

EIGHTH
ANNUAL REPORT

IDAHO FIRE STATISTICS

JANUARY 1, 1989 - DECEMBER 31, 1989



OFFICE OF THE STATE FIRE MARSHAL

LEE R. BRIGHT
STATE FIRE MARSHAL

ANTHONY J. FAGIANO
DIRECTOR
DEPARTMENT OF INSURANCE

Table of Contents

IDAHO STATE FIRE MARSHAL'S OFFICE

PART I - Annual Reports

State Fire Marshal	1
District I - Fire Prevention	2
District II - Fire Prevention	3
District II - Arson/Fraud Investigation	4
District III - Fire Prevention	5
District III - Arson/Fraud Investigation.....	6
Prevention/Arson Activity Summary.....	7
Incident Reporting System	8
Licensing/Certification/Insurance Losses.....	9

PART II - Fire Statistics

Fire Incident Summaries.....	10
Fire Casualties.....	16

PART III - Graphic Analysis of Fire Statistics

Hostile Fires.....	20
Outside Fires.....	31
Smoke Detector/Fire Sprinkler Performance.....	33

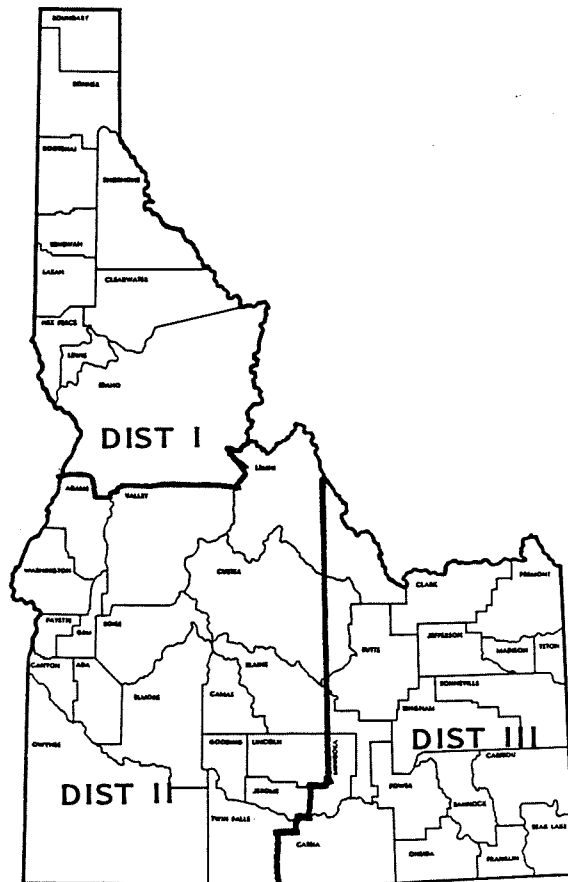
PART IV - Graphic Study of Wood Heating Appliances

Residential	34
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1989 Fire Report

PART I - ANNUAL REPORT

The annual report section is made up of reports from the fire marshal and employees from the three districts of the fire marshal's office.



LEE BRIGHT

IDAHO STATE FIRE MARSHAL

The office of the State Fire Marshal functions as a division within the Department of Insurance. The division is under the direction of the State Fire Marshal who is appointed by, and serves at the pleasure of, the Director of the Department of Insurance.

In its broadest sense, the mission of the office of the State Fire Marshal is to establish a basic environment of fire safety for the citizens of Idaho. An environment that serves as a foundation to be built upon and molded by local agencies to meet their specific needs. The State Fire Marshal is able to achieve the objective of public fire safety because enforcement of the minimum fire safety standards is generally carried out by legally organized local fire authorities. This delegation of enforcement responsibilities eliminates duplicating and overlapping effort and, at the same time, preserves the concept of local autonomy.

The mission of the office of the State Fire Marshal is carried out in three basic ways: (1) by regulating buildings in which people live, congregate, or are confined; (2) by controlling substances and products which may, in and of themselves, or by their misuse cause injuries, death, and destruction by fire; (3) by training and education in fire protection methods and responsibilities. Reduced to its simplest terms, the function of the State Fire Marshal is fire prevention. That function is accomplished through several program elements including field operations, technical services, regulation development, training, arson investigation, public education, and fire incident reporting.

Presently, the office of the State Fire Marshal is authorized nine positions. This staffing includes the State Fire Marshal, six field deputies, one office coordinator, and one microcomputer systems coordinator. The State Fire Marshal maintains headquarters in Boise with regional offices in Pocatello, Lewiston and Coeur d'Alene.

**DISTRICT 1
FIRE PREVENTION
JIM MACKLIN
DEPUTY STATE FIRE MARSHAL**

The number of requests for Uniform Fire Code classes has dropped from previous years. I expect this to increase the coming year because the updated version is about ready to be presented. This class will be given at the State Fire School in Moscow in June 1990.

A substantial amount of time has been given to questions and responses regarding underground storage tanks.

I have spent a considerable amount of time as a resource to those who are concerned about conforming to code requirements, i.e., the fire service, architects, designers, builders, and fire safety consultants. This may be due to increased code enforcement by the fire service.

So that Idaho does not become a major part of the national picture--nationwide the number of fire deaths and injuries have increased--I would like to see more of an effort put toward a public fire education program by individual departments in our state. Lee Bright, state fire marshal, made a start last year by providing, free of charge, posters and literature to small departments. It would be interesting to see what would happen if we all tried to expand on this program.

I want to take this opportunity to express my appreciation for the help and cooperation from the fire service in District 1.

**DISTRICT II
FIRE PREVENTION
DON MCCOY
DEPUTY STATE FIRE MARSHAL**

Having just completed my first year as the Deputy for District II, I will have to say that this has been the most rewarding and interesting year of my entire career. The people in District II have been great to work with and I hope that we can continue to grow and learn from our experiences and also from our mistakes.

The following is a synopsis of my activities this past year:

Training Given - Two Uniform Fire Code classes as well as six Underground Storage Tank Removal classes were given.

Training Received - I attended the Western Fire Chiefs Annual Code Change Conference and several other training seminars.

Travel - I have traveled 16,000 miles in my district this year and have not visited all of the fire departments yet. (If I have not found your department yet, I will.)

Code Interpretations - A considerable amount of my time is spent providing code interpretations to fire and building officials with the fire and building codes.

Code Recertification Test and Updated Code Class - I have written the recertification examination for certified fire inspectors and I am now working on the updated code class for certification of fire inspectors based on the 1988 Uniform Fire Code.

Next year, I foresee the work to be about the same as this last year with a large part of my time being spent helping local fire officials with fire code related problems. If we are to continue to give our citizens the fire protection they deserve, it appears that as we grow several problems need to be addressed in Idaho. One of these is a more concentrated effort to enforce building safety codes that are in place and to include education and certification of the state's building officials and the adoption of current codes.

I am looking forward to a very busy and exciting year with the constantly changing problems and technologies that face the fire service of today. This is not the fire service of our founding fathers, we must practice and teach the public who depend on us for fire protection to be fire safe.

**DISTRICT II
ARSON/FRAUD INVESTIGATIONS
DONALD D. DILLARD
CHIEF DEPUTY STATE FIRE MARSHAL**

Statewide in 1989 there was an 8.5% increase in case load and an increase of 35% in arrests and convictions. The arrest and conviction rate does not include those cases where the Arson/Fraud Unit did only the origin and cause investigation and/or provided only technical assistance and the cases later handled by a local agency.

The dollar amount saved or recoverable by the insurance industry in those arson cases criminally prosecuted equaled \$159,950. Additionally, suspects were arrested in a \$2.5 million fire loss, which occurred during a burglary. Because the fire was not deliberately set--a nonintentional act--the fire loss was handled by civil proceedings.

The insurance industry also was able to recover an undetermined amount of money, through their own subrogation efforts as a result of origin and cause investigations conducted by this Unit involving accidental fires. The major dollar losses in those criminal investigations handled by the Arson/Fraud Unit were in Region II. These fire losses involved large warehouses and investigations are continuing in each fire.

**DISTRICT III
FIRE PREVENTION
HAL CALL
DEPUTY STATE FIRE MARSHAL**

This past year has been a very busy and challenging one in District III. The major portion of my time was spent working with underground tank issues. I have worked with tank owners, contractors, city, county, state and federal officials involved in underground storage tank applications. Many problems have been solved, questions answered and code interpretations given. Tank inspections were conducted upon request or in areas where there are no fire departments.

Training Activities - Eight classes were conducted on proper removal of underground tanks. Fire department participation in these classes was excellent with approximately 90% of the departments attending. Also many contractors and owners and distributors participated.

Two basic arson classes were conducted with sixty students completing the course. I also conducted one segment of the basic arson course at the annual arson seminar held at Twin Falls.

A Uniform Fire Code class was presented at Fire School with fifteen participants from around the state.

Training Received - Attended the Western Fire Chiefs Conference in Tucson, Arizona. Many interesting and far-reaching proposals for changes to existing code were presented. Areas that we should pay particular attention to are in proposed changes to Article 79 Flammable/Combustible Liquids and Article 80 Hazardous Materials. Many questions are asked to clarify what we should be doing versus what our capabilities are with Article 80. It seems to me that each city or fire district must assess their own capabilities and resources and act accordingly.

Other activities included speaking to statewide engineering organizations, insurance groups, city councils, mayors, etc. I was instrumental in the formation of a new fire district.

Many challenges are facing us today and the underground tank issue may be one of the most difficult to resolve. Our goal is to ensure safety, prevent contamination, and not put present operators out of business. My present objective is to keep good code officials certified and to ensure that the public is adequately safeguarded against the perils of fire, unsafe buildings and hazardous practices.

**DISTRICT III
ARSON/FRAUD INVESTIGATIONS
DON BAILEY
DEPUTY STATE FIRE MARSHAL**

This year's goal was to provide training and investigative support to law enforcement and fire service agencies, as well as promote the arson task force concept.

Investigative Activities - This included assisting city and county fire and law enforcement agencies with 19 fire scene investigations in 10 Eastern Idaho counties. There were 9 suspicious, 10 accidental and 2 explosions (no fires) investigated. We also provided assistance to a county agency unrelated to fire/arson investigation.

Two of the fire scenes investigated were determined to have been incendiary fires and a third was determined suspicious. The investigations of the suspicious fires resulted in the arrest and convictions of five individuals on two counts of First Degree Arson and four counts of Defrauding an Insurance Company. Two juveniles arrested on burglary charges related to a fire cause were petitioned into juvenile court. Civil action is pending related to restitution for fire loss.

Arson Task Force Activities - This involved assisting Jefferson County/Rigby City fire and law enforcement agencies in forming an arson task force. The Minidoka-Cassia Task Force continues to be active. The Upper Valley Task Force (Bonneville County/Idaho Falls) has upgraded its training program. Fremont County has expressed an interest in forming a task force after January 1, 1990.

Fire/Arson Van Activities - This involved utilization of the van on eight fire scene investigations and two explosion scene investigations.

Training Activities - This involved on-going interaction with insurance claims representatives and attorneys related to fire investigations. Training included attending the International Association of Arson Investigators Inc. (IAAI) seminar in Clearwater Beach, Florida; Advanced Fire/Arson Conference, Oregon Chapter I.A.A.I., Medford, Oregon; Arson/Clandestine Lab Training, Canyon County; Idaho Fire/Arson Investigator's Association Conference, Twin Falls; and an Idaho Arson Certification Program orientation, Boise.

