



THIRD  
**ANNUAL REPORT**

**Idaho Fire Statistics**

JANUARY 1, 1984 - DECEMBER 31, 1984

W. K. "Bill" Wallis  
State Fire Marshal

Wayne L. Soward  
Director

Department of Insurance

DEPARTMENT OF INSURANCE  
State of Idaho

Wayne L. Soward  
Director

W. K. "Bill" Wallis  
State Fire Marshal

**THIRD ANNUAL REPORT**

By  
STATE FIRE MARSHAL

Table of Contents

Page No.

PART I.

Narrative.....	1
Goals & Objectives.....	1
Regulatory Functions.....	2
Arson Investigations.....	2
Fire Data, Collection & Analysis.....	2
Public Education.....	3
Organizational Chart.....	4
District #1 Annual Report.....	5
District #2 Annual Report.....	6
District #3 Annual Report.....	7
Recap of Activity Reports for 1984.....	8

PART II.

Report & Analysis of Fires.....	9
Graphs & Analyses of Fire Causes.....	10-21
Casualty Summary.....	22

## Part 1

### STATE FIRE MARSHAL

## THIRD ANNUAL REPORT

#### NARRATIVE:

After two years in operation the office of State Fire Marshal is finally beginning to have a positive impact on the fire service in Idaho. Some of the promises I made to deliver training and technical assistance to the fire departments are being fulfilled with the advent of the new deputy fire marshals that were hired October 15, 1984. Three deputies are now ready to serve and one each is stationed in Lewiston, Boise, and Pocatello. They each have 70-80 fire departments to assist and serve. Their duties are to educate and then assist the fire departments within their respective districts with the enforcement of the uniform fire code, the use of good fire prevention practices, the determination of fire causes, and a method of recording and reporting fires based on national standards. Four courses were purchased to fulfill these goals and three weeks of intensive training was carried out with the deputies to train them to teach these courses. The deputies have found themselves very busy indeed as they have found a big demand for their services. It will probably take three to four years before these courses can be delivered throughout the state in their entirety, but I am sure that we can expect some measurable results in the interim.

What has been most pleasing to me is the enthusiasm shown by the fire departments, both paid and volunteer alike, in starting their own fire prevention programs. There is no question that the fire services are entering a new era and that fire prevention is and will become as important as the suppression services as we have discovered that one without the other will not do the job.

#### GOALS AND OBJECTIVES:

In previous reports I stated that there were four main goals that I thought could be achieved with the resources at hand. The resources I am referring to is the amount of money allotted within the arson, fire, and fraud account which is our sole source of support. The goals as previously stated are (1) regulatory functions; (2) arson investigations; (3) Fire data collection and analysis; (4) and public fire safety education.

The following is an update of each goal and what we hope to achieve in the future.

## 1. REGULATORY FUNCTIONS

The 1982 edition of the Uniform Fire Code has been adopted as our States minimum fire safety standard. The authority to enforce this standard has been delegated to every fire chief of every city and fire district in Idaho. In other words a shared responsibility of the local fire chief and the state fire marshal. Obviously with only three deputies the office of the state fire marshal is very limited as to actual enforcement of the fire code. The enforcement has to be done by local authorities, which I believe is much better than could ever be accomplished by the state. I say this because local people know their problems much better than any outsider and local fire fighters should have an opportunity to learn what is in buildings during the course of a fire inspection. In this way fire prevention is accomplished as well as pre-planning in case of a fire.

Our support in this effort will be to train and assist the fire departments. We have two courses ready at no cost titled "Uniform Fire Code" and "Conducting Basic Fire Prevention Inspections". These courses are available now and I urge every fire chief to contact us to schedule a class.

## 2. ARSON INVESTIGATIONS

A new objective has been identified in this category, that being the establishment of local arson task forces. It has become quite clear that if we are going to have an impact on arson that it will only come with a multi-jurisdictional effort. That being local fire departments, police, sheriff, and prosecutors joining together in a mutual effort on a larger scale than their own particular jurisdictions. We are currently working with one county on a task force and another three county area to give us experience in development. Once this is accomplished then we should be ready to assist any area get organized.

Our assistance will consist of help to get organized, training for the force, and compiling reports from the task forces for future use as an investigative tool. The deputy state fire marshal in charge of arson/fraud has been assigned the job of arson task force development.

## 3. FIRE DATA, COLLECTION, AND ANALYSIS

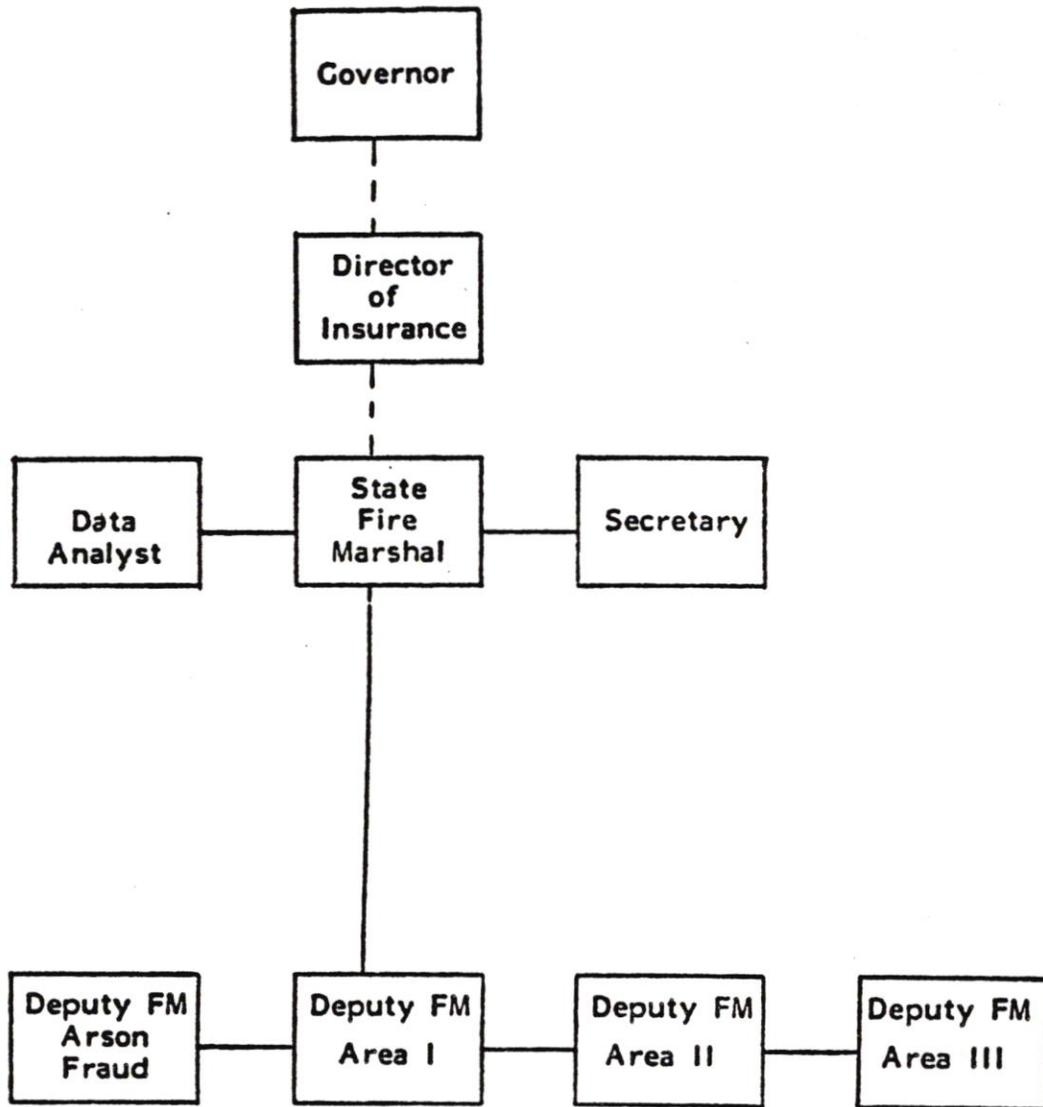
As stated in my previous report this goal has been achieved. However there are still many bugs to work out to make the system more accessible to the reporting departments in order for them to make decisions based upon their own fire problems. We are now in the process of writing our own data entry program with an analytical format that we will offer to fire departments ,free of charge, so that they can report to us via a computer floppy disk and also use to analyze their own fire data. This, of course would require that the

fire department purchase their own personal computer. I am hoping to have this system ready for demonstration soon. We are also looking ahead to implement "phase four", which is the new reporting format for the federal government. The only impact this will have on fire departments is a change of reporting form. These forms will be supplied from my office. There are a few changes, but nothing drastic.

#### 4. PUBLIC EDUCATION

I am still sorry to report that nothing has been accomplished in this category. A budget was submitted to the director of insurance and was approved by him but was subsequently disapproved by the legislative appropriations committee. I will resubmit for this program next year and this time I hope we will be successful. Part of the problem in dealing with the legislature was really not having enough time with them to explain, in depth, what can be done with a program of this kind. Our fire data proves that most fires are caused by people doing careless things. It has been my experience that these people simply have never been exposed to good fire safety practices. I think it is the job of the fire service to teach them since we are the experts. This would be a role that the state could really serve well as most fire departments cannot afford to carry on a comprehensive fire education program. I believe, given the chance, that we can muster the resources to start educating people within our school systems and right on through life to live safely with fire and other hazardous substances within our ever changing environment. We have the message and the experience. What we lack is the delivery system.

