ANNUAL REPORT

OF THE

FIRE MARSHAL

FOR

1976

BRITISH COLUMBIA

HON. GARDE B. GARDOM, Q.C.
Attorney-General of British Columbia

HENRY K. JENNS
Fire Marshal of British Columbia

MINISTRY OF THE ATTORNEY-GENERAL

To Colonel the Honourable WALTER S. OWEN, Q.C., LL.D.,
Lieutenant-Governor of the Province of British Columbia.

MAY IT PLEASE YOUR HONOUR:

The undersigned has the honour to present the Fifty-fourth Annual Report of the Fire Marshal for the year ended December 31, 1976.

GARDE B. GARDOM, Q.C.
Attorney-General

VICTORIA, B.C.

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Fire Losses in Municipalities and Fire Districts, 1976

City Municipalities

	Incidents	Loss $	Injured	Dead
Armstrong	6	907,035	—	—
Burnaby	376	2,902,773	30	5
Chilliwack	25	184,500	1	—
Courtenay	17	28,464	—	—
Cranbrook	25	415,380	2	1
Dawson Creek	31	230,145	1	1
Duncan	21	68,826	1	—
Enderby	1	2,055	—	—
Fernie	1	500	—	—
Grand Forks	3	44,360	—	—
Greenwood	1	45,000	—	—
Fort St. John	18	384,124	—	1
Kamloops	88	1,301,378	6	2
Kelowna	29	560,998	—	2
Kimberley	10	7,134	—	—
Langley	38	133,327	5	1
Nanaimo	116	1,356,932	12	—
Nelson	16	643,533	—	—
North Vancouver City	124	323,955	7	1
New Westminster	177	700,701	4	4
Port Alberni	79	1,473,159	13	—
Port Coquitlam	29	254,460	1	1
Penticton	71	160,265	5	—
Prince George	260	828,501	5	1
Port Moody	21	106,878	—	—
Prince Rupert	30	2,301,204	3	3
Revelstoke	13	285,479	—	—
Rossland	7	77,691	—	—
Trail	44	166,489	—	—
Vancouver	1,997	8,487,182	125	13
Vernon	53	185,122	1	—
Victoria	273	1,250,679	13	2
White Rock	16	43,377	—	—

District Municipalities

	Incidents	Loss $	Injured	Dead
Abbotsford-Sumas	34	3,354,175	3	1
Campbell River	46	4,891,900	—	4
Central Saanich	11	175,903	—	1
Chilliwhack	76	452,677	5	2
Coldstream	2	107,677	—	—
Coquitlam	123	1,098,286	2	1
Delta	141	756,522	26	—
Esquimalt	33	231,622	—	—
Houston	7	44,200	—	—
Kent	5	59,062	4	—
Kitimat	50	92,111	3	—
Langley	128	1,745,855	17	1
Mackenzie	24	52,375	—	—
Mission	24	932,593	—	2
Maple Ridge	64	580,121	5	—
Matsqui	60	685,025	—	—
North Cowichan	27	274,025	—	—
North Saanich	8	400,150	1	1
North Vancouver	176	1,701,957	20	2
Oak Bay	23	191,079	1	—
Peachland	1	400	—	—
Port Hardy	19	251,323	—	—
Pitt Meadows	7	53,932	—	—
Powell River	49	290,645	1	1
Richmond	203	3,517,472	9	1
Saanich	125	431,604	1	2
Sparwood	13	191,300	—	—
Summerland	6	37,500	—	—
Salmon Arm	31	196,734	1	—
Spallumcheen	3	21,000	—	2
Squamish	31	745,058	—	1
Stewart	3	11,000	—	—
Surrey	316	2,037,712	13	2
Terrace	35	113,578	4	—
Whistler	6	149,103	1	—
West Vancouver	132	609,245	6	1

Fire Districts

	Incidents	Loss $	Injured	Dead
Cariboo County	289	7,518,862	3	4
Colwood	27	144,347	—	—
Ioco	—	—	—	—
Kootenay County	113	2,031,593	1	3
Langford	13	31,186	—	—
Nanaimo County	136	1,374,083	6	11
Ocean Falls	4	23,000	—	—
Prince Rupert County	91	1,154,859	2	9
Sooke	7	48,801	—	—
University Area	17	30,150	—	1
Vancouver County	60	2,618,358	3	7
Victoria County	41	543,608	—	1
View Royal	5	43,313	—	1
Westminster County	50	543,410	—	2
Yale County	222	3,291,498	3	7

Town Municipalities

	Incidents	Loss $	Injured	Dead
Castlegar	2	20,708	—	—
Comox	5	48,949	—	—
Creston	2	42,000	—	—
Golden	9	56,718	1	—
Hope	6	1,261,243	—	—
Kinnaird	2	1,600	—	—
Ladysmith	14	115,068	—	—
Merritt	10	102,653	—	—
Quesnel	19	128,767	—	—
Sidney	5	94,157	—	—
Smithers	9	173,579	—	—
Williams Lake	34	131,567	—	—

Fire Losses in Municipalities and Fire Districts, 1976—Continued

Village Municipalities

	Incidents	Loss $	Injured	Dead
Alert Bay	2	16,500	----	----
Ashcroft	5	55,200	----	----
Burns Lake	4	66,145	----	----
Cache Creek	1	20,000	----	----
Chetwynd	----	----	----	----
Chase	3	19,665	----	----
Clinton	2	55,000	----	----
Cumberland	1	2,000	----	----
Elkford	4	85,400	----	----
Fraser Lake	2	27,814	----	----
Fort Nelson	7	458,500	----	----
Fruitvale	----	----	----	----
Granisle Village	----	----	----	----
Gibsons Landing	3	30,567	----	----
Gold River	2	8,436	----	----
Hazelton	2	16,173	----	----
Harrison Hot Springs	1	20,000	----	----
100 Mile House	10	164,046	----	----
Invermere	4	45,783	----	----
Kaslo	2	25,280	3	----
Keremeos	1	8,000	----	----
Lions Bay	----	----	----	----
Lake Cowichan	11	80,450	----	----
Lillooet	1	6,000	----	----
Logan Lake	15	1,450	----	----
Lumby	12	196,557	----	----
Masset	2	800	----	----
McBride	1	2,500	----	----
Midway	5	121,100	----	----
Nakusp	----	----	----	----
Oliver	2	22,616	----	----
Parksville	14	49,010	----	----
Pouce Coupe	1	500,000	----	----
Port Edward	1	35,000	----	----
Pemberton	----	----	----	----
Port McNeill	2	21,029	----	----
Port Alice	6	313,150	----	----
Princeton	3	110,250	----	----
Qualicum Beach	8	74,952	----	----
Salmo	5	15,000	----	----
Sechelt	2	6,200	----	----
Fort St. James	4	59,100	----	----
Tahsis	3	132,653	1	----
Telkwa	3	44,238	----	----
Tofino	----	----	----	----
Taylor	2	22,000	----	----
Ucluelet	----	----	----	----
Valemount	4	35,800	1	----
Vanderhoof	6	620,550	----	----
Warfield	6	180	----	----
Zeballos	2	18,156	----	----