Objectives for next year are to continue to offer assistance to local, state, and federal agencies with the investigation of suspicious fires; to promote the arson task force concept; and to promote fire/arson investigation training.

PREVENTION/ARSON ACTIVITY REPORT

SUMMARY FOR 1989

PREVENTION

Fire Inspections	184
Fire/Arson Investigations.....	18
Fire Code Interpretations.....	277
Business Meetings.....	192
Assistance	197
Official Contacts.....	284
Public Appearances	19
Training Courses	51
Schools/Seminars Attended.....	28
UST Inspections	76

ARSON/FRAUD

CASES INVESTIGATED

REGION I	Total 16
Arson.....	12
Fire	4
Cases Closed - 13	
Arrests and Convictions - 4	

REGION II	Total 35
Arson.....	21
Fire	14
Cases Closed - 23	
Arrests and Convictions - 5	

REGION III	Total 22
Arson.....	7
Fire	14
Other	1
Cases Closed - 15	
Arrests and Convictions - 7	

PROPERTY CLASSIFICATION OF CASES INVESTIGATED

Residential (single).....	31
Residential (multi).....	1
Storage and Warehouses.....	10
Industrial/Manufacturing	4
Commercial/Offices/Stores.....	9
All Other Structures	8
Motor Vehicles.....	4
Crops/Timber/Fences	1
All Others Not Specified.....	5
Total	73

**INCIDENT REPORTING SYSTEM
KYM WATSON
PROGRAM COORDINATOR**

This has been a great year for the Idaho Fire Incident Reporting System. We have added several new fire departments to the reporting system and they will join us in an effort to collect Idaho's fire data. The more support we have from the fire departments (large and small) the better overall picture we can get of Idaho's fire situation.

This year we held more training classes and started more fire departments on the computerized version of the reporting system. This will help in the accuracy of the data and has been a real help to me as far as data entry. I want to thank those fire departments who have hosted a class and those who allowed me to come in to set up the computerized program on your systems.

We are able to provide the following pages of reports and graphs **BECAUSE** of those who have been faithful in providing this important information.

Certificates of recognition will be coming from the National Fire Incident Reporting System for those who have reported in 1989. I want to commend the following Fire Departments for their support:

Athol F.P.D.	Hailey City	*Ovid
Bear Lake C.F.D.	Hansen City	Paul F.P.D.
*Bennington City	Hauser Lake F.P.D.	*Payette City/Rural
Boise City F.D.	Hayden Lake F.P.D.	*Pegram
Buhl City/F.P.D.	Heyburn F.P.D.	Pocatello City
Burley City	*Jerome City/F.P.D.	Post Falls F.D.
*Caldwell City/*F.P.D.	Kellogg City	Preston City
*Caribou C.F.D.	*Ketchum City	Priest River City
Cascade City/F.P.D.	Kimberly City/F.P.D.	*Rathdrum F.P.D.
Castleford	King Hill	*Rexburg City
Challis V.F.D.	*Kootenai C.F.D. #1	Rupert City
Coeur d'Alene City	*Kuna F.P.D.	Sagle Valley F.D.
Cole-Collister F.D.	Lewiston City	Salmon River F.D.
*Dingle	*Madison C.F.P.D.	Sand Hollow F.P.D.
Driggs	Melba F.P.D.	*Sandpoint City
Donnelly F.P.D.	Meridian City/F.P.D.	Shoshone City/F.P.D.
Eagle City	Middleton F.P.D.	Shoshone C.F.P.D. #2
East End F.P.D.	*Moscow City/F.P.D.	Soda Springs City
Eden/1st Segregation	*Nampa City/F.P.D.	St. Maries City/Rural
Emmett City	*New Plymouth/Rural	*Star F.D.
Filer City/F.P.D.	Nezperce F.D.	*Sun Valley City
*Fish Haven City	North Cassia F.P.D.	Teton C.F.D.
Fruitland City	North Fremont F.P.D.	*Twin Falls City
*Geneva City	Northside F.P.D.	Weiser City/F.P.D.
*Georgetown City	Notus City	West Pend Oreille F.P.
Glenns Ferry City	*Nounan City	*Whitney F.D.
Gooding City/F.P.D.	Oakley F.P.D.	Wilder F.D.
Grandview F.P.D.	Orofino City	Wood River F.P.D.

*Computerized Fire Department using

LICENSING, CERTIFICATION, AND INSURANCE LOSSES
RUBY ANDRIDGE
OFFICE COORDINATOR

Fire Inspector Certification - As of December 1989, there were 352 active certified fire inspectors which included 35 new applicants. To ensure familiarization with the 1988 Uniform Fire Code (adopted November 1, 1989), an open book (25 question) examination will be mailed to all renewals for 1990. A different test will be mailed each year for all renewals.

Fire Protection Sprinkler Contractors License - Persons desiring a contractors license must submit an application with the appropriate fee and meet the following qualifying standards: show proof of directly supervising the installation of at least four (4) fire protection sprinkler systems of more than 200 sprinkler heads; or provide proof of successful attainment of National Institute for Certification in Engineering Technologies (NICET) Level III Certification; or take and pass an examination given by the State Fire Marshal. Financial responsibilities include a license bond in the amount of \$2,000 and liability insurance of \$250,000. There are 8 in-state and 19 out-of-state contractors licensed to do business in the state of Idaho.

Fire Protection Sprinkler Fitter License - To be licensed as a fitter an application with the required fees must include: proof by affidavit signed by a licensed fire protection sprinkler contractor showing that the applicant has worked as a fitter for at least one thousand hours per year for three years. The applicant must then take and pass an written examination given by the state fire marshal. There are 32 in-state and 5 out-of-state fitters licensed in Idaho.

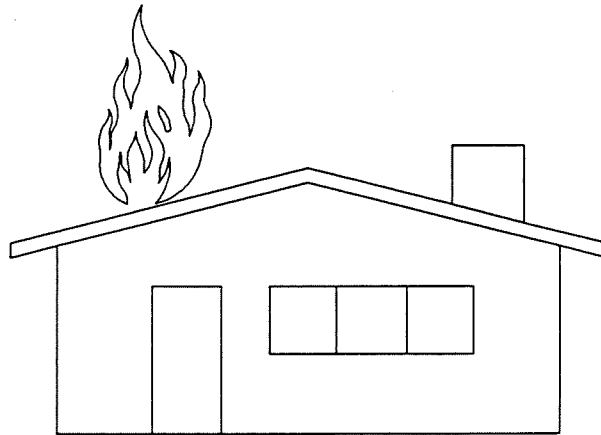
Sprinkler Installation Plans Review and Inspections - There were 136 plans submitted for review this year. Effective July 1, 1989, an inspector was hired to make on-site inspections of sprinkler installations; he conducted 69 inspections.

Property Insurance Loss Register - In 1989 insurance companies reported 989 fire loss claims for a total of \$24,619,484.

1989 Fire Report

PART II - FIRE STATISTICS

This report is a statistical analysis of fires occurring in Idaho. Without the help of the reporting fire departments, this report would not be possible.



IDAHO FIRE INCIDENT SUMMARY

Situation Found Category	Incidents
Building Fires	1,927
Vehicle Fires	771
All Other Fires	1,856
Total Fires	4,554
Overpressure Ruptures	46
Rescue Calls	566
Hazardous Conditions	1,277
Service Calls	601
Good Intent Calls	1,954
False/Malicious Calls	1,702
All Other Calls	17
Total Incidents Reported	** 10,717
Times Mutual Aid Given	573
Times Mutual Aid Recvd	367
Total Fire Dollar Loss	\$ 19,992,776
Civilian Fire Injuries	61
Civilian Fire Deaths	14
Fire Service Injuries	45
Fire Service Deaths	0

SUMMARIZATION OF FIRES, DEATHS AND INJURIES PLUS
THE ESTIMATED DOLLAR LOSS PER PERSON BY COUNTY

	Total Fires	Total Injuries	Total Deaths	Dollar Loss	Popu- lation	Dollar Per Person
Ada	1157	-16-	-4-	6,053,233	195,700	30.93
Adams	No Depts. Reporting			-0-	3,300	-0-
Bannock	224	-0-	-0-	369,845	68,400	5.41
Bear Lake	35	-0-	-0-	26,300	6,300	4.17
Benewah	34	-1-	-0-	46,800	8,500	5.51
Bingham	No Depts. Reporting			-0-	37,600	-0-
Blaine	90	-5-	-0-	616,055	13,800	44.64
Boise	No Depts. Reporting			-0-	3,200	-0-
Bonner	180	-6-	-0-	238,946	25,400	9.41
Bonneville	9	-0-	-0-	13,900	72,000	.19
*Boundary	1	-0-	-0-	500,000	7,500	66.67
Butte	No Depts. Reporting			-0-	3,000	-0-
Camas	No Depts. Reporting			-0-	700	-0-
Canyon	515	-13-	-0-	1,677,700	90,600	18.52
Caribou	35	-1-	-0-	82,200	7,300	11.26
Cassia	124	-7-	-0-	153,386	20,400	7.52
Clark	No Depts. Reporting			-0-	800	-0-
Clearwater	42	-1-	-0-	125,130	9,600	13.03
Custer	5	-0-	-0-	350	4,600	.08
Elmore	34	-1-	-1-	99,500	22,194	4.48
Franklin	45	-1-	-0-	259,825	9,300	27.94
Fremont	1	-6-	-1-	125,000	10,300	12.14
Gem	6	-0-	-0-	3,550	11,300	.31
Gooding	49	-0-	-0-	55,450	11,700	4.74
Idaho	5	-0-	-0-	15,000	13,600	1.10
Jerome	145	-3-	-0-	972,575	16,200	60.04
Jefferson	No Depts. Reporting				14,900	-0-
Kootenai	502	-11-	-0-	1,976,306	67,300	29.37
Latah	71	-2-	-0-	136,770	30,400	4.50
Lemhi	No Depts. Reporting			-0-	6,900	-0-
Lewis	No Depts. Reporting			-0-	3,700	-0-
Lincoln	7	-0-	-0-	62,600	3,400	18.41
Madison	109	-1-	-0-	172,055	21,900	7.86
Minidoka	151	-1-	-0-	373,315	20,400	18.30
Nez Perce	182	-4-	-0-	380,205	33,400	11.38
Oneida	No Depts. Reporting			-0-	3,600	-0-
Owyhee	-4-	-0-	-0-	3,100	8,400	.37
Payette	187	-1-	-0-	384,840	16,100	23.90
Power	No Dept. Reporting			-0-	6,800	-0-
Shoshone	129	-6-	-0-	114,955	14,800	7.77
Teton	18	-1-	-0-	76,200	3,200	23.81
Twin Falls	357	-9-	-0-	2,531,985	55,300	45.79
Valley	12	-0-	-0-	13,000	6,900	1.88
Washington	89	-6-	-1-	2,232,700	8,000	291.59
Deaths reported by Utah Burn Center			-7-			
TOTALS	4,554	-103-	-14-	19,992,776	998,694	20.02

* No Fire Departments reporting - Information gathered by Deputy State Fire Marshal.

