

SIXTH
ANNUAL REPORT
IDAHO FIRE STATISTICS

JANUARY 1, 1987 - DECEMBER 31, 1987



OFFICE OF THE STATE FIRE MARSHAL

W. K. "BILL" WALLIS

State Fire Marshal

DEPARTMENT OF INSURANCE

ANTHONY J. FAGIANO

Director

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1987 FIRE REPORT

PART I - ANNUAL REPORTS

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

**ANNUAL REPORT
BILL WALLIS
IDAHO STATE FIRE MARSHAL**

I am happy to report that what we set out to accomplish in 1982, when the office of the State Fire Marshal was created, is now a reality. There is much more that will need to be done, in the future, but I believe we have reached a level that will require some evaluation and contemplation. Any future growth of the office will be predicated upon the fire problems we face and the social/political scene. Also we have to recognize that Idaho's fire problems are to an acceptable level by most people's standards. This does not mean the fire service should not progress and keep pushing for those things that we know will make everyone's lives a little safer from fire.

Some things we should be striving for in the future are:

1. A statewide public fire education fire program that would reach all our citizens.
2. A required minimum standard fire training program for all firefighters.
3. A retirement program for volunteer firefighters.
4. Update our requirements for certification of fire inspectors.
5. A certification program for arson investigators.
6. A licensing program for portable fire extinguisher re-chargers, fixed fire systems, and fire alarm installers.
7. Adopt the Uniform Building Code statewide.
8. Legislation to create a uniform fireworks law.

The residential fire problem continues to be the area that needs work. Obviously we cannot, and do not want to, inspect these occupancies for fire hazards on a mandatory basis. So there is only one option left for us and that is through the public fire education process. This process should begin in the schools at the elementary level. This age group is the easiest to convince and develop good fire safety living habits for the rest of their lives. We cannot, however, forget the rest of the population. They too can be educated to do things safer. They are harder to convince, but we must keep trying. We must strive harder to see that every home has a working smoke detector. Notice I said a working detector. We are finding many that do not work any longer. We must develop maintenance programs to check these detectors. The best way to do this is with a voluntary home fire inspection program and the only way home fire inspection programs will work is to do it in the evening. In the majority of families both mother and father work and are not home during daytime hours. Another item we should keep pursuing is the residential fire sprinkler system. This device is the best form of fire protection I have seen for a home. But the only way residential fire sprinklers are going to become a factor is if the fire services promote them within their respective communities. The promotions will have to include mandatory ordinances for new construction and incentive programs for retrofits. Incentives for retrofits could include low interest loans, lower insurance rates, grants, subsidies, lower taxes etc.

We have to also keep in mind that along with more installations of fire protection equipment comes more maintenance problems. Fire departments should be thinking more and more about maintenance of all installed fire equipment in their planning. Every year more sprinklers, fixed systems, portable fire extinguishers, standpipes, detectors, and other sophisticated fire alarm systems are being installed. In most cases this equipment is crucial to the survival of the building and maybe its occupants if a fire occurs. The fire service must be the one to see that these things function as they are supposed to. I foresee the day, in the very near future, when fire departments will have a fleet of service vehicles manned with trained personnel to assure that the built-in fire appliances will work when called upon to do

so. Planning should be taking place for this right now. A good place to start would be to inventory all systems in your protection areas.

I believe we have learned a great deal since we started this office. We have learned what causes most fires and we have learned what type of occupancies and buildings are the most susceptible to fire. We have learned how to prevent most of these fires and we have learned that built-in fire protection devices are a viable tool we must start using in more buildings, if we are to do better. We have the knowledge to do better and we have the fire data to support what we are saying. What we need now is to take this knowledge into each of our communities and spread the word via education, ordinances and salesmanship. We are at a crossroads, if we follow the traditional approach we can expect to do no better than we are currently doing. We can and should take the next logical step and build a better delivery system for the future. If we are to succeed, future fire departments will have to include the prevention and engineering aspects of the fire delivery system as their number one priority. Lets start planning now.

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

The past year has been diverse and very interesting. I have had the opportunity to work with building officials, architects, engineers and developers on a number of projects.

One of the most enjoyable turn of events is that the fire service is taking more interest in their responsibilities for fire prevention, usually above the level of housekeeping inspection. The fire service is working more with building officials and asking the State Fire Marshal's Office for input and code interpretations in an honest effort toward solving their own fire prevention and protection problems.

Again, I think their desire to solve local problems is due to the ability of the State Fire Marshal's Office to respond to the needs of the fire service.

I assisted Sam Wylie in teaching the basic arson course at the annual arson school this year, we both thought it was a success. Lee Bright and I gave the Underground Storage Tank class at the annual Fire School in McCall. This class went well too.

I want to take this opportunity to thank all the people I have worked with in District I for their support and cooperation.

**DISTRICT II
FIRE PREVENTION
LEE BRIGHT
DEPUTY STATE FIRE MARSHAL**

During the past year, eight Underground Storage Tank classes, seven day care hearings, two sprinkler classes, one Uniform Fire Code class and one Fire Arson Detection class were delivered in District II.

As you can see from the aforementioned, two issues required a considerable amount of time. One of these, the day care licensing law, goes into effect March 1988. The other, E.P.A.'s regulation on underground storage tanks is due out sometime in 1988.

Many hours were spent developing day care fire safety regulations, holding public hearings and answering questions on the phone. This is a controversial issue and will continue to require time and effort in 1988.

There have been many questions addressed concerning the underground storage tank issue, but many remain unanswered. Hopefully, these concerns will be solved in the coming year. A lot of time was spent giving classes, researching the issues and attempting to answer questions.

Many requests for assistance were answered in District II. These covered a wide spectrum of concerns ranging from day care inspections to the demolition of buildings. Local assistance required a considerable amount of time and will continue to be a vital part of this office's function.

Two new and much needed projects will begin in District II in 1988. One being the construction of a new state prison, and the other a fire and life safety renovation of the present facility. Much time was spent on plans review and approval in 1987.

I would like to address the lack of public fire safety education in our state. We have applied our time and effort toward all areas of fire safety except, to a large extent, the human factor. Many of us take one week a year, show our fire truck, put on a skit and show a movie. This has been a tradition in the fire service. Dreaded by most of us and happy when it's over. We tend to forget that humans occupy buildings and it is human ignorance and carelessness that starts fires. If it is our responsibility to save lives and property, then this issue will have to be resolved before we are successful. Fire safety education should and must become a meaningful, worthwhile year-round project.

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

There has been a lot of activity in District III in 1987. I traveled approximately 25,000 miles within my district doing a variety of things. Six classes were presented, two in Fire Arson Detection and four in Underground Storage Tanks with 115 students attending. A number of building inspections were done mostly in conjunction with the local fire officials and/or building officials. Four schools were inspected at the request of either the school, fire chief, or patron. As a result, some violations were corrected and a better understanding of the code process came about.

After almost four years in the position, I find myself being used more as a resource in helping cities and fire districts as they attempt to enforce the fire code. This should become less as the certified inspectors become more comfortable in the administration of the code. I find that in addition to fire officials, mayors and other city officials, airport boards, contractors and others are requesting information about how to comply with the code.

One area of concern in this district is in our dealings with owners and installers of underground storage tanks. There is still a lot of misinformation regarding state laws versus federal laws. Many of the contractors are still not submitting plans for review prior to work starting.

We have been challenged and are in litigation about the use of above ground tanks being placed back in use without permission or inspections having been done. The conclusion of this case will have a great impact on future code enforcement for all of Idaho as well as other states.

In summary, it has been a most challenging year but a very good year with a lot of positive things being accomplished.

**DISTRICT I
ARSON/FRAUD INVESTIGATION
SAM WYLIE
DEPUTY STATE FIRE MARSHAL**

During the past year most of my time was devoted to liaison with fire personnel, law enforcement and the insurance industry.

The District I Office has opened a total of five fire investigations since May, 1987. One of them is currently pending action by the Bureau of Alcohol, Tobacco and Firearms. Another is being prepared for criminal prosecution to charge fraud involving a fire loss. One is currently an ongoing criminal investigation and the other two have been closed for lack of evidence.

Since May, 1987 the van has responded to 15 fires, 7 of which were determined as suspicious and were investigated by local authorities. In August, 1987 the van was utilized as a mobile command center by the Kootenai County Sheriff's Office in the infamous Twin Lakes Massacre.

In January, 1988 I responded with the van to a remote location near Laclede, Idaho and assisted Bonner County Sheriff's Officers in the recovery and identification of body parts from a burned residence, the result of a murder-suicide by a mentally disturbed black male.

I am still heavily involved in the North Idaho Fire Investigation Unit which has its good and bad days as far as active participation is concerned. At the present time interest in the unit has been waning with the exception of fire or six very active members.

In November, 1988 the North Idaho Fire Chiefs Association purchased a small electric refrigerator that is on loan to the van.

I feel that our presence in District I has had a significant impact on arson fires.

**DISTRICT II
ARSON/FRAUD INVESTIGATIONS
DON DILLARD
CHIEF DEPUTY STATE FIRE MARSHAL**

Organizing training exercises for the various arson task force teams has been one of the top priorities for District II's Arson/Fraud Unit. This training has been extended to include bomb scene investigation, a training exercise we hope to present to all arson task force teams statewide in the near future with the assistance of the Department of Alcohol, Tobacco and Firearms.

Out of the 15 counties covered by Region II of the State Fire Marshal's Office, all but four have various type arson task force teams in place and are doing well. In those areas where teams have been in place for a year or more we have seen a measurable reduction in arson related fires. The Arson Task Force Teams Program is effective in reducing arson fires.

It is our plan to continue to develop advanced training programs for field use and provide a modified arson team concept for those areas where multijurisdictional concepts are not adopted.

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

This past year has been a year of becoming oriented to, as-well-as meeting and working with law enforcement and fire departments in southeastern Idaho.

Investigative activities involved twelve fire scene investigations, plus three investigative assists to other agencies resulting in the following:

five arson investigations, resulting in three arrests and convictions, one of which lead to the issuance of an arrest warrant for parole violation and forwarding of information reference conspiracy charges in Utah relating to an arson in Idaho;

seven origin and cause investigations, three of which were suspicious in nature, all were deemed accidental after investigation;

three investigative assists to other agencies, one homicide, resulting in an arrest and conviction, and two insurance fraud investigations.

Arson task force activities involved assistance to law enforcement and fire departments in Minidoka/Cassia Counties; Bonneville County/Idaho Falls; and Bingham County/Blackfoot in completing development of their respective task forces as well as training programs.

Training activities involved conducting the following classes and training:

1 - origin and cause class, Bonneville County/Idaho Falls--15 students

9 - fire/arson van orientation classes--115 students

1 - fire/arson investigation techniques class (actual fire scene investigation, hands-on training, utilizing the arson van and equipment), involving Minidoka, Cassia and Jerome Counties--21 students.

All agencies contacted have expressed a need for additional training in fire/arson investigation.

Fire/arson van activities involved utilization of the van on seven investigations, including assisting Fremont County Sheriff's Office with a three day crime scene investigation of a homicide.

Up-grades in the fire/arson van included the individual keying of all evidence lockers; lockers labeled indicating contents to assist task force personnel with the location of equipment; installation of a telephone with land line connection capabilities to provide a secure means of communication; overhead racks for the storage of the graduated screens were made for all three of the vans and installed.

The availability of the various types of equipment, on-scene evidence storage, lighting and power system, as-well-as protection from the elements proved to be very productive and allowed for more comprehensive timely investigations.

My goals for next year are to complete any initial contact and then maintain contact with local and county fire and law enforcement agencies. To continue to assist with the organization of arson task force teams. To provide and up-grade practical training in arson investigation technics and continue to provide direct assistance with the investigation of arson and suspicious fires in District III.

PREVENTION/ARSON ACTIVITY REPORT
SUMMARY FOR 1987

PREVENTION

Fire Inspections.....	138
Fire/Arson Investigations.....	69
Fire Code Interpretations.....	360
Business Meetings.....	361
Assistance/Official Contacts.....	65
Public Appearances.....	48
Training Courses.....	37
Schools/Seminars Attended.....	17
Fire Losses from Insurance.....	\$26,128,307

ARSON/FRAUD

*Total Criminal Cases Investigated	65
Region #1	6
Region #2	44
Region #3	15
Arson	24
Fire	17
Other	24
Cases cleared	29
Cases pending	37
Cases referred to prosecuting attorney	8

*The above cases do not include investigations where the State Fire Marshal's Office did only the origin and cause and/or provided only technical assistance and cases later submitted and/or concluded by local agencies.

The Arson/Fraud Unit has now organized and trained eleven arson task force teams made up of single and/or multi-county jurisdiction. We have five additional teams in the early organizational stage. For the year 1988, it is this unit's goal to organize the remaining state areas interested in forming arson task force teams and further to provide improved training programs in arson detection and investigation techniques.

Also in the up-coming year we hope to initiate our fire investigator certification program available to all interested government agencies. An extensive training program is currently being developed by the State Fire Marshal's Office for presentation by the Arson/Fraud Unit to local agency personnel interested in certification.

It should be a fruitful year for the Arson/Fraud Unit for those who want to take advantage of our expertise and training programs.

