

UNREIMBURSED GENERAL AND AUTOMOBILE LIABILITY LOSSES

Table 42 shows that the amount of unreimbursed general and automobile liability losses averaged \$1.8 million in 1989 and \$1.7 million in 1988. The 1989 losses were .096% of revenues.

	Gross Losses	Average	% Increase	Number of Respondents
1989	\$667,531,173	\$1,799,275	2.9%	371
1988	\$629,741,890	\$1,749,283		360
	Gross Losses	Gross Revenues	% of Revenues	
1989	\$620,299,200	\$643,334,000,000	0.096%	354

UNREIMBURSED PRODUCT AND PROFESSIONAL LIABILITY LOSSES

Table 43 shows that in 1989 average losses for product/professional liability were \$2 million, up from \$1.2 million in 1988. These average liability losses were 64% higher in 1989 versus 1988. The 1989 losses were also .059% of revenues.

	Gross Losses	Average	% Increase	Number of Respondents
1989	\$250,035,197	\$2,032,806	63.5%	123
1988	\$155,375,170	\$1,243,001		125
	Gross Losses	Gross Revenues	% of Revenues	
1989	\$134,327,726	\$225,578,000,000	0.059%	116

OTHER UNREIMBURSED LIABILITY LOSSES

For the small number of respondents which reported losses for other lines of liability insurance, Table 44 shows that the average amount of other unreimbursed liability losses increased 236% from \$2.8 million in 1988 to \$9.5 million in 1989. This significant increase was due to one respondent with unreimbursed incurred losses (reserves, IBNR, and paid amounts) of \$348 million in 1989, which distorted the 1989 average. Without the losses, the average was much lower, (\$2,005,698) and actually decreased from 1988 to 1989.

	Gross Losses	Average	% Increase	Number of Respondents
1989	\$438,256,445	\$9,527,314	236.2%	46
1988	\$119,018,428	\$2,833,772		42
	Gross Losses	Gross Revenues	% of Revenues	
1989	\$89,556,035	\$85,111,000,000	0.105%	43

CLAIMS ADJUSTMENT FEES AND OTHER INTERNAL/EXTERNAL EXPENSES

Table 45 shows the claims adjustment fees and other internal and external expenses separately for unreimbursed liability and workers' compensation losses.

The average costs for adjusting unreimbursed liability losses increased slightly from \$403,991 in 1988 to \$410,751 in 1989. The expenses for liability losses were 13.52% of losses in 1989 and 13.34% in 1988.

The average cost to adjust workers' compensation losses increased 9% from \$339,086 in 1988 to \$368,345 in 1989. Expenses as a percentage of losses increased slightly for workers' compensation from 9.01% in 1988 to 9.15% in 1989.

This Table also contains the claims adjustment fees and expenses for liability and workers' compensation combined. Not surprisingly, the average increased from \$485,311 in 1988 to \$508,473 in 1989 while the expenses as a percentage of losses remained relatively the same at 11%.

TABLE 45
LIABILITY RISK FINANCING COSTS: CLAIMS ADJUSTMENT
FEEs AND OTHER INTERNAL AND EXTERNAL EXPENSES

LIABILITY:

	Gross Expense	Average	% Increase	Number of Respondents
1989	\$70,649,342	\$410,751	1.7%	172
1988	\$67,870,645	\$403,991		168

	Gross Expense	Gross Liability Losses	% of Losses	
1989	\$67,589,609	\$496,179,799	13.62%	159
1988	\$65,260,814	\$488,939,291	13.34%	156

WORKERS' COMPENSATION:

	Gross Expense	Average	% Increase	
1989	\$74,774,122	\$368,345	8.6%	203
1988	\$65,104,661	\$339,086		192

	Gross Expense	Gross WC Losses	% of Losses	
1989	\$74,557,237	\$814,660,104	9.15%	198
1988	\$64,784,686	\$719,009,125	9.01%	187

LIABILITY AND WORKERS' COMPENSATION COMBINED:

	Gross Expense	Average	% Increase	
1989	\$145,423,464	\$508,473	4.8%	286
1988	\$132,975,306	\$485,311		274

	Gross Expense	Gross Losses	% of Losses	
1989	\$145,549,979	\$1,310,839,903	11.10%	286
1988	\$132,975,306	\$1,207,948,416	11.00%	274

TOTAL UNREIMBURSED LIABILITY AND WORKERS' COMPENSATION LOSSES PLUS CLAIMS ADJUSTMENT FEES AND OTHER EXPENSES

According to Table 46, total unreimbursed liability losses and related expenses (excluding workers' compensation) averaged \$3.3 million in 1989, a 42% increase from an average of \$2.3 million in 1988. The 1989 losses plus expenses were .127% of revenues.

Total unreimbursed workers' compensation losses and expenses increased from an average of \$3.7 million in 1988 to \$4 million in 1989. Losses plus expenses were .205% of revenues, and the average losses and expenses per employee were \$267 in 1989.

**TABLE 46
LIABILITY RISK FINANCING COSTS: TOTAL UNREIMBURSED LIABILITY AND
WORKERS' COMPENSATION LOSSES PLUS CLAIMS ADJUSTMENT FEES
AND OTHER EXPENSES**

LIABILITY:

	Gross Losses/Expenses	Average	% Increase	Number of Respondents
1989	\$1,426,472,157	\$3,279,246	42.0%	435
1988	\$972,006,133	\$2,308,803		421

	Gross Losses/Expenses	Gross Revenues	% of Revenues	
1989	\$911,637,332	\$718,645,000,000	0.127%	412

WORKERS' COMPENSATION:

	Gross Losses/Expenses	Average	% Increase	
1989	\$1,300,257,635	\$3,964,200	8.3%	328
1988	\$1,138,488,372	\$3,660,734		311

	Gross Losses/Expenses	Gross Revenues	% of Revenues	
1989	\$1,223,989,400	\$597,679,000,000	0.205%	314

	Gross Losses/Expenses	Gross Employees	Average Losses/Expenses Per Employee	
1989	\$1,247,100,395	4,668,537	\$267	321

LIABILITY AND WORKERS' COMPENSATION COMBINED:

	Gross Losses/Expenses	Average	% Increase	
1989	\$2,726,729,792	\$4,021,725	23.8%	676
1988	\$2,110,494,505	\$3,246,914		650

	Gross Losses/Expenses	Gross Revenue	% of Revenue	
	\$2,135,626,732	\$907,131,000,000	0.235%	483

TOTAL LIABILITY RISK FINANCING COSTS

Table 47 provides the total risk financing costs for liability and workers' compensation. These values consist of total premiums, unreimbursed losses, and claims adjustment fees and related expenses. The average liability risk financing cost excluding workers' compensation equalled \$4.2 million and was .206% of revenues. The average workers' compensation cost was also \$4.2 million, and was .260% of revenues. The average cost for liability and workers' compensation was \$8 million, and was .427% of revenues.

TABLE 47
1989 LIABILITY RISK FINANCING COSTS:
TOTAL LIABILITY AND WORKERS' COMPENSATION PREMIUMS, UNREIMBURSED LOSSES
AND CLAIMS ADJUSTMENT FEES AND RELATED EXPENSES

LIABILITY:			
Gross Liability Risk Cost	Average		Number of Respondents
\$3,353,157,220	\$4,228,445		793
Gross Liability Risk Cost	Gross Revenues	% of Revenues	
\$2,678,695,174	\$1,300,466,000,000	0.206%	734
WORKERS' COMPENSATION:			
Gross WC Risk Cost	Average		
\$3,062,076,416	\$4,252,883		720
Gross WC Risk Cost	Gross Revenues	% of Revenues	
\$2,876,650,097	\$1,107,891,000,000	0.260%	668
LIABILITY AND WORKERS' COMPENSATION COMBINED:			
Gross Liability/WC Risk Cost	Average		
\$6,415,233,636	\$8,029,078		799
Gross Liability/WC Risk Cost	Gross Revenues	% of Revenues	
\$5,555,345,271	\$1,302,536,000,000	0.427%	738

INDUSTRY GROUP ANALYSES

Tables 48 through 51 provide a full review of liability and workers' compensation risk financing costs for each industry group.

According to Tables 48, 49, and 50, the transportation service industry (group 14) had the highest average industrywide liability, workers' compensation, and combined risk financing costs as a percent of revenues.

We also evaluated the workers' compensation costs per employee by industry group. Table 51 shows these results. The construction industry (group 4) had the highest average workers' compensation risk cost per employee industrywide at \$1,392.