HOSTILE FIRES BY COMPLEX

	FIRES	INJURY	DEATHS	LOSS
Public/Recreation Complex	20	2	0	\$ 12,000
Stadium/Exhibition Hall	4	0	0	1,025
Club Complex	9	0	0	279,425
Educational Complex	48	0	0	11,265
Medical Care Complex	17	0	0	14,250
Prison Complex	5	0	0	550
Business w/Resid. Complex	21	0	0	406,150
Dwelling (one/two family)	1,615	61	6	6,168,432
Apartment	103	2	1	227,665
Hotel	17	3	0	124,275
Mobile Home Park	42	0	0	53,050
Shopping Complex	104	4	0	1,459,715
Office Complex	35	0	0	147,574
Power Production	3	0	0	7,000
Military, Reservation, Defense	1	0	0	-0-
Farm	369	3	0	4,258,565
Industrial/Plant/Manufact.	72	0	0	855,500
Warehouse/Storage	49	12	0	2,845,100
Construction	11	0	0	67,000
Campsite	6	0	0	65
Waterfront	9	0	0	9,000
Railroad Transport	39	0	0	684,875
Road	521	7	1	472,726
Airport	5	0	0	6,500
No Complex	1,328	4	0	1,828,959
Not elsewhere classified	36	0	0	52,110
Complex Unknown/not reported	65	0	6	-0-
TOTAL ALL FIRES/BY COMPLEX	4,554	103	14	\$19,992,776

HOSTILE FIRES BY AREA OF ORIGIN
(TOP 15)

	FIRES	INJURY	DEATHS
Lounge Area	143	6	2
Sleeping Rooms	86	11	1
Kitchen/Cooking Area	208	15	1
Trash or Rubbish Area/Container	181	0	0
Garage/Carport/Vehicle Storage	52	0	0
Chimney	564	0	0
Crawl Space/Substructure Space	45	12	1
Ceiling/Floor/Roof Assembly	95	4	0
Wall Assembly	51	0	0
Exterior Wall/Roof Surface	123	3	0
Passenger Area of Transport Equip	76	2	0
Engine Area/Running Gear/Wheel	513	5	0
Highway/Public Way/Street	146	1	1
Lawn/Field/Open Area	1,128	12	0
Wildland Area/Woods	46	0	0

NOTE: We have listed only the top 15 Area's of Origin this year. In the past we have listed all area's of origin.

LOSSES ON ALL HOSTILE FIRES WITH SOME
INCENDIARY/SUSPICIOUS IGNITION FACTOR

Unknown	\$6,116,905
Incendiary	\$2,151,622
Suspicious	\$1,738,035

TYPE OF ACTION TAKEN BY FIREFIGHTERS UPON ARRIVAL
AT THE EMERGENCY SCENE

Extinguishment	4,715
Rescue Only	178
Investigation Only	4,286
Remove Hazard	527
Standby	857
Salvage	92
Fill In, Move Up	24
Other Type of Action	38
TOTAL	10,717

STATS PER FIRE

Total Man-Hours	128,615
Average Man Hours per Fire	11
Average Number of Personnel	10
Average Response Time	7 Minutes

Note of Interest: 128,615 Total Man Hours equates to more than 14 Years.

HOSTILE FIRES BY IGNITION FACTOR

	FIRES	INJURY	DEATH
Incendiary/Not during Civil Disturb.	85	0	2
Suspicious/Not during Civil Disturb.	192	3	0
Abandoned discarded material	210	1	1
Thawing	12	0	0
Inadequate Control of Open Fire	580	6	1
Cutting/Welding too Close	52	0	0
Children with/Child Playing	235	3	0
Fuel Spilled/Released Accidentally	24	1	0
Combustible too Close to Heat	77	4	0
Part failure,leak,break	173	3	0
Short Circuit/Ground Fault	240	8	0
Lack of Maintenance/Worn Out	650	1	4
Backfire	147	2	0
Property too Close To	99	4	1
Unattended	77	1	0
Rekindled from a Previous Fire	117	1	0

HOSTILE FIRES BY FORM OF IGNITION HEAT

	FIRES	INJURY	DEATH
Heat from Gas Fueled Equip.	76	5	0
Heat from Liquid Fueled Equip.	82	1	0
Heat From Solid Fueled Equip.	677	7	0
Short Circuit Arc/Mechanical	276	4	0
Arc From Faulty Contact/Loose Conn.	55	4	0
Cigarette/Cigar	123	3	1
Welding/Cutting Torch Operation	85	4	0
Match/Lighter	384	13	2
Open Fire or Flame	330	4	0
Backfire from Engine	135	0	0
Heat Spark from Friction	49	1	0
Hot Ember/Ash	118	1	0
Rekindle/Reignition	70	1	0
Properly Operating Elect. Equip	151	10	0
Fireworks	207	0	0

NOTE: This year we have listed only the top 15 Ignition Factors and Forms of Ignition.

1989 FIRE CASUALTIES

FIREFIGHTER CASUALTIES

SEX: Male 45
 Female 0

CASE SEVERITY

Minor 20
 Moderate 20
 Severe 2
 Life Threat 0
 D.O.A. 0
 Died Before Arrival 0

PATIENT TAKEN TO

Hospital 22
 Doctor's Office 6
 Medical Clinici 1
 Morgue 0
 Funeral Home 0
 Residence 0
 Not Transported 11
 At Scene 3

ASSIGNMENT

Fire Suppression 39
 Emergency Medical 2
 Fire Prevention 0
 Training 1
 Maintenance 2
 Fire Alarm 0
 Administrative 0
 Other 1

SEVERITY OF INJURY

Injury 45
 Death 0

CIVILIAN FIRE CASUALTIES

SEX: Male 47
 Female 28

PART OF BODY INJURED

Head/Neck 6
 Foot 1
 Arm 2
 Leg 3
 Hand 9
 Internal 18
 Multi Parts 26
 Other 3

NATURE OF INJURY

Burns & Smoke 9
 Burns Only 29
 Smoke Only 18
 Wound, Bleeding 4
 Disloc/Fracture 3
 Pain 1
 Shock 1
 Other 3

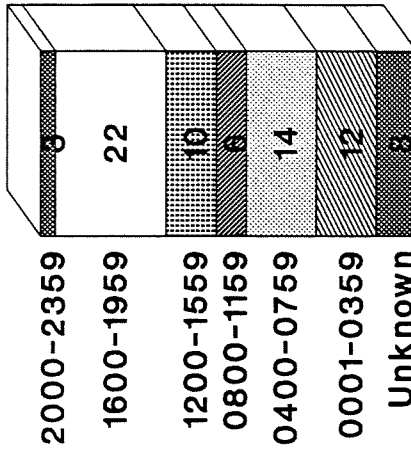
ACTIVITY AT INJURY

Escaping 11
 Rescue 1
 Fire Control 19
 Irrational Action 5
 Clean/Salvage 1
 Sleeping 9
 Unable to Act 1
 Other/Unknown 14

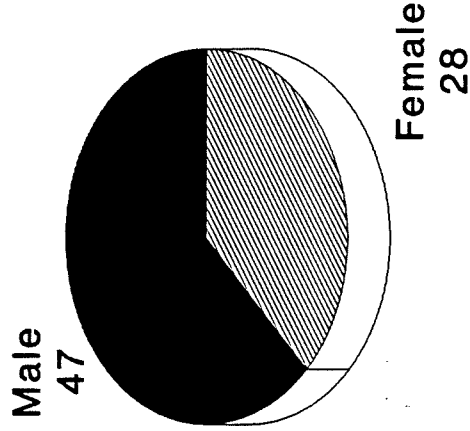
SEVERITY OF INJURY

Injury 61
 Death 14

1989 Casualties (Civilian)



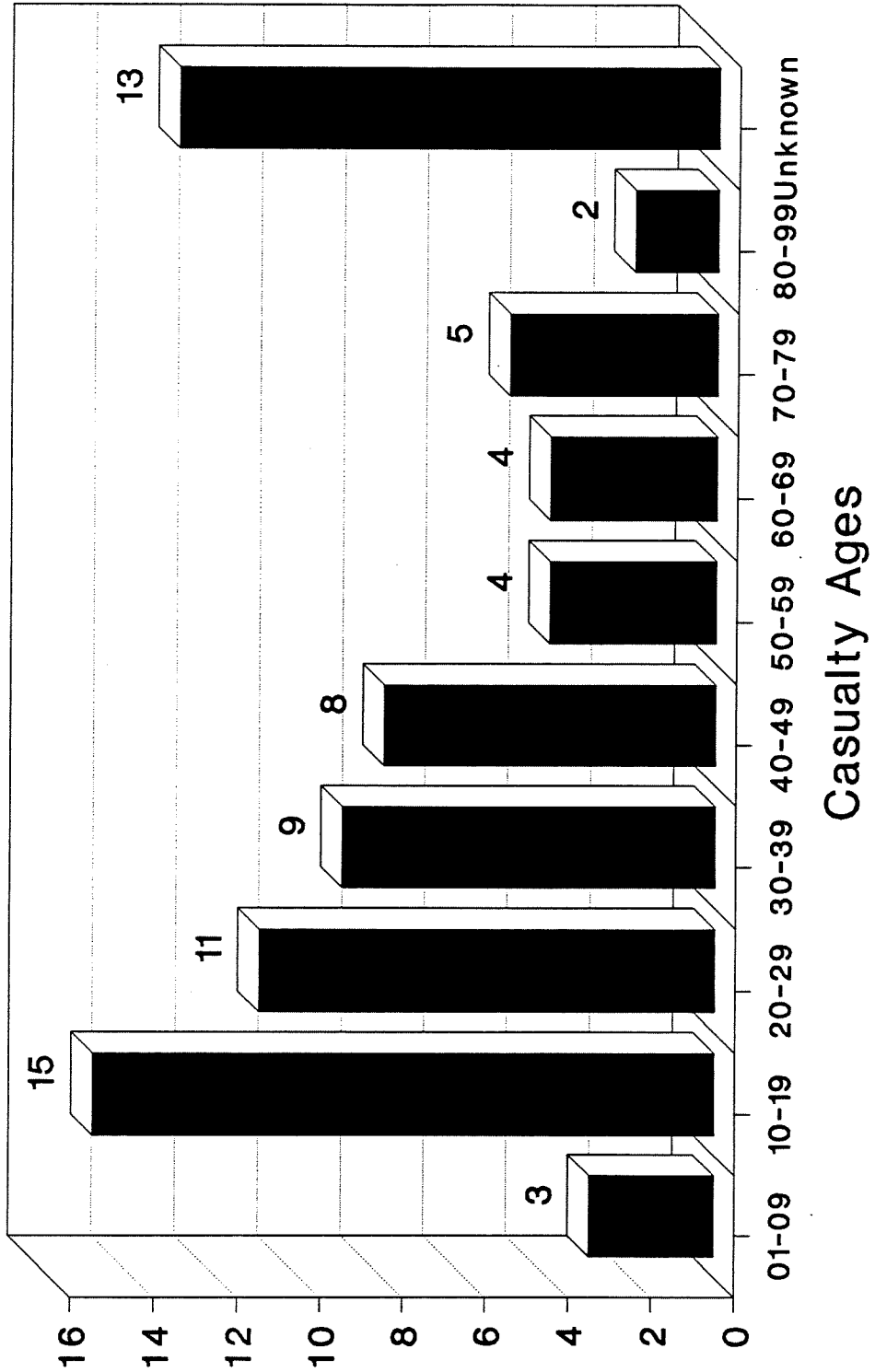
Time of Casualty



Sex

1989 CASUALTY REPORT

(Civilian)