There is no question in my mind that these four goals can be accomplished with the resources that we have at hand. These resources, for those of you that don't know, are provided through an assessment from insurance companies licensed to do business in Idaho. The assessment is deposited in the Arson, Fire, and Fraud account and dedicated for our use. There is however, a cap on the amount, and if more services than I have described are desired then more resources would have to be found. I believe that the aforementioned goals, whenever entirely implemented, will provide a reasonable degree of fire safety for Idaho for the near future. No more than this will be done unless there is a public clamor for more services or fire prevention practices are considered more worthwhile by the public at large.



CANADA

### REGIONAL DEPUTY STATE FIRE MARSHAL DISTRICTS

- Area 1 - Lewiston
- 2 - Boise
- 3 - Pocatello

WASHINGTON

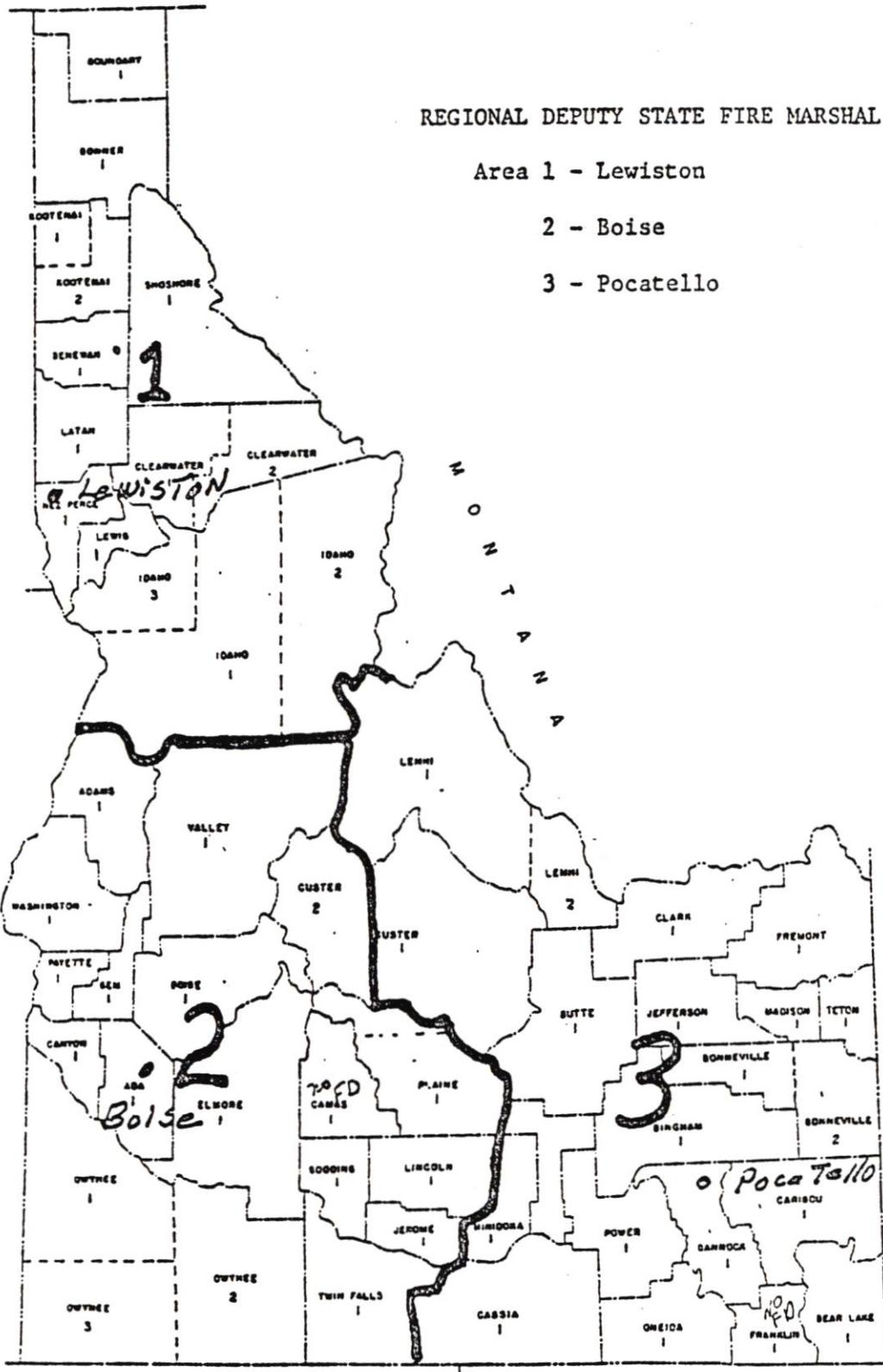
OREGON

MONMOUTH

WYOMING

NEVADA

UTAH



## DISTRICT #1 ANNUAL REPORT

By James Macklin, Deputy State Fire Marshal

Since January, four classes have been completed on fire prevention inspections for a total of 127 students completing the course. One class on the Uniform Fire Code began on March 13 at the Potlatch Corporation facilities with a total of 28 students. An Arson Course for patrol officers was held April 12 at the Lewiston Police Department.

There have been quite a number of requests for code interpretations and requests for help with problems not covered by codes or NFPA. The balance of requests have been for information to which we have access through the insurance companies. I have also helped form fire districts with apparatus specifications and required water supplies. Two school districts have requested inspections of three school facilities to which I responded. The North Idaho Fire Chiefs Association has requested help with the development of a training program through North Idaho College on May 23, 24, and 25.

I feel that it is going to take time to gain interest from some of the people in this district as they don't know me yet; however, with patience and time, I think we will be able to come to an understanding that is mutually beneficial. Law enforcement people and fire people have told me they feel that having deputies in the field is a big step toward improvement.

I am beginning to develop communications with insurance adjusters and fire investigators in District #1 and this should help us track the fire problem in the future. The major problem encountered is the uninformed and the untrained. Time, information and plenty of work will take care of these problems. I feel this also covers the general condition of the fire service.

Our role, as I see it, is pretty much what we have done up to this point, mainly an information source, and I realize that it is necessary that I become more involved in fire investigations.

Goals and objectives are to get a handle on the arson problem up here by working with investigators and fire organizations in an attempt to solve some cases and to convince the prosecutors to try the cases in court.

## DISTRICT #2 ANNUAL REPORT

By John Boros, Deputy State Fire Marshal

As per your request the following is my annual report. The past six months have been very rewarding, interesting, and most challenging for me. As of April 12, 1985 I have taught five classes, four on the Uniform Fire Code for Canyon County Fire Departments, Twin Falls County Fire Departments, Ada County Fire Departments, and the Snake River Valley Fire Departments. I have also taught one Basic Fire and Arson Detection Course to the Twin Falls Fire Department.

Number of Students Completing the courses:

<u>Uniform Fire Code</u> Course.....	48	Students
Basic Fire & Arson Detection Course.....	30	Students
Number of Fire Inspectors Certified.....	44	Inspectors

I have responded to several requests for assistance, calls from civic organizations, fire departments, and law enforcement agencies, which are as follows:

<u>Uniform Fire Code</u> Inspections.....	12
Fire & Arson Investigations.....	9
Meetings with Mayors & Fire Commissioners.....	7
Meetings with Fire Chiefs.....	44
Public Education/Fire Safety Presentations.....	6

I have made contact and visited with 44 fire departments within my district, and have found everyone to be very receptive and very appreciative of our assistance in all of our services. My visits also revealed that the majority of the departments need more training on the Uniform Fire Code and training in doing actual field inspections. I also found they need more guidance in the area of setting up and outlining their fire prevention programs, etc. In most cases, due to the lack of funding, the majority of the departments are not able to become involved in a fire prevention program at this time.

Another major problem I have encountered with a few of my assigned departments is that they are challenging whether they have to follow the state fire code, etc. I also find a definite need for better public education programs at local levels, and some departments need to work on having better communication with their elected officials, etc.

In my opinion I feel strongly that our future role should be to continue to assist and educate the departments and other agencies as we have been doing in the past. Also, I would highly recommend that we continue to make every effort to someday add a public education person to our staff to assist local areas in developing public education programs, etc.

I have found the general conditions of the fire service in District #2 to range from good in several areas to poor in other areas. (I hope to have better information in this area in my next report.)

My goals and objectives for 1985-86 would be to continue to make visits to the departments and to provide assistance in fire prevention, inspections, training, and fire and arson investigations, etc.

## DISTRICT #3 ANNUAL REPORT

By Hall Call, Deputy State Fire Marshal

The last few months have been most interesting and challenging. To date, I have completed seven courses of instruction: Six have been Uniform Fire Code for Pocatello Valley Fire Protective District, Preston City, Soda Springs, Montpelier City, Bear Lake County, Arimo, McCammon, Downey, Arco, Mackay, and Custer County. One Arson Course has been completed for the City of Preston. The total number of students who completed the courses is 69.

Requested assistance has been given to the following police and/or fire agencies (most assistance given has been for fire cause determination):

Pocatello, Arco, Butte County, Shelley, St. Anthony, Preston, American Falls, Aberdeen, and Fort Hall.

I have made five inspections and have issued one permit for explosives and blasting in Power County.

After visiting with the departments in this part of the state, it is my feeling that most departments need much more exposure to the workings of the Uniform Fire Code. This is probably our number one problem. Also, public education is sorely needed as most departments just don't have the funding to carry this out. Also, better communication is needed between the various agencies, city councils, and county commissioners.