ANNUAL REPORT
RUBY ANDRIDGE
SECRETARY/OFFICE COORDINATOR

Certified Fire Inspectors - As of December 1987 there were 361 certified fire inspectors in the state which included 13 new applications received during the year. To be certified, interested parties are to be endorsed by a fire department or other government unit official, complete a 24 hour Basic Uniform Fire Code class, and receive a passing grade on the exam.

Fire Protection Sprinkler Contractors - The licensing of Sprinkler Contractor's became effective December 31, 1986. As of December 31, 1987, 23 applications had been received and approved. All contractors who undertake to design, install, modify, alter, repair, maintenance or maintenance inspection of any fire protection sprinkler system must be licensed. To be licensed, a contractor must meet qualifying standards and financial requirements.

Design Requirements - Herb Keen, plans reviewer, received and approved 135 sets of fire protection sprinkler plans which were submitted by licensed contractors during this period.

Fire Protection Sprinkler Fitters - Licensing became effective December 31, 1986 on an optional basis. There were 50 initial applications received and approved to be licensed as Sprinkler Fitters for 1987. By December 31, 1987 there were 36 renewal applications received for the coming year.

1987 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 be impossible.

IDAHO FIRE INCIDENT SUMMARY

Situation Found Category	Incidents	
Building Fires	1,947	
Vehicle Fires	708	
All Other Fires	2,442	
TOTAL Fires	5,095	(4,857 Hostile Fires)
Overpressure Ruptures	29	
Rescue Calls	153	
Hazardous Conditions	835	
Service Calls	503	
Good Intent Calls	1,581	
False/Malicious Calls	1,477	
All Other Calls	19	
TOTAL Incidents Reported	9,692	
Times Mutual Aid Given	398	
Times Mutual Aid Recvd	247	
TOTAL Fire Dollar Loss	\$16,715,482	
Fires reporting NO loss	2,883	
Civilian Fire Injuries	18	
Civilian Fire Deaths	7	
Fire Service Injuries	50	
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	1109 1239	10	1	3771919	191543	19.692283	12.14
Adams	No Depts. Reporting			0	3436	0	
Bannock	271 32x	3	0	808012	68866	11.733105	8.57
Bear Lake	46	0	0	199800	6832	29.244731	11.08
Benewah	50 43	0	1	85750 8432	8611	9.958193	6.35
Bingham	No Depts. Reporting			0	38710	0	
Blaine	83 8	1	0	881355	12908	68.279749	22.22
Boise	No Depts. Reporting			0	3097	0	
Bonner	173 149	0	0	293710 1,085,675	25998	11.297407	42.92
Bonneville	200 151	2	0 440,495	597815	70605	8.4670349	6.24
Boundary	18 0	0	0	7750	7734	1.0020688	
Butte	No Depts. Reporting			0	3373	0	
Camas	No Depts. Reporting			0	750	0	
Canyon	600 579	13	0 739,635	2258840	89198	25.323886	82.92
Caribou	20 15	0	0 35,201	102650	8479	12.10638	4.15
Cassia	17 125	1	0 819,275	251735	20738	12.138827	39.51
Clark	No Depts. Reporting			0	764	0	
Clearwater	58 44	7	0 67,130	253075	10015	25.269596	6.70
Custer	79 18	1	0 54,215	126400	5186	24.373313	10.45
Elmore	23 118	0	0 327,205	374100	22194	16.855907	14.74
Franklin	18 59	0	0 179,326	1035800	9548	108.48345	18.78
Fremont	9 0	0	1	44300	10778	4.1102245	
Gem	No Depts. Reporting			0	11811	0	
Gooding	42 48	0	0 310,950	379500	12326	30.788577	25.77
Idaho	(4) 467 7 19	0	0 31,550	73100	83530	0.8751347	2.32
Jerome	142 152	0	0 300,090	69416	15557	4.4620428	19.29
Kootenai	535 510	4	3 1,749,072	781825	67157	11.64175	26.25
Latah	89 85	9	0 77,520	393000	30496	12.886936	2.51
Lemhi	No Depts. Reporting			0	7525	0	
Lewis	13 1	1	0	163050	3810	42.795276	
Lincoln	11 10	0	0 32,000	854400	3431	249.02361	9.53
Madison	106 136	0	0 1,316,781	109395	21786	5.021344	60.20
Minidoka	190 162	1	0 2,2710	802240	21426	37.44236	11.23
Nez Perce	156 12	5	0 14,950	1132440	33399	33.906404	6.45
Oneida	No Depts. Reporting			0	3497	0	
Owyhee	2 0	0	1	6500	8551	0.760145	
Payette	120 135	3	0 246,274	74025	16136	16.982214	19.20
Power	No Depts. Reporting			0	6955	0	
Shoshone	126 110	2	0 110,430	191765	16787	11.423423	6.58
Teton	38 54	2	0 534,115	57640	3130	18.415335	177.03
Twin Falls	242 72	4	0 93,783	3846901	56056	15.108124	1.67
Valley	41 22	0	0 47,236	83750	6725	12.453532	7.02
Washington	34 29	0	0 32,175	72290	8304	8.7054432	5.12
TOTALS	4798	69	7	17384248	1057758	16.434996	

4385

18,943,037

HOSTILE FIRES BY COMPLEX

	FIRES	INJURY	DEATHS	LOSS
Public Recreation Complex	16	0	0	350
Stadium, Exhibition Hall	7	0	0	12,850
Club Complex	6	0	0	100
Educational Complex	47	3	0	711,420
Medical Care Complex	22	0	0	47,900
Prison Complex	3	0	0	375
Business w/Resid. Complex	28	0	0	400,365
Dwelling (one-two family)	1,854	35	3	7,600,114
Apartment	83	4	1	335,270
Hotel	21	0	0	18,040
Mobile Home Park	20	0	0	67,350
Shopping Complex	102	0	0	407,970
Office Complex	22	0	0	39,718
Power Production	4	0	0	1,050
Military,Reservation,Defense	1	0	0	500
Farm	489	6	0	1,721,541
Indian Reservation	2	0	0	-0-
Industrial Plant, Manufact.	74	0	0	927,617
Warehouse, Storage	74	3	0	1,781,810
Construction	11	0	0	1,700
Campsite	17	2	0	25,400
Waterfront	10	0	0	-0-
Railroad Transport	37	0	0	55,725
Road	457	4	0	415,028
Airport	7	0	0	11,400
No Complex	1,405	11	3	2,077,864
Not elsewhere classified	37	0	0	54,025
Complex unknown/not reported	1	0	0	-0-
TOTAL ALL FIRES/BY COMPLEX	4,857	68	7	16,715,482

HOSTILE FIRES BY AREA OF ORIGIN

	FIRES	INJURY	DEATHS
Hallway, Corridor, Mall	8	1	0
Exterior/Interior Stairway	6	0	0
Lobby, Entrance Way	5	0	0
Large open room/assembly area	3	1	0
Small assembly area/lounge area	197	7	1
Sales/showroom area	3	0	0
Sleeping room	85	1	1
Dining, lunchroom, cafeteria	11	3	0
Kitchen, cooking area	194	5	0
Lavatory, locker room, cloakroom	31	0	0
Laundry room, area	36	2	0
Office/Personal Service Area	9	0	0
Operating/First Aid Room	3	0	0
Electronic Equip. Room	2	0	0
Perform/stage/project. area	3	0	0
Process Manufacturing Area	10	0	0
Product Storage Areas	38	1	0
Closet	18	7	0
Supply/Records Storage Area	38	3	0
Shipping, Receiving, Loading Area	3	0	0
Trash or Rubbish Area, Container	193	0	0
Garage/Carport/Vehicle Storage	71	6	0
Utility Shaft, Chute	10	0	0
Chimney, Conveyor, Duct, Chute	628	2	0
Machinery Room Area	14	0	0
Heating Equip./Water Heater Area	30	3	0
Inciner./Transform/Switchgear Area	15	0	0
Maintenance Shop, Area	22	1	0
Crawl Space, Substructure Space	33	0	0
Ext. Balcony, Open Porch, Patio, Terr.	21	0	0
Ceiling, Floor, Roof Assembly	97	5	0
Wall Assembly	48	0	0
Exterior Wall Surface	91	2	0
Exterior Roof Surface/Awning	39	0	0
Passenger Area of Transport Equip.	63	0	0
Trunk, Load Carrying Area	29	2	0
Engine Area/Running Gear/Wheel	473	3	0
Fuel Tank, Fuel Line Area	19	0	2
Operating, Control Area	30	1	0
Exterior Exposed Surface	28	1	0
On or Near Railroad Right of Way	34	0	0
Highway, Public Way, Street	200	0	0
Lawn, Field, Open area	1,632	8	0
Wildland Area, Woods	66	0	0
Multiple Location, Use Area	9	1	0
ORIGIN Unk, not reported	106	0	2
ORIGIN n/applicable or classified	153	2	1
TOTAL ALL FIRES-AREA OF ORIGIN	4,857	68	7

X

HOSTILE FIRES BY FORM OF IGNITION HEAT

	FIRES	INJURY	DEATH
Fuel-Fired/Power Equip.-Insuffic.	11	0	0
Spark, ember, flame/gas fueled eq.	29	1	0
Heat from gas fueled equip.	66	3	0
Spark, ember, flame/liquid fuel eq.	35	0	0
Heat from liquid fueled equip.	79	2	0
Spark flame-solid fueled equip.	28	1	0
Heat from solid fueled equip.	772	4	1
Spark, flame from equip.fuel unk.	7	0	0
Heat from fuel power/fired eq.unk	10	0	2
Electrical- insuffic. info	35	0	0
Water caused short circuit arc	8	0	0
Short circuit arc/mechanical	45	1	0
Short circuit arc/worn insulation	65	1	0
Unspecified short circuit arc	192	3	0
Arc from faulty contct, loose conn.	25	0	0
Arc, spark from operating equip.	25	0	0
Heat from overloaded equip.	26	0	0
Fluorescent light ballast	12	0	0
Heat from Smoking Mat.-Insuff.	12	1	0
Cigarette	136	4	3
Heat fm Open Flame/Spark Insuff.	75	1	0
Weld/Cutting Torch Operation	60	2	0
Torch oper.not cutting/welding	17	5	0
Candle, taper	13	0	0
Match/Lighter	439	5	0
Open fire or flame	731	4	1
Backfire from engine	145	2	0
Heat from hot object-insuff.info	21	2	0
Heat spark from friction	37	0	0
Molten, hot material	10	1	0
Hot ember, ash	107	0	0
Electric lamp	19	0	0
Rekindle, reignition	112	0	0
Properly opert.elec. equip.	162	1	0
Improperly opert. elec. equip.	36	0	0
Explosive, blast agent, party pop	4	0	0
Fireworks	172	1	0
Incendiary device	7	0	0
Sun's heat	5	0	0
Spontaneous ignit./chemical react	46	1	0
Lighting discharge	31	0	0
Direct Flame	51	2	0
Radiated Heat	22	0	0
Flying brand, ember, spark	8	0	0
Multiple forms (multiple ignit.)	4	1	0
Form of Heat/not classified	117	0	0
Heat Form Unknown or Not Reported	788	19	0
 Total All Fires - Form of Heat	 4,857	 68	 7

X - 88'

HOSTILE FIRES BY IGNITION FACTOR

	FIRES	INJURY	DEATH
Incendiary/not during civil dist.	135	3	0
Suspicious/" "	255	13	0
Abandoned discarded material	234	3	0
Thawing	8	0	0
Falling asleep	7	2	2
Inadequate control of open fire	588	4	1
Cutting, welding too close	54	3	0
Children with, child playing	268	0	0
Unconscious, mental/phys impair.	2	0	0
Misuse of heat/not classified	54	4	1
Fuel spilled, release accidentally	31	2	0
Improper fueling technique	13	2	0
Flamm. liquid used to kindle fire	7	1	0
Washing part, cleaning, painting	1	0	0
Improper container	12	0	0
Combustible too close to heat	93	1	0
Improper storage	16	0	0
Children with, children playing	122	1	0
Misuse of material/not classified	33	0	0
Part failure, leak, break	164	2	2
Automat/Manual control failure	25	0	0
Short circuit, ground fault	263	3	0
Other electrical failure	88	0	0
Lack of maintenance, worn out	709	2	0
Backfire	149	1	0
Mechanical failure/not classif.	34	0	0
Design/Const. deficiency	30	0	0
Installed too close to combust	62	2	0
Other installation deficiency	12	0	0
Property too close	109	1	0
Design/Const/Instal/not classif.	6	0	0
Collision, overturn, knockdown	17	1	0
Accidentally turned on	24	0	0
Unattended	102	0	0
Overloaded	9	0	0
Spontaneous heating	45	1	0
Improper startup, shutdown proced.	6	0	0
Operational deficiency/not class.	24	0	0
High wind	46	0	0
Lightning	30	0	0
Natural condition/not classified	7	0	0
Animal	1	0	0
Rekindled from previous fire	144	0	0
Not Applicable	47	0	0
Other Fires Not Classif. by code	148	4	0
Cause unknown or not reported	623	12	1
TOTAL OF ALL FIRE CAUSES	4,857	68	7

X

1987 FIRE CASUALTIES

FIREFIGHTER CASUALTIES

CIVILIAN FIRE CASUALTIES

SEX: Male 49
 Female 1

SEX: Male 34
 Female 6

CASE SEVERITY

PART OF BODY INJURED

Minor 26
 Moderate 13
 Severe 11
 Life Threat 0
 D.O.A. 0
 Died Before Arrival 0

Head/Neck 1
 Body, Trunk, Back 2
 Arm 1
 Leg 2
 Hand 7
 Internal 11
 Multi Parts 13
 Other 1

PATIENT TAKEN TO

NATURE OF INJURY

Hospital 31
 Doctor's Office 4
 Long Term Care 0
 Morgue 0
 Funeral Home 0
 Residence 0
 Not Transported 14
 Other 1

Burns & Smoke 7
 Burns Only 15
 Smoke Only 7
 Wound, Bleeding 2
 Disloc/Fracture 2
 Pain 3
 Shock 2
 Other 2

ASSIGNMENT

ACTIVITY AT INJURY

Fire Suppression 41
 Emergency Medical 1
 Fire Prevention 0
 Training 0
 Maintenance 0
 Fire Alarm 0
 Administrative 0
 Other 8

Escaping 1
 Rescue 1
 Fire Control 12
 Respons/Return 1
 Clean/Salvage 1
 Sleeping 8
 Unable to Act 1
 Other 15

SEVERITY OF INJURY

Injury 33
 Death 7

COMMENTS: The casualty report is dramatically better this year than last. There were 22 deaths reported last year as opposed to 7 this year. There are a few other things to note in that there are always more males than females injured in fires and fire fighter injuries are mostly attributable to fire suppression activities. Overall the casualty report is very good.