IFIRS - 1989

FIREFIGHTER CASUALTIES

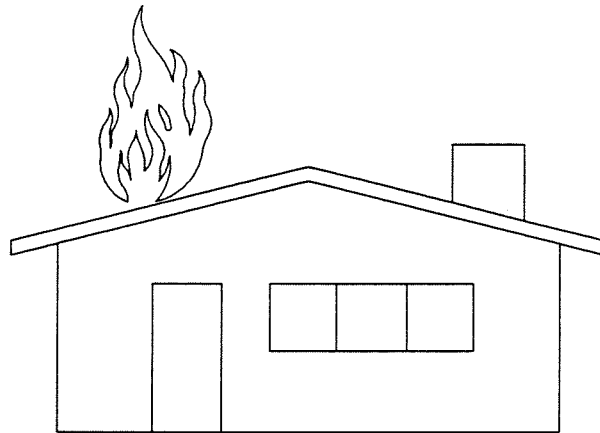
PART OF BODY INJURED		H/W	C/W	T/W	F/P	G/W	B/W	B/A
Number of Injuries								
Eye	1	1	1	1	0	1	1	0
Face	1	1	1	1	0	1	1	0
Neck	1	1	1	1	1	1	1	3
Head	1	0	1	1	1	1	1	0
Shoulder	1	1	1	1	1	1	1	1
Back-Lower	1	1	1	1	1	1	1	1
Trunk(Not class)	1	1	1	1	1	1	1	0
Chest	2	2	2	2	2	2	2	0
Arm-Lower	1	1	1	1	0	0	1	0
Hand	3	2	3	3	3	0	3	0
Fingers-Thumb	2	2	2	2	2	0	2	1
Back-Upper	2	1	2	2	2	2	2	0
Leg-upper	1	1	1	1	1	1	1	0
Leg-lower	1	1	1	1	1	1	1	0
Knee	8	7	7	8	7	8	8	2
Ankle	1	1	1	1	1	1	1	0
Foot	3	2	3	3	3	3	3	0
Lungs	9	2	2	2	0	2	2	0
Spine	2	2	2	2	2	2	2	2
Multiple Lower Body	1	1	1	1	1	1	1	1
Multiple All-Body	2	3	2	3	3	3	3	1
Unknown	0	0	0	1	0	0	1	0

H/W = Helmet Worn C/W = Coat Worn T/W = Trousers Worn
 F/P = Face Protection Worn G/W = Gloves Worn
 B/W = Boots Worn B/A = Breathing Apparatus Worn

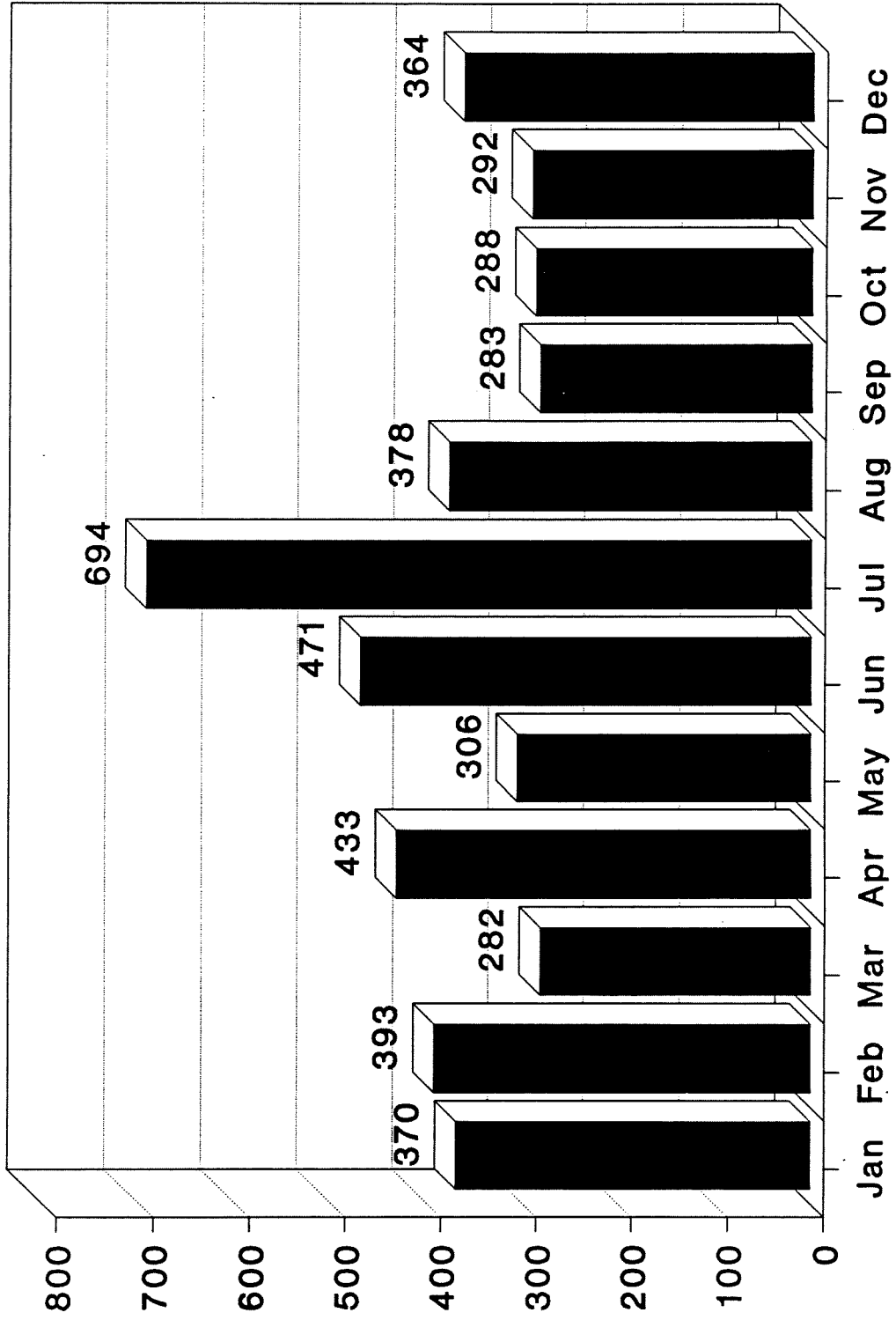
Note: The numbers above reflect the number of times protective gear was worn when an injury occurred to a certain part of the body.

