARAP for that portion of the risk in Massachusetts. The ARAP surcharge shall be calculated using Massachusetts losses and expected losses. The ARAP surcharge shall be applied to the Massachusetts portion of the premium.

PART II - EXHIBIT OF EXPECTED LOSSES

(1) CLASS CODE	(2) YR	(3) PAYROLL	(2) YR	(3) PAYROLL	(2) YR	(3) PAYROLL	(2) YR	(3) PAYROLL	(4) EXPECTED LOSS RATE PAYROLL LIMITATIONS		(5) EXPECTED LOSSES (3) X (4) ÷ 100	(6) "D" RATIO	(7) PRIMARY EXPECTED LOSSES (5) X (6)	
									UNLIMITED	\$300				
2003	7	735987	6	948289	5	660593			3.83		89808	.32	28739	
3810	7	206465	6	37419	5	115400			.15		539	.34	183	
4079	7	154315	6	69163	5	150805			1.86		6962	.37	2576	
TOTAL									EXPECTED EXCESS (f)=(d)-(e)		(d) TOTAL EXPECTED LOSSES		(e) TOTAL PRIMARY EXPECTED LOSSES	
									65811		97309		31498	

PART I - EXHIBIT OF ACTUAL LOSSES

(8) YR	(9) CLAIM NUMBER	(10) ACTUAL INCURRED LOSSES	(11) PRIMARY ACTUAL LOSSES	(8) YR	(9) CLAIM NUMBER	(10) ACTUAL INCURRED LOSSES	(11) PRIMARY ACTUAL LOSSES				
5	22520	3244	2885								
5	22622	12694	6134								
6	29190	100400	9262								
6	29565	2525	2399								
7	68176	2537	2408								
7	69538	4286	3489								
7	72727	2136	2107								
7	74560	8478	5145								
TOTAL BY POLICY YEAR		5	1103	1103	TOTAL BY POLICY YEAR		5	17041	10122		
OF ALL CASES \$2000 OR UNDER		6	361	361	OF ALL CASES		6	82886	12022		
		7	2328	2328			7	19765	15477		
				ACTUAL EXCESS (c)=(a)-(b)		(a) ACTUAL INCURRED LOSSES		(b) PRIMARY ACTUAL LOSSES			
POL # 123456				12/01/88		82071		119692		37621	

TO - MAJOR INSURANCE BUREAU FILE NO. 999999 NAME OF RISK XYZ COMPANY BOSTON ARAP SURCHARGE = 1.04	PART III - RATING PROCEDURE		
	1. PRIMARY ACTUAL AND TOTAL EXPECTED LOSSES	(b) 37621	(d) 97309
	2. "B" VALUE	18200	18200
	3. RATABLE EXCESS	(w) X (c)	X
	w = .09	7386	
	4. (1.00-w) = .91	(1-w) X (f) 59888	
5. TOTALS	(g) 123095	(h) 115509	
EXPERIENCE MODIFICATION (g)/(h)		1.07	

CODE NO.	MANUAL CLASSIFICATION	AUTHORIZED RATE	DATE EFFECTIVE
003	BAKERY - & SPVSR & DR		JAN. 1, 1990
079	RESTAURANT - NOC		DATE ISSUED
8810	CLERICAL OFFICE EMPLOYEES NOC		DEC. 8, 1989

**Sample Premium Calculation For Risk
Subject To ARAP**

LOCATIONS, CLASSIFICATION AND PAYROLL IN MASSACHUSETTS
Calculation of Estimated Annual Premium:

Describe by location the duties of employees	Class Code	Number of Employees	Total Payroll	Rate	Premium
Carpentry - NOC	5403	2	30,000	26.89	8067
Concrete Construction - NOC	5213	1	10,000	25.38	2538
Clerical Office Employees NOC	8810	1	15,000	0.29	44
Salesperson, Collectors or Messengers - Outside	8742				
Drivers, NOC	7380				
Employers Liability / /					
Total Premium					\$10,649
[1] Experience Modification (1.07)					745
Standard Premium					11,394
[1] ARAP Surcharge (1.04)					456
[2] Less Premium Discount (if applicable)					- 695
Expense Constant					155
Total Estimated Annual Premium					11,310
Mass. D.I.A. Assessment (1.2%) of Standard Premium					137
Total of Estimated Annual Premium and Mass. D.I.A. Assessment					11,447

1. Available from Bureau.
2. Premium Discount is a percentage of Standard Premium.