I have talked with mayors, city commissioners, county commissioners, and a number of sheriffs. They are enthusiastic about what we are doing. They are appreciative of our input and assistance in the areas of training and arson investigation.

The main problem I have encountered appears to be a basic lack of commitment on the part of some fire departments and cities to both understand the fire code, as well as to enforce it.

It would seem to me that our future role would be to continue to be a resource office for the various agencies that need our assistance. We should continue to provide classes as needed or requested. We could also provide some fire inspection/code enforcement in areas where no expertise presently exists.

My observations of the general condition of the fire service in this district range from excellent in some areas to almost nonexistent in others and with varying degrees in between.

My goals and objectives for this coming year will be to continue to refund the educational materials that we are presenting, and to get this information into the departments that will use it in a positive way to impact the loss of life and property in their communities.

RECAP OF ACTIVITY REPORTS FOR 1984

STATE FIRE MARSHAL

Training Classes	2
Fire Inspections	18
Arson/Fire Investigations	26
Business Meetings	132
Public Relations Appearances	31
Schools - Seminars Attended	5
Fire Code Interpretations	324
Letters Written	5,163
Long Distance Calls	861
Fire Losses Reported From Insurance	\$26,117,493

RECAP OF INVESTIGATION REPORTS FOR 1984

DEPUTY STATE FIRE MARSHAL -- ARSON/FRAUD INVESTIGATOR

Total Cases Received	47
Arson/Fire	25
Fraud	32
Cases Cleared	46
Cases Pending as of 12-31-84	25
Recoveries	\$ 134,672

Part II

STATE FIRE MARSHAL  
REPORT AND ANALYSIS OF FIRES  
IN IDAHO

JANUARY 1, 1984 - DECEMBER 31, 1984

The fire reports you are about to see are the accumulation of fire statistics gathered from many Fire Departments across the State. The reporting Fire Departments are located in every geographical area of the State so the data shown will truly represent the whole State. There are currently 75 Fire Departments reporting that make-up about 60-70% of the States population. So again we feel that the fire data is truly representative of our fire problems.

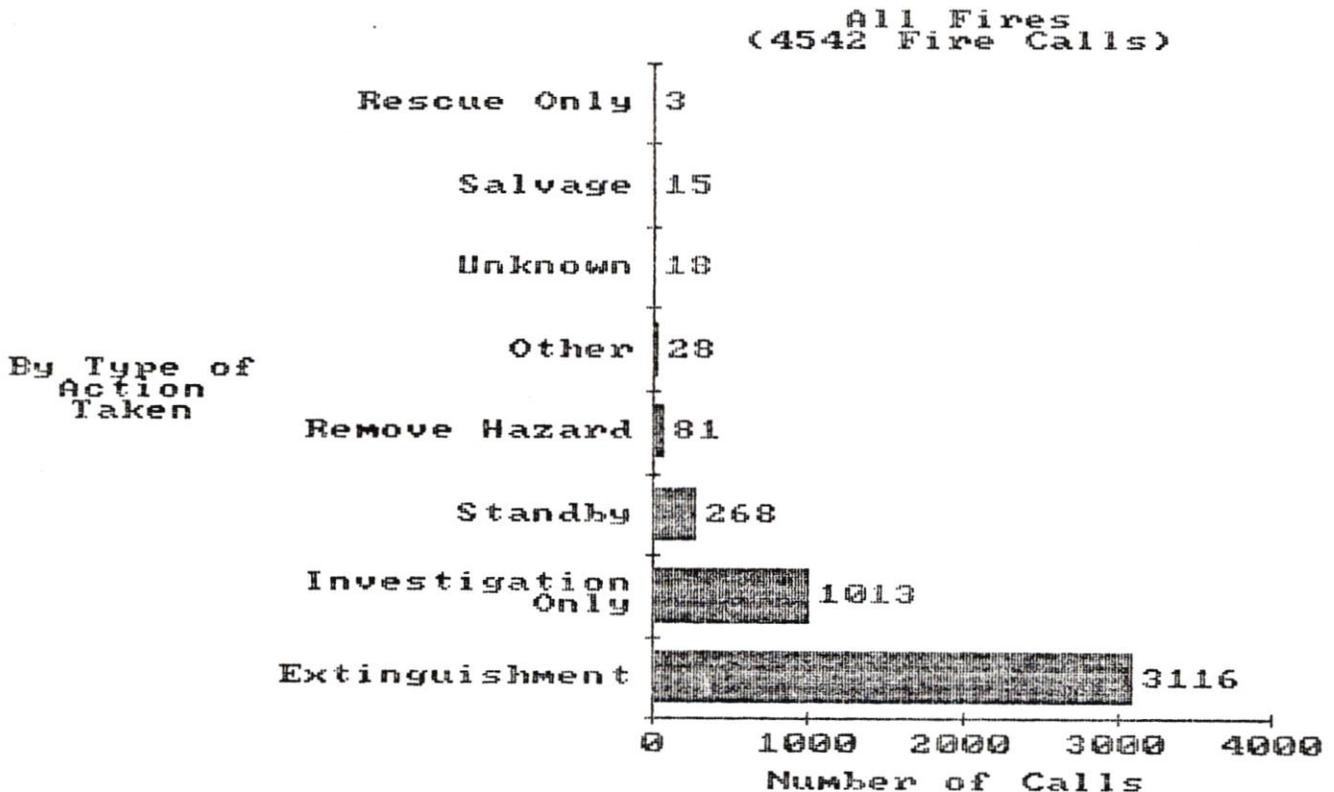
The citizens of the State of Idaho owe the reporting Fire Departments a debt of gratitude for taking of their time to learn the reporting system and to fill out the reporting forms. This is no easy task. The firefighters, because of their sense of duty, not only to Idaho but the nation as well, have taken on this task as a necessary part of their jobs. I say the nation because we report their data to the National Fire Incident Reporting System (NFIRS) in Washington D.C. I personally want to thank them on behalf of my office as well.

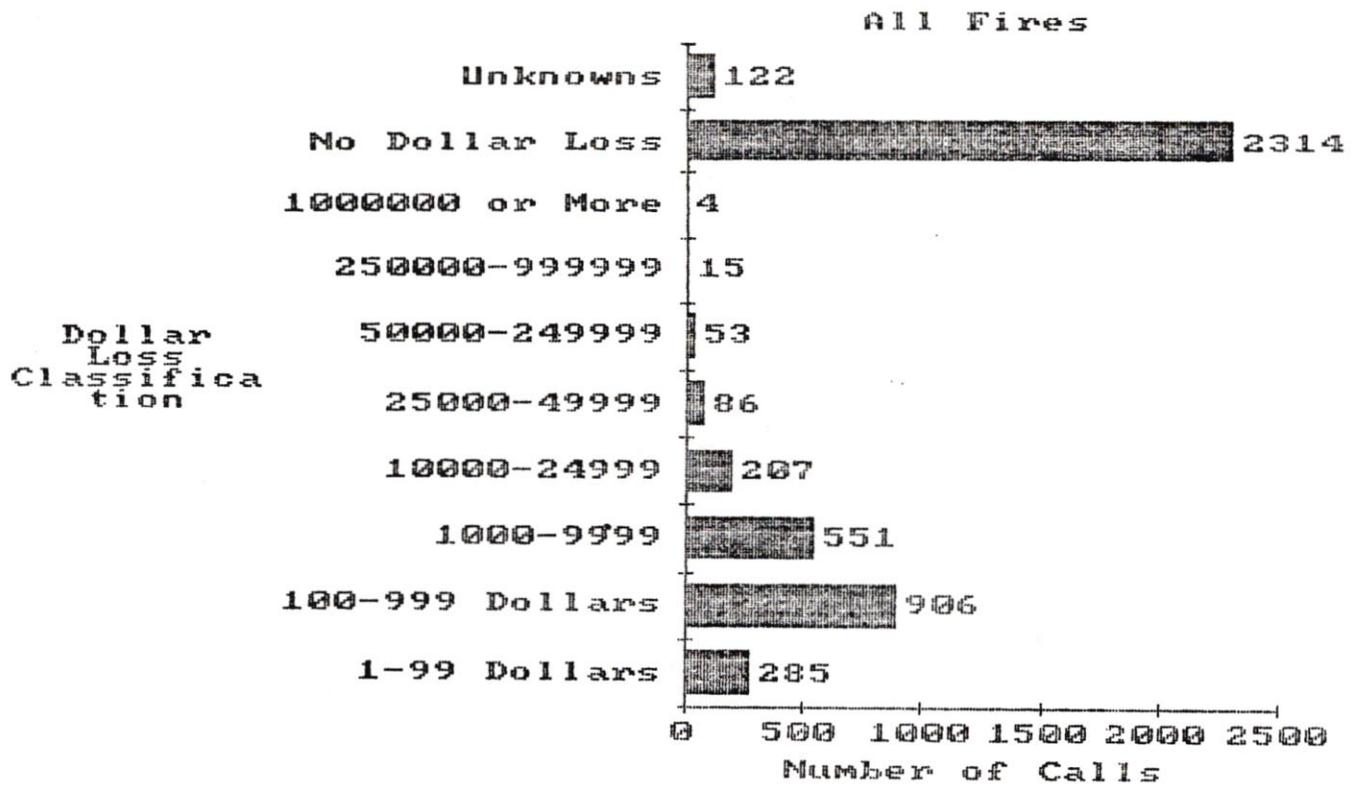
Gathering and studying fire data is the only way we are going to make any head-way in our fight against fire. Our deadly enemy can only be conquered from a position of intelligence. Our Idaho Fire Incident Reporting System (IFIRS) is the intelligence arm in this fight.