TABLE 48
LIABILITY RISK FINANCING COSTS AS A PERCENT OF REVENUES

Industry Group	1989					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industrywide
1 Mining & Energy	.01	.11	.20	.39	.95	.17
2 Food, Agriculture	.02	.06	.23	.44	.47	.16
3 Food, Tobacco, Textiles	.01	.07	.13	.26	15.46	.13
4 Construction	.11	.32	.70	1.25	5.05	.42
5 Lumber, Furniture, Packaging	.01	.05	.08	.23	.75	.09
6 Printing, Publishing	.04	.05	.12	.24	.38	.19
7 Chemicals, Rubber, Plastic	.01	.19	.32	.48	2.26	.26
8 Primary Metals, Leather, Stone	.04	.12	.22	.28	2.52	.21
9 Metal Products	.05	.19	.29	.74	1.33	.28
10 Machinery	.04	.10	.30	.66	1.43	.23
11 Electrical Eqmt., Instruments	.02	.11	.20	.46	1.10	.09
12 Misc. Manufacturing Industries	.00	.18	.30	.40	1.82	.35
13 Transportation Equipment	.02	.15	.35	.46	1.92	.38
14 Transportation Service	.09	.37	1.29	2.91	11.29	1.63
15 Telecommunications	.04	.07	.13	.25	1.09	.07
16 Electric Utility	.02	.12	.19	.27	1.46	.20
17 Natural Gas Utility	.06	.17	.36	.41	.78	.24
18 Combination Utility	.01	.29	.53	1.15	3.50	.41
19 Wholesale Trade	.01	.09	.12	.17	.30	.10
20 Retail Trade	.01	.14	.28	.46	.72	.20
21 Finance-Bank, S&L, Holding Co	.02	.12	.17	.39	7.26	.23
22 Finance-Real Estate, Other	.04	.28	.55	1.00	8.43	.16
23 Insurance	.01	.02	.05	.10	.37	.07
24 Personal, Business Service	.01	.16	.48	1.10	3.77	.36
25 Health Care	.14	.71	1.54	1.97	7.12	1.42
26 Educational, Nonprofit Institutions	.03	.13	.29	.51	44.74	.71
27 Governmental	.01	.15	.31	.72	2.68	.53

TABLE 49
WORKERS' COMPENSATION RISK FINANCING COSTS AS A PERCENT OF REVENUES

Industry Group	1989					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industrywide
1 Mining & Energy	.00	.06	.13	.36	4.25	.13
2 Food, Agriculture	.04	.06	.13	.21	.91	.14
3 Food, Tobacco, Textiles	.00	.13	.30	.56	2.59	.37
4 Construction	.02	.57	.82	1.87	4.29	.71
5 Lumber, Furniture, Packaging	.04	.21	.36	.60	1.41	.23
6 Printing, Publishing	.08	.13	.19	.29	.42	.20
7 Chemicals, Rubber, Plastic	.02	.09	.22	.47	2.14	.13
8 Primary Metals, Leather, Stone	.01	.29	.40	.60	7.61	.29
9 Metal Products	.09	.29	.51	.88	1.88	.37
10 Machinery	.03	.09	.19	.36	.79	.23
11 Electrical Eqmt., Instruments	.03	.18	.25	.44	1.21	.14
12 Misc. Manufacturing Industries	.01	.19	.31	.51	1.22	.35
13 Transportation Equipment	.07	.13	.42	.64	2.46	.35
14 Transportation Service	.02	.45	.76	1.83	8.97	.95
15 Telecommunications	.01	.10	.14	.24	1.25	.05
16 Electric Utility	.01	.07	.13	.18	.31	.10
17 Natural Gas Utility	.02	.06	.10	.16	.83	.20
18 Combination Utility	.02	.15	.23	.70	.94	.17
19 Wholesale Trade	.00	.06	.14	.23	1.32	.14
20 Retail Trade	.01	.24	.40	.60	1.44	.29
21 Finance-Bank, S&L, Holding Co	.00	.04	.07	.12	1.40	.09
22 Finance-Real Estate, Other	.00	.03	.13	.65	2.70	.05
23 Insurance	.00	.02	.03	.06	.37	.06
24 Personal, Business Service	.00	.14	.33	1.03	5.39	.42
25 Health Care	.04	.43	.75	1.09	3.62	.82
26 Educational, Nonprofit Institutions	.01	.14	.28	.52	2.37	.46
27 Governmental	.01	.24	.59	.92	6.80	.22

TABLE 50
LIABILITY AND WORKERS' COMPENSATION RISK FINANCING COSTS
AS A PERCENT OF REVENUES

Industry Group	1989					
	Lowest Value	First Quartile	Median	Thrd Quartile	Highest Value	Industrywide
1 Mining & Energy	.01	.16	.40	.69	5.20	.30
2 Food, Agriculture	.06	.10	.28	.61	1.36	.30
3 Food, Tobacco, Textiles	.01	.21	.43	.89	15.46	.50
4 Construction	.13	1.26	1.86	3.40	8.13	1.13
5 Lumber, Furniture, Packaging	.01	.27	.43	.79	1.76	.32
6 Printing, Publishing	.14	.25	.33	.45	.65	.39
7 Chemicals, Rubber, Plastic	.01	.29	.54	.79	3.74	.39
8 Primary Metals, Leather, Stone	.13	.35	.51	.81	10.13	.50
9 Metal Products	.27	.64	.84	1.45	3.21	.65
10 Machinery	.11	.17	.72	.98	1.65	.46
11 Electrical Eqmt., Instruments	.05	.30	.49	.73	1.80	.23
12 Misc. Manufacturing Industries	.00	.41	.53	.79	2.33	.70
13 Transportation Equipment	.16	.23	.86	.99	4.38	.73
14 Transportation Service	.18	.68	2.01	4.90	20.25	2.76
15 Telecommunications	.04	.09	.21	.44	2.34	.12
16 Electric Utility	.02	.17	.27	.47	1.60	.30
17 Natural Gas Utility	.06	.27	.46	.67	1.24	.44
18 Combination Utility	.07	.50	.74	1.69	4.34	.58
19 Wholesale Trade	.01	.16	.23	.40	1.59	.24
20 Retail Trade	.01	.36	.61	1.00	2.17	.49
21 Finance-Bank, S&L, Holding Co	.02	.17	.26	.48	8.66	.32
22 Finance-Real Estate, Other	.05	.44	.81	1.33	10.67	.21
23 Insurance	.01	.04	.07	.15	.57	.13
24 Personal, Business Service	.01	.39	1.03	2.62	8.19	.79
25 Health Care	.60	1.54	2.22	2.77	10.73	2.25
26 Educational, Nonprofit Institutions	.04	.33	.57	1.14	44.74	1.17
27 Governmental	.01	.35	.86	1.48	7.53	.75

**TABLE 51
WORKERS' COMPENSATION COSTS PER EMPLOYEE**

Industry Group	1989					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industrywide
1 Mining & Energy	\$123	\$337	\$695	\$1,011	\$7,764	\$706
2 Food, Agriculture	364	380	529	638	1,550	441
3 Food, Tobacco, Textiles	4	346	593	1,088	5,092	787
4 Construction	81	779	1,246	2,628	8,750	1,392
5 Lumber, Furniture, Packaging	170	368	616	900	1,551	574
6 Printing, Publishing	87	179	267	333	622	244
7 Chemicals, Rubber, Plastic	96	267	487	773	1,976	374
8 Primary Metals, Leather, Stone	25	544	845	1,227	3,045	444
9 Metal Products	115	376	620	958	2,829	594
10 Machinery	54	234	371	681	1,458	516
11 Electrical Eqmt., Instruments	150	262	408	499	1,251	328
12 Misc Manufacturing Industries	48	283	343	625	1,596	474
13 Transportation Equipment	100	487	625	945	2,075	527
14 Transportation Service	87	486	885	1,453	6,138	918
15 Telecommunications	10	144	201	378	534	81
16 Electric Utility	33	233	400	584	1,029	321
17 Natural Gas Utility	49	178	258	410	1,204	589
18 Combination Utility	54	382	514	772	1,343	460
19 Wholesale Trade	59	302	525	949	2,102	522
20 Retail Trade	8	153	296	644	1,373	265
21 Finance-Bank, S&L, Holding Co.	0	63	101	140	457	96
22 Finance-Real Estate, Other	61	154	282	603	1,618	206
23 Insurance	19	87	126	199	706	181
24 Personal, Business Service	45	125	280	722	29,556	468
25 Health Care	17	156	393	581	1,218	282
26 Educational, Nonprofit Institutions	5	118	189	323	26,516	271
27 Governmental	11	267	436	750	9,345	405

V. CAPTIVE INSURANCE PROGRAM

In order to evaluate the net cost or benefit of any wholly-owned captive insurance company, respondents were asked to determine the extra cost (loss) or benefit (income) of their captive program, if applicable.

Table 52 shows that the average reported income generated by a captive insurance program for the 70 respondents was \$1.8 million. Captive net income as a percent of total premiums plus unreimbursed losses was 5.97%.

Total Net Income	Average Income		Number of Respondents
\$124,463,206	\$1,778,045		70
Total Net Income	Gross Premiums Plus Unreimbursed Losses	Net Income as % of Premiums Plus Unreimbursed Losses	
\$124,074,206	\$2,079,637,749	5.966%	69

VI. OTHER RISK MANAGEMENT EXPENSES

Other risk management expenses are typically defined to include costs for risk control (loss prevention) and the cost of outside services. However, since we received a low response to the Survey's questions on risk control expenditures, we excluded these costs from the *1990 Cost of Risk Survey* report. It is unusual for all corporate risk control expenditures to be administered and budgeted by the risk management department. In addition, some of the most significant risk control expenditures (the security system for an art museum, for example) are often perceived as being ordinary costs of doing business and are not reported as risk control expenditures.

We did receive an excellent response to our questions regarding alignment of risk control cost areas with responsible departments. The 1990 Survey questionnaire was expanded to include three additional cost areas: fleet or transportation safety; public safety; and an "other" category. We also increased the number of departments potentially responsible for each of the cost areas, by adding: operations; quality control/quality assurance; and an "other" category.

Table 53 shows the results of these findings. Respondents reported that their organization's risk management department was most likely to have responsibility for property protection (40.4%), fleet or transportation safety (30.3%), and public safety (37.1%). Not surprisingly, safety and health (or loss control) departments were primarily responsible for employee safety (28.8%) and industrial hygiene (28.3%).