Provincial Totals

	Incidents	Loss $	Injured	Dead
Provincial totals	7,433	77,566,724	382	109

Fire Loss Statistics for All Fires,[1] 1976

	Incidents	Per Cent of Incidents	Loss	Per Cent of Loss
Days of week—			$	
Sunday	1,065	14.3	11,551,144	14.8
Monday	940	12.6	6,729,679	8.6
Tuesday	990	13.3	9,952,858	12.8
Wednesday	973	13.0	10,260,919	13.2
Thursday	943	12.6	10,582,853	13.6
Friday	1,051	14.1	15,923,088	20.5
Saturday	1,130	15.2	10,505,825	13.5
Unknown	341	4.5	2,060,358	2.6
Totals	7,433	100.0	77,566,724	100.0
General construction—				
Combustible, fire-resistance rating—				
Less than ¾ hour	2,782	37.4	32,026,082	41.2
¾ hour or greater	912	12.2	16,337,134	21.0
Heavy timber construction	97	1.3	5,620,128	7.2
Noncombustible, fire-resistance rating—				
Less than 1 hour	145	1.9	3,502,792	4.5
1 hour or greater	236	3.1	1,923,066	2.4
General construction—unclassified	260	3.4	9,496,856	12.2
Unknown or not applicable	3,001	40.3	8,660,666	11.1
Totals	7,433	100.0	77,566,724	100.0
Building height—				
1-storey	2,223	29.9	25,554,180	32.9
2-storey	1,123	15.1	17,582,272	22.6
3-storey	477	6.4	11,819,542	15.2
4 to 6-storey	186	2.5	3,798,257	4.8
7 to 10-storey	89	1.1	4,974,237	6.4
11 to 20-storey	76	1.0	579,619	.7
21 and more storeys	29	.3	71,915	----
Unknown or not applicable	3,230	43.4	13,186,702	17.0
Totals	7,433	100.0	77,566,724	100.0
Year of construction—				
Before 1900	23	.3	373,401	.4
1900 to 1920	249	3.3	6,415,868	8.2
1921 to 1940	842	11.3	6,525,758	8.4
1941 to 1960	989	13.3	22,377,900	28.8
1961 to 1980	1,744	23.4	22,330,059	28.7
Unknown or not applicable	3,586	48.2	19,543,738	25.1
Totals	7,433	100.0	77,566,724	100.0
Interior fire protection—				
Extinguishers, standpipe system, and manual alarm	293	3.9	8,169,934	10.5
Extinguishers and standpipe system	32	.4	440,494	.5
Extinguishers and manual alarm system	271	3.6	8,513,994	10.9
Extinguishers	440	5.9	16,115,254	20.7
Standpipe system and manual alarm system	114	1.5	1,150,392	1.4
Standpipe system	17	.2	70,362	-------
Manual fire alarm system	205	2.7	1,129,346	1.4
Manual fire protection facilities—unclassified	317	4.2	5,526,078	7.1
Unknown or not applicable	5,744	77.2	36,450,870	46.9
Totals	7,433	100.0	77,566,724	100.0
Last inspected—				
Less than 30 days	194	2.6	6,541,861	8.4
31 to 60 days	228	3.0	8,195,883	10.5
61 to 90 days	244	3.2	3,390,509	4.3
91 to 180 days	439	5.9	6,835,119	8.8
6 to 12 months	259	3.4	4,232,526	5.4
13 to 24 months	63	.8	1,358,271	1.7
25 to 36 months	14	.1	141,743	.1
Over 36 months	73	.9	952,837	1.2
Not applicable	3,546	47.7	23,459,031	30.2
Unknown	2,373	31.9	22,458,944	28.9
Totals	7,433	100.0	77,566,724	100.0

[1] Similar information is available for groups of specific property classifications as listed on page 14—Summary of Fire Losses by Property Classifications.

Fire Loss Statistics for All Fires,[1] *1976*—Continued

	Incidents	Per Cent of Incidents	Loss	Per Cent of Loss
Sprinkler protection—				
Complete—			$	
Supervised or standard watchman service	45	.6	240,399	.3
Alarm to fire department	12	.1	72,278	.....
Unsupervised, local alarms only	122	1.6	318,272	.4
Partial—				
Supervised or standard watchman service	24	.3	781,458	1.0
Alarm to fire department	64	.8	1,741,006	2.2
Unsupervised, local alarms only	131	1.7	1,076,981	1.3
Insufficient information to classify further	19	.2	572,799	.7
No sprinkler protection	1,836	24.7	39,625,606	51.0
Unclassified	56	.7	5,904,791	7.6
Unknown or not applicable	5,124	68.9	27,233,134	35.1
Totals	7,433	100.0	77,566,724	100.0
Automatic fire-detection system—				
Complete—				
Heat—				
Alarm to fire department or central station	31	.4	5,613,097	7.2
Local alarm only	87	1.1	1,462,068	1.8
Combustion or smoke—				
Alarm to fire department or central station	8	.1	78,658	.1
Local alarm only	14	.1	2,607,160	3.3
Partial—				
Heat—				
Alarm to fire department or central station	32	.4	199,532	.2
Local alarm only	250	3.3	3,540,796	4.5
Combustion or smoke—				
Alarm to fire department or central station	54	.7	1,717,315	2.2
Local alarm only	154	2.0	1,626,642	2.0
Unclassified	259	3.4	2,918,445	3.7
Unknown or not applicable	6,544	88.0	57,803,011	74.5
Totals	7,433	100.0	77,566,724	100.0
Outside fire protection—				
Municipal hydrant and fire department	4,070	54.7	48,074,748	61.9
Municipal hydrant and no fire department	9	.1	47,089	.....
Municipal fire department only	342	4.6	6,614,038	8.5
Private hydrant and fire department	72	.9	1,261,539	1.6
Private hydrant and no fire department	11	.1	346,375	.4
Private fire department only	32	.4	401,548	.5
None	242	3.2	5,721,119	7.3
Unclassified	175	2.3	4,547,442	5.8
Unknown or not applicable	2,480	33.3	10,552,826	13.6
Totals	7,433	100.0	77,566,724	100.0
Water supply flow—				
None	354	4.7	5,807,561	7.4
Less than 200 gpm	95	1.2	2,163,615	2.7
200 to 399 gpm	115	1.5	2,155,305	2.7
400 to 599 gpm	356	4.7	5,662,991	7.3
600 to 799 gpm	483	6.4	6,266,209	8.0
800 to 1,199 gpm	922	12.4	16,345,614	21.0
1,200 to 1,599 gpm	319	4.2	3,227,247	4.1
1,600 or over gpm	1,435	19.3	16,289,270	21.0
Unclassified	48	.6	1,287,136	1.6
Unknown or not applicable	3,306	44.4	18,361,776	23.6
Totals	7,433	100.0	77,566,724	100.0

[1] Similar information is available for groups of specific property classifications as listed on page 14—Summary of Fire Losses by Property Classifications.