FIREFIGHTER CASUALTIES

PART OF BODY INJURED		H/W	C/W	T/W	F/P	G/W	B/W	B/A
Number of Injuries								
Eye	3	2	3	3	2	3	2	0
Shoulder	1	1	1	1	0	1	1	0
Back-Upper	1	0	0	0	0	0	0	0
Chest	6	6	5	5	6	5	5	1
Arm-Lower	1	0	0	1	0	0	1	0
Wrist	1	1	1	1	1	1	1	0
Hand	3	3	3	3	2	2	2	2
Fingers-Thumb	4	4	4	4	3	3	4	2
Knee	2	2	2	2	2	2	1	0
Ankle	4	3	3	2	2	2	3	0
Foot	3	2	2	1	0	3	3	0
Trachea	1	1	1	1	1	1	1	1
Lungs	13	12	12	10	10	10	10	3
Spine	1	1	1	1	0	1	1	0
Multiple Lower Body	1	1	1	1	0	0	1	0
Multiple All-Body	3	3	3	3	3	3	3	2
All Other	2							

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.

COMMENTS: The most firefighter injuries continue to be associated with the lungs. This appears to be contributable to not wearing breathing apparatus (SCBA's).

TYPE OF ACTION TAKEN BY FIRE FIGHTERS UPON ARRIVAL
AT THE EMERGENCY SCENE

Extinguishment	3,992
Rescue Only	120
Investigation Only	4,067
Remove Hazard	526
Standby	579
Salvage	54
Fill in, Move Up	12
Other Type of Action	345
TOTAL	9,695

MUTUAL AID RECEIVED

Extinguishment	180
Rescue Only	4
Investigation Only	26
Remove Hazard	6
Standby	25
Salvage	0
Fill in, Move up	0
Other Type of Action	6
TOTAL	247

MUTUAL AID GIVEN

Extinguishment	204
Rescue Only	5
Investigation Only	50
Remove Hazard	2
Standby	107
Salvage	0
Fill in, Move up	12
Other Type of Action	18
TOTAL	398

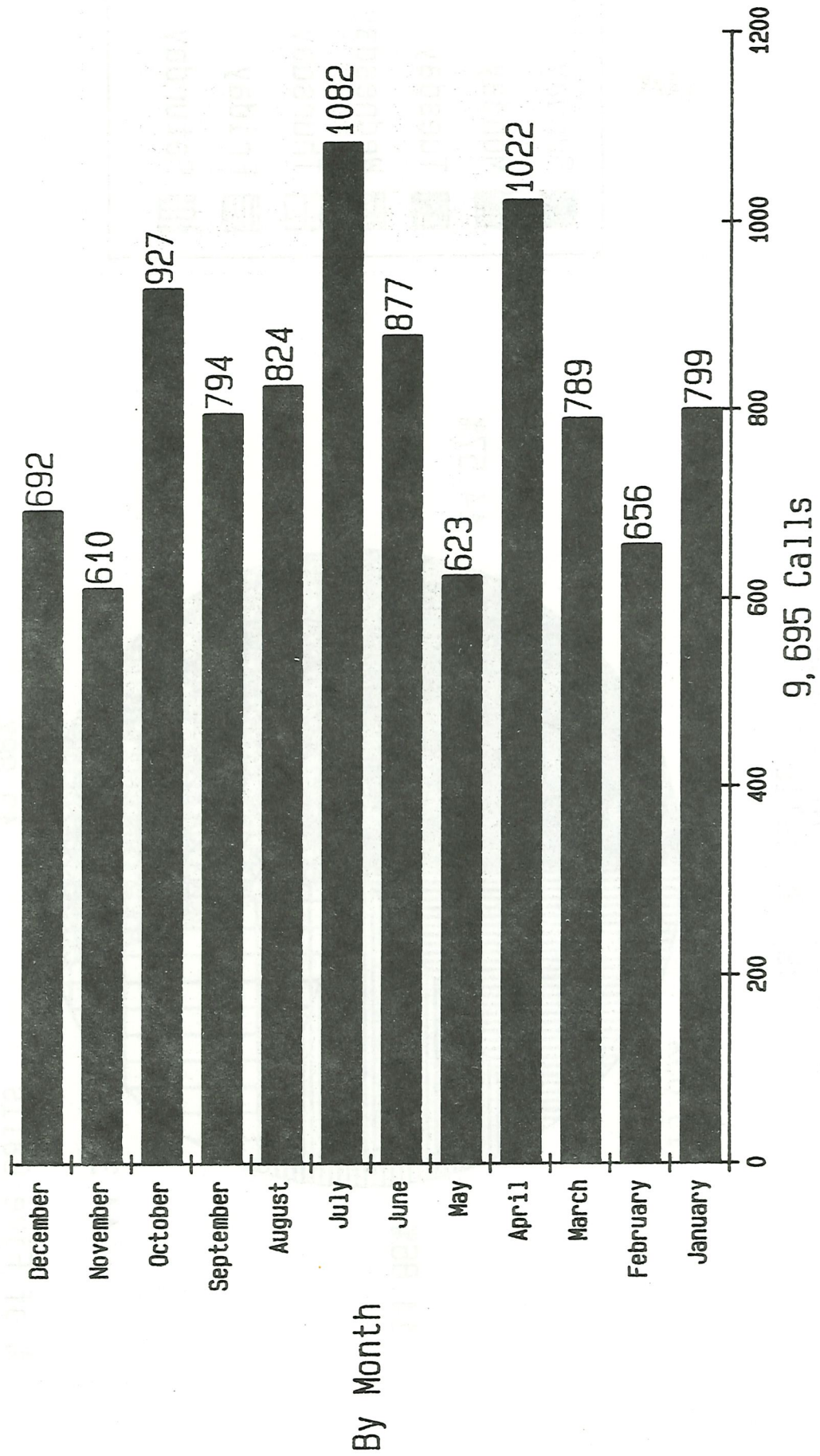
COMMENTS: This report shows that the fire departments deliver other services than just the extinguishment of fires. They serve to alleviate small problems before they become big ones as seen in the totals under investigation only, remove hazard, and standby. Extinguishment had to be done a good deal of the time however.

It is also interesting to see that mutual aid, which means giving some help to your neighboring fire department, is being used on many occasions. This is just good management by all concerned. Consolidating our forces to fight fire just makes good sense.

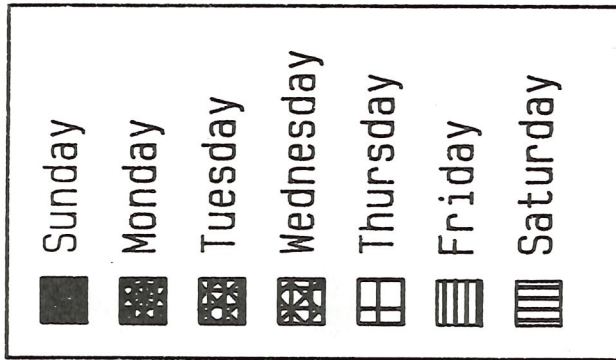
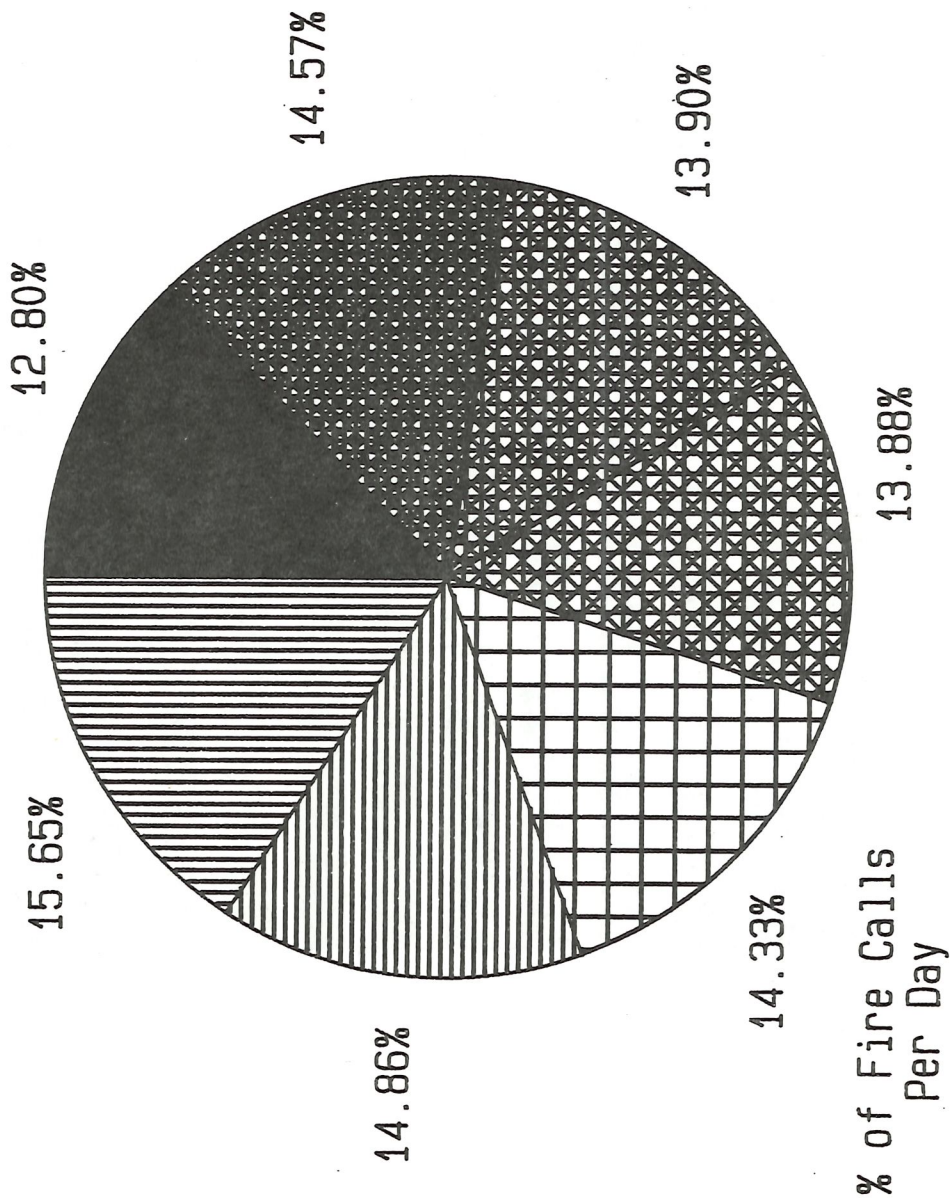
1987 FIRE REPORT