## ALL FIRES

Our reporting Fire Departments responded to 8,219 incidents in 1984. These incidents encompassed a myriad of problems from building and vehicle fires to hazardous spills and many other things. Fire Calls amounted to 4,543 of the total, while the rest were so many and varied that it is impossible to classify them. It is apparent that the Fire Departments are the first line of defense in their communities because of the variety of calls they respond to.

The first category will be an analysis of the 4,543 reported fires. Then we will break this down to structure fires, mobile property-vehicle fires, and outside fires. Our analysis, as you will see, is provided in graphics form for an easy to read method. You will be able to readily see that we do have a fire problem in Idaho and what those problems are.

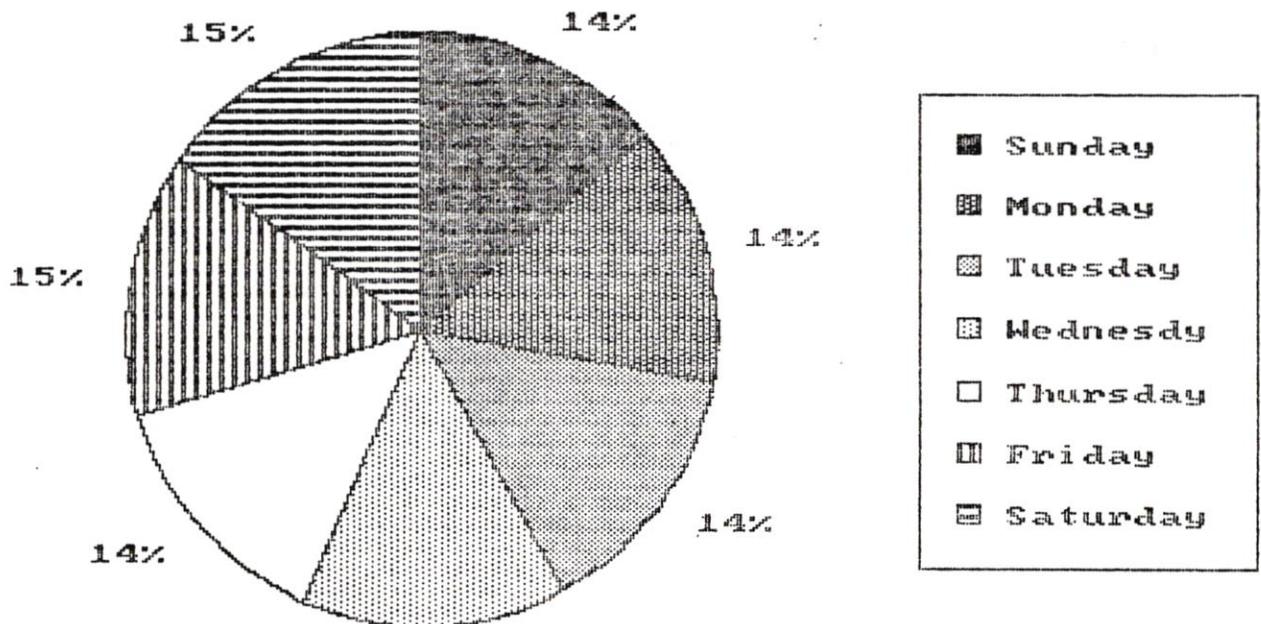




ANALYSIS: This graph shows clearly that the fire services do save money as most fires are in the no loss column and most of the other fires fall within the lower dollar figures. It is also plain that only a few fires have been responsible for the large total fire loss figure.