Fire Loss Statistics for All Fires,[1] *1976*—Continued

	Incidents	Per Cent of Incidents	Loss	Per Cent of Loss
Size of water-main (inches)—			$	
0	282	3.7	5,682,704	7.3
4	245	3.2	3,497,634	4.5
5	11	.1	32,775	.....
6	2,293	30.8	27,174,205	35.0
8	718	9.6	14,796,430	19.0
10	163	2.1	1,223,028	1.5
12	133	1.7	3,521,144	4.5
14 or over	65	.8	965,783	1.2
Unclassified	46	.6	1,932,138	2.4
Unknown or not applicable	3,477	46.7	18,740,883	24.1
Totals	7,433	100.0	77,566,724	100.0
Fire service—				
Full-time fire department	2,960	39.8	19,943,867	25.7
Volunteer fire department	998	13.4	20,116,891	25.9
Combined full-time and volunteer	1,299	17.4	20,016,862	25.8
Police acting as full-time fire-fighters	2	.....	6,150	.....
Combined police and fire department	37	.4	293,479	.3
Combined police and volunteer fire-fighters	11	.1	93,250	.1
Contract to others	8	.1	59,700	.....
None	270	3.6	9,287,367	11.9
Unclassified	46	.6	1,724,145	2.2
Unknown or not applicable	1,802	24.2	6,025,013	7.7
Totals	7,433	100.0	77,566,724	100.0
Extinguishment—				
Hand fire extinguisher	995	13.3	4,680,444	6.0
Standpipe and hose system	91	1.2	684,386	.8
Makeshift aids	766	10.3	961,922	1.2
Fire department—				
Water	3,495	47.0	55,030,921	70.9
Other than water	20	.2	83,767	.1
Sprinkler system	31	.4	159,020	.2
Fixed system, not sprinkler	8	.1	58,470	.....
Burned out	558	7.5	7,919,054	10.2
Miscellaneous	1,108	14.9	5,814,903	7.4
Unknown	361	4.8	2,173,837	2.8
Totals	7,433	100.0	77,566,724	100.0
Level of origin—				
Basement, sub-basement	514	6.9	6,747,465	8.6
Crawl space, under structure	54	.7	459,048	.5
Ground floor, grade level (grade to 9 feet)	2,664	35.8	46,915,153	60.4
2nd storey (10–19 feet above grade)	552	7.4	6,126,507	7.8
3rd storey (20–29 feet above grade)	146	1.9	1,122,208	1.4
4th to 12th storey, inclusive (30–119 feet above grade)	85	1.1	909,832	1.1
Over 12 storeys (120 feet and over above grade)	18	.2	26,540	.....
Roof level (includes concealed roof space, attic)	133	1.7	2,026,095	2.6
Unclassified	152	2.0	1,851,355	2.3
Unknown or not applicable	3,115	41.9	11,382,521	14.6
Totals	7,433	100.0	77,566,724	100.0
Extent of damage—				
Confined to—				
Object of Origin	1,131	15.2	1,974,958	2.5
Part of room/area or origin	924	12.4	1,496,141	1.9
Room of origin	421	5.6	973,325	1.2
Floor area of origin	356	4.7	2,357,229	3.0
Building of origin	1,438	19.3	45,053,135	58.0
Roof	51	.6	382,863	.4
Extended beyond building of origin	230	3.0	8,979,148	11.5
Unclassified	132	1.7	7,326,715	9.4
Unknown or not applicable	2,750	36.9	9,023,210	11.6
Totals	7,433	100.0	77,566,724	100.0

[1] Similar information is available for groups of specific property classifications as listed on page 14—Summary of Fire Losses by Property Classifications.

Fire Loss Statistics for All Fires,[1] *1976*—Continued

	Incidents	Per Cent of Incidents	Loss	Per Cent of Loss
			$	
Area of origin—				
Means of egress	181	2.4	1,935,306	2.4
Assembly area—				
Lounge, living-room	527	7.0	6,122,543	7.8
Others	82	1.1	5,261,883	6.7
Function area—				
Sleeping	688	9.2	3,445,228	4.4
Kitchen	609	8.1	4,206,730	5.4
Laundry	95	1.2	762,674	.9
Others	502	6.7	12,881,785	16.6
Storage area inside building	769	10.3	15,037,513	19.3
Service facilities—				
Chimney, flue	61	.8	211,357	.2
Others	95	1.2	1,790,676	2.3
Service and equipment area	328	4.4	9,851,870	12.7
Structural area	456	6.1	5,759,643	7.4
Vehicle—				
Engine area	922	12.4	1,013,809	1.3
Fuel area	209	2.8	198,434	.2
Passenger area	402	5.4	437,703	.5
Others	471	6.3	2,769,982	3.5
Outside area	602	8.0	3,338,291	4.3
Unknown	434	5.8	2,541,297	3.2
Totals	7,433	100.0	77,566,724	100.0
Source of ignition—				
Heating equipment	499	6.7	5,255,040	6.7
Cooking equipment	496	6.6	2,091,793	2.6
Smokers' material	911	12.2	6,685,061	8.6
Electrical distribution equipment	754	10.1	4,271,533	5.5
Electrical appliances	295	3.9	2,855,791	3.6
Other appliances	718	9.6	1,528,668	1.9
Open flames	1,147	15.4	12,379,200	15.9
Exposure	230	3.0	967,094	1.2
Miscellaneous	2,025	27.2	39,506,227	50.9
Unknown	358	4.8	2,056,317	2.6
Totals	7,433	100.0	77,566,724	100.0
Fuel or energy—				
Coal, wood	1,413	19.0	14,182,666	18.2
Fuel oil	183	2.4	2,591,409	3.3
Gasoline	1,079	14.5	3,972,861	5.1
Natural gas	101	1.3	1,133,165	1.4
Propane	180	2.4	1,245,446	1.6
Smokers' material	872	11.7	7,105,743	9.1
Electricity	1,304	17.5	7,309,255	9.4
Lightning	4	.....	630,000	.8
Unclassified	552	7.4	6,439,328	8.3
Unknown or not applicable	1,745	23.4	32,956,851	42.4
Totals	7,433	100.0	77,566,724	100.0
Form of heat—				
Spark—				
Ember	220	2.9	1,632,154	2.1
Electrical	1,139	15.3	5,999,952	7.7
Static electrical	37	.4	128,545	.1
Direct flame	1,658	22.3	13,492,403	17.3
Friction heat	52	.6	136,349	.1
Hot object, conduction or radiation	1,094	14.7	6,030,389	7.7
Spontaneous ignition (not incompatible chemicals)	88	1.1	537,881	.6
Heat from smokers' material	788	10.6	6,383,324	8.2
Unclassified	227	3.0	2,964,822	3.8
Unknown or not applicable	2,130	28.6	40,260,905	51.9
Totals	7,433	100.0	77,566,724	100.0

[1] Similar information is available for groups of specific property classifications as listed on page 14—Summary of Fire Losses by Property Classifications.

Fire Loss Statistics for All Fires,[1] *1976*—Continued

	Incidents	Per Cent of Incidents	Loss	Per Cent of Loss
Material first ignited—			$	
Structural components	1,131	15.2	12,716,108	16.3
Furniture, furnishings	1,056	14.2	9,286,812	11.9
Clothing, textiles	318	4.2	1,552,469	2.0
Wood, paper	1,024	13.7	7,966,969	10.2
Flammable liquids	1,466	19.7	8,067,774	10.4
Flammable gases	181	2.4	1,509,246	1.9
Chemicals	102	1.3	247,195	.3
Agricultural, forestry products	127	1.7	828,642	1.0
Miscellaneous	2,028	27.2	35,391,509	45.6
Totals	7,433	100.0	77,566,724	100.0
Act or omission—				
Incendiary	1,735	23.3	21,752,452	28.0
Misuse of source of ignition	1,027	13.8	8,830,484	11.3
Misuse of material ignited	414	5.5	2,075,086	2.6
Mechanical or electrical failure	1,828	24.5	8,355,157	10.7
Construction deficiency	174	2.3	1,576,949	2.0
Misuse of equipment	85	1.1	435,559	.5
Human failing	699	9.4	3,852,382	4.9
Vehicle accident	103	1.3	1,179,362	1.5
Miscellaneous	1,029	13.8	27,491,481	35.4
Unknown	339	4.5	2,017,812	2.6
Totals	7,433	100.0	77,566,724	100.0

[1] Similar information is available for groups of specific property classifications as listed on page 14—Summary of Fire Losses by Property Classifications.