TABLE 53
RISK CONTROL: RESPONSIBLE DEPARTMENTS
1989

COST AREA	RESPONSIBLE DEPARTMENT									
	Risk Management	Human Resources/ Personnel	Safety & Health (or Loss Control)	Medical	Environmental	Facilities or Maintenance	Operations (Mfg. Services, etc.)	Quality Control and Quality Assurance	Security	Other
Employee Safety	165 26.3%	140 22.3%	181 28.8%	3 .5%	10 1.6%	38 6.1%	67 10.7%	2 .3%	7 1.1%	15 2.4%
Industrial Hygiene	92 18.9%	84 17.2%	138 28.3%	20 4.1%	22 4.5%	38 7.8%	63 12.9%	13 2.7%	0 .0%	17 3.5%
Property Protection	231 40.4%	15 2.6%	51 8.9%	0 0%	4 7%	128 22.4%	89 15.6%	0 .0%	31 5.4%	23 4.0%
Environmental Affairs	100 19.3%	26 5.0%	70 13.5%	3 6%	117 22.6%	58 11.2%	80 15.5%	8 1.5%	3 .6%	52 10.1%
Fleet/Transportation Safety	149 30.3%	33 6.7%	69 14.1%	0 .0%	5 1.0%	58 11.8%	106 22.0%	0 .0%	5 1.0%	64 13.0%
Public Safety (3rd Party)	176 37.1%	25 5.3%	72 15.2%	1 .2%	7 1.5%	60 12.6%	78 16.4%	6 1.3%	19 4.0%	31 6.5%
Emergency Response & Contingency Planning	138 25.0%	45 8.2%	75 13.6%	6 1.1%	13 2.4%	56 10.2%	129 23.4%	3 5%	33 6.0%	53 9.6%
Security	61 11.8%	57 11.1%	39 7.6%	0 .0%	3 .6%	103 20.0%	105 20.4%	2 .4%	104 20.2%	41 8.0%
Quality Assurance/ Product Safety	34 10.2%	3 .9%	10 3.0%	1 .3%	3 .9%	9 2.7%	109 32.6%	143 42.8%	1 .3%	21 6.3%
Other (e.g., Nuclear Safety)	20 21.5%	2 2.2%	22 23.7%	3 3.2%	7 7.5%	6 6.5%	25 26.9%	3 3.2%	0 .0%	5 5.4%

COSTS FOR OUTSIDE SERVICES (EXCLUDING EXTERNAL RISK CONTROL)

Costs for outside services include brokers fees (those not included within premium cost), consulting fees, and miscellaneous costs not otherwise captured. Table 54 shows that these expenditures averaged \$76,780 in 1989 and were 1.040% of gross insurance premiums. Of special note, these expenditures decreased from 1985 Survey results where the average costs for outside services for 1984 were \$99,103 and the costs were 2.441% of premiums.

Gross Costs	Average		Number of Respondents
\$31,480,132	\$76,780		410
Gross Costs	Gross Premiums	% of Premiums	
\$31,332,381	\$3,010,598,806	1.040%	404

VII. RISK MANAGEMENT AND INSURANCE DEPARTMENT COSTS

RISK MANAGEMENT AND INSURANCE DEPARTMENT COSTS: WAGES, SALARY, OVERHEAD, TRAVEL, ETC.

Table 55 shows that the risk management department expenditures averaged \$342,969 in 1989. In addition, these costs were .018% of revenues, 5.70% of premiums, and 3.50% of premiums plus unreimbursed losses in 1989. We found dramatic decreases from 1984 data (1985 Survey Report) which indicated risk management department costs were 9.64% of premiums and 6.44% of premiums plus unreimbursed losses.

Gross Costs	Average		Number of Respondents
\$245,222,983	\$342,969		715
Gross Costs	Gross Revenues	% of Revenues	
\$219,513,238	\$1,218,445,000,000	0.018%	664
Gross Costs	Gross Premiums	% of Premiums	
\$242,727,955	\$4,259,011,348	5.699%	703
Gross Costs	Gross Premiums Plus Unreimbursed Losses	% of Premiums Plus Unreimbursed Losses	
\$243,200,010	\$6,953,086,902	3.497%	707

SIZE OF RISK MANAGEMENT AND INSURANCE DEPARTMENT

Table 56 shows that in 1989, the average risk management and insurance department industrywide employed 4.96 professional and clerical employees. The median size for a department totalled 3 employees, and the highest value was 120 employees. Respondent risk management/insurance departments had, on the average, 3.15 professional staff members.

1989	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry Average	Total Employees	Number of Respondents
Professional	0 10	1 00	2 00	3 00	95 00	3.15	2,516	798
Clerical	0 10	1 00	1 00	2 00	50.00	2.14	1,444	676
Total	0 10	1.50	3 00	5.00	120.00	4.96	3,960	798

The number of employees in the risk management/insurance department varied according to revenue size. Table 57 shows that 34.6% of the 746 respondents had 2.1 to 5 employees. Cumulatively, 76.4%, had total risk management employees ranging from 0 to 5 employees. Only 2.3% had over 20 total risk management employees.

TABLE 57
SIZE OF RISK MANAGEMENT AND INSURANCE DEPARTMENT BY 1989 REVENUES

REVENUES	TOTAL RISK MANAGEMENT EMPLOYEES						
	0 to 1	1.1 to 2	2.1 to 5	5.1 to 10	10.1 to 20	Over 20	
\$30,000,000 or less	15 40.5%	7 18.9%	13 35.1%	2 5.4%	0 .0%	0 .0%	
\$30,000,001 to \$100,000,000	27 32.1%	27 32.1%	23 27.4%	7 8.3%	0 .0%	0 .0%	
\$100,000,001 to \$300,000,000	46 27.9%	39 23.6%	56 33.9%	19 11.5%	5 3.0%	0 0%	
\$300,000,001 to \$1,000,000,000	38 18.4%	64 31.1%	65 31.6%	24 11.7%	10 4.9%	5 2.4%	
\$1,000,000,001 to \$3,000,000,000	11 6.9%	33 20.8%	69 43.4%	33 20.8%	7 4.4%	6 3.8%	
\$3,000,000,001 or higher	1 1%	4 4.2%	32 33.7%	33 34.7%	19 20.0%	6 6.3%	
Total, all respondents	138 18.5%	174 23.3%	258 34.6%	118 15.8%	41 5.5%	17 2.3%	

Table 58 shows the relationship between the size of the risk management/insurance department and the amount of premiums plus unreimbursed losses. Predictably, responding organizations with lower costs had smaller risk management departments, while those organizations with higher costs had larger risk management/insurance departments.

PREMIUMS PLUS UNREIMBURSED LOSSES	TOTAL RISK MANAGEMENT EMPLOYEES					
	0 to 1	1.1 to 2	2.1 to 5	5.1 to 10	10.1 to 20	Over 20
\$300,000 or less	10 66.7%	1 6.7%	3 20.0%	1 6.7%	0 .0%	0 0%
\$300,001 to \$1,000,000	34 34.3%	32 32.3%	25 25.3%	6 6.1%	2 2.0%	0 0%
\$1,000,001 to \$3,000,000	58 25.6%	75 33.0%	73 32.2%	19 8.4%	1 4%	1 .4%
\$3,000,001 to \$10,000,000	17 7.8%	54 24.7%	103 47.0%	33 15.1%	8 3.7%	4 1.8%
\$10,000,001 to \$30,000,000	4 3.3%	12 9.8%	43 35.0%	38 30.9%	22 17.9%	4 3.3%
\$30,000,001 or higher	2 4.3%	1 2.2%	6 13.0%	15 32.6%	11 23.9%	11 23.9%
Total, all Respondents	125 17.1%	175 24.0%	253 34.7%	112 15.4%	44 6.0%	20 2.7%

VIII. TOTAL COST OF RISK

Table 59 shows the total cost of risk, defined as the sum of premiums, unreimbursed losses, other risk management and insurance expenses, captive expenses, and departmental expenses. The cost of risk, as presented in this report, does not include risk control expenditures.

In 1989, the total cost of risk, as defined above, averaged \$9.6 million, was .518% of revenues, and .214% of assets. For financial institutions, the total cost of risk was .034% of deposits.

Gross Cost of Risk	Average		Number of Respondents
\$7,740,276,778	\$9,591,421		807
Gross Cost of Risk	Gross Revenues	% of Revenues	
\$6,773,094,723	\$1,305,541,000,000	0.518%	744
Gross Cost of Risk	Gross Assets	% of Assets	
\$5,781,512,711	\$2,695,765,000,000	0.214%	650
Gross Cost of Risk	Gross Deposits	% of Deposits	
\$230,495,646	\$671,911,000,000	0.034%	51

Table 60 illustrates a useful alternative measure to the cost of risk: total property and liability premiums plus unreimbursed losses. The costs for these components averaged \$9.5 million, were .510% of revenues, .211% of assets, and .033% of deposits for financial institutions.

TABLE 60 1989 TOTAL PROPERTY AND LIABILITY PREMIUMS PLUS UNREIMBURSED LOSSES			
Gross Premium Plus Losses	Average		Number of Respondents
\$7,588,036,869	\$9,532,709		796
Gross Premium Plus Losses	Gross Revenues	% of Revenues	
\$6,648,548,704	\$1,302,536,000,000	0.510%	738
Gross Premium Plus Losses	Gross Assets	% of Assets	
\$5,695,185,198	\$2,689,759,000,000	0.211%	644
Gross Premium Plus Losses	Gross Deposits	% of Deposits	
\$223,537,845	\$671,911,000,000	0.033%	51

Table 61 shows that the average total property and liability premium per respondent was \$5.8 million in 1989. The highest total premiums paid by any respondent was \$162 million, while the lowest was \$13,000.