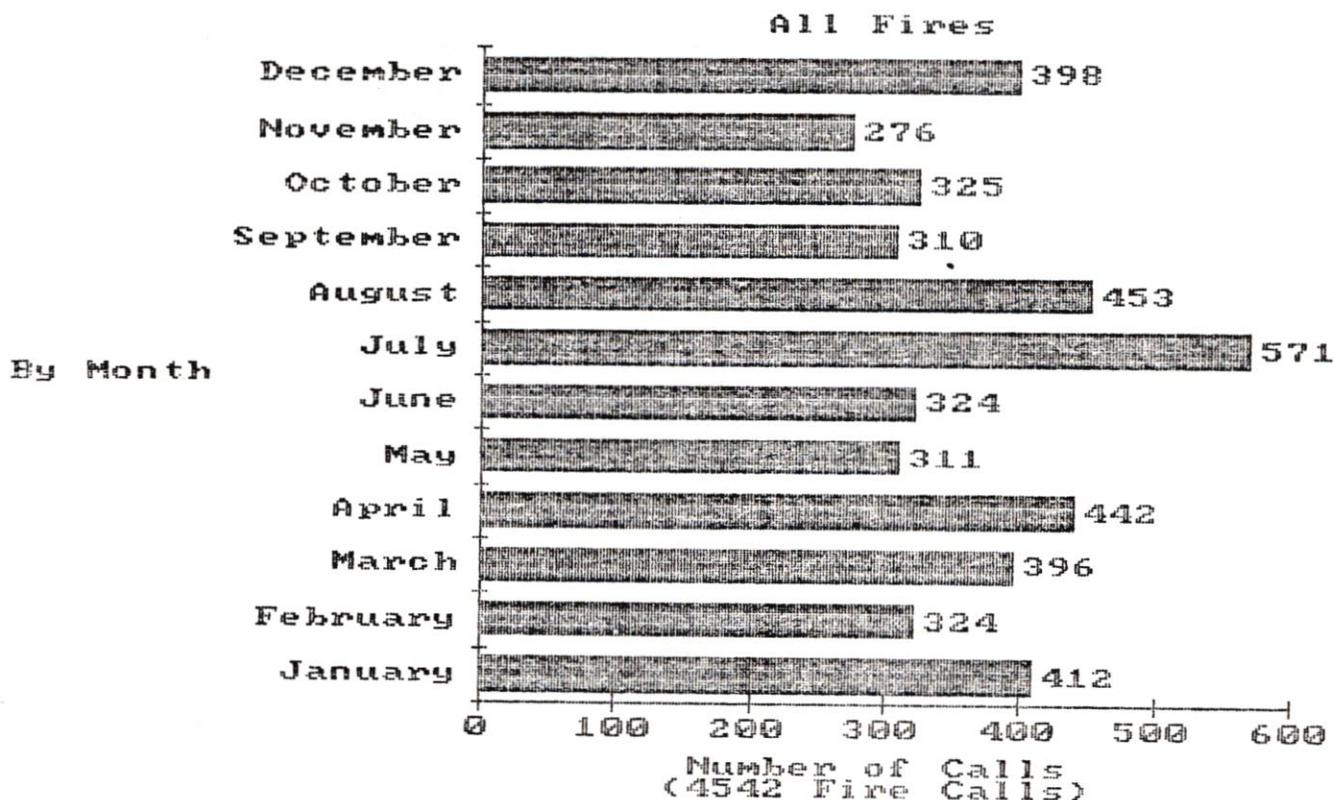
Total Fire Loss - \$28,253, 239

**All Fires  
4542 Total Fire Calls**

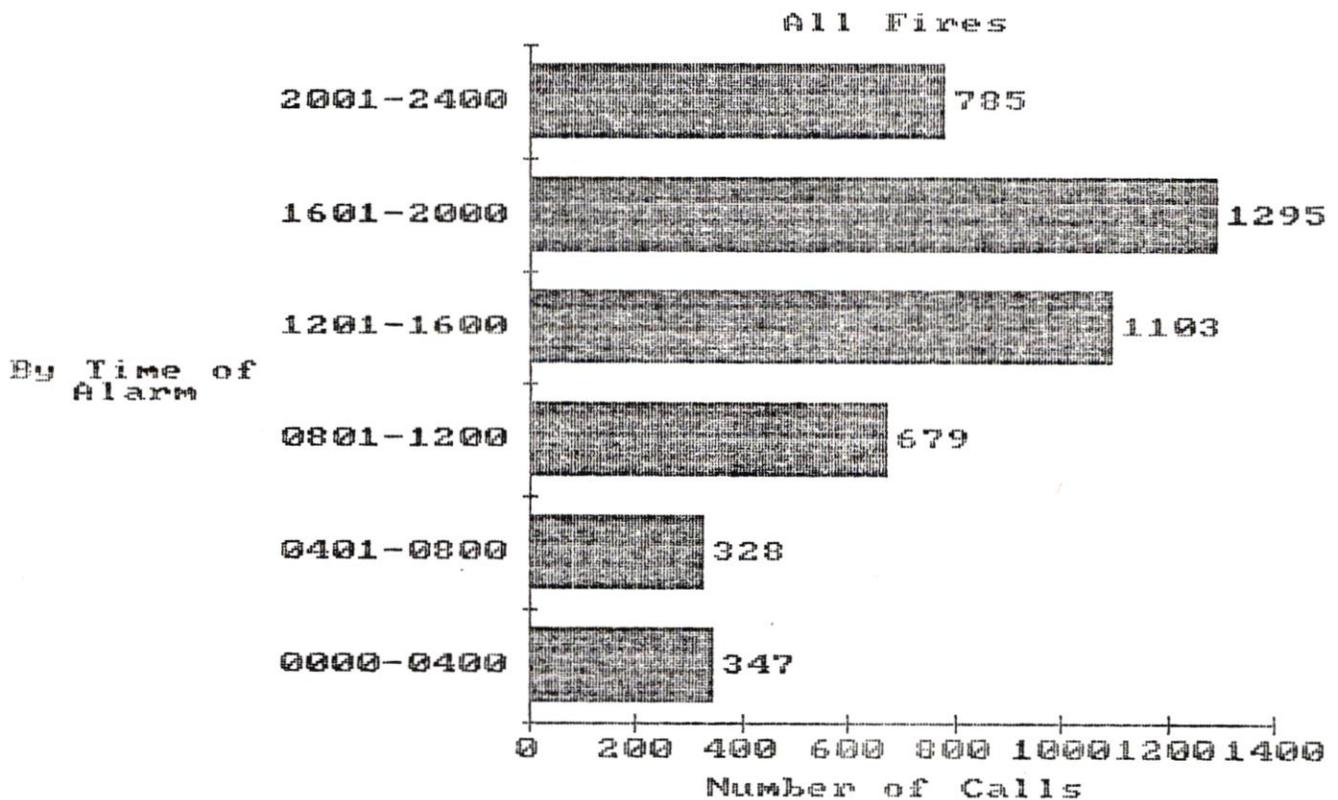


**% of Fire Calls Per Day**

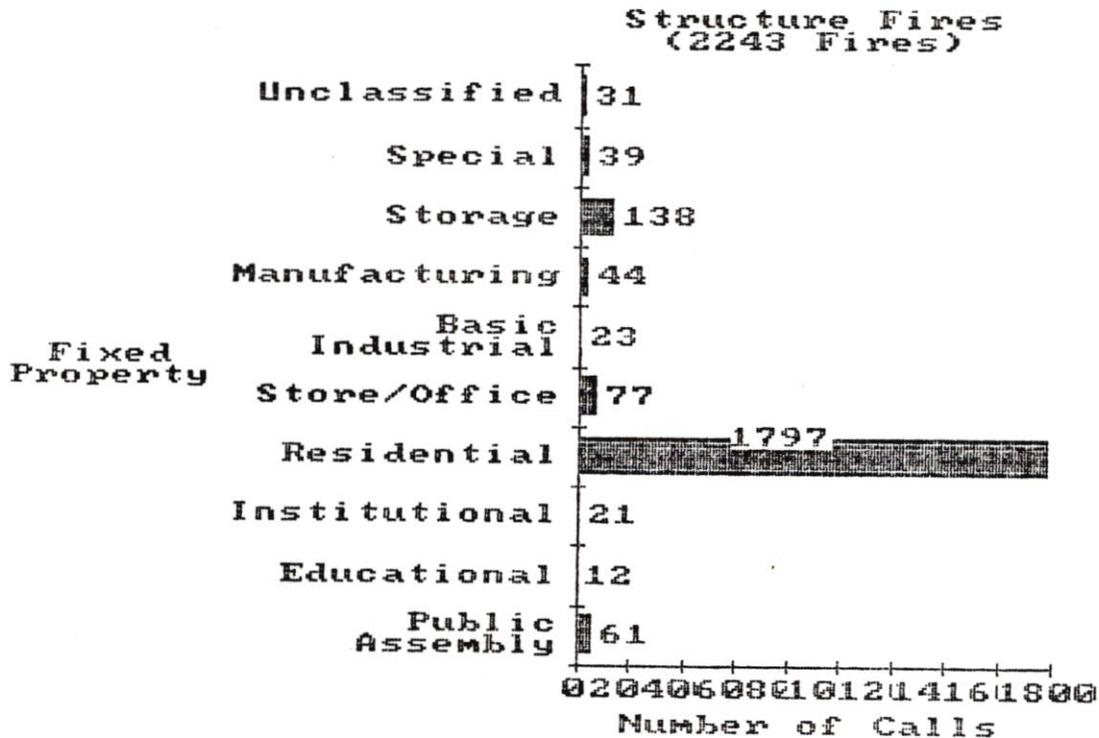
ANALYSIS: Calls per day did not vary more than one percent. This only means that the Fire Departments can't let their vigilance lapse on any given day. This statistic has not varied hardly at all in three years.



ANALYSIS: The summer months still are the busiest time for our Fire Departments. This will probably always be the case as these months are the ones when we have a lot of open burning to clean up weeds and brush. Also this is the time of year that weeds and brush are very dry. However it is interesting to note that January and December stand out in the winter months. It is understandable when you consider that this time is when heating systems are being taxed to their limits. The graph still does not indicate that there is a season that is much slower than any other. This only proves that there is a perpetual fire season for our fire services.

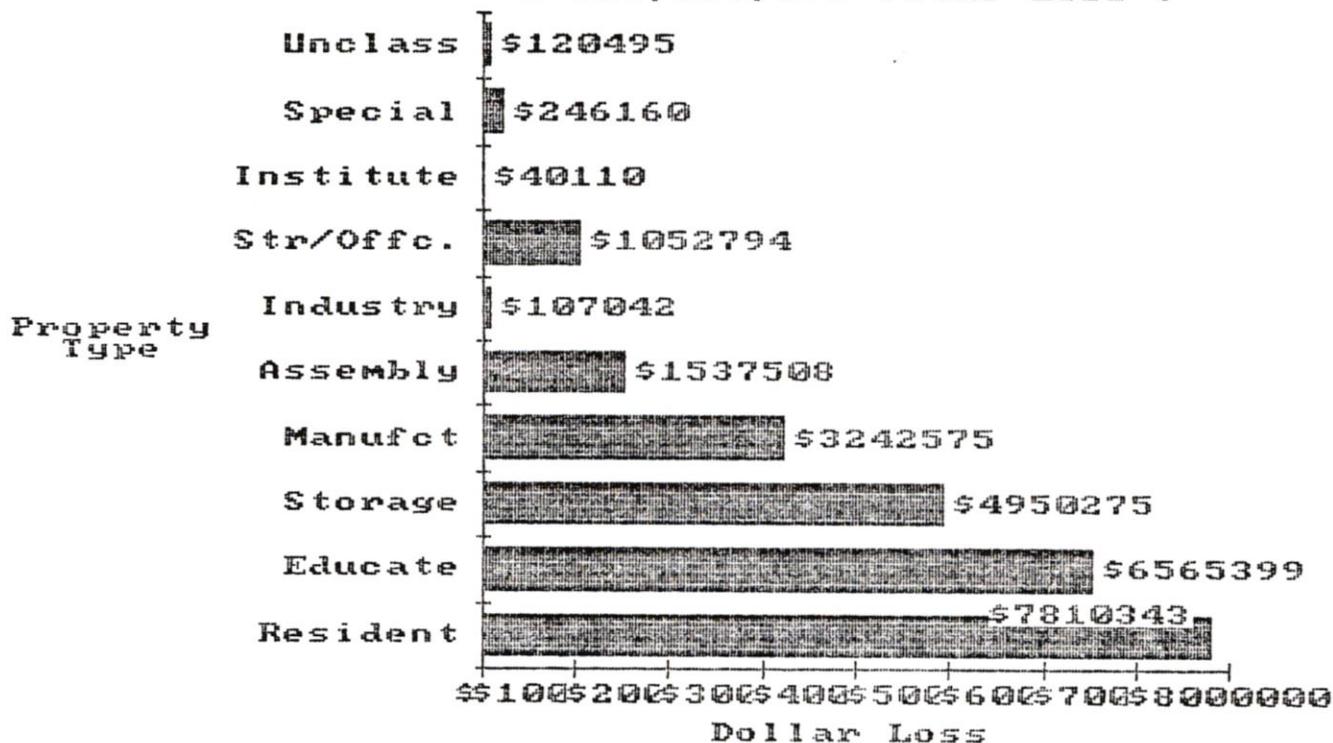


ANALYSIS: The hours of most frequency have not varied appreciably from last year. I doubt that this will change much from year to year. As you can see most of the activity is from 12 noon to midnight. As we know people cause most fires and this time frame is when people are most active. However it has been my experience that the larger fires are in the later time slots as they go undetected for a longer time as we still rely on people to report fires. A thorough analysis of time versus large fires would provide a good argument for detection systems tied directly to the Fire Department. The reporting Fire Departments have this data via the Idaho fire reporting system.



**ANALYSIS:** As last year the residential property practically stands alone as the leader in number of fire calls. There are two reasons for this. One, there are more of these properties than any other and two, they are never inspected for fire hazards as are other property types. We do know that the massive move to woodburning stoves has also added significantly to this number. This statistic tells us that we must try harder as fire officials to convince people to work to prevent fires in their homes. Since we cannot, and probably should not, mandatorally inspect these properties, we must try to change this through a public education process. Keep in mind also that most fire deaths occur in this property as well.