Summary of Fire Losses by Property Classifications, 1976

Uniform Reporting Manual Codes	Property Classifications	Incidents	Per Cent of Total Incidents	Loss	Per Cent of Total Loss	Fatalities	Per Cent of Total Fatalities	Injured	Per Cent of Total Injured
	Assembly—			$					
131–139	Educational	109	1.5	9,931,872	12.8	.....	.....	4	1.0
172–173	Nightclubs, taverns	7	.....	179,700	.....	.....	.....	3	.....
171, 174, 179	Restaurants, eating establishments	58	.....	1,261,242	1.6	.....	.....	3	.....
111–129									
141–169									
181–199	Others	87	1.2	4,304,705	5.5	.....	.....	6	1.6
	Institutional—								
221–229	Home for aged	12	.....	30,480	.....	1	.....	2	.....
231–249	Hospital	75	1.0	68,091	.....	1	.....	.....	.....
211–219, 299	Others	17	.....	50,515	.....	1	.....	2	.....
311–319	One- and two-family dwellings	2,036	27.4	17,665,686	22.8	60	54.5	140	36.6
321–329	Apartments	568	7.6	4,004,462	5.2	5	4.5	43	11.3
331–359	Hotels, motels, rooming-houses	275	3.7	5,995,494	7.7	8	7.3	87	22.8
361–369	Dormitory	16	.....	152,405	.....	1	.....	1	.....
371, 375	Mobile home, mobile camp	112	1.5	870,129	1.1	5	4.5	5	1.3
372–374	Recreational vehicle	58	.....	245,646	.....	5	4.5	6	1.6
376, 379, 399	Residential—others	51	.....	112,926	.....	1	.....	1	.....
400–499	Business and personal service	51	.....	1,031,388	1.3	.....	.....	3	.....
500–599	Mercantile	223	3.0	6,171,487	8.0	.....	.....	7	1.8
600–699	Industrial manufacturing	210	2.8	7,495,864	9.7	1	.....	8	2.1
700–799	Industrial storage	448	6.0	5,470,728	7.1	2	1.8	14	3.9
811–829	Outdoor property, piers, wharves	293	3.9	29,984	.....	2	1.8	3	.....
841–849	Watercraft	71	1.0	1,895,654	2.4	3	2.7	9	2.4
851–859	Rail transport and equipment	11	.....	127,470	.....	.....	.....	3	.....
861	Ground transport—automobile	1,525	20.5	1,128,132	1.5	8	7.3	13	3.4
862–869, 881–889	Other ground transport and special vehicles	528	7.1	2,068,786	2.7	1	.....	10	2.6
871–879	Aircraft	8	0.1	1,033,500	1.3	1	.....	1	.....
831–839, 899	Others—miscellaneous	584	7.9	6,240,378	8.0	4	3.6	8	2.1
900–999									
	Totals	7,433	.....	77,566,724	.....	110	.....	382	.....

Fire Losses of $250,000 and Over, 1976

Date	Municipality	Occupancy	Cause	Loss
				$
01-08	Langley	Canned, bottled food or soft drinks	Miscellaneous act or omission[1]	500,000
01-23	Surrey	Food processing[1]	Incendiarism[2]	296,000
01-07	Cariboo County	Gas-distribution system, pipeline	Miscellaneous act or omission[1]	2,500,000
01-15	Vancouver	Laundry and dry-cleaning	Incendiarism[2]	679,863
01-18	Hope	Ice rink	Part failure, leak, break	250,000
02-24	Prince Rupert	Hotel, year-round use	Miscellaneous act or omission[1]	311,432
02-01	Abbotsford-Sumas	Department store	Disposal of smokers' material	3,194,100
02-26	Langley	Elementary school	Miscellaneous act or omission[1]	380,000
02-16	Vancouver County	Hotel, seasonal use (off season)	Miscellaneous act or omission[1]	650,038
02-05	Hope	Machinery	Miscellaneous act or omission[1]	1,000,000
02-27	Richmond	Airport passenger terminal	Arson or other fires[1]	839,300
02-20	Burnaby	Amusement centre	Criminal offence	517,000
03-23	Vancouver	Canning, preserving of fish, sea foods	Miscellaneous act or omission[1]	839,936
03-03	Prince Rupert	Hotel, year-round use	Miscellaneous act or omission[1]	1,750,000
03-04	Cariboo County	Property unknown	Act or omission[1]	250,000
03-05	Vancouver	General warehouse	Miscellaneous act or omission[1]	350,000
04-09	Burnaby	Apartment, three to 20 units with business	Temporary loss of judgemnt	410,000
04-10	Richmond	Junior high, intermediate school	Criminal offence	1,700,000
05-31	Kamloops	Restaurant	Arson or other fires[1]	310,000
05-21	Vancouver	Upholstered furniture, bedding	Incendiarism[2]	330,000
05-28	Vancouver	Church, chapel	Incendiarism[2]	250,000
05-19	Vancouver County	Commercial fishing-vessel	Miscellaneous act or omission[1]	300,000
06-24	Armstrong	Elementary school	Miscellaneous act or omission[1]	750,000
06-30	Mission	Sawmill, planing-mill	Miscellaneous act or omission[1]	250,000
06-18	Surrey	Elementary school	Incendiarism[2]	270,000
06-30	Yale County	Sawmill, planing-mill	Miscellaneous act or omission	266,577
06-16	Vanderhoof	Ice rink	Criminal offence	488,000
07-28	Mission	Boxed, crated, or packaged agricultural products storage	Miscellaneous act or omission[1]	325,000
07-23	Kootenay County	Boxed, crated, or packaged agricultural products storage	Miscellaneous act or omission[1]	400,000
07-04	Cranbrook	Department store	Incendiarism[2]	311,500
08-11	Nanaimo	Apartment, over 20 units with or without business	Human failing[1]	299,150
08-20	Campbell River	Junior high, intermediate school	Incendiarism[2]	4,500,000
08-17	Cariboo County	Helicopter and vertical take-off aircraft, non-military	Miscellaneous act or omission[1]	270,000
08-10	Squamish	Civic, Federal, or Provincial Government Office	Incendiarism[2]	600,000
08-12	Pouce Coupe	Seeds, beans, nuts, grain storage in bulk	Miscellaneous act or omission[1]	500,000
09-01	City of Fort St. John	Seeds, beans, nuts, grain storage in bulk	Welding or cutting too close	250,000
09-16	North Vancouver	Helicopter and vertical take-off aircraft, non-military	Aircraft	600,000
09-10	Vancouver County	Senior high school	Incendiarism[2]	1,000,000
09-03	Yale County	Sawmill, planing-mill	Miscellaneous act or omission[1]	900,000
10-25	Burnaby	Sawmill, planing-mill	Miscellaneous act or omission[1]	406,000
11-23	Cariboo County	Apartment, three to 20 units	Miscellaneous act or omission[1]	480,000
12-01	Nelson	Building under major renovation	Miscellaneous act or omission[1]	404,103
12-25	Port Alberni	Hotel, year-round use	Miscellaneous act or omission[1]	1,200,000
12-19	Cariboo County	Variety store (large)	Mechanical and electrical failure[1]	345,000

[1] Unclassified or unknown. [2] Or suspected incendiarism (no charges laid).