1989 Fire Report

PART III - GRAPHIC ANALYSIS OF FIRE STATISTICS

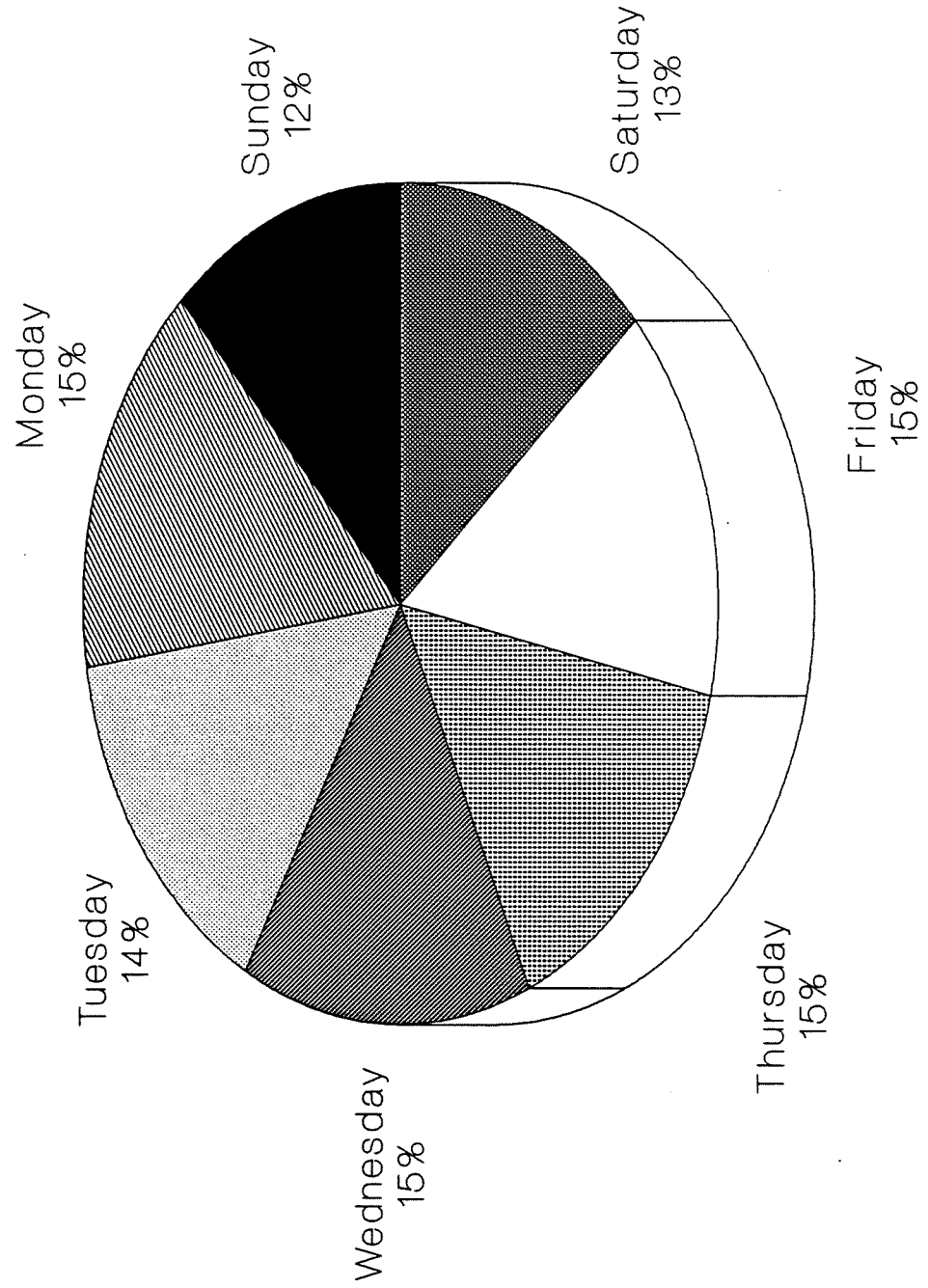


All FIRE Calls by Month



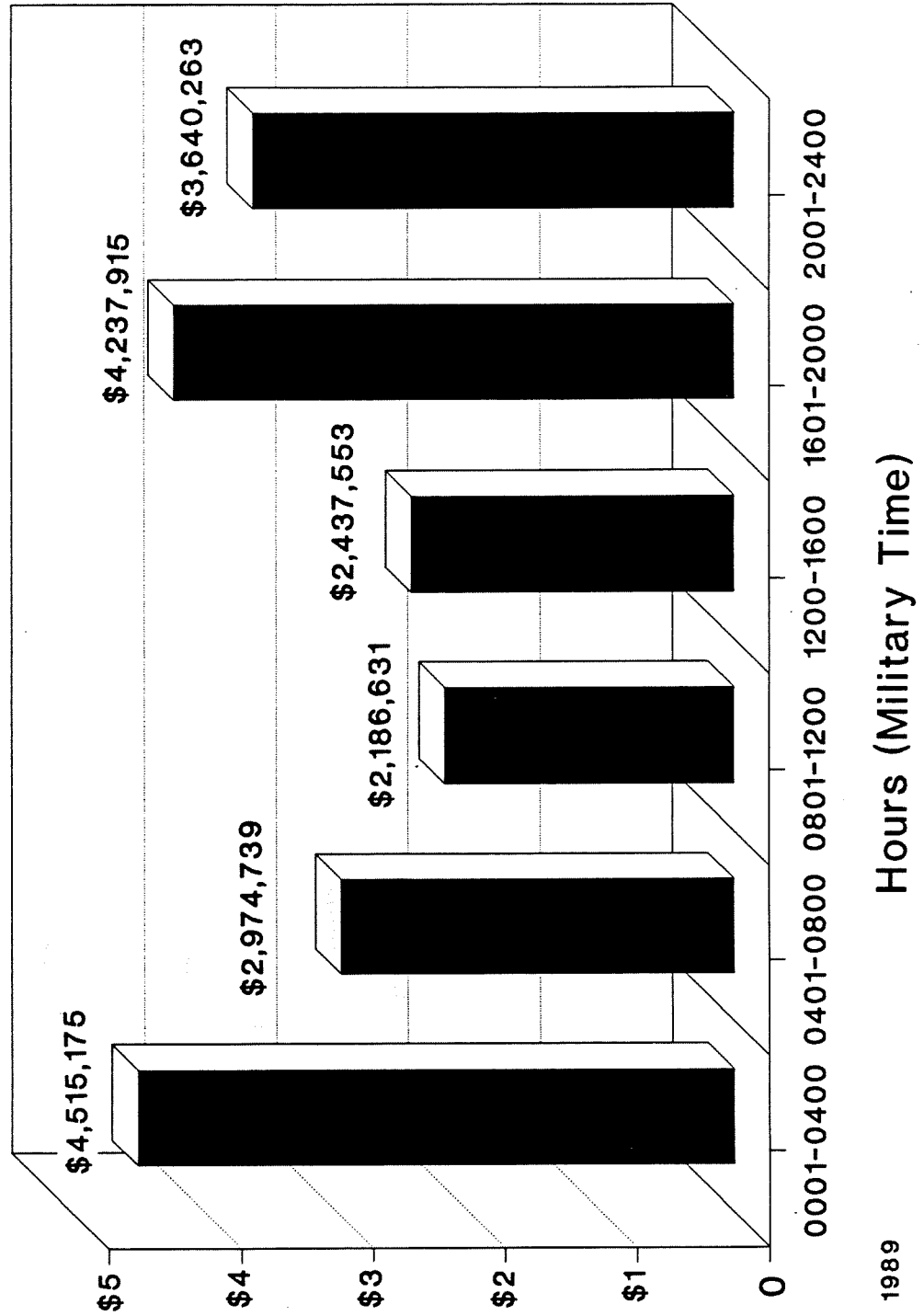
IFIRS - 1989

Fires by Day of Week



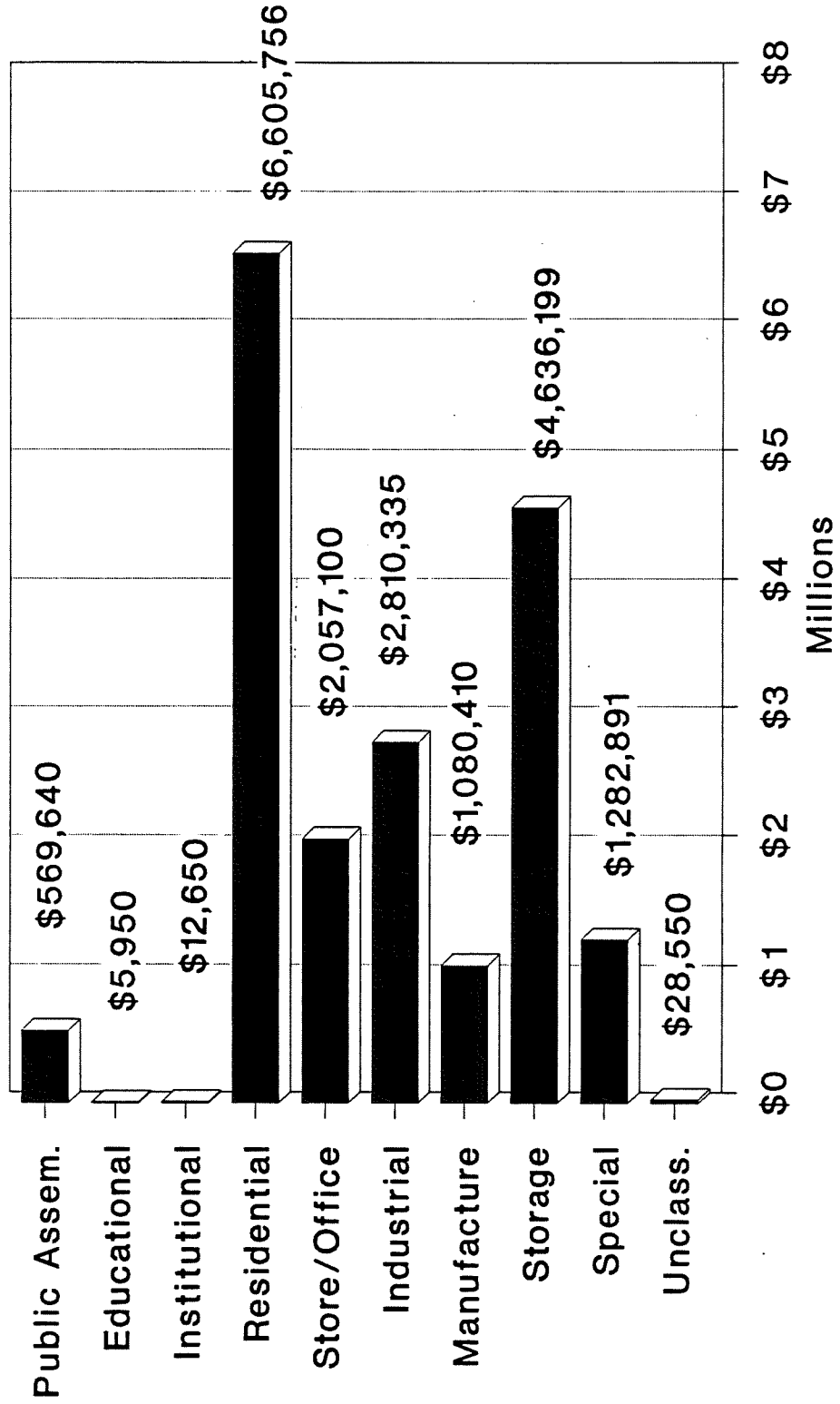
IFIRS - 1989

Alarm Time vs. Fire Loss Millions



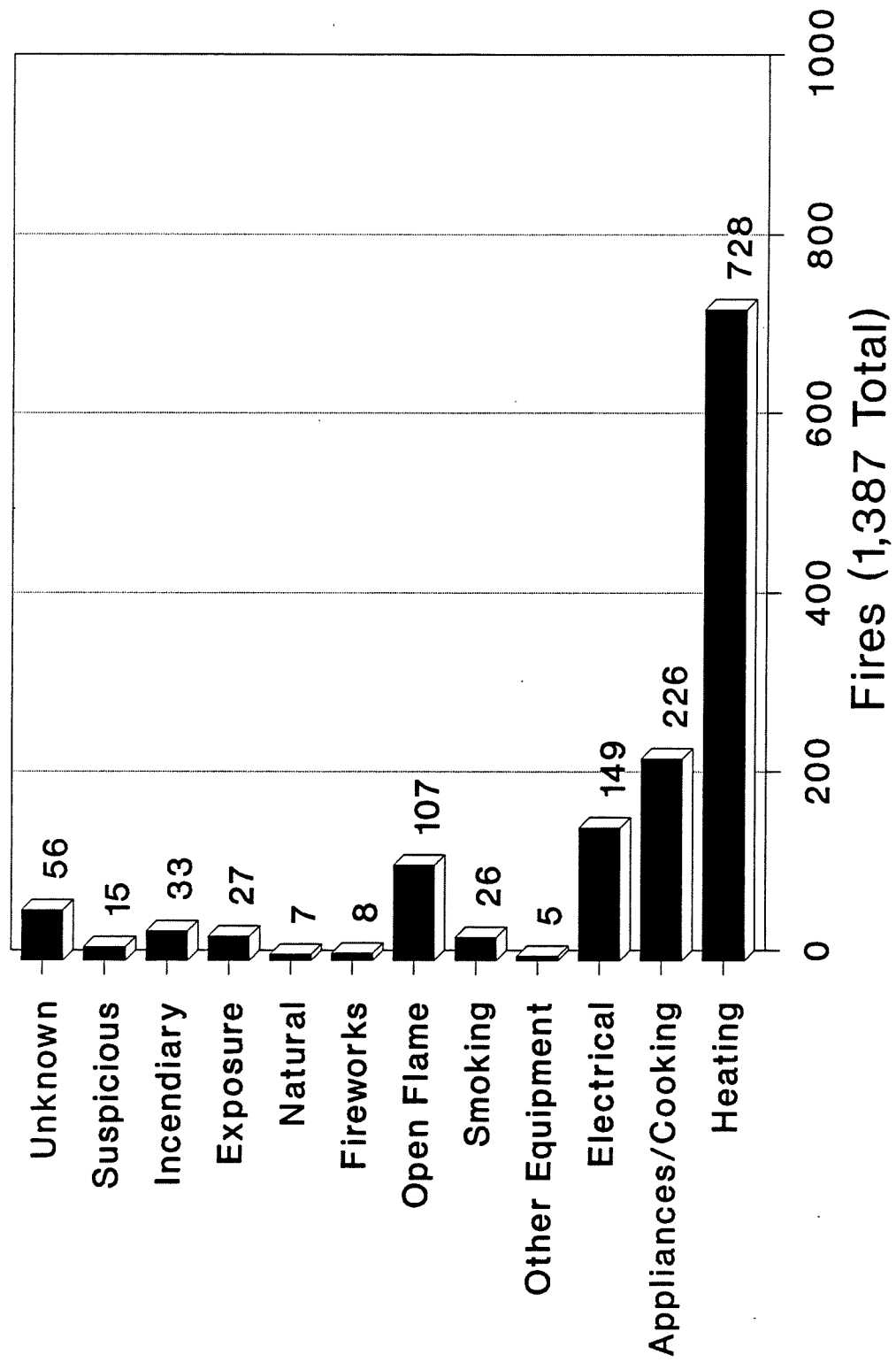
IFIRS - 1989

Structure Loss By Property Type



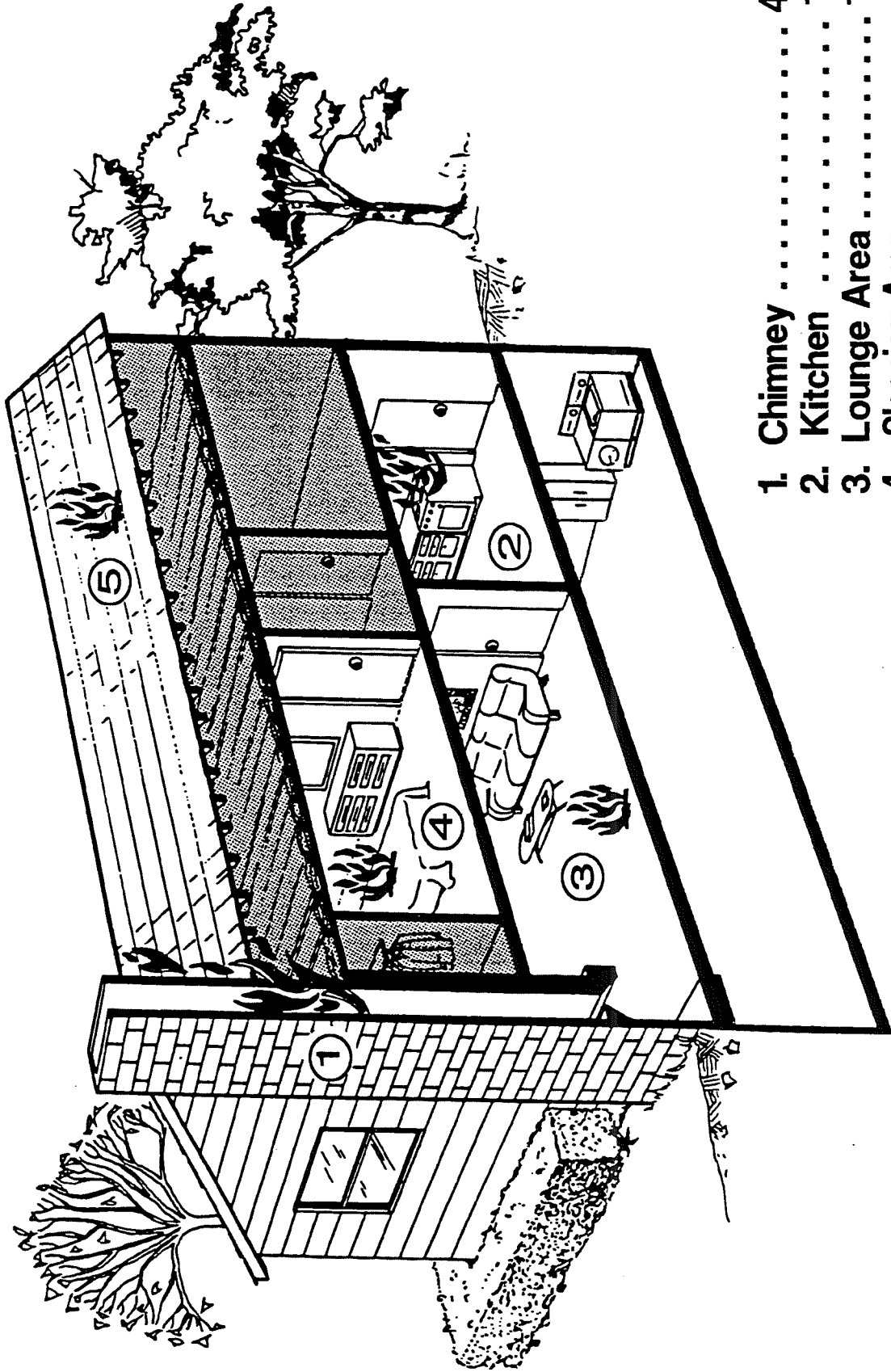
IFIRS - 1989

Residential Fires



IFIRS - 1989

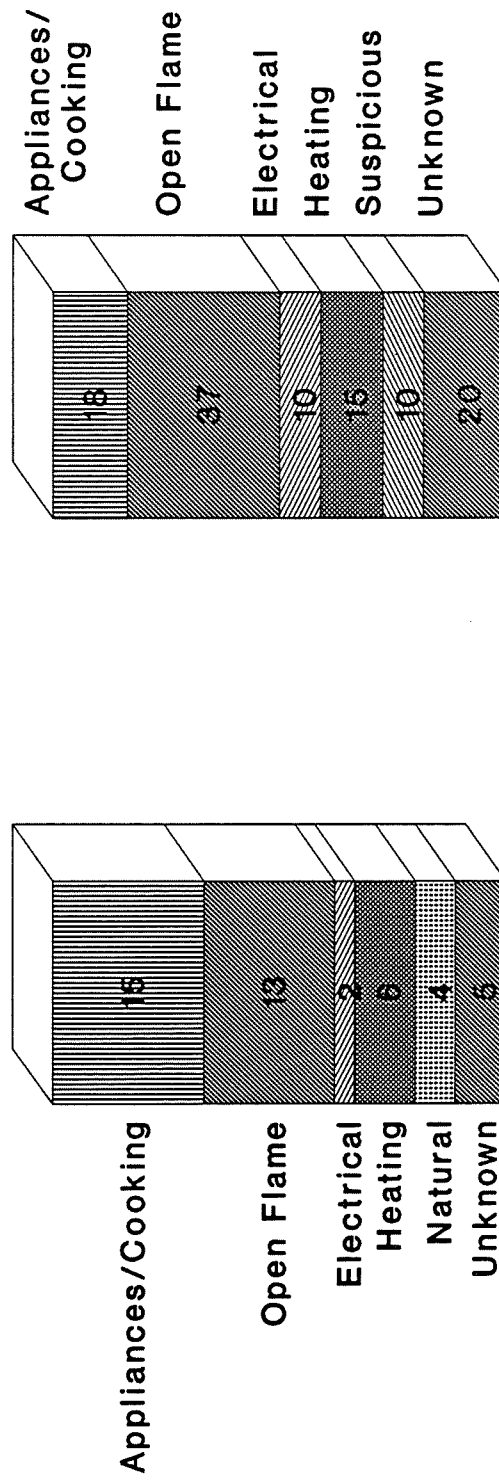
Leading Areas of Fire Origin in Residential Property in 1989



1. Chimney	42%
2. Kitchen	12%
3. Lounge Area	10%
4. Sleeping Area	5%