TABLE 61 TOTAL PROPERTY AND LIABILITY PREMIUMS FOR 1989				
Lowest Value	First Quartile	Median	Third Quartile	Highest Value
\$13,000	\$1,040,403	\$2,270,500	\$5,910,557	\$162,220,000
	Gross Premium	Average	Number of Respondents	
	\$4,625,203,744	\$5,817,866	795	

Table 62 shows the relative sizes of the components of the cost of risk, excluding risk control costs. Again, the lowest value of the cost of risk as a percent of revenues was negative since captive profits were considered a negative cost of risk.

TABLE 62 RELATIONSHIPS OF COST OF RISK COMPONENTS					
Year	Lowest Value	First Quartile	Median	Third Quartile	Highest Value
Cost of Risk as a Percent of Revenues					
1989	-0.506%	0.400%	0.770%	1.446%	49.485%
Property Premiums as a Percent of Revenues					
1989	0.001%	0.042%	0.081%	0.157%	7.858%
Property Premiums as a Percent of Assets					
1989	0.000%	0.030%	0.071%	0.133%	2.969%
Property Risk Financing Costs as a Percent of Revenues					
1989	0.001%	0.050%	0.094%	0.185%	7.938%
Property Risk Financing Costs as a Percent of Assets					
1989	0.000%	0.036%	0.084%	0.160%	3.073%
Property Premiums as a Percent of Insured Value					
1989	0.000%	0.034%	0.071%	0.150%	56.228%
Liability Premiums as a Percent of Revenues					
1989	0.001%	0.095%	0.201%	0.454%	19.363%
Liability Risk Financing Costs as a Percent of Revenues					
1989	0.001%	0.117%	0.253%	0.601%	44.742%
Workers' Compensation Premiums as a Percent of Revenues					
1989	0.001%	0.049%	0.144%	0.402%	7.613%
Workers' Compensation Risk Financing Costs as a Percent of Revenues					
1989	0.001%	0.104%	0.257%	0.618%	8.967%

Table 63 reviews the relationship of organization size and total property and liability premiums plus unreimbursed losses as a percentage of revenues. As evidenced, a clear relationship exists between these factors: as revenues increase, premiums plus unreimbursed losses as a percent of revenues appear to fall.

REVENUES	COST AS OF 1989 REVENUES
\$30,000,000 or less	5.202%
\$30,000,001 to \$100,000,000	2.164%
\$100,000,001 to \$300,000,000	1.289%
\$300,000,001 to \$1,000,000,000	0.923%
\$1,000,000,001 to \$3,000,000,000	0.690%
3,000,000,001 or higher	0.332%

Since many responding organizations have accurate records of premiums and losses, but not of other types of risk management costs, total premiums plus unreimbursed losses as a percentage of revenues is another way to examine relative costs of risk. Table 64 presents total property and liability premiums plus unreimbursed losses as a percentage of revenues by industry group classification.

The transportation service industry (group 14) had the highest average industrywide cost at 2.53% of revenues, according to this measure.

Tables 65 and 66 analyze the total cost of risk (excluding risk control expenditures) by industry group relative to revenues and assets. The industry with the highest average total cost of risk as a percentage of revenues was transportation service (group 14), reporting 2.81%. Relative to assets, health care (group 25) had the highest average total cost of risk as a percentage of assets, reporting 2.29%.

Please note that the column with the lowest values contains some negative figures. Although it does not make sense for firms to have a negative cost of risk, these were negative due to the information we received from certain respondents reporting gains from their captive programs.

TABLE 64
TOTAL PROPERTY AND LIABILITY PREMIUMS PLUS UNREIMBURSED LOSSES
AS A PERCENT OF REVENUES

Industry Group	1989					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industrywide
1 Mining & Energy	.05	.46	.74	1.07	5.98	.54
2 Food, Agriculture	.22	.32	.44	.88	1.38	.51
3 Food, Tobacco, Textiles	.03	.29	.51	.95	16.84	.57
4 Construction	.17	1.32	1.94	3.40	8.45	1.18
5 Lumber, Furniture, Packaging	.09	.42	.65	1.04	2.23	.44
6 Printing, Publishing	.17	.32	.42	.61	.77	.47
7 Chemicals, Rubber, Plastic	.02	.43	.80	1.05	5.05	.52
8 Primary Metals, Leather, Stone	.29	.38	.66	.87	11.06	.63
9 Metal Products	.42	.74	.93	1.50	3.33	.75
10 Machinery	.16	.24	.75	1.13	1.71	.51
11 Electrical Eqmt., Instruments	.06	.40	.61	.87	1.95	.27
12 Misc. Manufacturing Industries	.05	.50	.63	.90	2.45	.75
13 Transportation Equipment	.21	.30	.91	1.12	5.84	.77
14 Transportation Service	.20	1.23	3.07	4.92	20.50	2.53
15 Telecommunications	.07	.17	.27	.73	3.01	.17
16 Electric Utility	.02	.33	.61	.89	1.85	.55
17 Natural Gas Utility	.10	.41	.53	.73	1.35	.56
18 Combination Utility	.12	.69	1.14	2.02	4.44	.79
19 Wholesale Trade	.01	.21	.28	.44	1.77	.27
20 Retail Trade	.05	.41	.68	1.02	2.29	.51
21 Finance-Bank, S&L, Holding Co	.05	.25	.39	.77	15.22	.30
22 Finance-Real Estate, Other	.08	.51	1.16	3.48	18.61	.29
23 Insurance	.04	.06	.10	.18	.69	.13
24 Personal, Business Service	.01	.49	1.18	2.76	8.32	.80
25 Health Care	.67	1.62	2.37	2.89	11.02	2.23
26 Educational, Nonprofit Institutions	.15	.45	.73	1.37	44.75	1.03
27 Governmental	.02	.52	.97	1.59	7.88	.34

TABLE 65
TOTAL COST OF RISK AS A PERCENT OF REVENUES
(EXCLUDING RISK CONTROL EXPENDITURES)

Industry Group	1989					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industrywide
1 Mining & Energy	-.09	.52	.77	1.05	6.09	.50
2 Food, Agriculture	.22	.34	.61	1.20	1.66	.52
3 Food, Tobacco, Textiles	-.09	.31	.54	1.06	16.84	.58
4 Construction	.19	1.40	1.97	3.70	8.82	1.21
5 Lumber, Furniture, Packaging	.09	.42	.67	.98	2.33	.46
6 Printing, Publishing	.18	.35	.43	.65	.81	.51
7 Chemicals, Rubber, Plastic	-.51	.41	.83	1.06	5.25	.49
8 Primary Metals, Leather, Stone	.29	.42	.68	.92	13.06	.64
9 Metal Products	.19	.74	.95	1.56	3.53	.78
10 Machinery	.18	.27	.73	1.24	1.71	.54
11 Electrical Eqmt., Instruments	.06	.46	.61	.90	2.06	.28
12 Misc. Manufacturing Industries	.06	.52	.67	.90	2.55	.76
13 Transportation Equipment	.21	.42	.93	1.12	6.34	.81
14 Transportation Service	.23	1.46	2.95	5.13	20.72	2.81
15 Telecommunications	.07	.19	.28	.79	3.34	.18
16 Electric Utility	.14	.28	.60	.96	1.90	.57
17 Natural Gas Utility	.10	.48	.62	.79	1.28	.59
18 Combination Utility	.02	.63	1.19	2.21	4.90	.82
19 Wholesale Trade	.02	.23	.30	.46	1.89	.28
20 Retail Trade	.05	.46	.72	1.07	2.36	.53
21 Finance-Bank, S&L, Holding Co.	.05	.26	.43	.96	18.52	.32
22 Finance-Real Estate, Other	.08	.51	1.16	3.48	18.91	.31
23 Insurance	.04	.07	.11	.20	7.07	.13
24 Personal, Business Service	.01	.45	1.22	2.84	8.52	.82
25 Health Care	.65	1.51	2.43	2.92	12.81	2.30
26 Educational, Nonprofit Institutions	.18	.45	.79	1.43	49.48	1.11
27 Governmental	.02	.60	1.16	1.81	8.36	.37

TABLE 66
TOTAL COST OF RISK AS A PERCENT OF ASSETS
(EXCLUDING RISK CONTROL EXPENDITURES)

Industry Group	1989					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industrywide
1 Mining & Energy	.17	20	.57	.88	4.81	.42
2 Food, Agriculture	.89	1.77	2.29	2.76	4.02	2.18
3 Food, Tobacco, Textiles	-.05	.49	.96	2.08	15.86	.90
4 Construction	.06	1.78	4.22	7.35	26.45	1.24
5 Lumber, Furniture, Packaging	.12	.26	.71	1.37	3.30	.43
6 Printing, Publishing	.22	.44	.58	.77	1.08	.54
7 Chemicals, Rubber, Plastic	-.68	.43	.90	1.44	6.66	.49
8 Primary Metals, Leather, Stone	.34	.70	1.04	1.57	4.35	.74
9 Metal Products	.28	.82	1.68	2.35	4.85	.93
10 Machinery	.20	.45	1.06	2.01	4.20	.90
11 Electrical Eqmt., Instruments	.11	.61	.91	1.45	2.67	.40
12 Misc. Manufacturing Industries	.09	.48	.93	2.46	4.12	.93
13 Transportation Equipment	.43	.95	1.48	2.02	3.99	1.42
14 Transportation Service	.20	.76	1.49	5.74	19.82	1.35
15 Telecommunications	.03	.07	.13	.23	1.31	.10
16 Electric Utility	-.04	.07	.20	.25	.74	.16
17 Natural Gas Utility	.07	.29	.45	.53	1.07	.37
18 Combination Utility	.01	.24	.35	.52	2.27	.31
19 Wholesale Trade	.24	.55	.69	1.15	1.46	.99
20 Retail Trade	.11	.86	1.29	1.97	15.28	.71
21 Finance-Bank, S&L, Holding Co	.01	.02	.03	.05	.57	.02
22 Finance-Real Estate, Other	.01	.12	.35	.95	1.71	.04
23 Insurance	.01	.02	.07	.14	2.02	.04
24 Personal, Business Service	.01	.55	1.54	2.98	55.51	.86
25 Health Care	.58	1.71	2.12	2.95	6.18	2.29
26 Educational, Nonprofit Institutions	.04	.22	.35	.93	17.17	.42
27 Governmental	-.06	.24	.41	.88	13.45	.26

IX. CANADIAN COST OF RISK

Canadian RIMS members were identified so their statistics could be compiled separately. All previous tables in this Survey include data on Canadian organizations, converted to U.S. dollars. This chapter presents Canadian data separately, in Canadian dollars, for those who wish to make Canadian-to-Canadian comparisons.