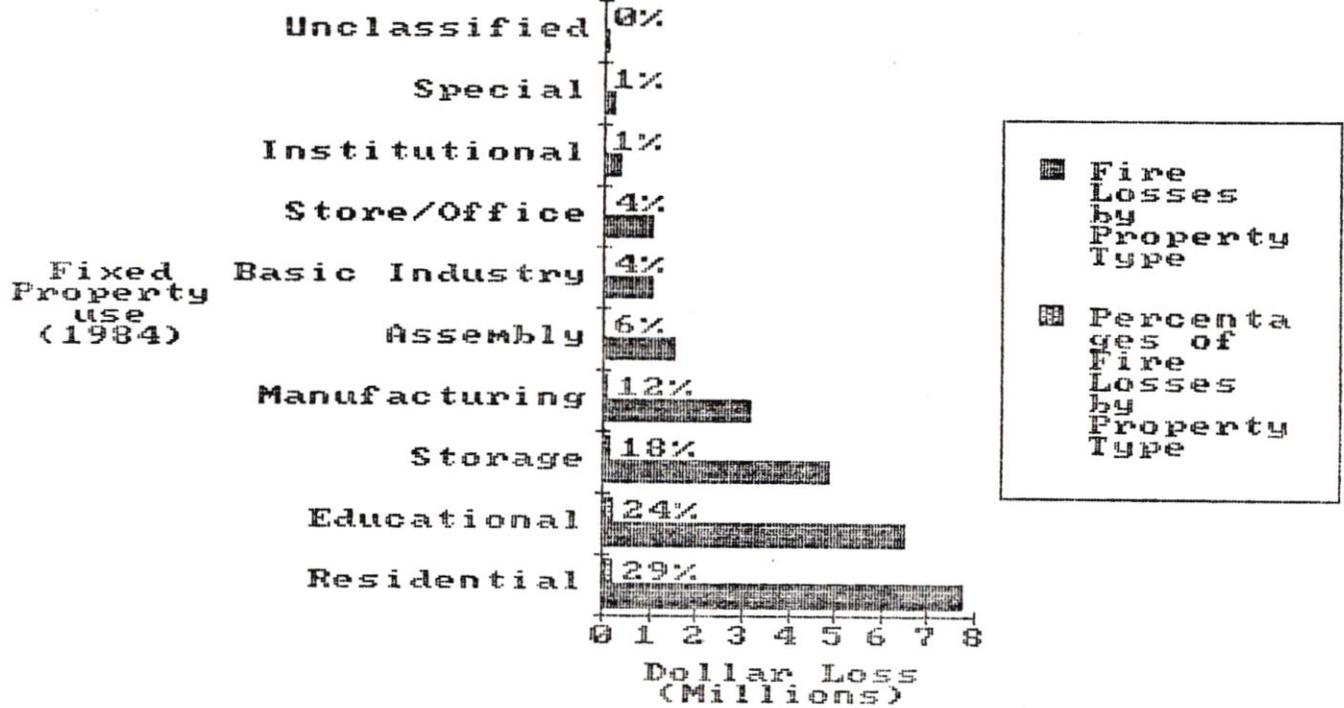
**Structure Fires  
( \$26,636,079 Total Loss )**



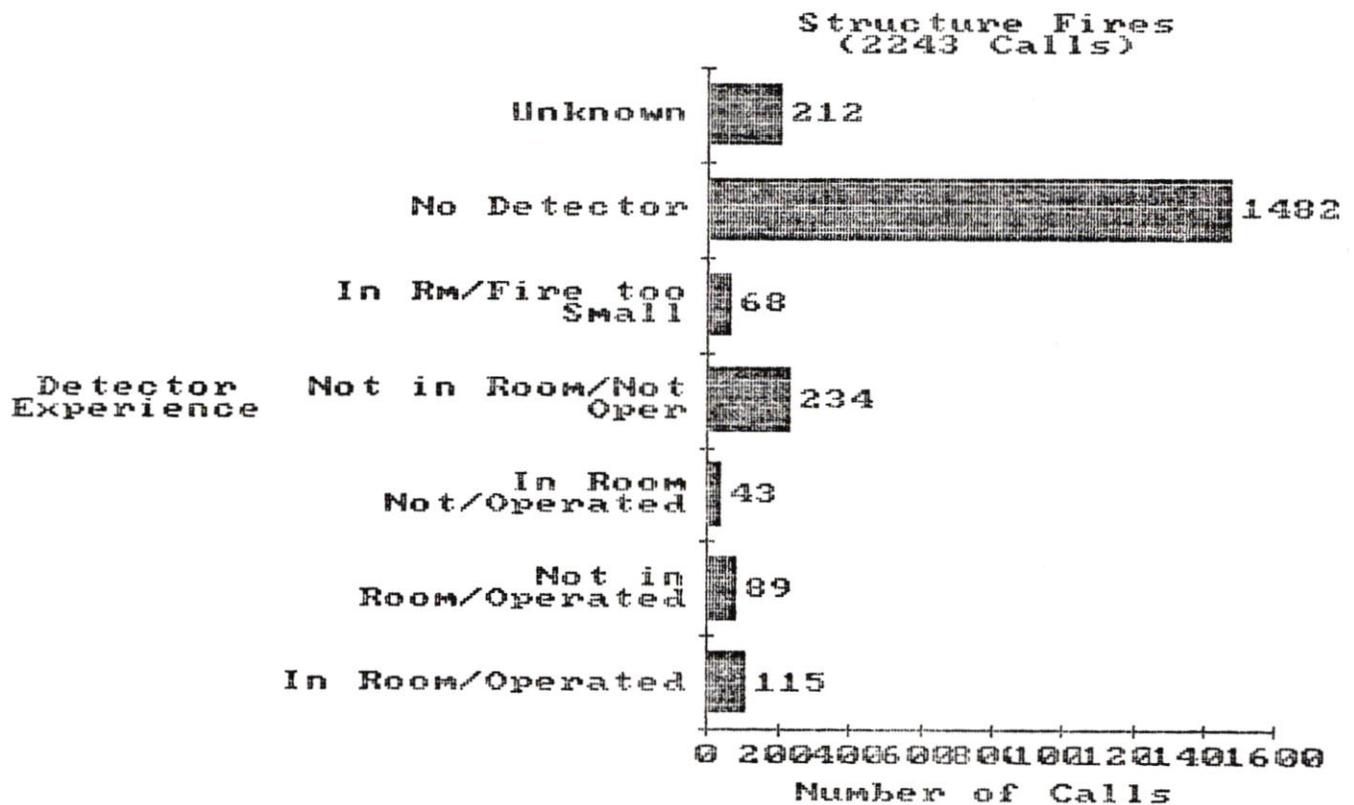
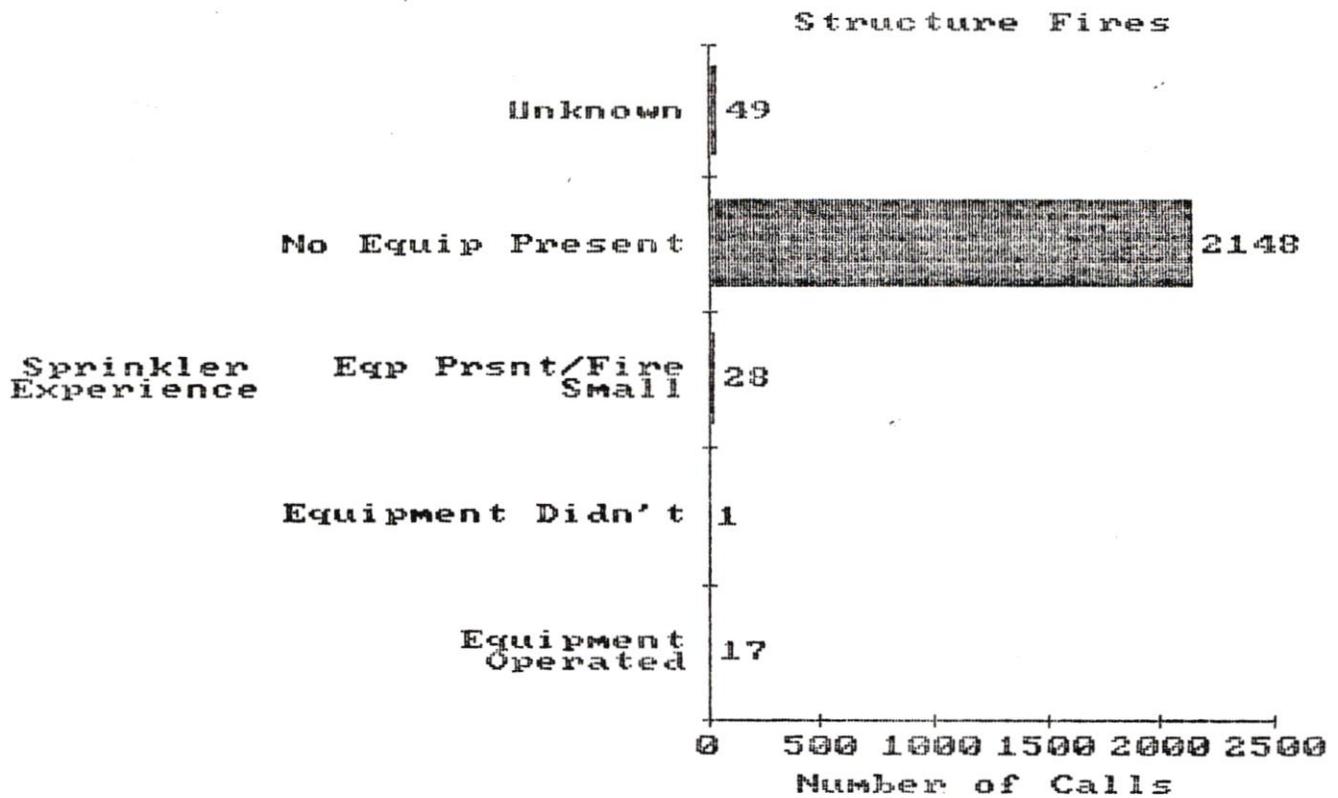
ANALYSIS: This graph more clearly shows the losses per property type. It may be easier to understand this data if the property types are described.