5. Ceiling/Roof Assembly	4%

Source: Idaho State Fire Reporting System

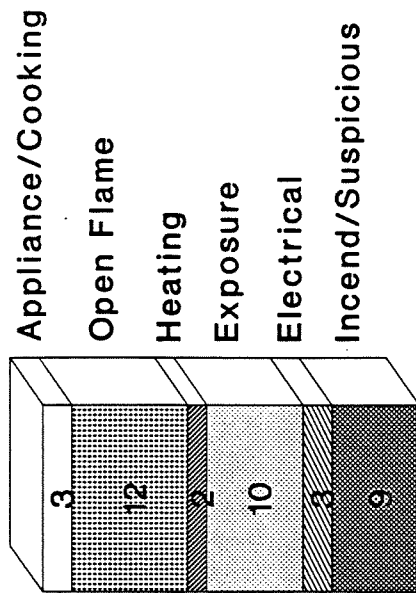
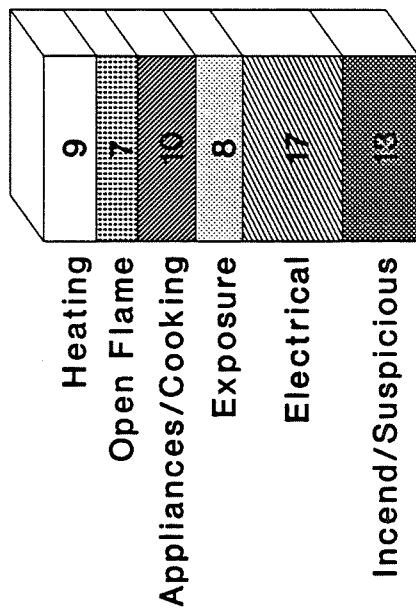
Fire Causes by Property Use (Top 6 Causes)



Manufacturing

Storage

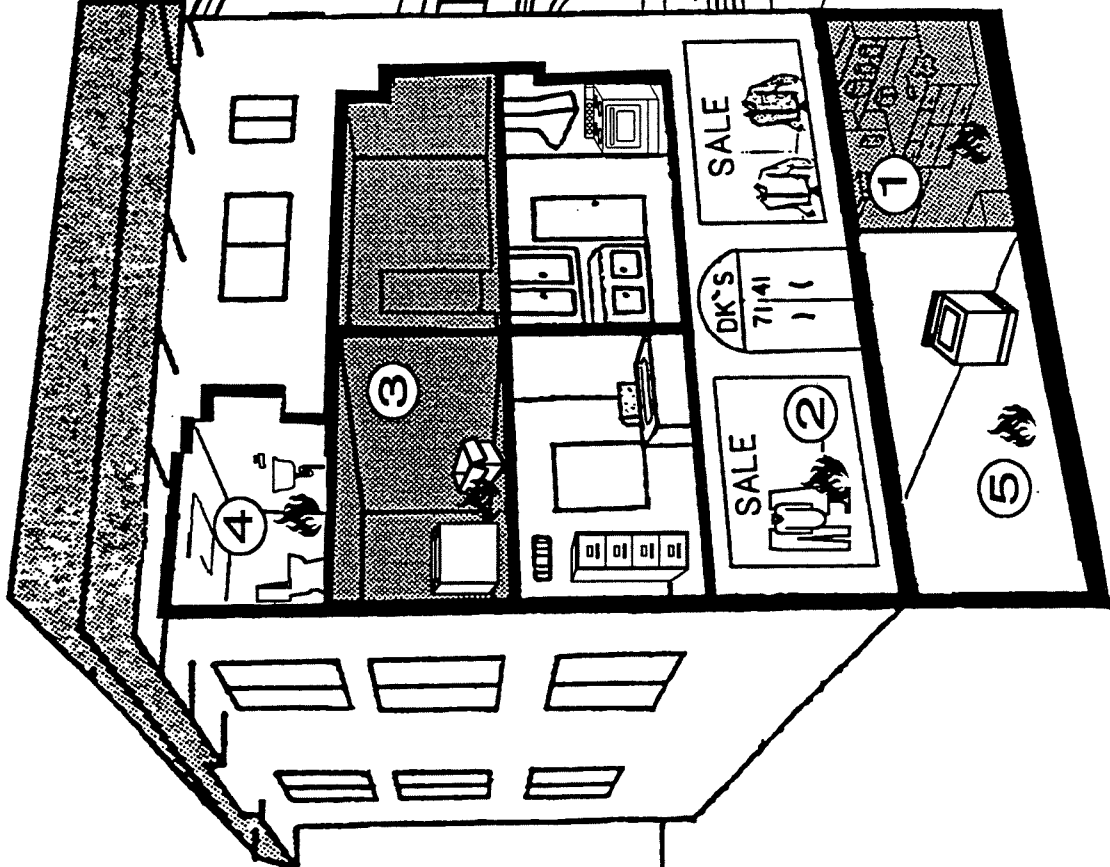
Fire Causes By Property Use (Top 6 Causes)



Special Properties

Store/Office

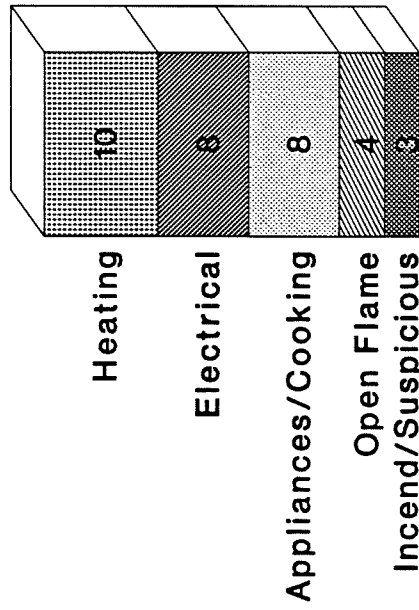
Leading Areas of Fire Origin in Store/Office Property in 1989



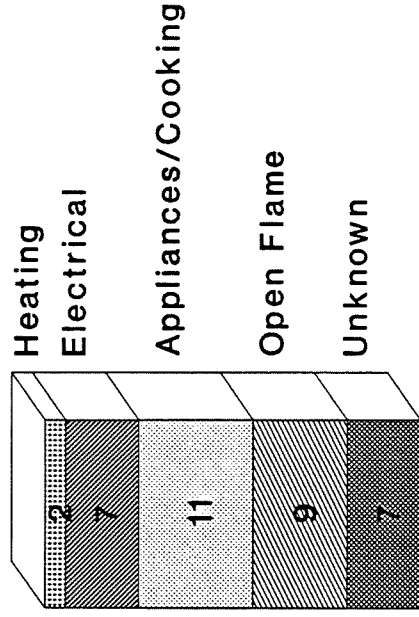
- 1. Maintenance/Shop Area 14%
- 2. Sales, Showroom Area 11%
- 3. Supply Storage Room/Area 9%
- 4. Lavatory/Locker Room 7%
- 5. Laundry Room/Area 5%