Major Causes of Fires Resulting in Deaths, 1976

Cause	Men	Women	Children	Total
Careless use of smoking materials	30	11	4	45
Suicide	3	3	----	6
Vehicle accidents	5	4	----	9
Wood-fired stove and space heaters	2	----	2	4
Candles used for lighting	2	----	2	4
Oil stove	2	1	----	3
Other	21	11	7	39
Totals	65	30	15	110

Fire Casualties by Month, 1976

Month	Injuries			Deaths		
	Male	Female	Total	Male	Female	Total
January	21	5	26	4	2	6
February	22	7	29	4	2	6
March	16	4	20	11	1	12
April	32	6	38	6	3	9
May	26	1	27	8	2	10
June	25	6	31	2	1	3
July	44	42	86	11	9	20
August	9	4	13	8	2	10
September	15	1	16	8	4	12
October	19	8	27	2	1	3
November	18	7	25	5	1	6
December	37	7	44	9	4	13
Totals	284	98	382	78	32	110

Fire Casualties by Day of Week, 1976

Day	Dead	Injured
Sunday	22	50
Monday	16	71
Tuesday	13	27
Wednesday	8	47
Thursday	20	44
Friday	9	76
Saturday	22	67
Totals	110	382

Fire Casualties by Age, 1976

Age	Deaths	Injuries
Unknown	1	12
Under 2 years	1	----
2–10 years	9	9
11–18 years	8	29
19–70 years	78	323
Over 70 years	13	9
Totals	110	382

Circumstances Contributing to Fire Casualties, 1976

	Deaths	Injuries
Condition of casualty—		
Asleep at time of fire	40	55
Bedridden or other handicap	3	4
Impairment by alcohol	19	9
Impairment by drugs	----	6
Under restraint or detention	1	----
Too young to act	4	2
Senile	1	1
Left unattended (children)	1	2
Unclassified	17	79
Unknown or not applicable	24	224
Totals	110	382

	Deaths	Injuries
Action of casualty—		
Injured while attempting to escape	10	37
Overexertion or heart attack	1	1
Volunteer entered—		
Remained for rescue purposes	----	16
Remained for fire-fighting	2	106
Remained to save property	----	11
Loss of judgment or panic	8	14
Received delayed warning	6	16
Unclassified	29	59
Unknown or not applicable	54	122
Totals	110	382

	Deaths	Injuries
Ignition of clothing or other fabrics—		
Outer clothing	17	51
Sleepwear	11	3
Underclothing	1	1
Bedding or bed linen	6	10
Mattress or pillow	2	9
Upholstered furniture	11	6
Unclassified	10	4
Unknown or not applicable	52	298
Totals	110	382

	Deaths	Injuries
Type of fabric or material ignited—		
Cotton	11	27
Wool	1	4
Other natural fibre	7	----
Rayon (viscose)	----	2
Other synthetic fibre	3	16
Mixed fibres	4	12
Rubber	1	----
Unclassified	10	8
Unknown or not applicable	73	313
Totals	110	382

	Deaths	Injuries
Cause of failure to escape—		
Trapped—		
Vertical spread of fire/smoke	7	6
Horizontal spread of fire/smoke	23	13
High flame spread—combustible interior finish	11	2
Falling debris	----	2
Explosion	4	23
Exit blocked or obstructed by fire	2	2
Outdoor fire	----	3
Unclassified	21	45
Unknown or not applicable	42	286
Totals	110	382

Fire Crime Statistics, 1976

	Motive Unknown	Insurance Fraud	Revenge	Cover Crime	Mischief	Mental	Total
Incendiary, suspected or known—							
Provincial totals	1,166	3	13	1	551	40	1,774
Time—							
0001–0800	549	2	6	1	118	25	701
0801–1600	163	1	2	----	139	7	312
1601–0000	454	----	5	----	294	8	761
Property—							
Assembly	77	----	1	1	62	1	142
Institutional	11	----	4	----	4	2	21
Residential	348	2	5	----	135	24	514
Office	21	----	----	----	3	----	24
Mercantile	64	----	1	----	32	2	99
Manufacturing	23	----	----	----	5	----	28
Storage	147	----	----	----	67	1	215
Vehicles, outside areas	445	----	2	----	209	9	665
Miscellaneous	29	1	----	----	32	1	63
Incendiary method—							
Unknown	542	----	3	----	205	7	757
Flammable liquids	177	1	3	----	61	8	250
Incendiary devices	----	----	----	----	2	----	2
Matches and combustibles	431	2	6	1	265	25	730
Other	14	----	1	----	18	----	33
Not applicable	2	----	----	----	----	----	2
Persons involved—							
Unknown	1,067	----	1	1	443	----	1,512
Adult male	42	3	5	----	13	13	76
Adult female	14	----	6	----	2	20	42
Juvenile male	41	----	1	----	87	7	136
Juvenile female	2	----	----	----	6	----	8
Persons charged—							
Adult male	35	2	4	----	11	2	54
Adult female	10	----	3	----	2	12	27
Juvenile male	21	----	----	----	10	1	32
Total persons charged	66	2	7	----	23	15	113
Offences cleared—							
By charge	66	2	7	----	23	17	115
Other	7	----	5	----	55	14	81
Not cleared	1,092	1	1	1	473	9	1,577
Disposition of charge—							
Convictions	8	----	----	----	----	----	8
Dismissals	1	----	----	----	----	----	1
Pending	66	2	6	----	29	15	118
Withdrawn	3	----	----	----	2	----	5
Stay of proceedings	1	----	1	----	----	----	2
Committed	----	----	----	----	----	1	1
Authority for charge—							
Criminal Code—							
Sec. 387	9	----	1	----	10	4	24
Sec. 389 (1)	38	2	5	----	8	4	57
Sec. 389 (2)	----	----	----	----	2	----	2
Sec. 390	12	----	1	----	----	7	20
Sec. 392 (1)	2	----	----	----	----	----	2
Fire Marshal Act	1	----	----	----	----	----	1
Other	17	----	----	----	11	1	29

Inspections and Orders by Local Assistant Fire Marshals, 1976

CITY MUNICIPALITIES (32)

	Inspections	Orders		Inspections	Orders
Armstrong	----	----	New Westminster	5,812	----
Chilliwack	1,176	1	North Vancouver	2,948	6
Courtenay	317	----	Penticton	1,975	3
Cranbrook	2,115	6	Port Alberni	785	15
Dawson Creek	368	----	Port Coquitlam	----	----
Duncan	104	----	Port Moody	405	----
Enderby	----	----	Prince George	160	----
Fernie	215	4	Prince Rupert	----	----
Grand Forks	----	----	Revelstoke	231	----
Greenwood	----	----	Rossland	256	----
Kamloops	158	6	Trail	224	----
Kelowna	2,548	----	Vancouver	31,824	426
Kimberley	663	1	Vernon	1,999	4
Langley	611	134	Victoria	8,912	8
Nanaimo	1,293	----	White Rock	546	----
Fort St. John	460	----	Totals	66,318	614
Nelson	213	----			