CANADIAN PROPERTY RISK FINANCING COSTS

Table 67 indicates that the 1989 average total property premiums plus unreimbursed losses for Canadian organizations were \$1.5 million; the costs were .076% of revenues and .026% of assets.

TABLE 67 1989 TOTAL CANADIAN PROPERTY RISK FINANCING COSTS: PREMIUMS PLUS UNREIMBURSED LOSSES			
Gross Property Risk Costs	Average		Number of Respondents
\$136,184,288	\$1,513,158		90
Gross Property Risk Costs	Gross Revenues	% of Revenues	
\$130,443,800	\$170,340,553,689	0.076%	84
Gross Property Risk Costs	Gross Assets	% of Assets	
\$129,348,478	\$486,370,902,351	0.026%	78

CANADIAN LIABILITY RISK FINANCING COSTS

As shown in Table 68, average total Canadian liability risk financing costs, excluding workers' compensation, were \$2.4 million, and .123% of revenues. Average total Canadian workers' compensation risk financing costs were \$2.6 million, and .155% of revenues. The U.S. liability and workers' compensation risk costs were double the Canadian averages and costs as a percentage of revenues.

TABLE 68			
1989 TOTAL CANADIAN LIABILITY AND WORKERS' COMPENSATION RISK FINANCING COSTS: PREMIUMS, UNREIMBURSED LOSSES, AND CLAIMS ADJUSTMENT FEES AND RELATED EXPENSES			
LIABILITY:			
Gross Liability Risk Cost	Average		Number of Respondents
\$219,417,506	\$2,359,328		93
Gross Liability Risk Cost	Gross Revenues	% of Revenues	
\$213,384,662	\$173,390,478,396	0.123%	87
WORKERS' COMPENSATION:			
Gross WC Risk Cost	Average		
\$118,656,039	\$2,636,800		45
Gross WC Risk Cost	Gross Revenues	% of Revenues	
\$118,466,440	\$76,354,685,509	0.155%	43

TOTAL CANADIAN COST OF RISK

Table 69 documents the total Canadian cost of risk excluding risk control expenditures. The average Canadian cost of risk was \$4.4 million, .236% of revenues, and .077% of assets. For financial institutions reporting deposits, cost of risk was .014% of deposits.

TABLE 69 1989 TOTAL CANADIAN COST OF RISK (EXCLUDING RISK CONTROL EXPENDITURES)			
Gross Cost of Risk	Average		Number of Respondents
\$422,532,261	\$4,447,708		95
Gross Cost of Risk	Gross Revenues	% of Revenues	
\$412,312,500	\$174,387,814,201	0.236%	89
Gross Cost of Risk	Gross Assets	% of Assets	
\$385,113,556	\$496,365,110,622	0.077%	83
Gross Cost of Risk	Gross Deposits	% of Deposits	
\$30,678,614	\$217,330,012,741	0.014%	7

X. THE RISK MANAGER

REPORTING RELATIONSHIPS

The top risk management executive reported to a variety of organization functions. As Table 70 indicates, 59.56% reported to the Finance or Treasury function. As reported in the 1985 Survey, 65.6% of the risk management executives reported to the Finance or Treasury function.

Function to Which Top Risk Management Executive Reports	Number of Respondents	Percent of Total
1. Finance	285	35.66%
2. Treasury	191	23.90%
3. Administration	70	8.76%
4. CEO/President	77	9.63%
5. Legal	51	6.38%
6. Other	87	10.88%
7. Human Resources	38	4.75%

FUNCTIONAL RESPONSIBILITIES

Table 71 depicts the top risk management executive's level of responsibility for various functional areas. The majority of respondents indicated the top risk management executive had general or shared authority as follows: 93.1% for property and liability insurance purchases; 90.2% for liability claims management, 83% for workers' compensation insurance purchases, 72.6% for workers' compensation claims management; 80.2% for property loss prevention; 61.4% for employee and public safety; and 91.7% for selection of brokers and agents.

Not surprisingly, the majority of respondents indicated the top risk management executive was not responsible for the following: 59% for employee benefits - welfare plans; and 72% for pension and profit sharing - deferred compensation plans

**TABLE 71
TOP RISK MANAGEMENT EXECUTIVE: RESPONSIBILITIES
1989**

Functional Area	General Authority	Shared Authority	Recommend Only	Not Responsible
Property and Liability Insurance Purchase	657 82.3%	86 10.8%	54 6.8%	1 1%
Liability Claims Management	502 63.0%	217 27.2%	40 5.0%	38 4.8%
Workers' Compensation Insurance Purchase	545 70.7%	95 12.3%	59 7.7%	72 9.3%
Workers' Compensation Claim Management	361 46.3%	205 26.3%	55 7.1%	158 20.3%
Property Loss Prevention	348 43.6%	292 36.6%	119 14.9%	39 4.9%
Employee/Public Safety	190 23.8%	302 37.6%	180 22.6%	125 15.7%
Environmental Affairs	89 11.3%	279 35.3%	212 26.8%	211 26.7%
Employee Benefits - Welfare Plans	97 12.3%	147 18.6%	80 10.1%	466 59.0%
Pension/Profit sharing - Deferred Compensation Plans	57 7.2%	103 13.1%	61 7.7%	567 72.0%
Security	62 7.8%	142 18.0%	192 24.2%	395 49.9%
Selection of Brokers/Agents	624 78.2%	108 13.5%	51 6.4%	15 1.9%

EMPLOYMENT STATUS

Tables 72 and 73 indicate the full-time employment status of the top risk management executive. Table 72 shows this employment status by 1989 revenues, while Table 73 shows it by 1989 cost of risk.

Table 72 shows a clear relationship between employment status and organization size. Of all respondents reporting revenues greater than \$3 billion, 97.9% had a full-time risk manager. The respondent group also reported a similar relationship between employment status and total cost of risk, 98.27% of respondents with a cost of risk over \$30 million had a full-time risk manager.

Revenues	Full-Time
\$30,000,000 or less	15 40.54%
\$30,000,001 to \$100,000,000	49 58.33%
\$100,000,001 to \$300,000,000	105 64.02%
\$300,000,001 to \$1,000,000,000	162 79.02%
\$1,000,000,001 to \$3,000,000,000	146 91.82%
\$3,000,000,001 or higher	93 97.89%
Total, all respondents	570 76.61%

TABLE 73
1989 TOP RISK MANAGEMENT EXECUTIVE JOB:
FULL-TIME STATUS BY 1989 COST OF RISK

Cost of Risk	Full-Time
\$300,000 or less	11 47.82%
\$300,001 to \$1,000,000	39 43.82%
\$1,000,001 to \$3,000,000	150 64.10%
\$3,000,001 to \$10,000,000	220 89.06%
\$10,000,001 to \$30,000,000	140 94.82%
\$30,000,001 or higher	57 98.27%
Total, all respondents	617 77.61%

XI. USE OF INSURANCE BROKERS AND INSURERS

The 1990 Survey questionnaire asked for information on the use of insurance brokers, agents, direct writers and reinsurers, and broker/agent compensation. These questions were not asked in previous surveys.

NUMBER OF INSURANCE BROKERS/AGENTS USED

Table 74 shows the number of insurance brokers/agents used, profiled by 1989 revenues. Overall, 33.4% of respondents used two insurance brokers/agents. The majority of respondents, 77.8%, used between one and three insurance brokers/agents.

Revenues	NUMBER OF INSURANCE BROKERS/AGENTS USED							
	None	One	Two	Three	Four	Five	Six to Ten	Greater Than Ten
\$30,000,000 or less	1 2.7%	13 35.1%	14 37.8%	8 21.6%	0 0%	0 0%	1 2.7%	0 .0%
\$30,000,001 to \$100,000,000	3 3.6%	20 23.8%	30 35.7%	13 15.5%	11 13.1%	5 6.0%	2 2.4%	0 .0%
\$100,000,001 to \$300,000,000	0 .0%	50 30.3%	57 34.5%	34 20.6%	11 6.7%	9 5.5%	3 1.8%	1 .6%
\$300,000,001 to \$1,000,000,000	6 2.9%	53 25.7%	65 31.6%	44 21.4%	23 11.2%	7 3.4%	7 3.4%	1 .5%
\$1,000,000,001 to \$3,000,000,000	7 4.4%	33 20.8%	57 35.8%	28 17.6%	11 6.9%	9 5.7%	13 8.2%	1 .6%
\$3,000,000,001 or higher	1 1.1%	13 13.7%	26 27.4%	22 23.2%	14 14.7%	9 9.5%	10 10.5%	0 0%
Total Respondents in Each Category	18 2.4%	182 24.4%	249 33.4%	149 20.0%	70 9.4%	39 5.2%	36 4.8%	3 4%

BROKER/AGENT COMPENSATION

Table 75 provides the broker/agent compensation as a percentage of premium for property insurance, liability insurance, workers' compensation, and other insurance coverages. For both property and liability insurance, the majority of respondents, 54.1% and 53.8% respectively, paid compensation between 6% and 10% of premiums to brokers/agents.