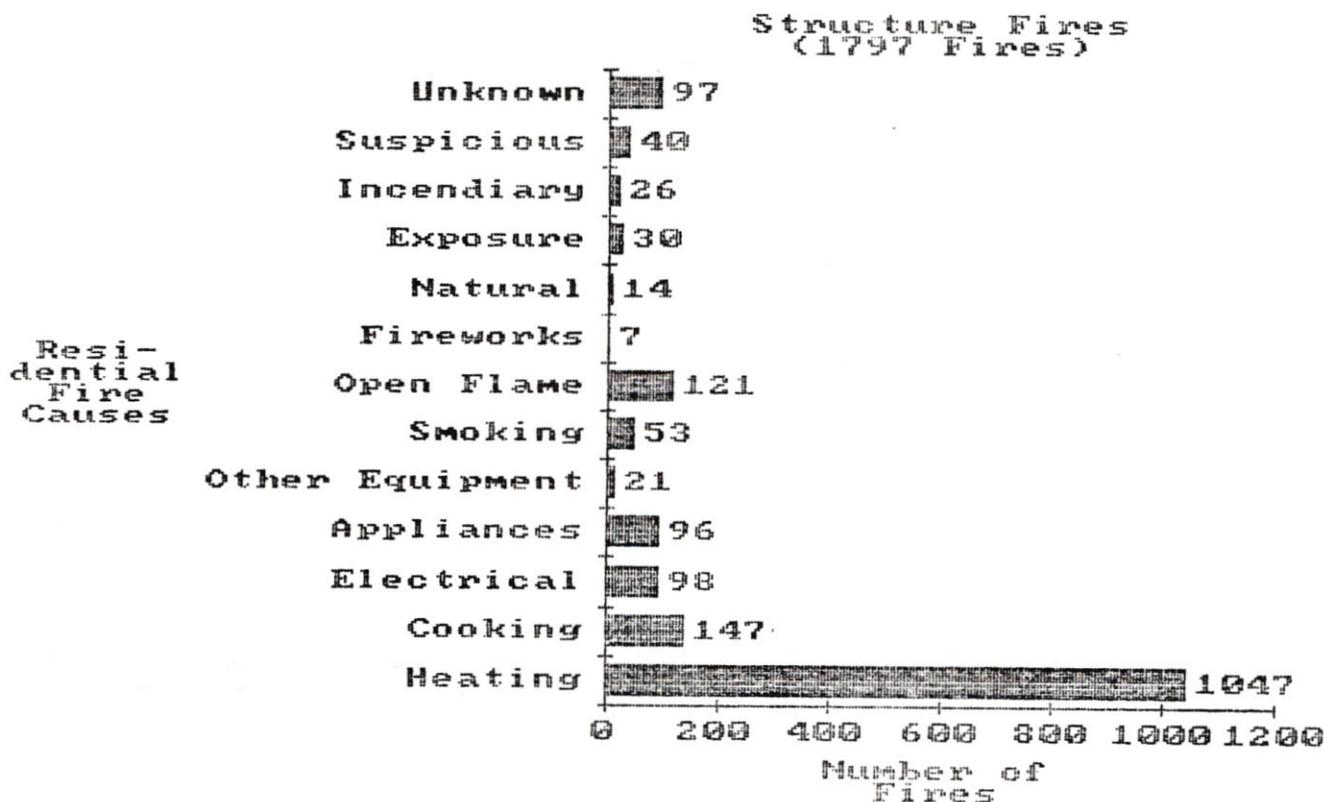
1. Residential: Where sleeping accommodations are provided for normal living purposes.
2. Educational: Schools, Colleges, etc.
3. Storage: Buildings, Structures for the storage or sheltering of goods, equipment, ie; warehouses, barns, etc.
4. Manufacturing: Properties where substances are transformed into new products. ie; factories etc.
5. Assembly: Places where the public assembles for amusement, recreation. ie; Theaters, Gyms.
6. Industry: Agriculture, forestry, mineral, utilities, and communication facilities.
7. Institutional: Hospitals, nursing homes, penal, etc.
8. Special: Mainly outdoor properties with value. ie; signs, poles, fences, etc.

**Fire Losses by Property Type**  
 (\$26,636,079 Total Loss)



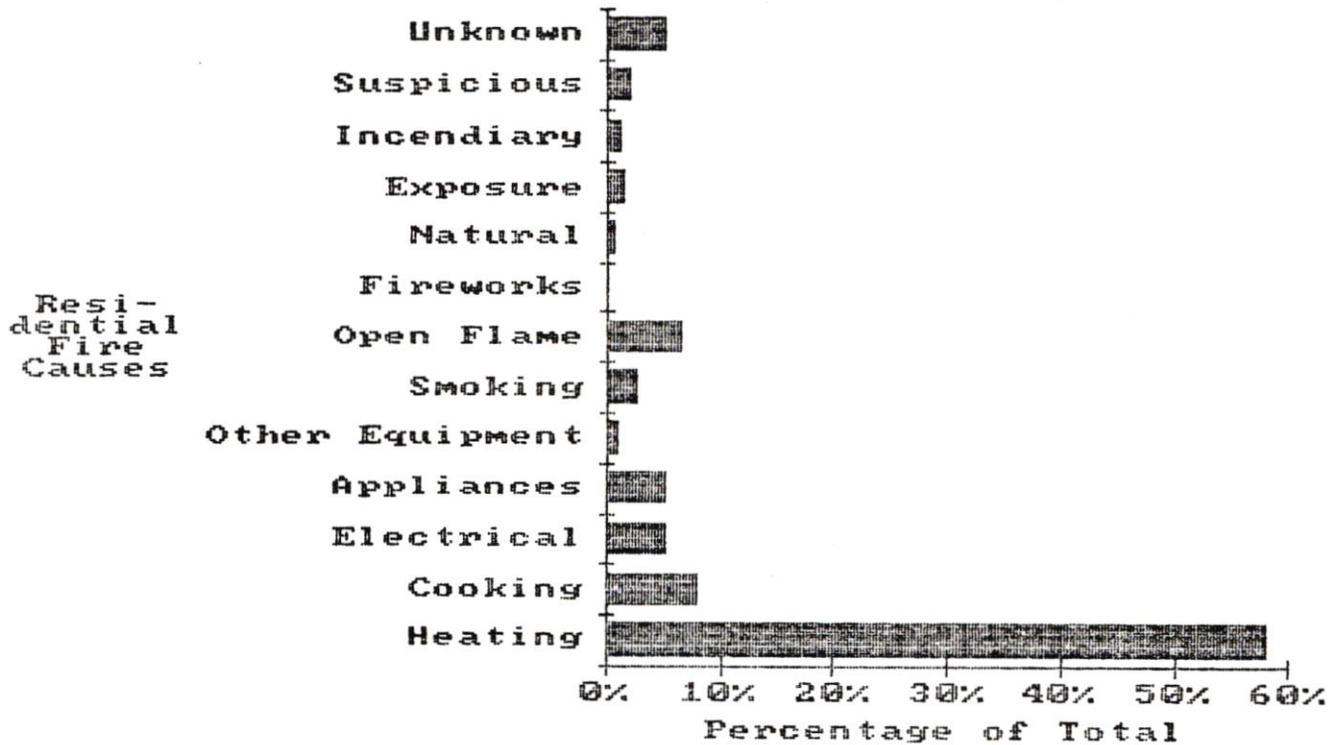
ANALYSIS: The highest percentage of loss is in the residential category. This is understandable when you consider that it leads in the number of fires as well. But the most significant change over last year is the educational property. It accounts for only 12 fires for the year but for 24% of the total loss. Three school fires in Lewiston, Lapwai, and New Plymouth make up the bulk of the total. To my knowledge none of them would have met current code. It makes one wonder if the fires would have been so extensive if they had. To our good fortune no lives were lost. With all this in mind it would be good to remind our school officials to try to meet current code at the earliest opportunity.