PART III — GRAPHIC ANALYSIS
OF
FIRE STATISTICS

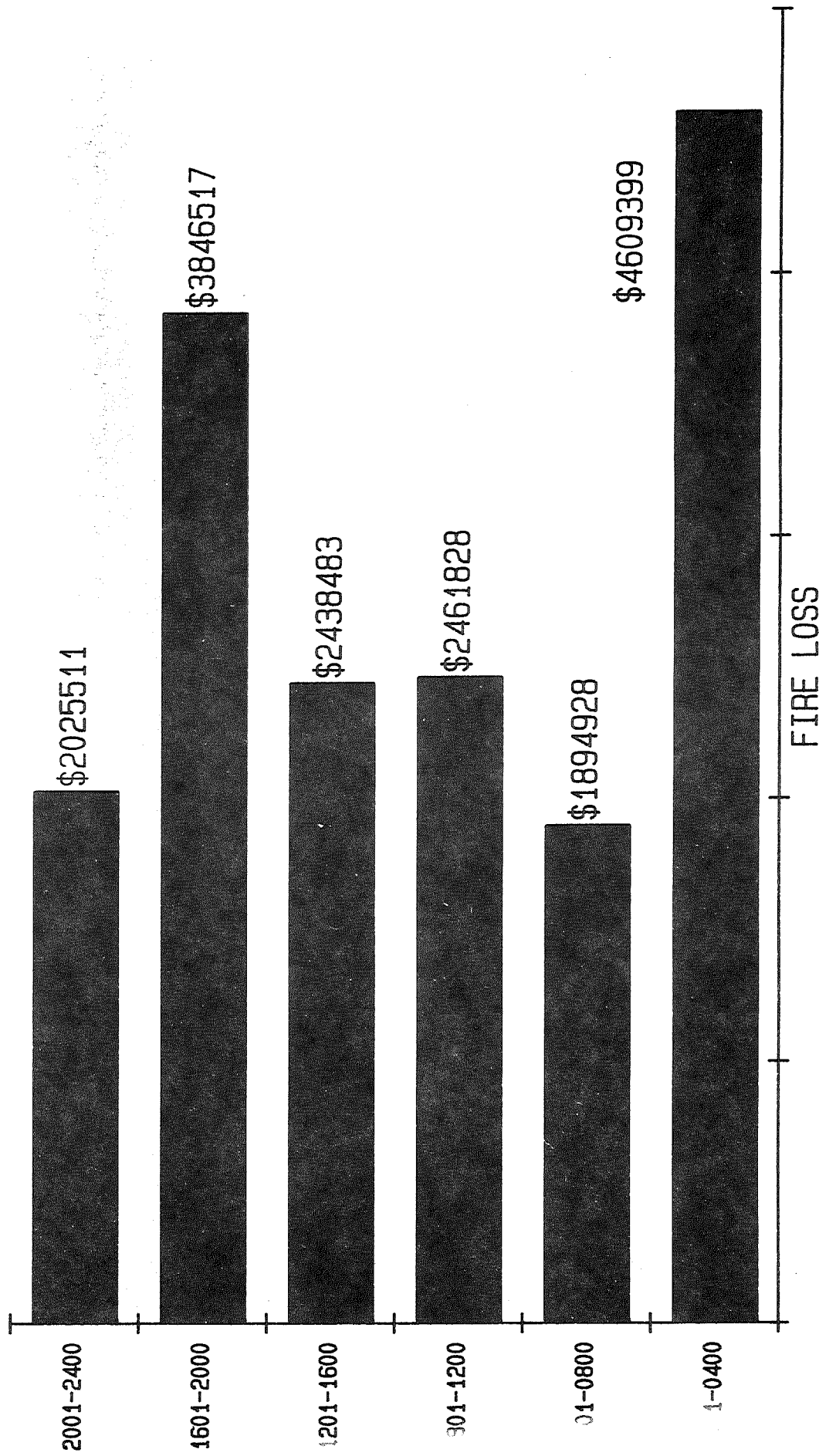
All calls by Month



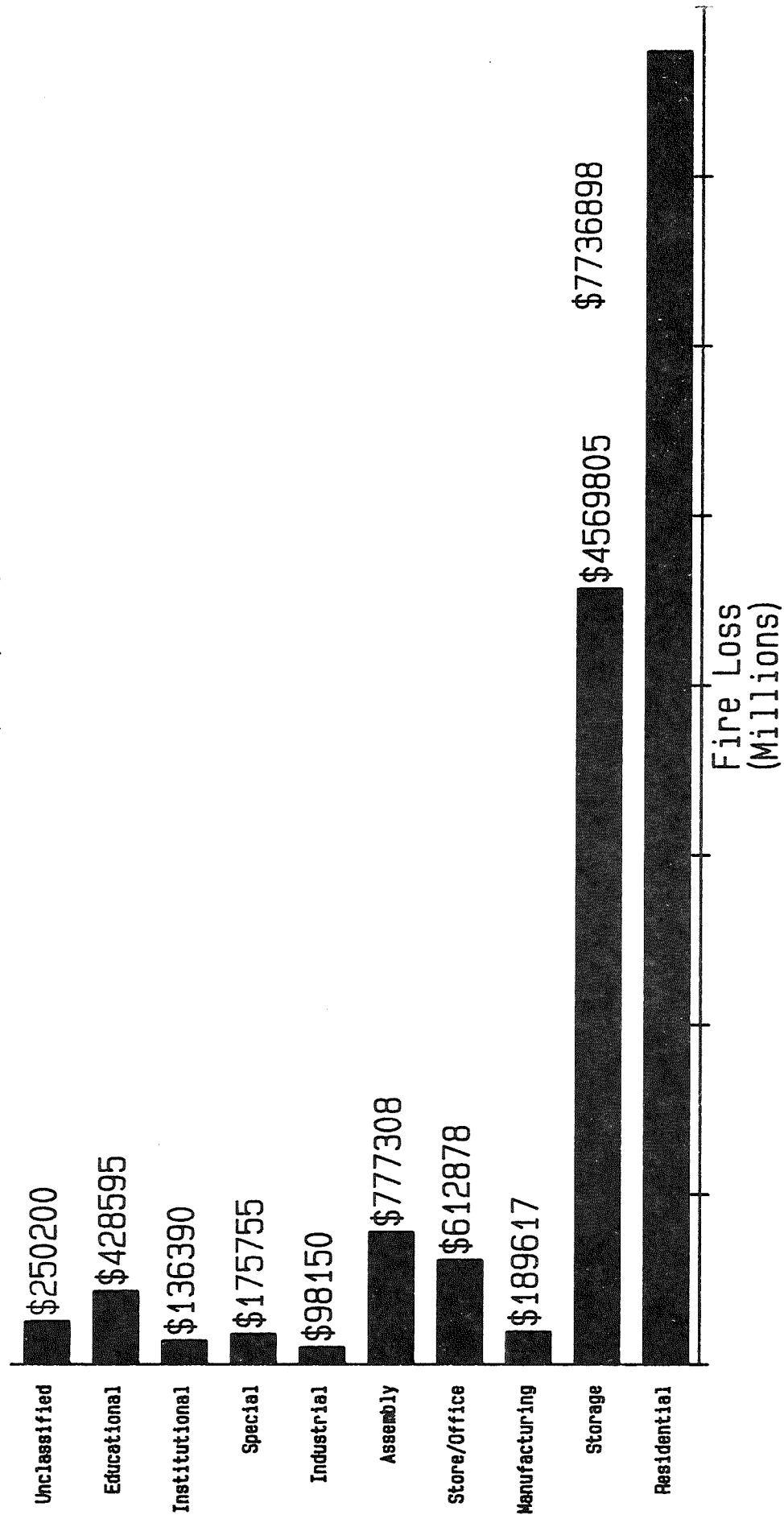
ALL CALLS BY DAY OF WEEK
(9,695 calls)



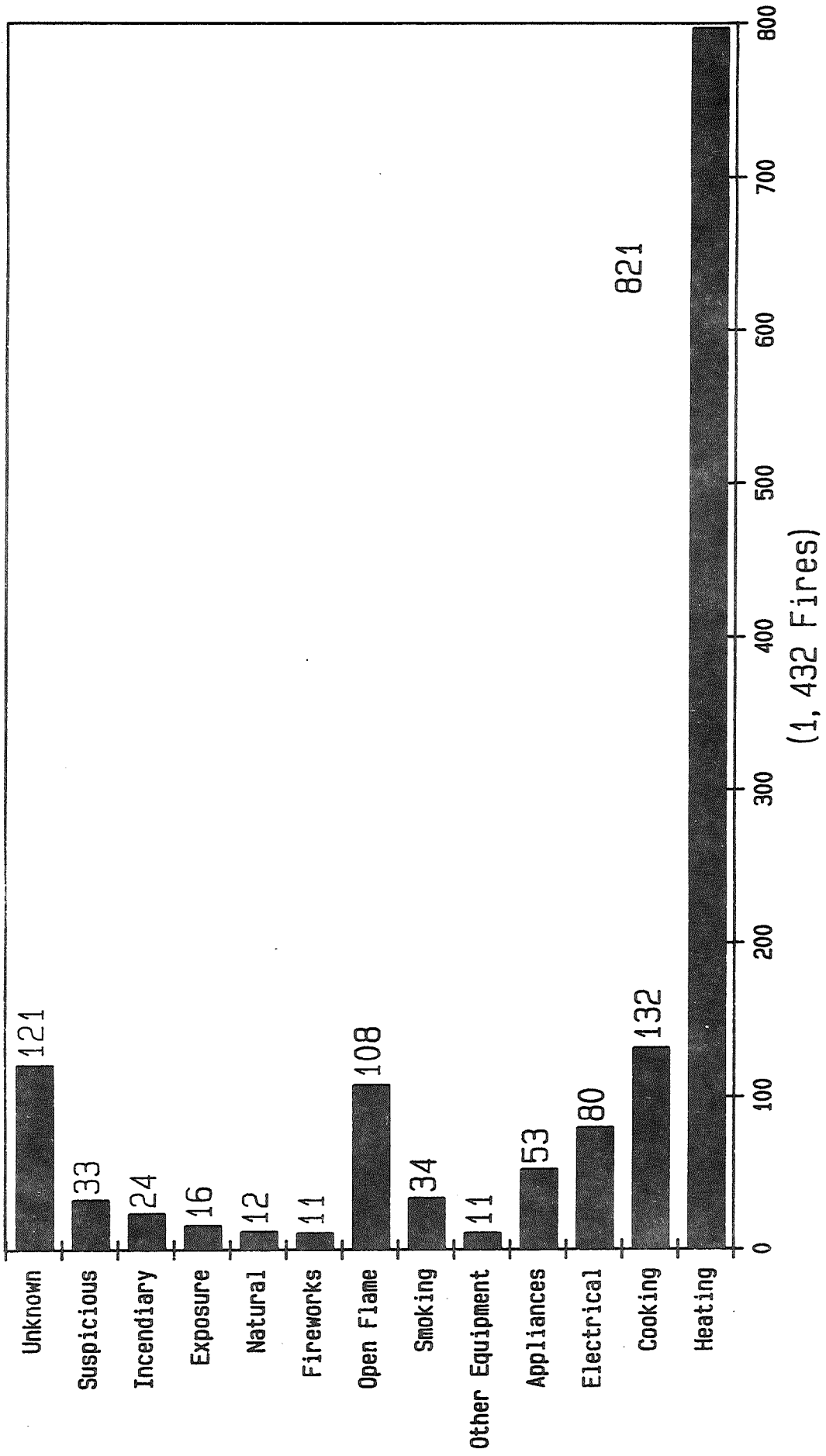
ALARM TIME VS. FIRE LOSS



Structure Loss
By Property Type
(\$14,975,596)