	AMOUNT OF COMPENSATION: PERCENT OF PREMIUM				
	Less than 3%	3% to 5%	6% to 10%	11% to 20%	Over 20%
Property Insurance	7 2.2%	49 15.3%	173 54.1%	88 27.5%	3 .9%
Liability Insurance	21 6.7%	52 16.6%	169 53.8%	65 20.7%	7 2.2%
Workers' Compensation	28 12.7%	80 36.2%	87 39.4%	20 9.0%	6 2.7%
Other	8 6.6%	12 9.9%	60 49.6%	38 31.4%	3 2.5%

Table 76 shows the method of compensation for brokers/agents by type of coverage. Not surprisingly, the most frequently cited response, for each line of coverage, for method of broker/agent compensation was straight commission.

	Fixed Fee for Service	Negotiated Commission	Straight Commission
Property Insurance	221 32.3%	94 13.7%	370 54.0%
Liability Insurance	268 37.6%	117 16.4%	328 46.0%
Workers' Compensation	243 42.0%	85 14.7%	250 43.3%
Other	83 33.1%	42 16.7%	126 50.2%

Table 77 shows that for the majority of respondents, insurance placement (69.2%), and risk analysis (41.1%) were included in their brokers/agents commission. For the remaining services, the majority of the responding organizations did not receive these services from their brokers/agents.

TABLE 77 1989 BROKER/AGENT COMPENSATION: SERVICES SUPPLIED FOR COMPENSATION			
Service	Included in Commission	Fee for Service	Not Provided by Broker/Agent
Insurance Placement	545 69.2%	237 30.0%	6 .8%
Retention Selection	301 38.2%	139 17.6%	348 44.2%
Risk Analysis	324 41.1%	182 23.1%	282 35.8%
Annual Loss Projection	216 27.4%	148 18.8%	424 53.8%
Property Exposure Survey	266 33.8%	153 19.4%	369 46.8%
Risk Management Information Systems	108 13.7%	124 15.7%	556 70.6%

USE OF INSURERS: DIRECT WRITERS/REINSURERS

Table 78 shows the number of respondents that utilized direct writers and the number that deal directly with reinsurers. Of the 809 respondents to the survey, 397 (49%) do not utilize direct writers. However, of the 412 respondents (51%) that do use direct writers, the majority, 256 (62%), use one direct writer versus two or more.

Only those respondents reporting the use of captives indicated that they dealt directly with reinsurers; which were 93 or 12% of the total number of respondents.

	Number of Direct Writers Utilized					Number of Respondents Who Deal Directly With Reinsurers
	Zero	One	Two	Three	More than Three	
Number of Respondents	397	256	97	22	37	93

APPENDIX A

METHODOLOGY

The information presented in the 1990 Cost of Risk Survey report was gathered from the 809 usable responses (18%) to the 4,394 questionnaires mailed in April 1990 to RIMS' first deputy members and nine questionnaires mailed to non-RIMS members.

The 1990 Survey questionnaire differs from previous surveys: the Survey was presented in five parts to address the diverse allocation of risk management responsibilities within respondent organizations; additional questions regarding the use of insurance brokers, insurance companies, etc. were added; and the Survey requested only one year of data in most cases. RIMS and Tillinghast anticipate conducting the Cost of Risk Survey on an annual basis in an effort to provide the most current information on a timely basis.

All completed questionnaires were reviewed for accuracy. Tillinghast conducted telephone and/or written follow-up with approximately 50% of the respondents in order to clarify and verify responses.

The confidentiality of all participants has been strictly maintained. All Surveys were destroyed by RIMS after tabulation.

The questionnaire and all instructions are included as Appendix B. When reading sections, it may be useful to refer to this Appendix to identify what is included in the data presented

USING THE 1990 COST OF RISK SURVEY

We believe that the 1990 Cost of Risk Survey documents the costs of risk for the 27 industry groups examined. However, there are three cautions to be noted in using this study:

1. The 1990 Cost of Risk Survey is a stand-alone study that does not update past surveys. Some but not all of the respondents to the 1990 Survey may have participated in earlier surveys. In addition, survey questions have changed from survey to survey and may not be comparable.
2. A high cost of risk does not necessarily indicate that a poor job has been done. Rather, it could reflect a superior job in identifying, treating, and accounting for the cost of all loss exposures

facing the organization. It may also represent the results of a superior effort of purchasing high limits of cover with broad terms and conditions.

3. Likewise, a low cost of risk is not proof of superior risk management performance.

How then should the reader use the *1990 Cost of Risk Survey*? First, in its simplest form, it provides a method for categorizing various risk and insurance costs. Second, it can serve as a benchmark against which an organization's cost of risk can be compared to similar organizations.

COMMENT ON DATA REPORTING

1989 Data. Respondents were asked to provide premiums, deductibles, and limits for their 1989 insurance coverages, on a calendar year basis. For those policies not corresponding with the 1989 calendar year, we requested respondents to calculate the cost for the 1989 calendar year or to assign the cost to the year in which the policy year ends (e.g., an October 1, 1988-September 30, 1989 policy would be a 1989 policy).

1984 Data. Some results from the *1985 Cost of Risk Survey* (which collected 1984 data) are presented within this report.

Risk Control Costs. We received few responses to this part of the survey. We believe this is due to the overall difficulty organizations have in quantifying risk control expenditures since activities can be dispersed throughout an organization rather than centralized into one unit. We therefore excluded the risk control expenditure amounts from all financial analyses.

However, the Survey still contains other risk control information, such as where the risk control function is placed within organizations (see Chapter VI, Table 53). Many respondents indicated that they do not oversee all risk control activities for their organizations. In addition, they may not keep detailed cost figures for property protection, employee safety, public safety, security, and other such expenditures (See Part V of the 1990 Survey in Appendix B.)

Self-Insured, Self-Retained, or Self-Assumed Loss Costs. While we received a greater number of usable responses to this part of the 1990 Survey, compared to previous attempts, some of the

responses were still incomplete. In some cases, respondents were unable to provide any information, or only tracked aggregate annual payments. We found that some of the respondents still do not maintain detailed records of their self-assumed losses or administrative costs

In addition, we requested self-assumed liability loss costs for 1988 and 1989. Liability claims pay out over time, and the final costs may not be known for many years. This can lead to the under- or overestimation of total losses. As reserving practices vary among claims managers, care must be exercised when using these numbers for analysis and comparison.

Administrative Costs. While we asked for the total risk management department budget, including all administrative costs, wages, salaries, bonuses, allocated and fixed overhead costs, etc., many respondents only provided "direct salary" expenses.

Property Valuation and Premiums. Property premiums were not perfectly comparable since some organizations reported property insurance values on the basis of replacement cost, whereas others used actual cash value or other methods of valuation. Also, some organizations insured only against fire and extended perils, while others insured on a broader basis.

Liability Insurance Costs. Some respondents purchased loss-sensitive insurance programs, e.g., paid loss retrospectively rated programs. In these instances, respondents often were unable to provide a reasonable estimate of the ultimate cost of the programs. In these instances we relied on proxies such as standard premium.

Pools. Six risk-sharing pools responded to the 1990 Survey. As these organizations' revenues (premiums) or assets were often on par with their cost of risk, they tended to distort the ratios taken as a percent of revenues or assets. When queried, these respondents were not able to provide the consolidated revenues and/or assets of their members. We have excluded their revenues and assets from all calculations to minimize distortion.

INTERPRETING THE RESULTS

Throughout this report, six statistical terms are used. The "Lowest Value" and "Highest Value" numbers refer to the responses which represented the lowest and highest figures. The "Median" is the figure at which one-half of the responses had a lower value and one-half had a higher value.

The "First and Third Quartile" numbers are those at which one-quarter of the responses are below and above that figure, respectively. The "Industrywide Cost of Risk" number represents the sum of the costs for a given industry group divided by the sum of, in most instances, the total revenues or assets for that industry group.

For ease of use, self-insured losses are referred to as uninsured losses except where such funding techniques are commonly referred to as "self-insurance," such as in workers' compensation.

APPENDIX B: COST OF RISK QUESTIONNAIRE

Part I: Demographic and Administrative Information

1.0 Organization Domicile (please check one):

1. U.S. based company or organization.
2. Canadian based company or organization. If Canadian, please indicate if responses are in: Canadian dollars U.S. dollars
3. Other (please specify): _____

2.0 Industry

As we are trying to determine where your major exposures lie, please provide the primary 4-digit Standard Industrial Classification (SIC) code (from the list on the opposite page) which is representative of your primary activity as determined by the product, group of products produced or handled, or service rendered. (This will be the industry group your organization's data will be included within.)

2.1 Primary Standard Industrial Classification code: _____

Please provide a one to three-word description of your organization's primary function, e.g. primary care hospital, commercial bank, clothing retailer, etc.

2.2 Primary industry or service: _____

3.0 Risk Management and Insurance Department

3.1 Number of employees in department in 1989. Include both full-time employees and those with some responsibilities unrelated to risk and insurance management by indicating the fraction of time spent on matters relating to risk and insurance management. (For example, an Assistant Treasurer who spends one-half time on risk management would be indicated as "0.5".)

- A. Professional Staff _____
- B. Clerical Staff _____
- C. Total _____

3.2 Total risk management department budget, including all administrative costs, wages, salaries, bonuses, allocated and fixed overhead costs, staff training, dues, travel, subscriptions, etc. Please do not include premiums, self-assumed loss or other costs paid to outsiders such as consultants, brokers, etc.