DISTRICT MUNICIPALITIES (38)

Abbotsford	----	----	North Saanich	2	----
Burnaby	1,247	338	North Vancouver	----	----
Campbell River	----	----	Oak Bay	2,617	23
Central Saanich	90	3	Peachland	----	----
Chilliwhack	598	----	Pitt Meadows	----	----
Coldstream	26	----	Port Hardy	----	----
Coquitlam	1,400	----	Powell River	----	----
Delta	1,052	794	Richmond	2,520	141
Esquimalt	176	----	Saanich	3,981	22
Fraser Mills	----	----	Salmon Arm	253	3
Houston	----	----	Spallumcheen	----	----
Hudson's Hope	----	----	Sparwood	31	1
Kent	----	----	Squamish	----	----
Kitimat	194	----	Stewart	44	----
Mackenzie	----	----	Summerland	344	----
Maple Ridge	210	----	Surrey	4,643	----
Matsqui	167	----	Terrace	685	----
Mission	428	----	West Vancouver	695	----
North Cowichan	313	----	Totals	21,716	1,325

Inspections and Orders by Local Assistant Fire Marshals, 1976—Continued

VILLAGE MUNICIPALITIES (59)

	Inspections	Orders		Inspections	Orders
Alert Bay	----	----	Montrose	22	1
Ashcroft	----	----	Nakusp	----	----
Burns Lake	----	----	New Denver	----	----
Cache Creek	----	----	Oliver	----	----
Chase	----	----	100 Mile House	----	----
Chetwynd	----	----	Osoyoos	----	----
Clinton	1	----	Parksville	141	----
Cumberland	----	----	Port Alice	11	1
Elkford	----	----	Pemberton	----	----
Fort Nelson	----	----	Port Edward	----	----
Fort St. James	----	----	Port McNeill	----	----
Fraser Lake	5	3	Pouce Coupe	----	----
Fruitvale	----	----	Princeton	----	----
Gibsons	----	----	Qualicum Beach	----	----
Gold River	----	----	Salmo	----	----
Granisle	----	----	Sayward	----	----
Harrison Hot Springs	----	----	Sechelt	----	----
Hazelton	----	----	Silverton	----	----
Invermere	----	----	Slocan	----	----
Kaslo	----	----	South Fort George	----	----
Keremeos	----	----	Tahsis	----	----
Lake Cowichan	----	----	Taylor	----	----
Lillooet	----	----	Telkwa	----	----
Lions Bay	----	----	Tofino	9	----
Logan Lake	15	2	Ucluelet	----	----
Lumby	----	----	Valemount	----	----
Lytton	----	----	Vanderhoof	----	----
McBride	----	----	Warfield	10	1
Masset	92	----	Zeballos	----	----
Midway	----	----	Totals	306	8

TOWN MUNICIPALITIES (10)

Comox	135	----	Quesnel	----	----
Creston	----	----	Sidney	----	----
Golden	----	----	Smithers	----	----
Hope	----	----	Williams Lake	160	----
Ladysmith	3	1	Totals	298	1
Merritt	----	----			

FIRE DISTRICTS (15)

Cariboo, County of	----	----	Sooke	----	----
Colwood	----	----	University Area	1,078	----
Ioco	----	----	Vancouver, County of	1	----
Kootenay, County of	24	2	Victoria, County of	11	----
Langford	----	----	View Royal	----	----
Nanaimo, County of	9	1	Westminster, County of	----	----
Ocean Falls	282	----	Yale, County of	279	----
Prince Rupert, County of	----	----	Totals	1,684	3

	Inspections	Orders
Grand totals, 1976	90,322	1,951
Grand totals, 1975	81,027	1,920
Grand totals, 1974	91,418	1,544
Grand totals, 1973	87,266	1,686
Grand totals, 1972	63,940	888
Grand totals, 1971	84,104	588
Grand totals, 1970	81,056	92
Grand totals, 1969	77,927	197
Grand totals, 1968	92,074	172
Grand totals, 1967	85,969	529

10-Year Property Fire Loss Comparison, 1967–76

	1967	1968	1969	1970	1971
(1) Number of fires	6,934	7,010	7,602	7,546	7,454
(2) Loss	$21,490,053	$21,116,871	$27,514,446	$34,561,074	$34,716,758
(3) Loss per fire (2) ÷ (1)	$3,099	$3,012	$3,619	$4,580	$4,657
(4) Population (thousands)[1]	1,945.0	2,003.0	2,060.0	2,128.0	2,184.6
(5) *Per capita* fires [(1) ÷ (4)] × 1,000	3,57	3.50	3.69	3.55	3.41
(6) *Per capita* loss (2) ÷ (4)	$11.05	$10.54	$13.36	$16.24	$15.89
(7) Adjustment Factor (A)[2]	.746	.799	.851	.912	1.000
(8) Adjusted *per capita* loss (A) (6) ÷ (7)	$14.81	$13.19	$15.70	$17.81	$15.89
(9) CPI Adjustment Factor (B)[2]	.874	.906	.937	.969	1.000
(10) Adjusted *per capita* loss (B) (6) ÷ (9)	$12.64	$11.63	$14.26	$16.76	$15.89
(11) Fire fatalities	106	100	87	104	153

	1972	1973	1974	1975	1976
(1) Number of fires	8,120	7,613	7,526	7,782	7,433
(2) Loss	$37,389,116	$45,693,116	$62,842,182	$66,461,246	$77,566,724
(3) Loss per fire (2) ÷ (1)	$4,605	$6,002	$8,350	$8,540	$10,432
(4) Population (thousands)[1]	2,241.4	2,302.4	2,375.7	2,433.2	2,466.6
(5) *Per capita* fires [(1) ÷ (4)] × 1,000	3.62	3.31	3.17	3.20	3.01
(6) *Per capita* loss (2) ÷ (4)	$16.68	$19.85	$26.45	$27.31	$31.45
(7) Adjustment Factor (A)[2]	1.101	1.232	1.347	1.440	1.605
(8) Adjusted *per capita* loss (A) (6) ÷ (7)	$15.15	$16.11	$19.64	$18.97	$19.31
(9) CPI Adjustment Factor (B)[2]	1.040	1.110	1.239	1.377	1.510
(10) Adjusted *per capita* loss (B) (6) ÷ (9)	$16.04	$17.88	$21.35	$19.84	$20.83
(11) Fire fatalities	100	116	129	129	110

[1] Population statistics were provided by Statistics Canada. The figures for 1966 and 1971 were actual census figures. The others are estimates by Statistics Canada.

[2] Adjustment Factor: In an effort to get a more realistic picture of losses over the years, some form of adjustment factors were necessary to take inflation into consideration. We chose

(A) the B.C. Residential Building Construction Input Price Index, as provided by the Central Mortgage and Housing Corp., using 1971 as a base of 1.000; and

(B) Consumer Price Index for Vancouver with 1971 = 1.000.