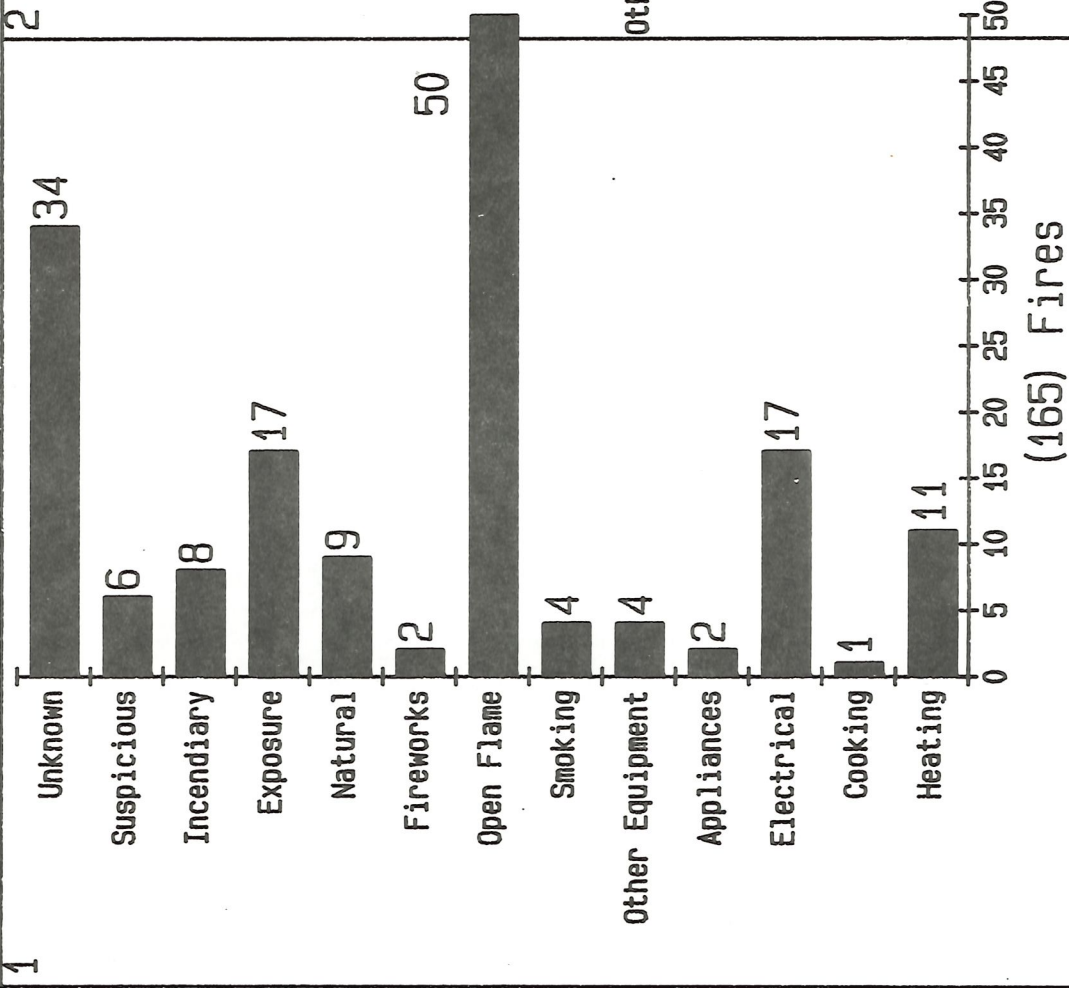


Residential Fires



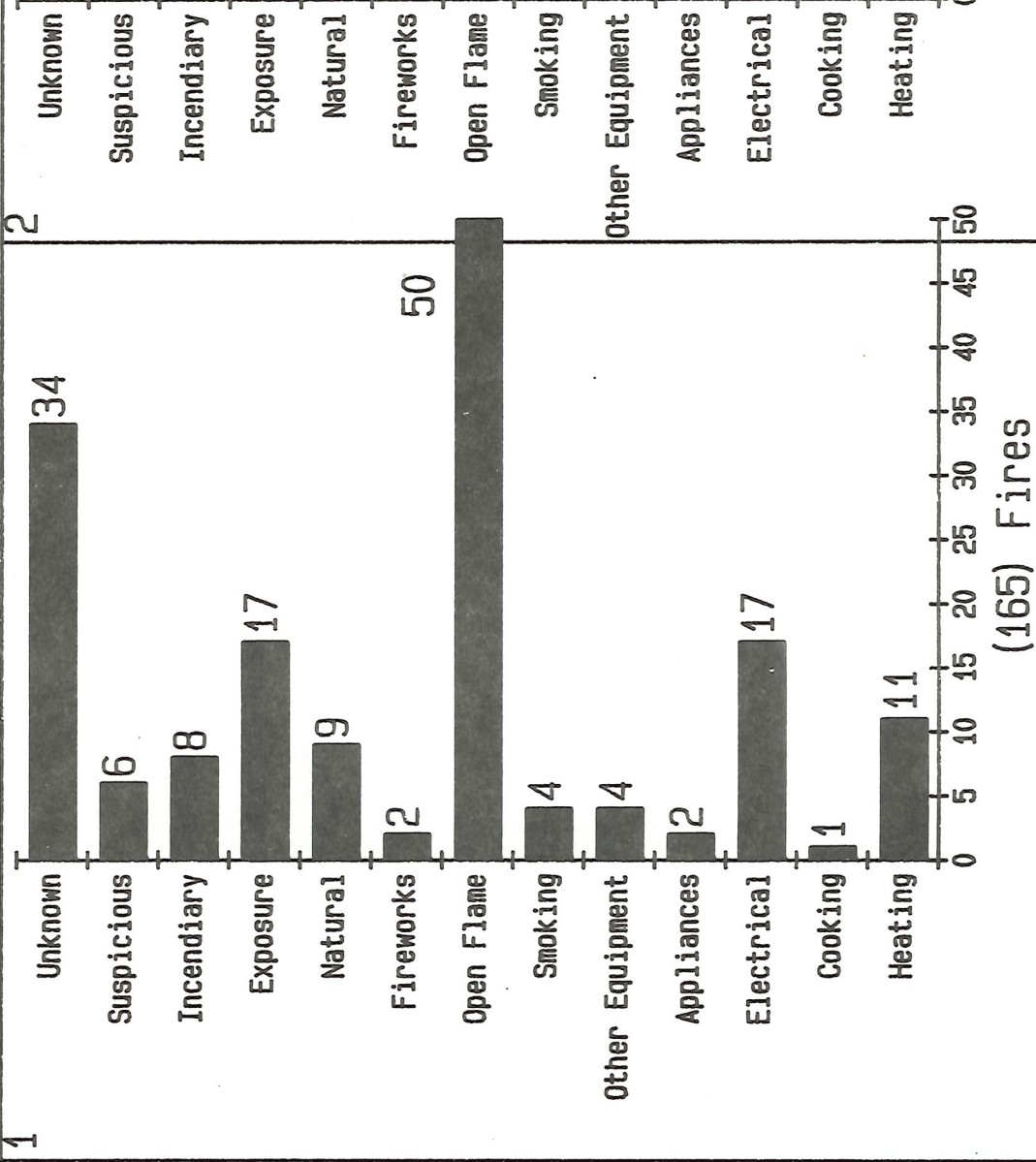
Storage Fire Causes

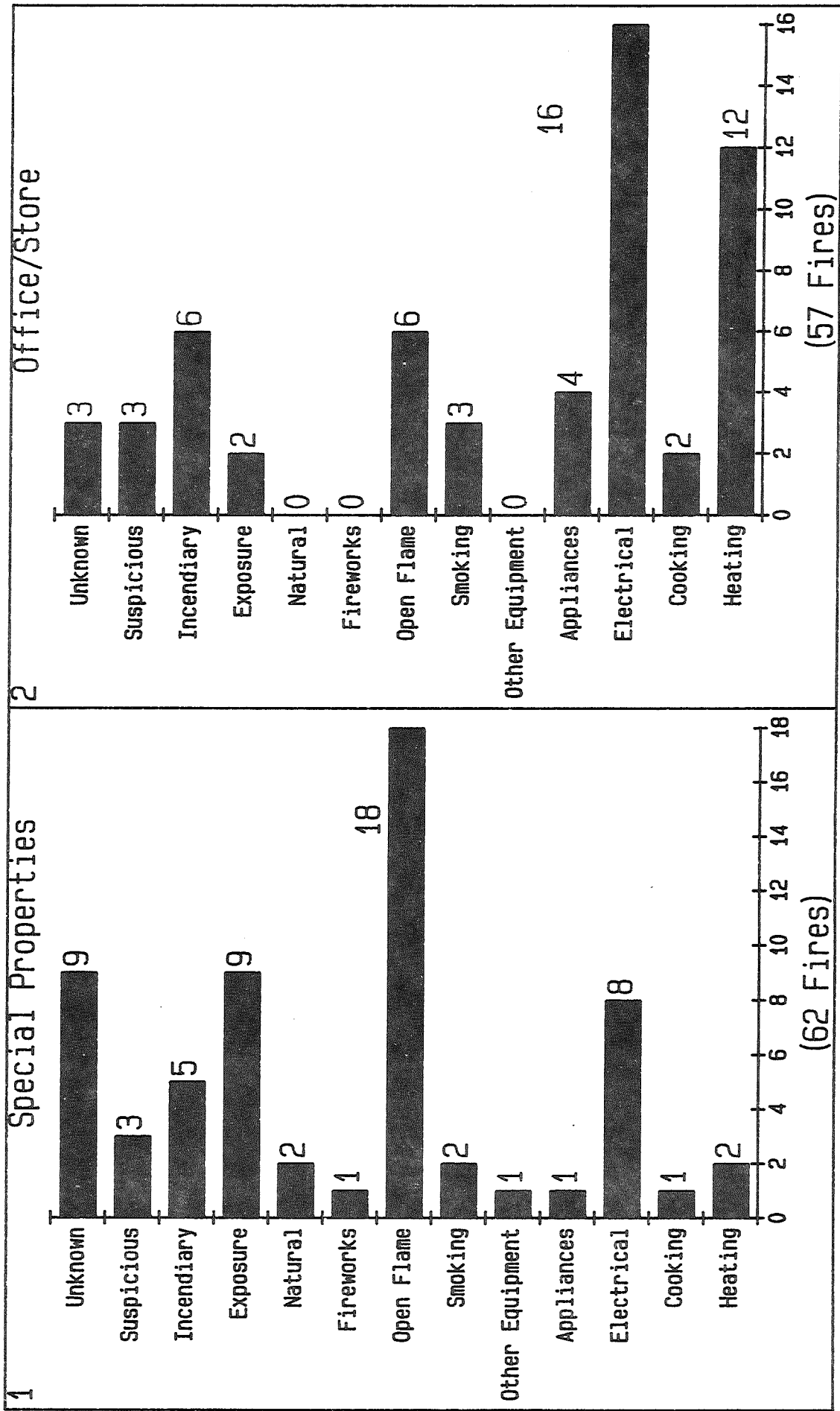
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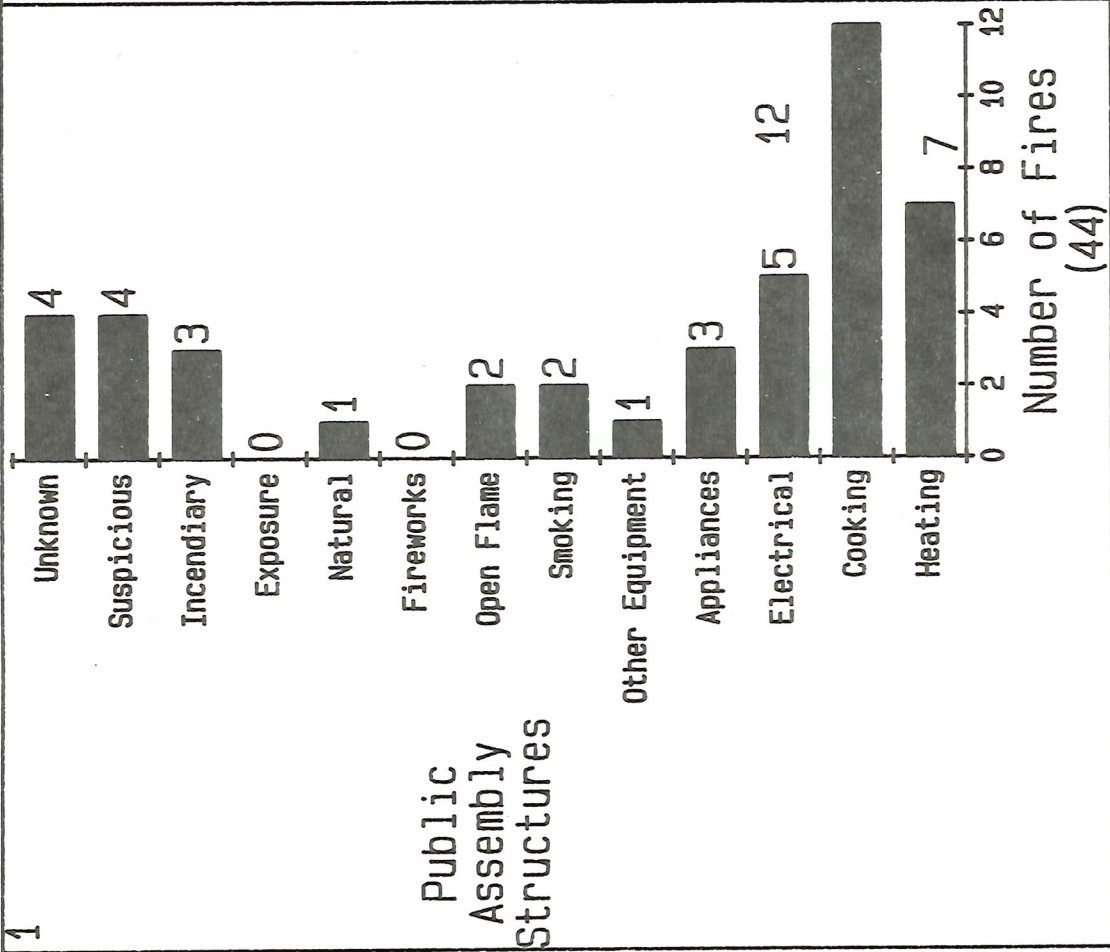
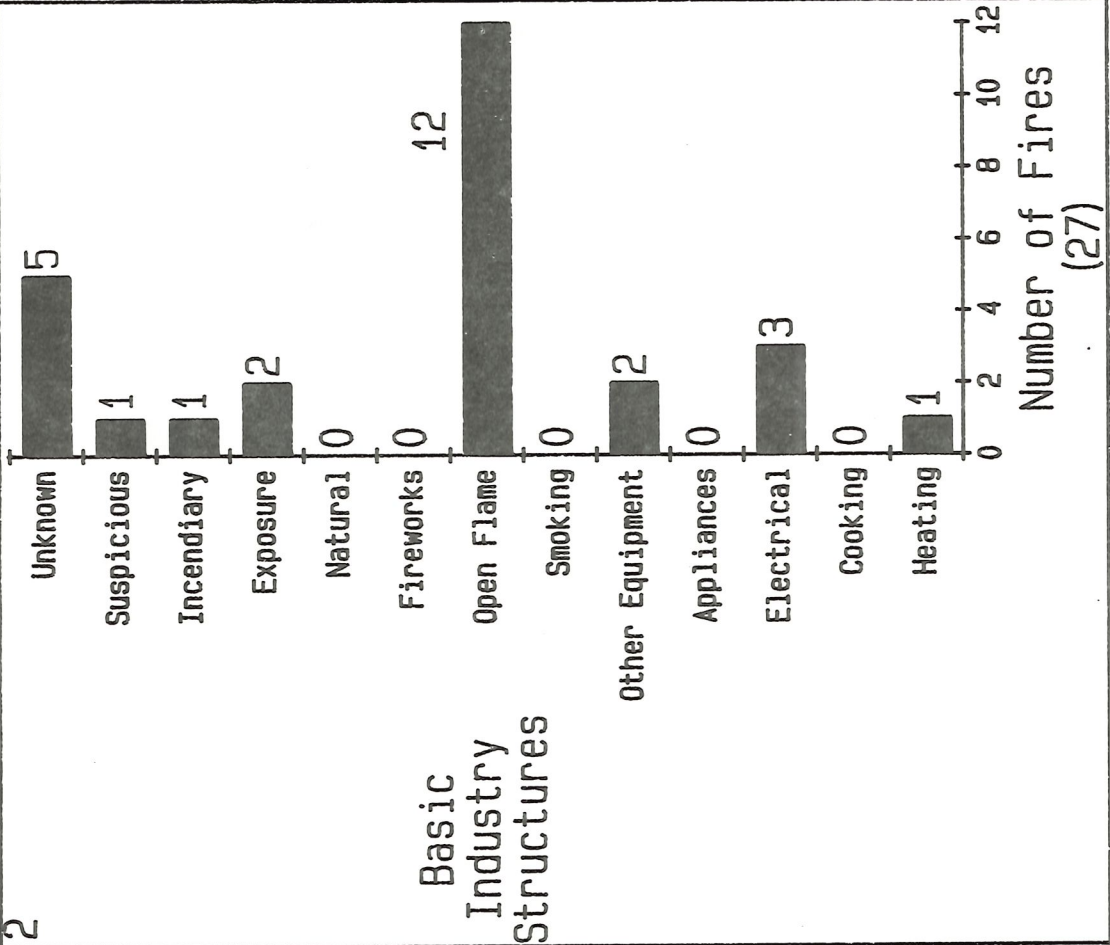