Total Budget \$ _____

3.3 Is the top risk management job a full-time position? Yes No

Please list the exact title of the person responsible for day-to-day risk management operations in your organization. _____

3.4 Does the top risk management executive have direct budgetary responsibility for the items listed below? Please write in the *letter* of the most accurate description:

- a = general authority
- b = shared authority (with another department or function)
- c = recommend only
- d = not responsible

- A. Property and liability insurance purchase _____
- B. Liability claims management _____
- C. Workers' compensation insurance purchase _____
- D. Workers' compensation claims management _____
- E. Property loss prevention _____
- F. Employee/public safety _____
- G. Environmental affairs _____
- H. Employee benefits — welfare plans _____
- I. Pension/profit sharing, qualified/registered deferred compensation plans _____
- J. Security _____
- K. Selection of brokers/agents _____
- L. Other (please specify): _____

3.5 Function to which the top risk management executive reports: (please check one)

- A. Treasury
- B. Legal
- C. Finance
- D. CEO/President
- E. Administration
- F. Human Resources/Personnel
- G. Other (please specify): _____

4.0 Use of Insurance Brokers/Insurers

4.1 With how many insurance agents/brokers does your organization work? _____

4.2 How are your broker(s) compensated and what % of premium is their compensation (if not fee for service)?

	<u>Straight Commission</u>	<u>Negotiated Commission</u>	<u>Fee for Service</u>	<u>% of Premium</u>
A. Property Insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B. Liability Insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
C. Workers' Compensation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
D. Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

4.3 What services do your broker(s) supply for their compensation (please check all that apply):

<u>Included In Commission</u>	<u>Fee for Service</u>	
<input type="checkbox"/>	<input type="checkbox"/>	A. Insurance placement
<input type="checkbox"/>	<input type="checkbox"/>	B. Retention selection
<input type="checkbox"/>	<input type="checkbox"/>	C. Risk analysis
<input type="checkbox"/>	<input type="checkbox"/>	D. Annual loss projection
<input type="checkbox"/>	<input type="checkbox"/>	E. Property exposure survey
<input type="checkbox"/>	<input type="checkbox"/>	F. Risk management information systems

4.4 With how many direct writer insurance companies (e.g. Liberty Mutual, Allendale, etc.) does your organization work? _____

4.5 Does your organization deal directly with reinsurers? Yes No

5.0 Fees to Outside Service Providers

Please indicate 1989 fees you pay for computer system costs, casualty actuaries and risk management or insurance consultants who perform audits or reviews of your insurance program, self-insurance studies, etc. Do not show costs already included in premium figures or ongoing program services such as safety, engineering or industrial hygiene.

5.1 Total outside service costs \$ _____

6.0 1989 Company Data

This information, particularly revenues, is necessary for survey compilation. If actual data cannot be supplied, please provide estimates.

"Revenue" is the sales, gross income or budget of an organization. Government Entities and not-for-profit organizations should provide the total Annual Budget.

Only banking organizations should supply information on "Deposits."

"Assets" — please show your organization's year-end figure.

"Number of Employees" — estimate the total year-end number of employees for your organization, or if your business is seasonal, the average number of employees. Include both full-time and part-time employees.

6.1 Total worldwide revenues (from financial statement) \$ _____,000,000

6.2 Deposits (if a banking organization) \$ _____,000,000

6.3 Total assets (from financial statement) \$ _____,000,000

6.4 Is your organization privately held? Privately held Not privately held

6.5 Total number of employees in your organization:

<u>U.S.</u>	<u>Canadian</u>	<u>Other</u>	<u>Total</u>
_____	_____	_____	_____

Part II: Property and Liability Insurance

The years indicated on the following pages refer to calendar years. However, if your policy years do not coincide and you cannot reasonably calculate the cost on a calendar year basis, please assign the cost to the year in which the policy year ends (e.g. an October 1, 1988 - September 30, 1989 policy would be a 1989 policy).

1.0 Background

1.1 Do the premiums apply to (check all appropriate boxes):

- A. U.S. only
- B. Canadian only
- C. U.S. and Canadian
- D. Worldwide

1.2 Are dollar amounts expressed in:

- A. U.S. dollars
- B. Canadian dollars

2.0 Property Insurance Program

We are trying to determine your organization's total 1989 property insurance premium, both international and domestic, as well as your insured values. Please include premiums paid to captives and risk sharing pools.

2.1 Please indicate the most recent significant renewal date (month and year) for property policies _____
(month/year)

2.2 Property Coverage (check all that apply)

A. Property Coverage is primarily:

- (1) All risk
- (2) Fire
- (3) DIC
- (4) EC only
- (5) Specified perils

B. Property limit is set:

- (1) Blanket basis
- (2) Specified per loss
- (3) Other _____

C. Predominant Property Valuation Basis:

- (1) Replacement Cost
- (2) Actual Cash Value (ACV)
- (3) Other (please specify): _____

2.3 Property Insurance Premiums

	<u>Coverage Not Purchased</u>	<u>Insured Value</u>	<u>Limit Purchased</u>	<u>Premium</u>
A.1 Property damage	<input type="checkbox"/>	\$.000,000	\$.000,000	\$ _____
A.2 Business interruption	<input type="checkbox"/>	\$.000,000	\$.000,000	\$ _____
A.3 Extra expense	<input type="checkbox"/>	\$.000,000	\$.000,000	\$ _____
A.4 Flood	<input type="checkbox"/>	\$.000,000	\$.000,000	\$ _____
A.5 Earthquake (excluding California)	<input type="checkbox"/>	\$.000,000	\$.000,000	\$ _____
B. Boiler and machinery direct damage, business interruption, and extra expense	<input type="checkbox"/>	\$.000,000	\$.000,000	\$ _____
C. Fidelity/crime insurance	<input type="checkbox"/>		\$.000,000	\$ _____
D. Financial institutions blanket bond	<input type="checkbox"/>		\$.000,000	\$ _____
E. California earthquake	<input type="checkbox"/>	\$.000,000	\$.000,000	\$ _____
F. Other property (please itemize):				
1. _____		\$.000,000	\$.000,000	\$ _____
2. _____		\$.000,000	\$.000,000	\$ _____
3. _____		\$.000,000	\$.000,000	\$ _____
G. Total Property Insurance Premiums				\$ _____

3.0 Liability Insurance Program

We are trying to determine the ultimate cost of your organization's total 1989 liability insurance premium (excluding workers' compensation) as well as the limits. Please include premiums for guaranteed cost programs, estimated ultimate retrospectively rated program cost, and for captives.

3.1 Please indicate the most recent significant renewal date (month and year) for liability policies _____
(month/year)

3.2 Liability Premiums

	<u>Coverage Not Purchased</u>	<u>Claims Made</u>	<u>Limit</u>	<u>Premium</u>
A. Primary general, auto and, if included in policy, products <input type="checkbox"/> Includes product liability	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____,000,000	\$ _____
B. Excess general, auto and, if included in policies, products <input type="checkbox"/> Includes product liability	<input type="checkbox"/>			
Umbrella		<input type="checkbox"/>	\$ _____,000,000	\$ _____
First		<input type="checkbox"/>	\$ _____,000,000	\$ _____
Second		<input type="checkbox"/>	\$ _____,000,000	\$ _____
All other excess		<input type="checkbox"/>	\$ _____,000,000	\$ _____
C. Product liability if a separate policy is purchased (including excess) Product type: (e.g. aircraft products) _____	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____,000,000	\$ _____
D. Professional liability if a separate policy is purchased (including excess) Professional coverage: (e.g. medical malpractice) _____	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____,000,000	\$ _____
E. Directors' and officers' liability	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____,000,000	\$ _____
F. Environmental impairment liability	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____,000,000	\$ _____
G. Fiduciary/ERISA liability	<input type="checkbox"/>	<input type="checkbox"/>		\$ _____
H. Other liability:				
1. _____			\$ _____,000,000	\$ _____
2. _____			\$ _____,000,000	\$ _____
3. _____			\$ _____,000,000	\$ _____
I. Total Liability Insurance Premiums				\$ _____

4.0 Single-Parent Captive Insurers

In question 4.0 we are trying to evaluate the net cost or benefit of any wholly-owned captive insurance company if applicable. The premiums paid to the captive would be shown under previous questions. Thus, we are trying to determine the extra cost (loss) of benefit (income) of your organization's captive program. These amounts include both underwriting and investment income and are related to your own risks and are before income taxes.

1989

Net Profit

Net Loss

4.1 Captive insurance company's profit or loss \$ _____

Part III: Workers' Compensation Costs

We are trying to determine the ultimate cost of your organization's 1989 total workers' compensation program as well as the predominant deductible or retention.

The years indicated on the following pages refer to calendar years. However, if your policy years do not coincide and you cannot reasonably calculate the cost on a calendar year basis, please assign the cost to the year in which the policy year ends (e.g. an October 1, 1988 - September 30, 1989 policy would be a 1989 policy).

1.0 Workers' Compensation Insurance Program

Please include premiums for guaranteed cost programs, estimated ultimate retrospectively rated program cost for the accident year and premiums for captives.

1.1 Please indicate the most recent significant renewal date (month and year) for workers' compensation policies _____
(month/year)

1.2 Workers' compensation/employers liability premiums, including cost of letters of credit, excess workers' compensation payments, and bonds for self-insurers (if appropriate). \$ _____

1.3 Payments to state funds and/or Canadian provincial workers' compensation board. \$ _____

1.4 Total Workers' Compensation Premiums \$ _____

2.0 Uninsured Workers' Compensation Losses

We are trying to determine what portion of your workers' compensation losses are self-insured. This reflects costs for losses which actually occurred in 1988 and 1989 — whether or not the losses have been reported or the costs have been paid. For your convenience, we have separated the loss costs into their three components — amounts already paid, outstanding reserves (amounts on known claims that you expect to pay in the future), and estimated incurred-but-not-reported "IBNR" amounts on claims which occurred in that year.