Source: Idaho State Fire Reporting System

Fire Causes by Property Use (Top 5 Causes)

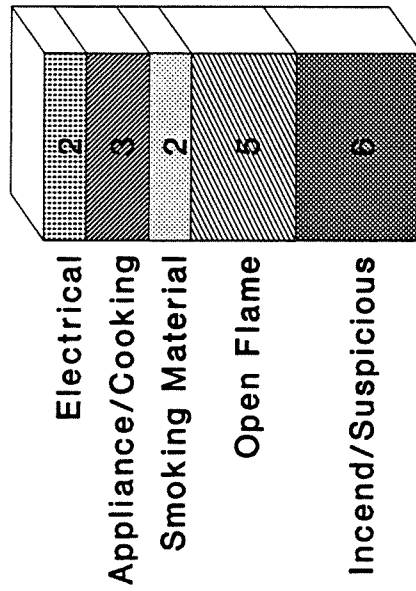


Public Assembly

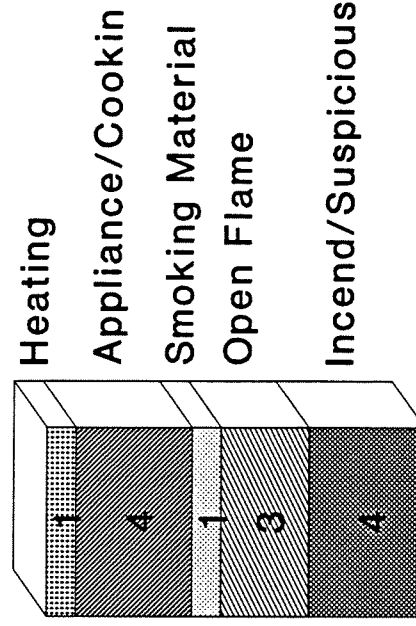


Basic Industry

Fire Causes by Property Type (Top 5 Causes)