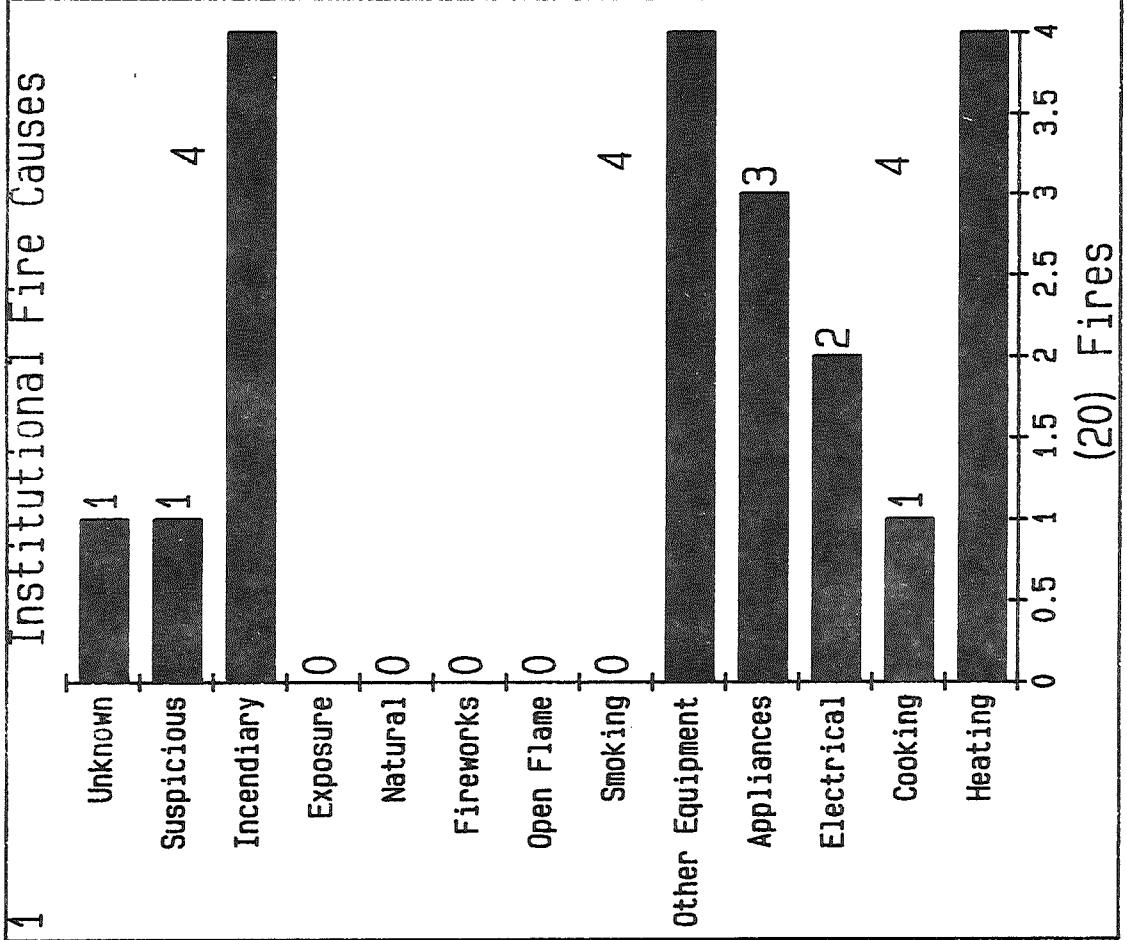
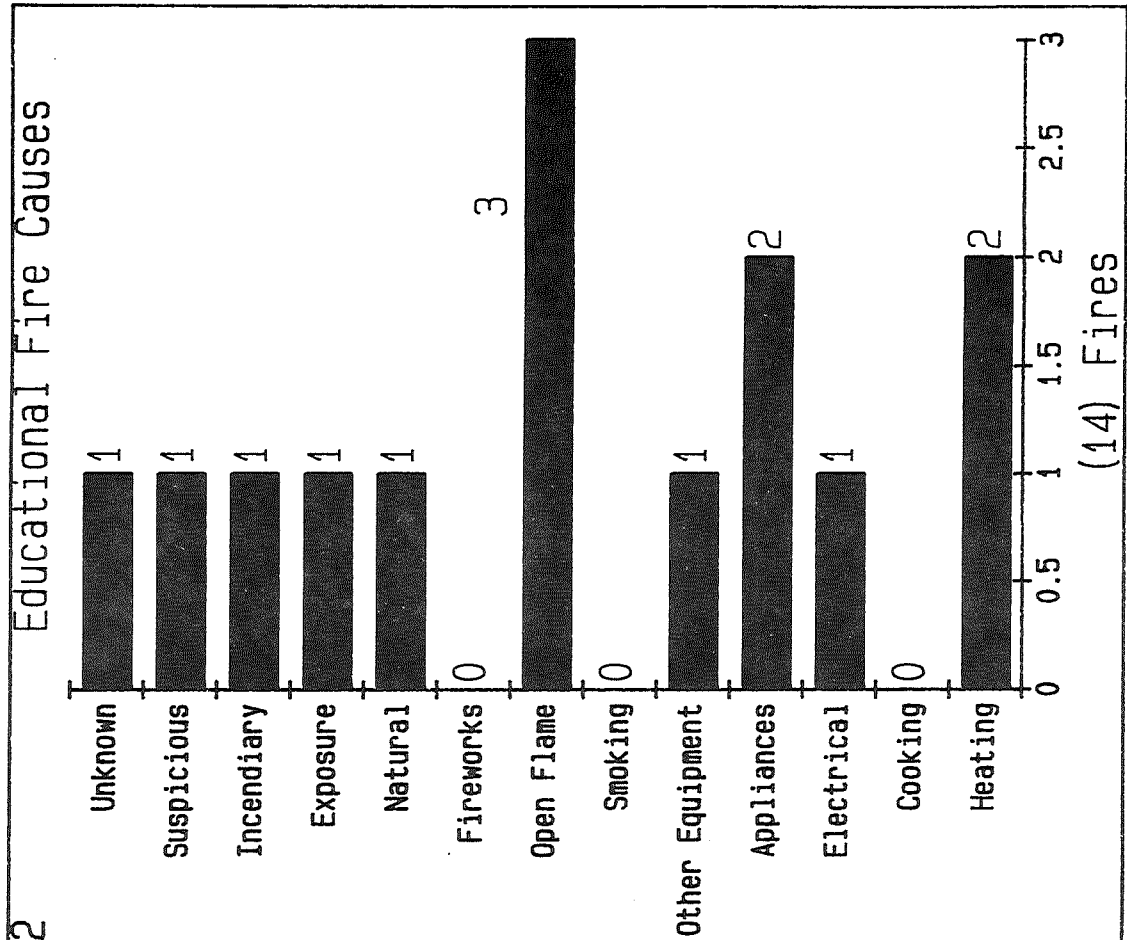
Manufacturing Fire Causes

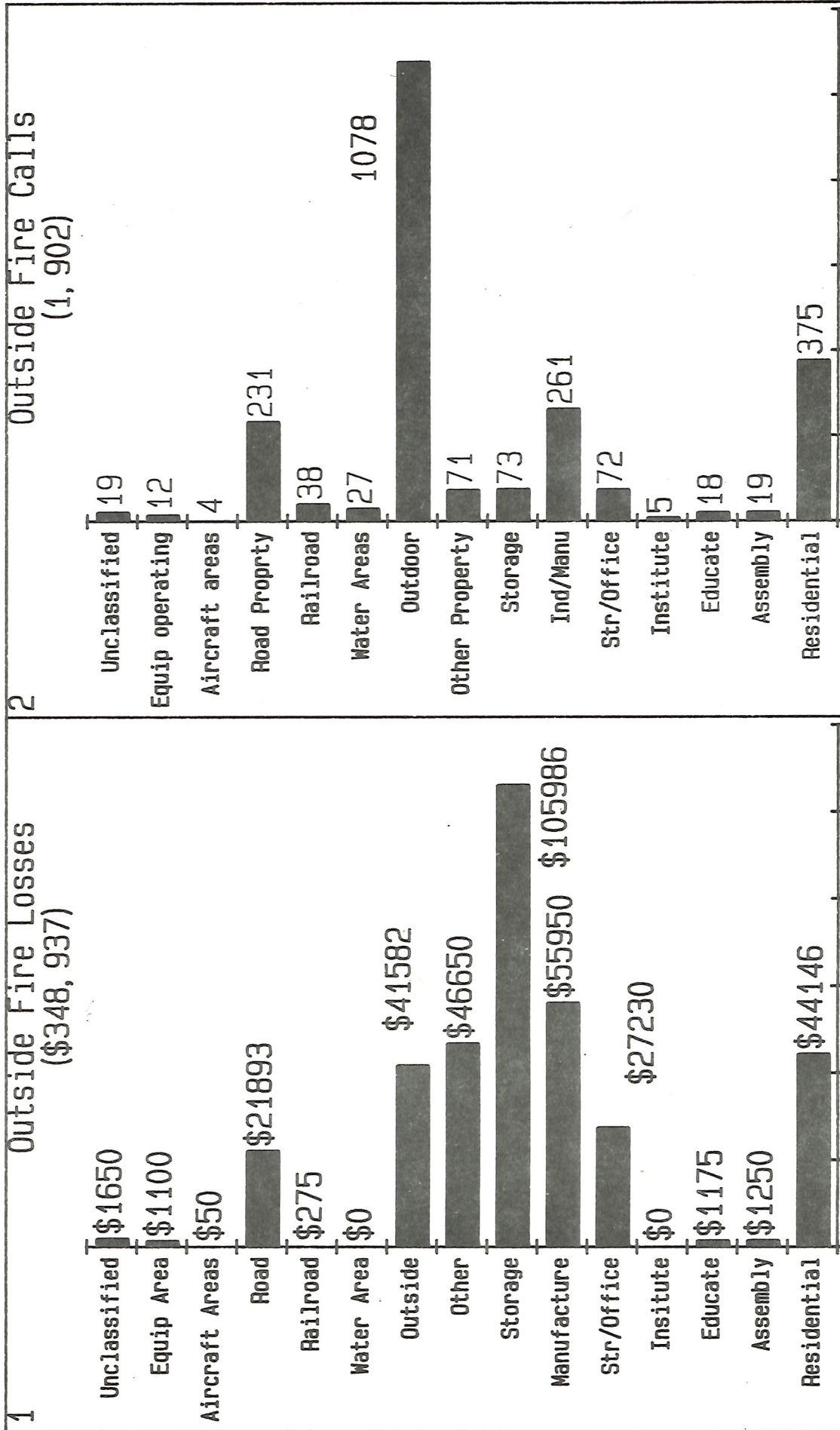
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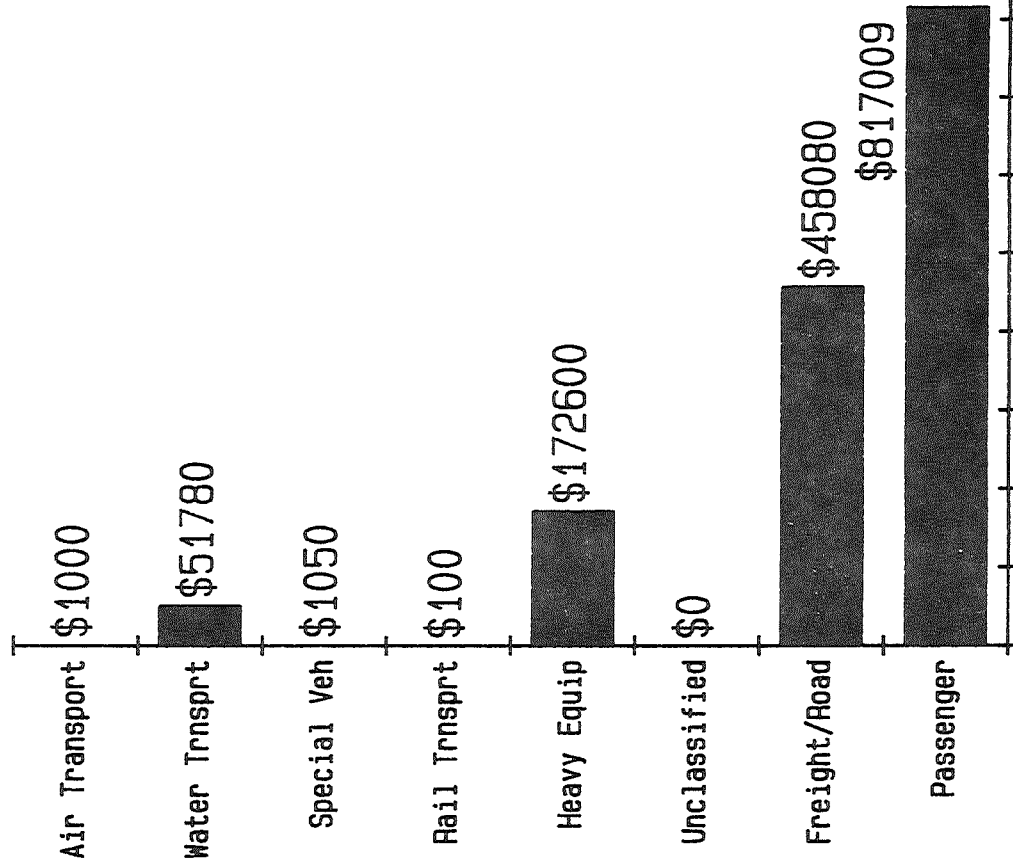