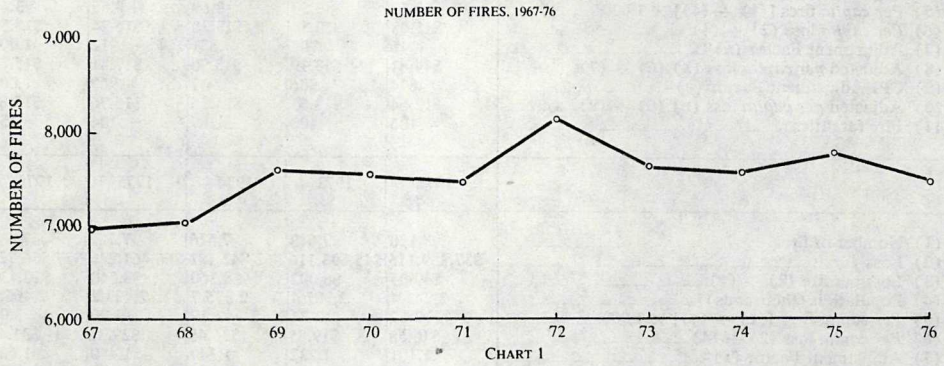

CHART 1

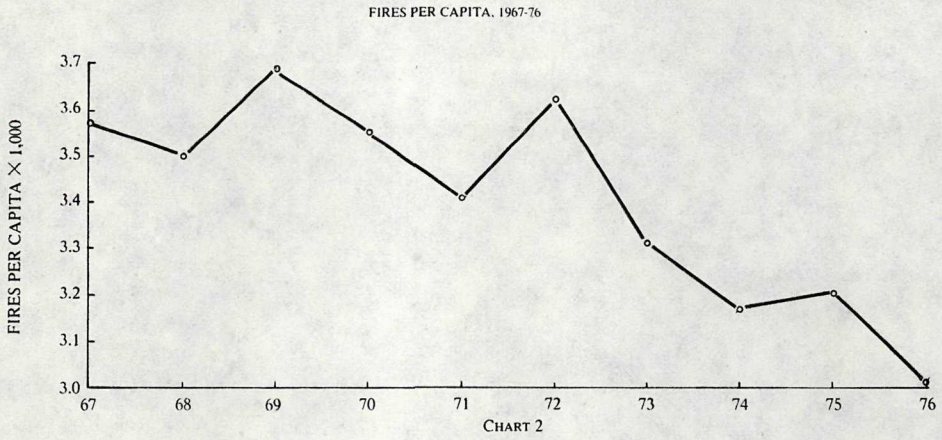

CHART 2

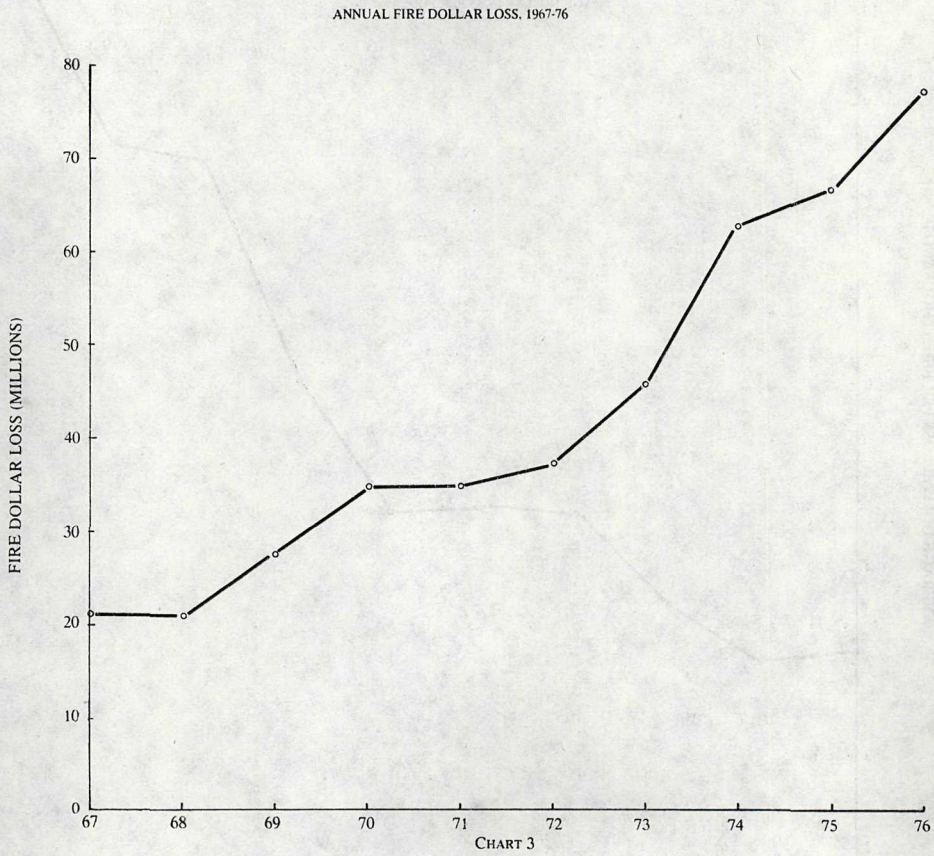
ANNUAL FIRE DOLLAR LOSS, 1967-76
FIRE DOLLAR LOSS (MILLIONS)
80
70
60
50
40
30
20
10
0
67
68
69
70
71
72
73
74
75
76

CHART 3

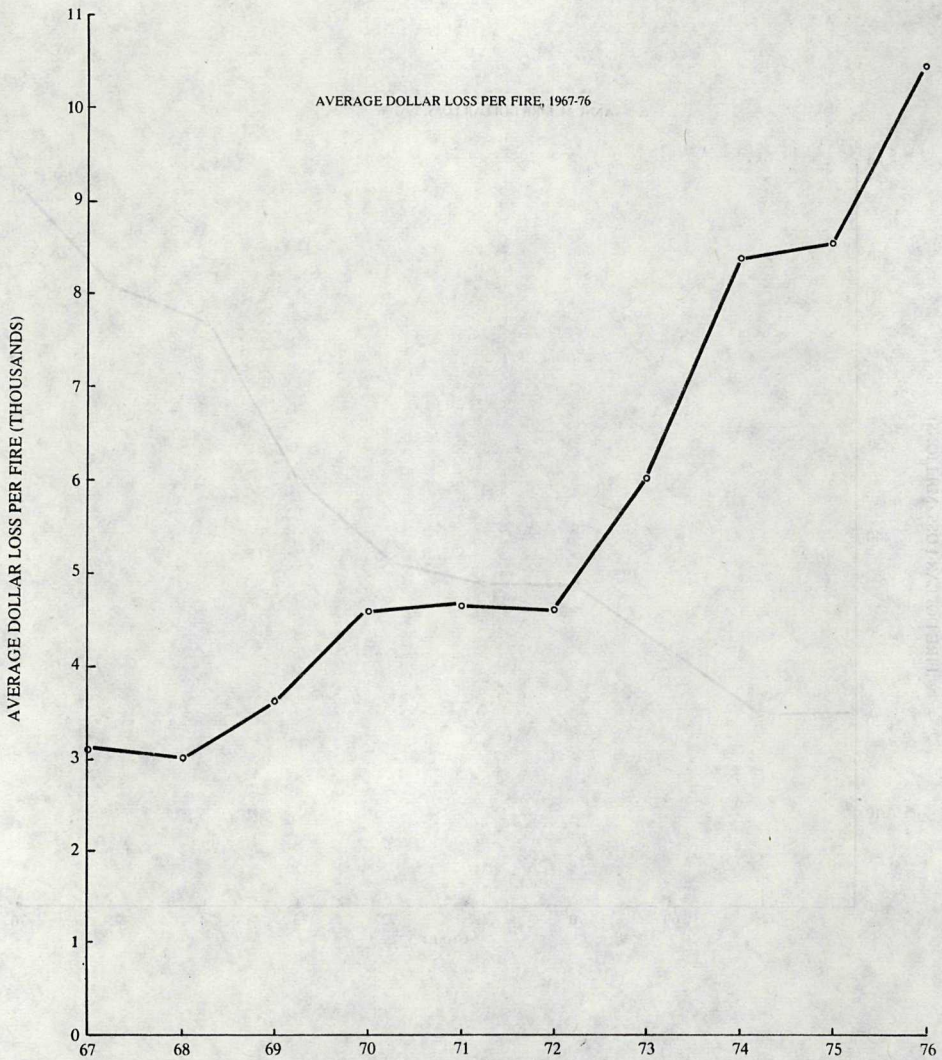
AVERAGE DOLLAR LOSS PER FIRE, 1967-76
AVERAGE DOLLAR LOSS PER FIRE (THOUSANDS)
0
1
2
3
4
5
6
7
8
9
10
11
67
68
69
70
71
72
73
74
75
76