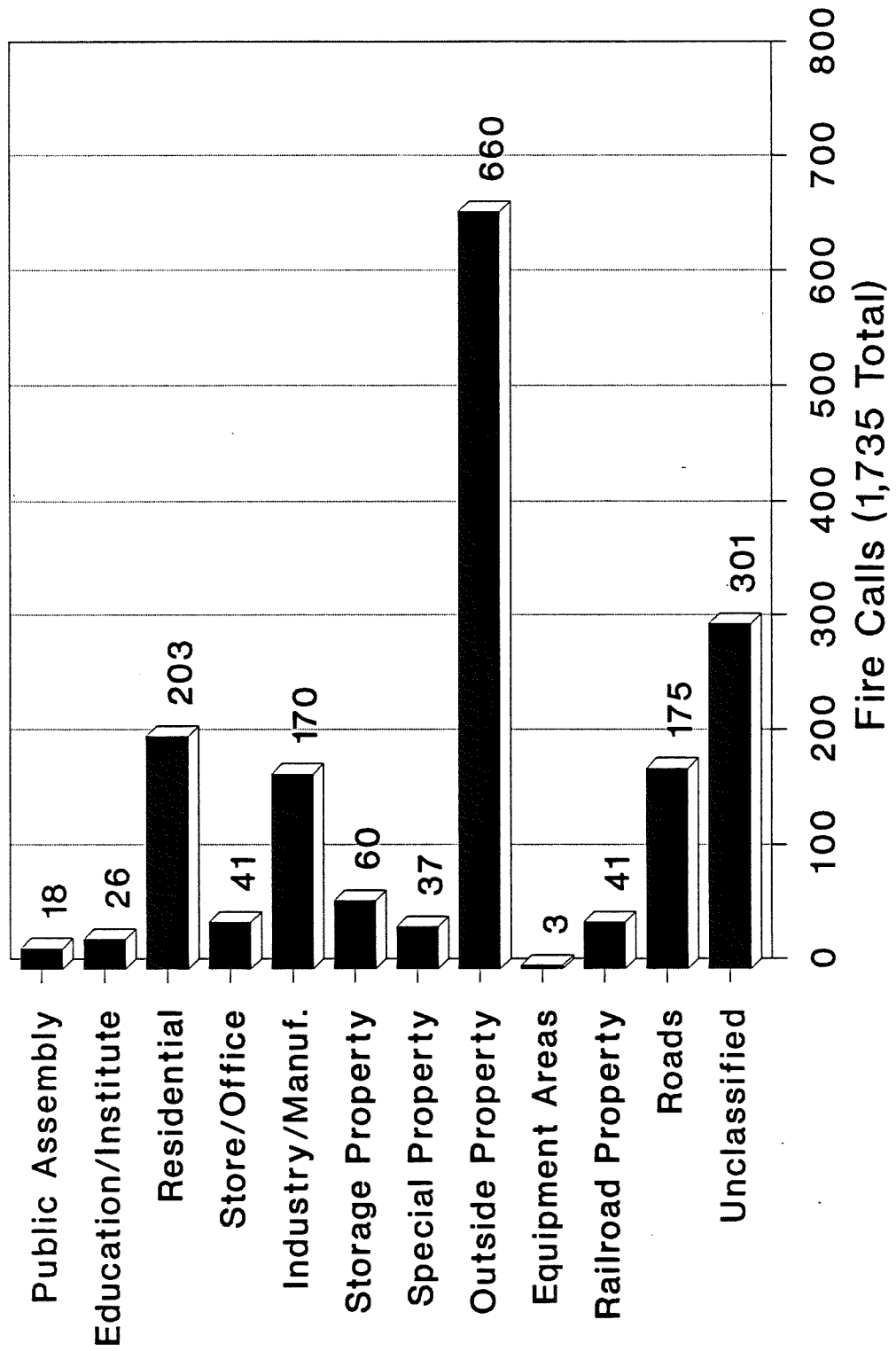


Institutional



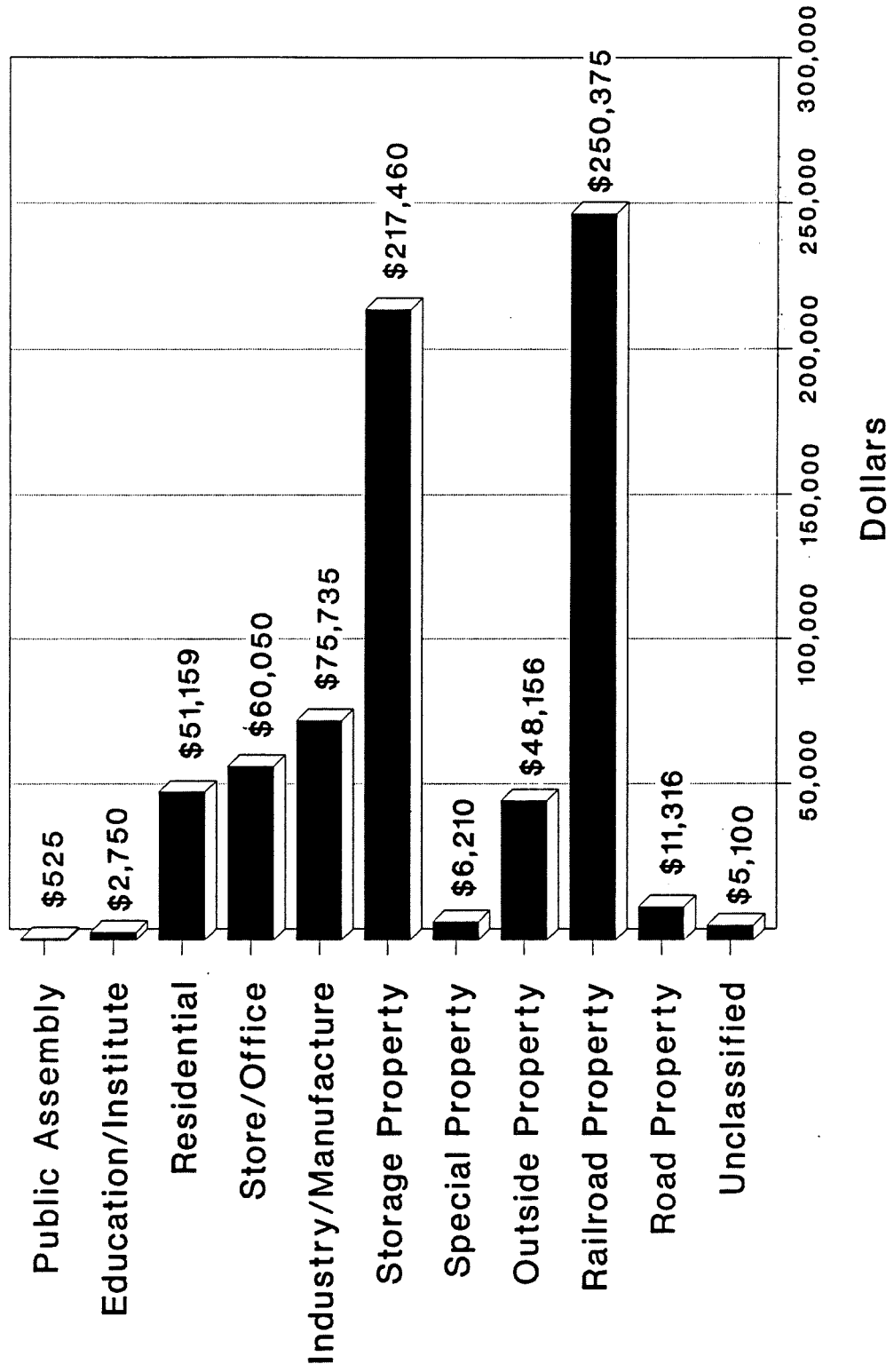
Educational

Outside Fire Calls



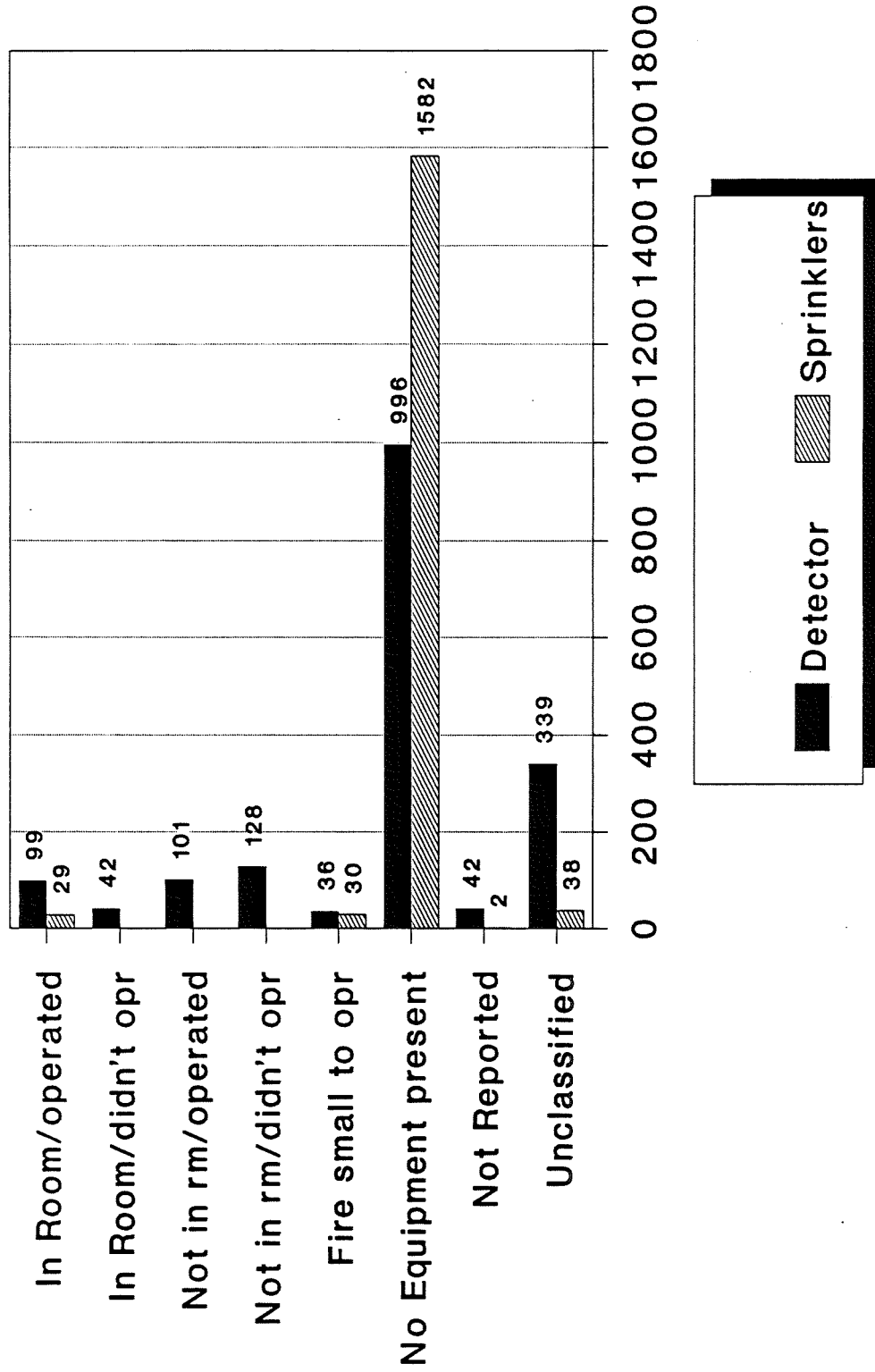
IFIRS - 1989

Outside Fire Losses



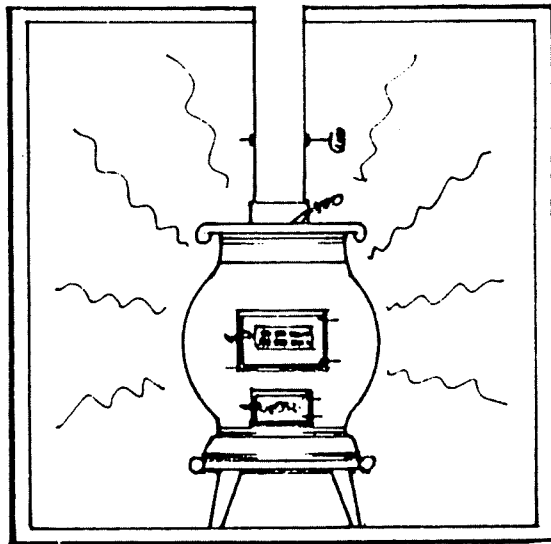
IFIRS - 1989

DETECTOR/SPRINKLER PERFORMANCE

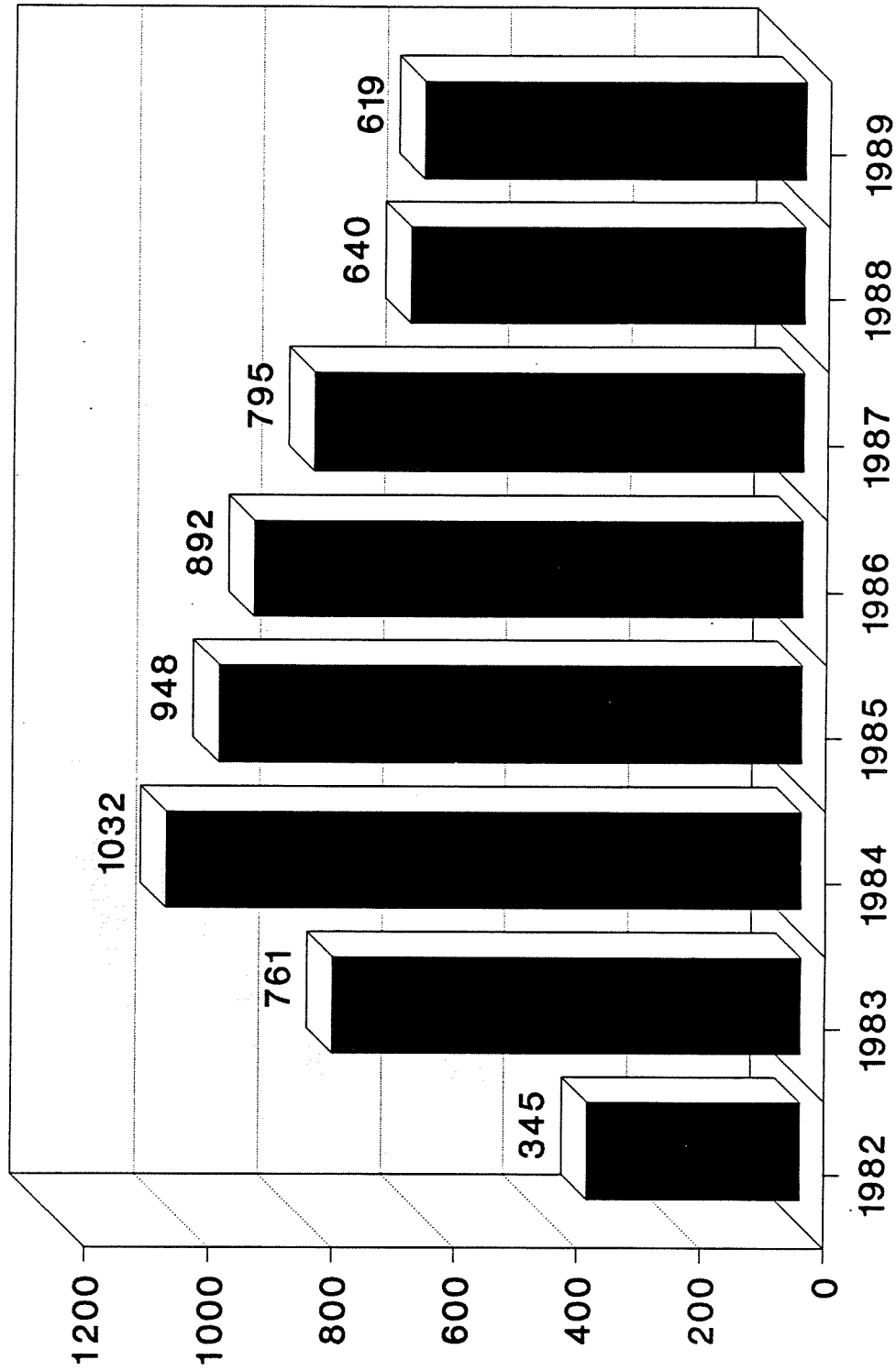


1989 Fire Report

**PART IV - A GRAPHIC STUDY
OF WOOD HEATING APPLIANCES**

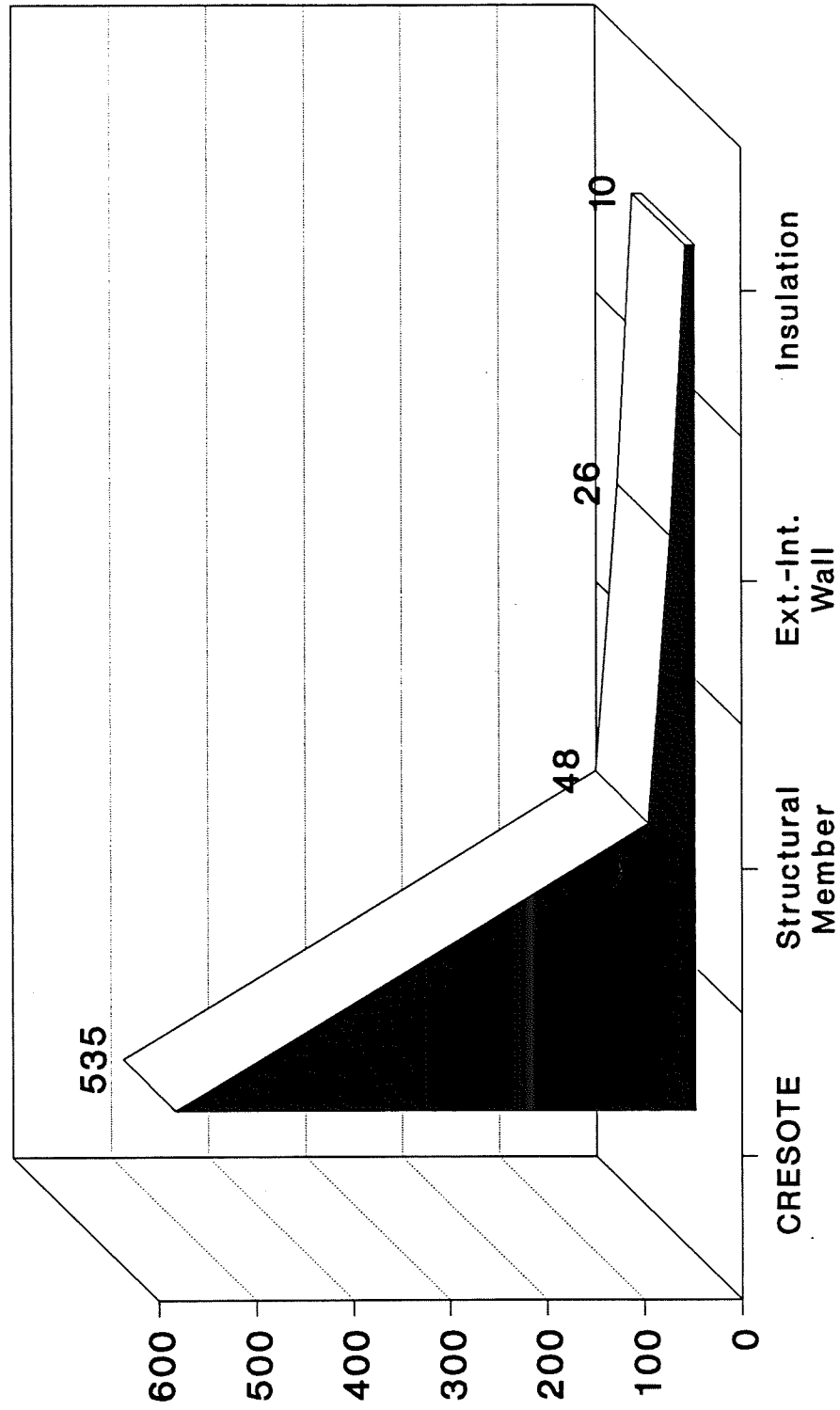


Solid Fuel Fires In Idaho (Residential Only)



IFIRS - 1989

Material First Ignited (Residential Woodstove Fires)



IFIRS - 1989

Wood Stove Fires Equipment Involved