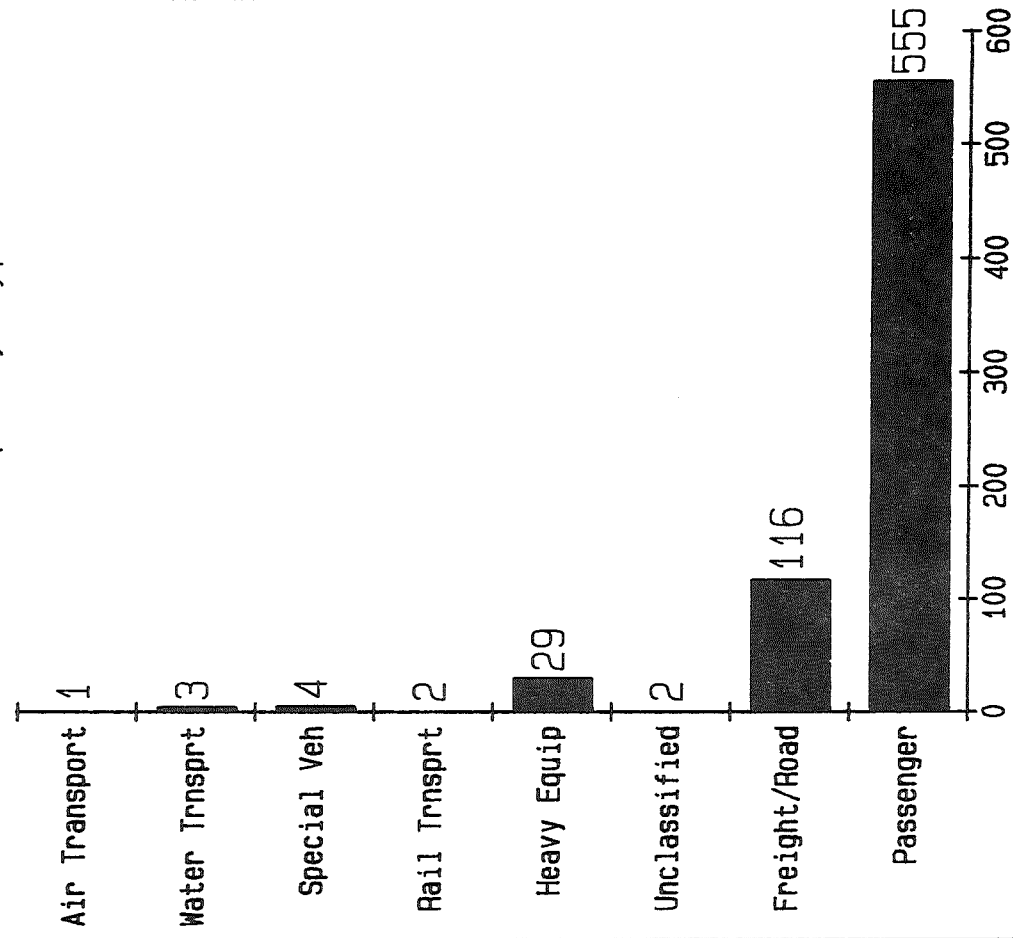


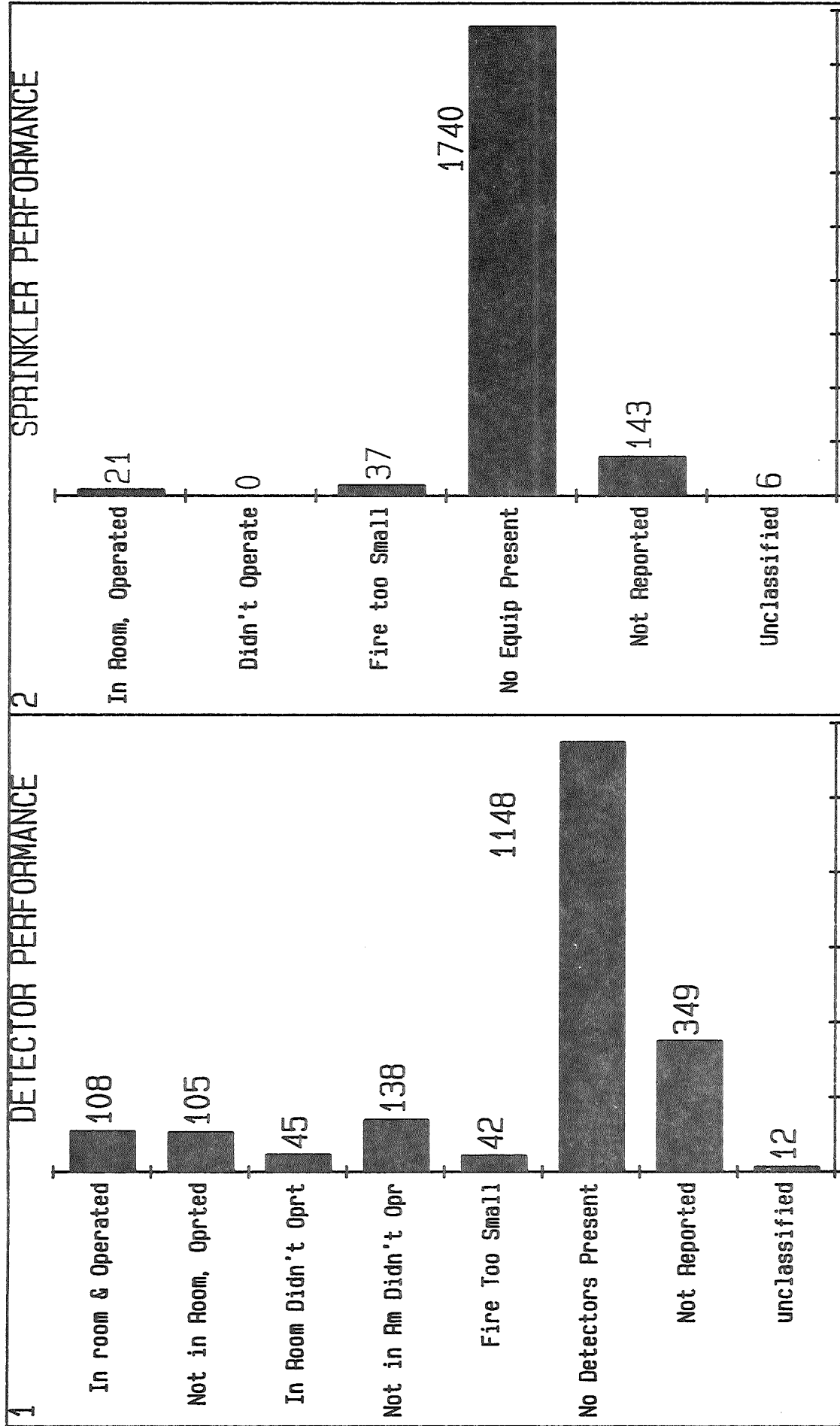


1 Mobile Property Fire Loss
(\$1,501,619)



2 Fire Calls by Mobile
Property Type

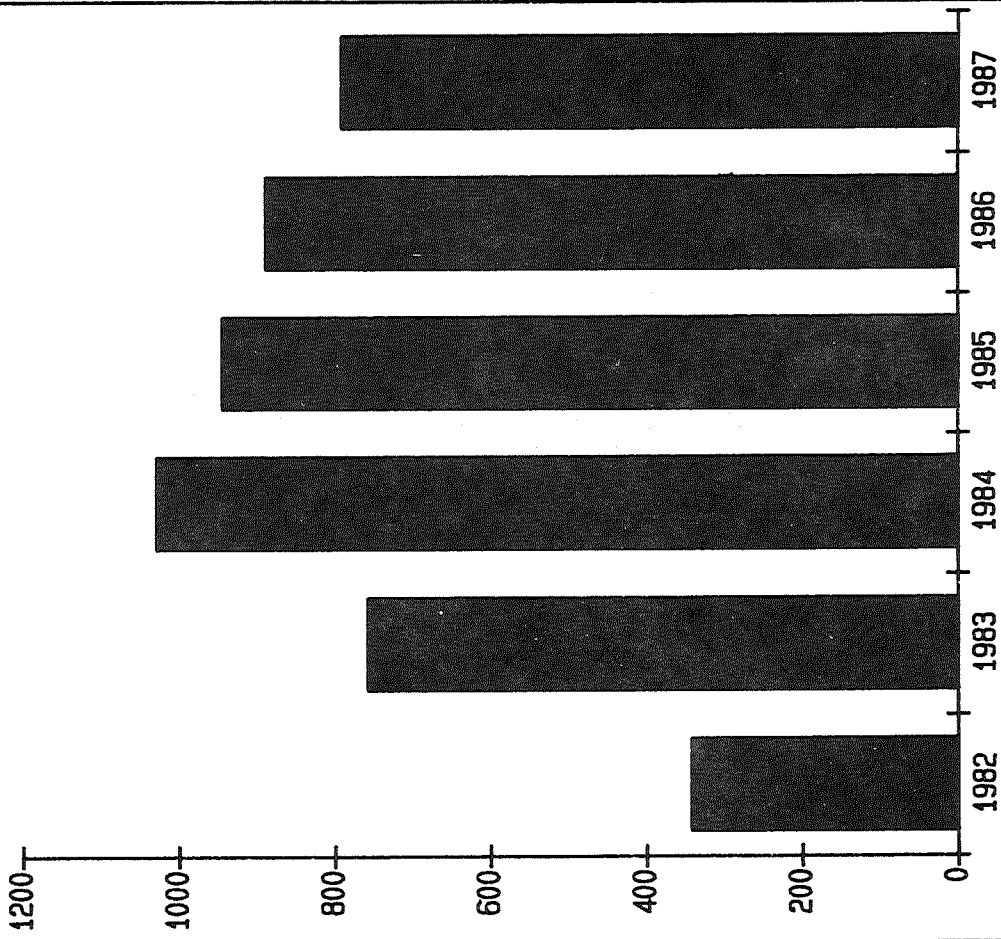




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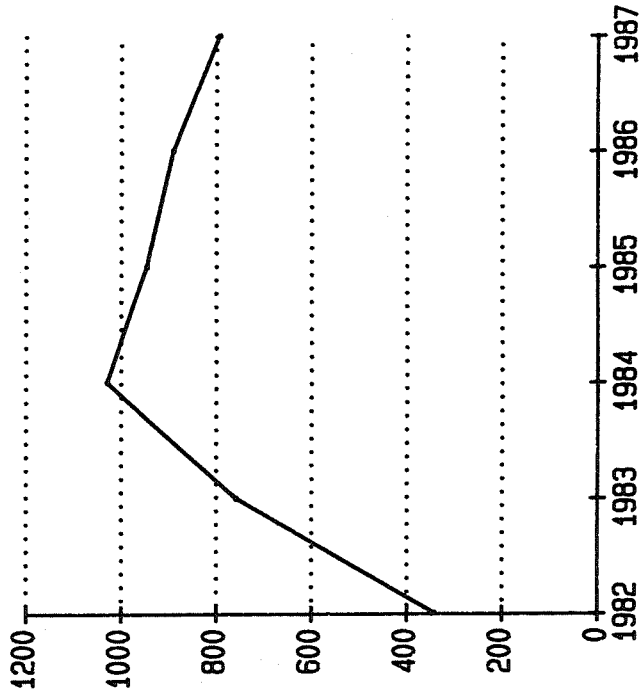
PART IV -- A GRAPHIC STUDY
OF WOOD HEATING APPLIANCES

1 SOLID FUEL RESIDENTIAL FIRES IN IDAHO



2

Wood stove fires are on a downward trend. We can thank the fire service for their efforts.