CHART 4

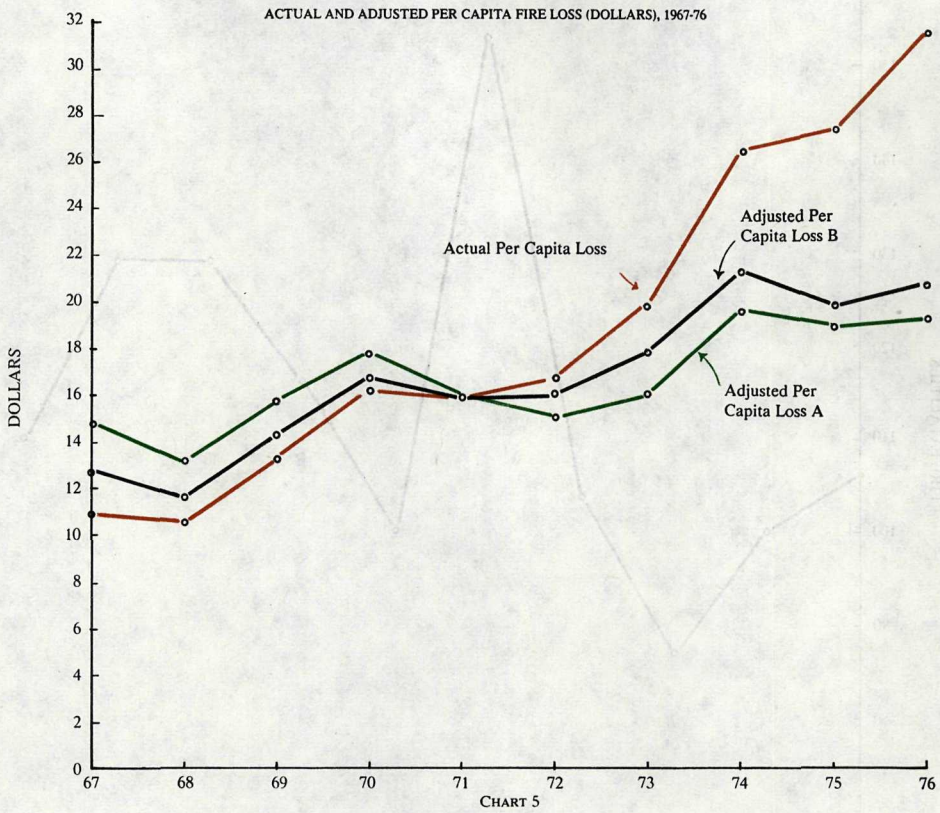
ACTUAL AND ADJUSTED PER CAPITA FIRE LOSS (DOLLARS), 1967-76
DOLLARS
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
67
68
69
70
71
72
73
74
75
76
Actual Per Capita Loss
Adjusted Per Capita Loss B
Adjusted Per Capita Loss A

CHART 5

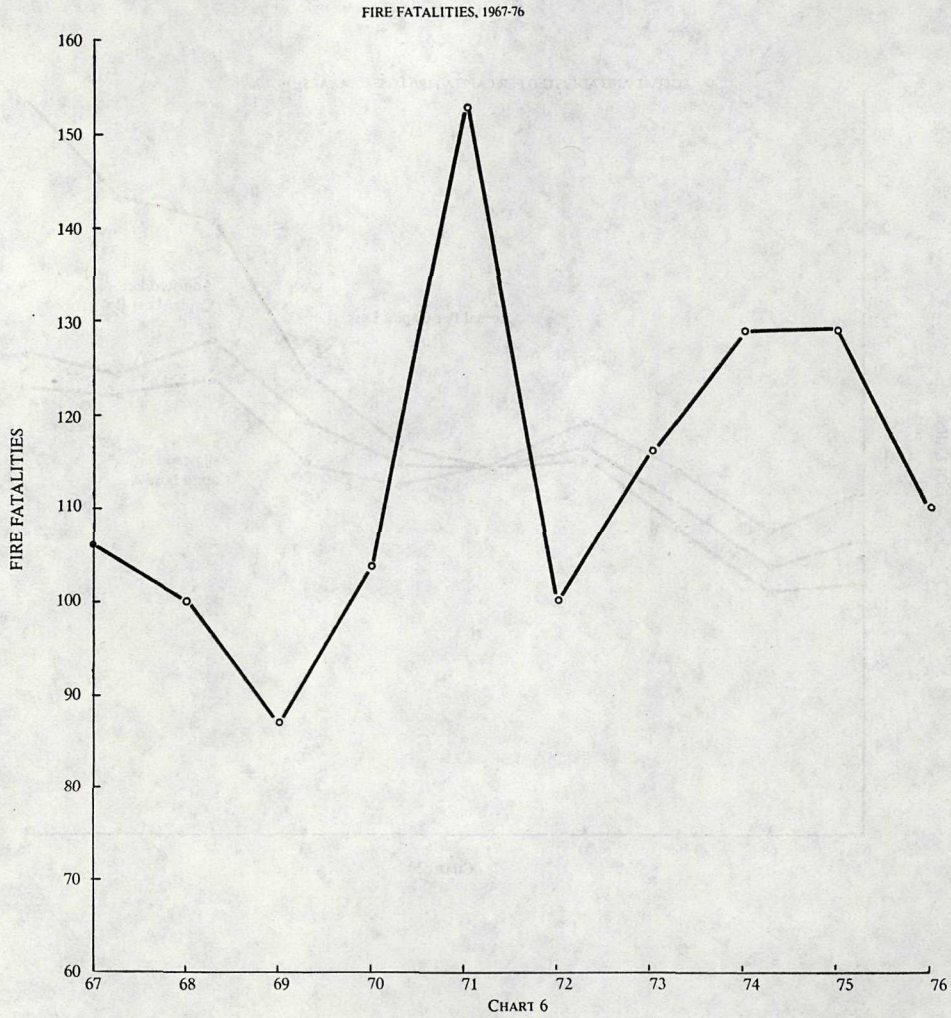

CHART 6

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