	<u>No Self- Insured Loss</u>	<u>Paid Amounts</u>	<u>Reserved Amounts</u>	<u>IBNR Amounts</u>
2.1 1988 amounts	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
2.2 1989 amounts	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
2.3 Claims adjustment fees and other expenses (internal and external) not included above				
1988		\$ _____	\$ _____	
1989		\$ _____	\$ _____	
2.4 Total uninsured workers' compensation losses				
1988		\$ _____	\$ _____	\$ _____
1989		\$ _____	\$ _____	\$ _____
2.5 Do you have records on uninsured workers' compensation losses?		<input type="checkbox"/> Records kept	<input type="checkbox"/> Records not kept	
2.6 Predominant workers' compensation retention or deductible: \$ _____ (If your program is fixed cost, please write "fixed cost.")				

Part IV: Self-Assumed Loss Costs

We are addressing the cost of self-assumed property and liability losses.

1.0 Property

Please specify or estimate the dollar amount of uninsured and self-retained property losses experienced by your company. This could include losses within property program deductibles and auto physical damage losses. These should be losses which are otherwise insurable and should exclude ordinary business expenses (e.g. inventory shrinkage).

1.1 Total Uninsured Property Losses 1988 1989
\$ _____ \$ _____

1.2 Do you keep records on uninsured losses? Records kept
 No records kept

NOTE: If insurance is on an ACV basis and the property was replaced, you should include the incremental cost of the replacement. Show losses net of subrogated recoveries, but include your subrogation costs.

1.3 Predominant Property retention or deductible \$ _____

2.0 Liability

We are trying to determine what portion of your total liability costs are self-insured or self-assumed. This reflects costs for losses which actually occurred in 1988 and 1989 — whether or not the losses have been reported or the costs have been paid. For your convenience, we have separated the loss costs into their three components — amounts already paid on losses which occurred in that year, outstanding reserves (amounts on known claims that you expect to pay in the future) on claims which occurred in that year, and estimated incurred-but-not-reported (IBNR) amounts for these claims.

NOTE: The cost of any unrecovered products — recall expense should be included in your answer to question B. EEO and EPA suits and settlements not covered by insurance should be included in your response to questions C. and D.

2.1 Uninsured Liability Losses

	<u>No Self- Insured Loss</u>	<u>Paid Amounts</u>	<u>Reserved Amounts</u>	<u>IBNR Amounts</u>
A. General and auto liability				
1988	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
1989	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
B. Product liability				
1988	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
1989	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
C. Professional liability (or professional liability "trust fund" contributions)				
1988	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
1989	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
D. Other liability losses				
1988	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
1989	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
E. Claims adjustment fees and other expenses, including legal costs, (internal and external) not included above.				
1988		\$ _____	\$ _____	\$ _____
1989		\$ _____	\$ _____	\$ _____
F. Total Uninsured Liability Losses				
1988		\$ _____	\$ _____	\$ _____
1989		\$ _____	\$ _____	\$ _____

2.2 Do you keep records on uninsured losses? Records kept
 No records kept

2.3 Predominant General Liability Policy retention or deductible \$ _____

Part V: Risk Control Costs

We seek to determine the cost of risk control for your organization. Risk control is defined as those efforts aimed at anticipating and preventing accidental or unplanned loss. It includes employee safety, environmental affairs, fleet safety, etc. A more complete listing is presented on the following page.

We ask that you give these costs some thought, and, if you are not directly responsible for risk control, please indicate the responsible department(s) and ask them to estimate the total annual expenditures involved for this category of risk management cost. These expenditures can be both internal and external. External expenditures would include fees for outside consultants. If capital expenditures are involved, provide the amount of expense recognized during the year. Please show only identifiable costs primarily related to risk control. The number of people refers to the number of full-time equivalent internal staff involved in this area of activity.

Risk Control Expenditures for 1989

For each cost area, please identify which department is primarily responsible for these costs:

- | | | |
|--|------------------------------|--|
| a. Risk management | d. Medical | g. Operations (manufacturing services, etc.) |
| b. Human resources/personnel | e. Environmental | h. Quality control/quality assurance |
| c. Safety and health (or loss control) | f. Facilities or maintenance | i. Other (please name) |

	Number of People	Internal Costs		External Costs	Responsible Department
		Labor	Equipment and Supplies		
1.1 Employee safety		\$	\$	\$	
1.2 Industrial hygiene		\$	\$	\$	
1.3 Property protection		\$	\$	\$	
1.4 Environmental affairs		\$	\$	\$	
1.5 Fleet or transportation safety		\$	\$	\$	
1.6 Public safety (3rd party)		\$	\$	\$	
1.7 Emergency response and contingency planning		\$	\$	\$	
1.8 Security		\$	\$	\$	
1.9 Quality assurance/product safety		\$	\$	\$	
1.10 Other (e.g. nuclear safety)		\$	\$	\$	
1.11 Total Risk Control Expenditures		\$	\$	\$	

APPENDIX C: APPLICABLE STANDARD INDUSTRIAL CLASSIFICATION CODES

Cost of Risk Industry Groups	Applicable Standard Industrial Classification (SIC) Codes
1 Mining & Energy	1000 Metal Mining 1200 Coal Mining 1300 Oil and Gas Extraction 1400 Mining and Quarrying of Nonmetallic Minerals, Except Fuels 2900 Petroleum Refining & Related Industries 4600 Pipelines, Except Natural Gas
2 Food, Agriculture	0100 Agricultural Production - Crops 0200 Agricultural Production - Livestock 0700 Agricultural Services 0800 Forestry 0900 Fishing, Hunting, and Trapping
3 Food, Tobacco, Textiles (Manufacturing)	2000 Food and Kindred Products 2100 Tobacco Products 2200 Textile Mill Products 2300 Apparel and Other Textile Products
4 Construction - Building, Heavy, Special	1500 Building Construction - General Contractors and Operative Builders 1600 Heavy Construction Other Than Building Construction; Contractors 1700 Construction - Special Trade Contractors
5 Lumber, Furniture, Packaging	2400 Lumber & Wood Products, Except Furniture 2500 Furniture and Fixtures 2600 Paper and Allied Products
6 Printing, Publishing	2700 Printing, Publishing & Allied Industries
7 Chemicals, Rubber, Plastic	2800 Chemicals & Allied Products (includes pharmaceuticals) 3000 Rubber and Miscellaneous Plastic Products
8 Primary Metals, Leather, Stone	3100 Leather and Leather Products 3200 Stone, Clay, Glass and Concrete Products 3300 Primary Metal Industries
9 Metal Products	3400 Fabricated Metal Products, Except Machinery & Transportation Equip.
10 Machinery	3500 Industrial and Commercial Machinery and Computer Equipment
11 Electrical Equipment, Instruments	3600 Electronic and Other Electrical Equipment and Components, Except Computer Equipment 3800 Measuring, Analyzing and Controlling Instruments; Photographic, Medical, and Optical Goods; Watches and Clocks
12 Misc. Manufacturing Industries	3900 Miscellaneous Manufacturing Industries
13 Transportation Equipment	3700 Transportation Equipment

14	Transportation Service	4000 Railroad Transportation 4100 Local and Suburban Transit & Interurban Hwy. Passenger Transp. 4200 Motor Freight Transportation & Warehousing 4400 Water Transportation 4500 Transportation by Air 4700 Transportation Services
15	Telecommunications	4800 Communications
16	Electric Utility	4910 Electric Utilities
17	Natural Gas Utility	4920 Gas Production & Distribution
18	Combination Utility	4930 Combined Electric & Gas Utilities 4999 All Other Utilities (Water, Sanitary, etc.)
19	Wholesale Trade	5000 Wholesale Trade - Durable Goods 5100 Wholesale Trade - Nondurable Goods
20	Retail Trade	5200 Building Materials, Hardware, Garden Supply, Mobile Home Dealers 5300 General Merchandise Stores 5400 Food Stores 5500 Automotive Dealers & Gasoline Service Stations 5600 Apparel and Accessory Stores 5700 Home Furniture, Furnishings, and Equipment Stores 5800 Eating and Drinking Places 5900 Miscellaneous Retail Stores
21	Finance-Bank, S&L, Holding Co.	6000 Depository Institutions 6100 Nondepository Credit Institutions 6700 Holding and Other Investment Offices
22	Finance-Real Estate, Other	6200 Security and Commodity Brokers, Dealers, Exchanges & Services 6500 Real Estate
23	Insurance	6300 Insurance Carriers 6400 Insurance Agents, Brokers and Service
24	Personal, Business Service	7000 Hotels, Rooming Houses, Camps, and Other Lodging Places 7200 Personal Services 7300 Business Services 7500 Auto Repair, Services, and Parking 7600 Miscellaneous Repair Services 7800 Motion Pictures 7900 Amusement and Recreation Services 8100 Legal Services 8700 Engineering, Accounting, Research, Management & Related Services 8900 Services, Not Elsewhere Classified
25	Health Care	8000 Health Services
26	Educational, Nonprofit Institutions	8200 Educational Services 8300 Social Services 8400 Museums, Art Galleries, and Botanical and Zoological Gardens 8600 Membership Organizations
27	Governmental	4300 United States Postal Service 8940 Municipalities 8950 Cities 8960 Counties 8970 States