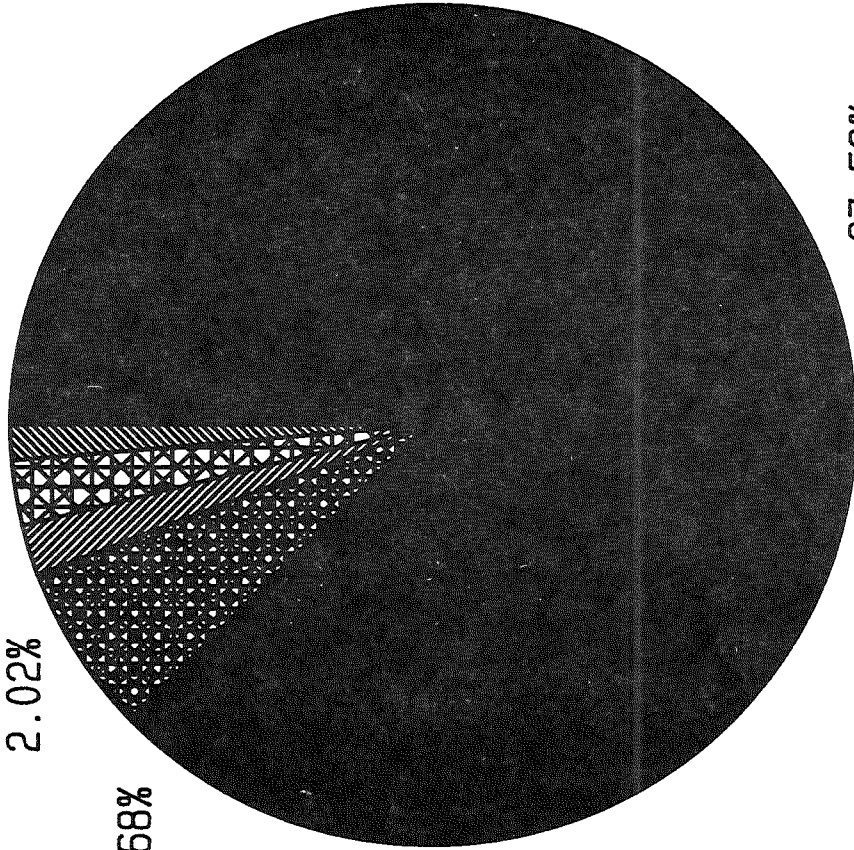
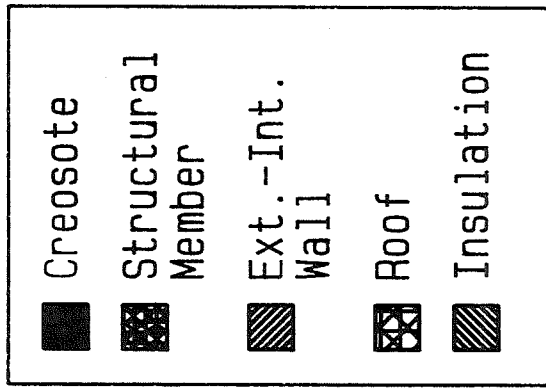
MATERIAL FIRST IGNITED

2.39% 1.39%

2.02%

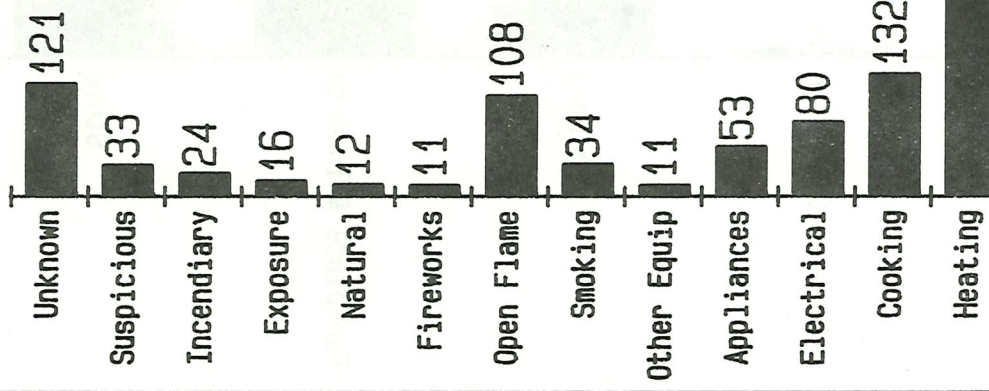
6.68%

87.53%



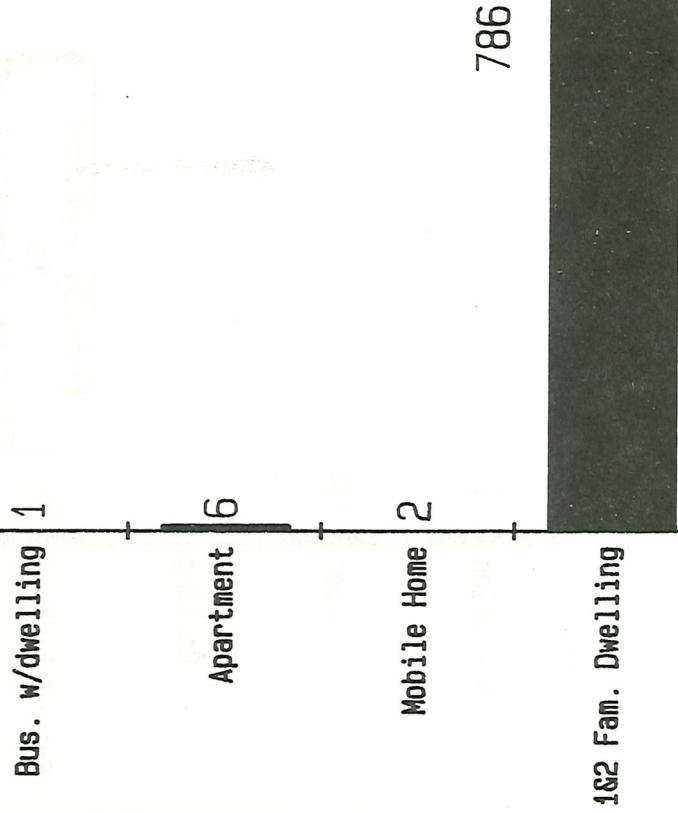
RESIDENTIAL FIRES
(1432 Fires)

1

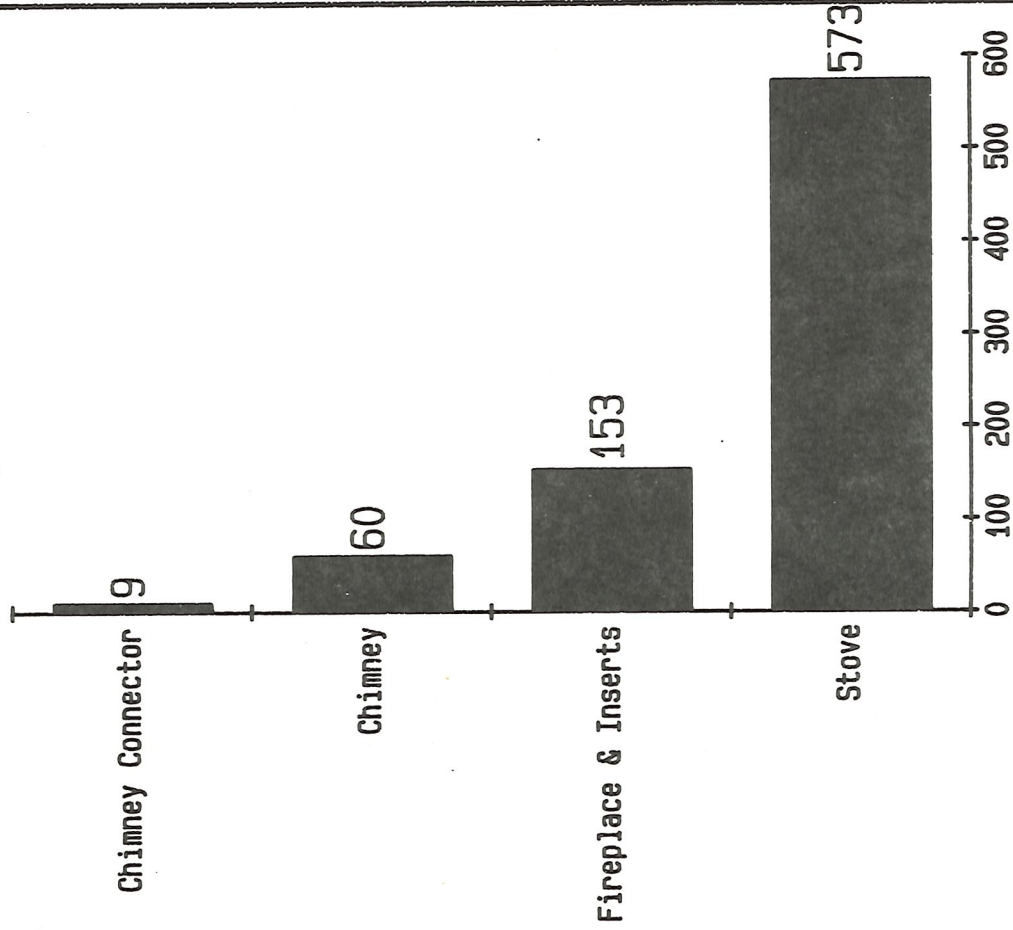


2

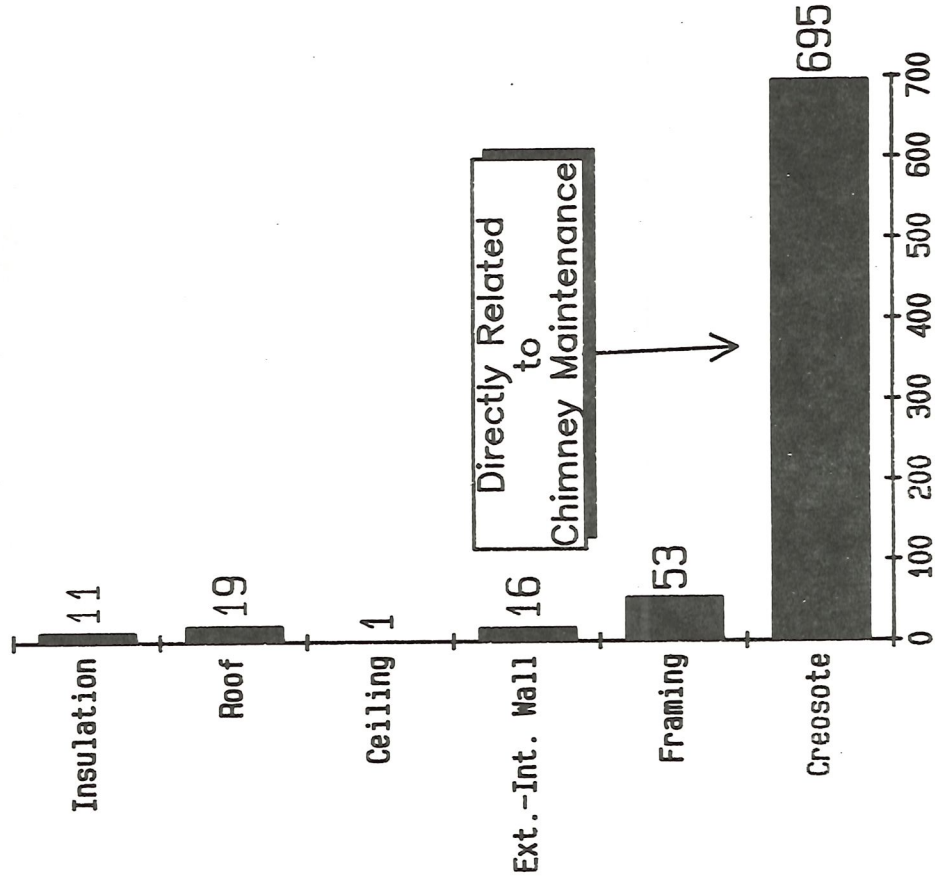
795 Residential Solid Fuel Fires



EQUIPMENT INVOLVED



MATERIAL FIRST IGNITED



PART V

NATIONAL FIRE DATA



1986 NFIRS DATA -- ALL FIRES DEATHS PER 1,000 FIRES