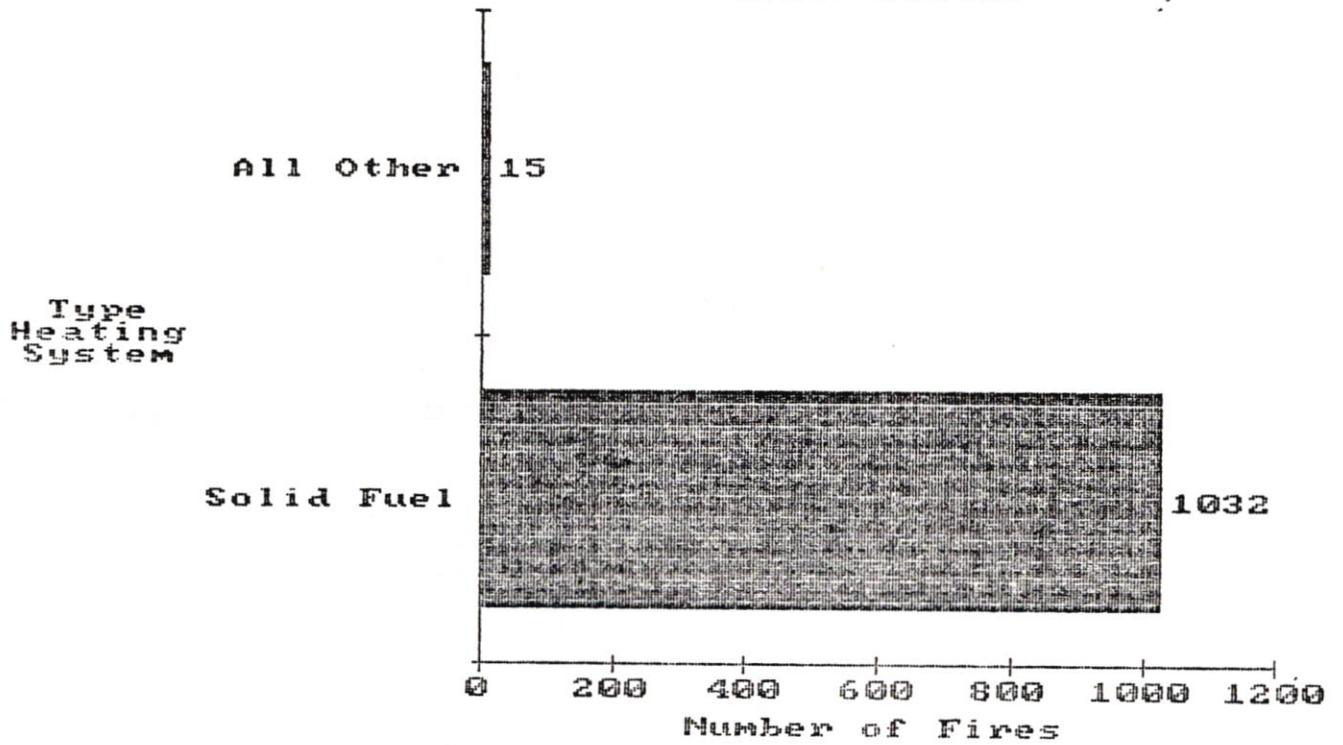
ANALYSIS: It is not hard to see why residential properties far outnumber the rest in total fires because of the heating caused fires. If the heating category could be eliminated it would reduce the total 58%. This could only be accomplished with a better public education program or a mandated inspection of heating system as is done in some of the European countries. I don't, however, believe that this country is ready for mandated inspection from a government entity, but it could come about from the insurance industry who may see the risk large enough to require periodical inspections before they write a policy, as they have done for years with boiler systems. I believe this would have the most impact in reducing losses due to heating systems in this property type.

Structure Fires  
(1797 Fires)

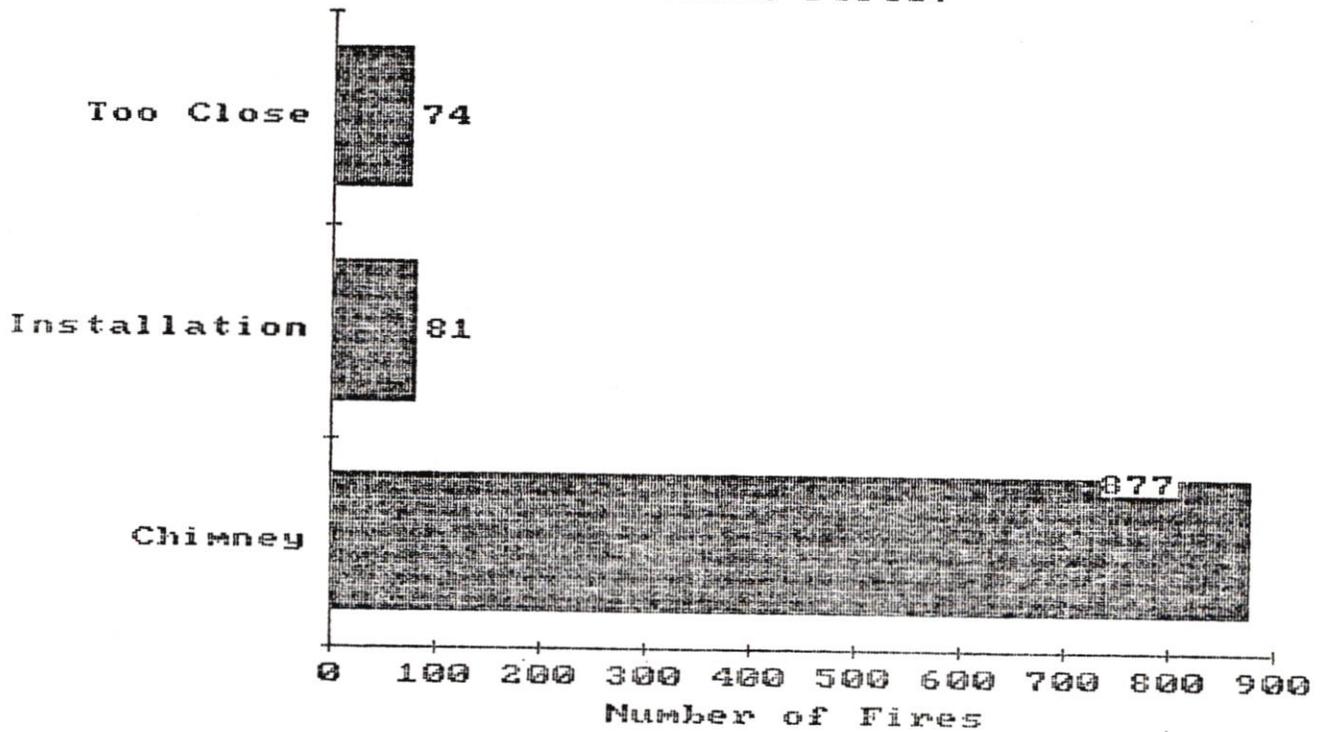


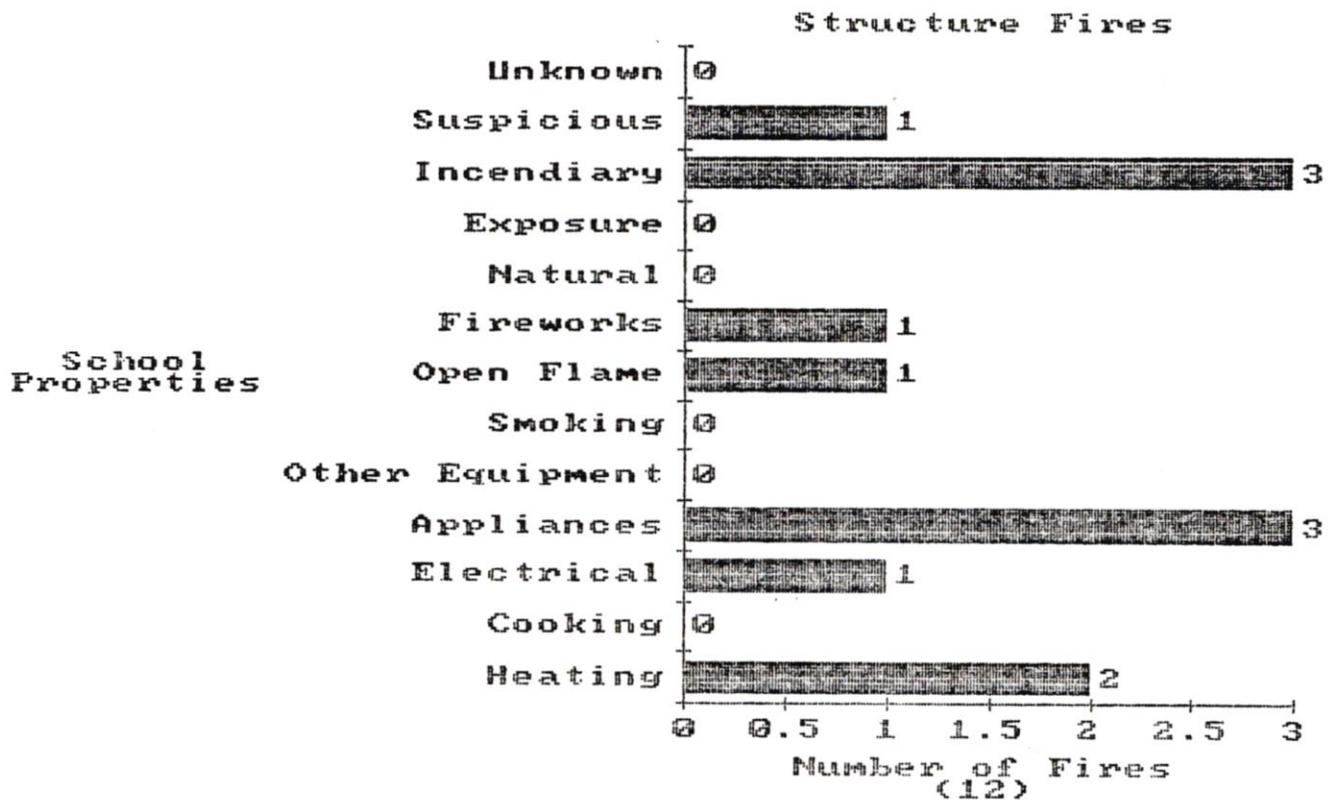
ANALYSIS: This graph was included to show the large percentage of heating fires as compared to the rest of the total. On the following page you will see two more graphs that show a breakdown of the heating problem in residential occupancies. As you will see the solid fuel heating system is by far the leading category and chimney maintenance the leading problem area. Most, if not all solid fuel problems are directly related to the air tight wood burning appliance.

Residential Heating Fires  
(1047 Fires)



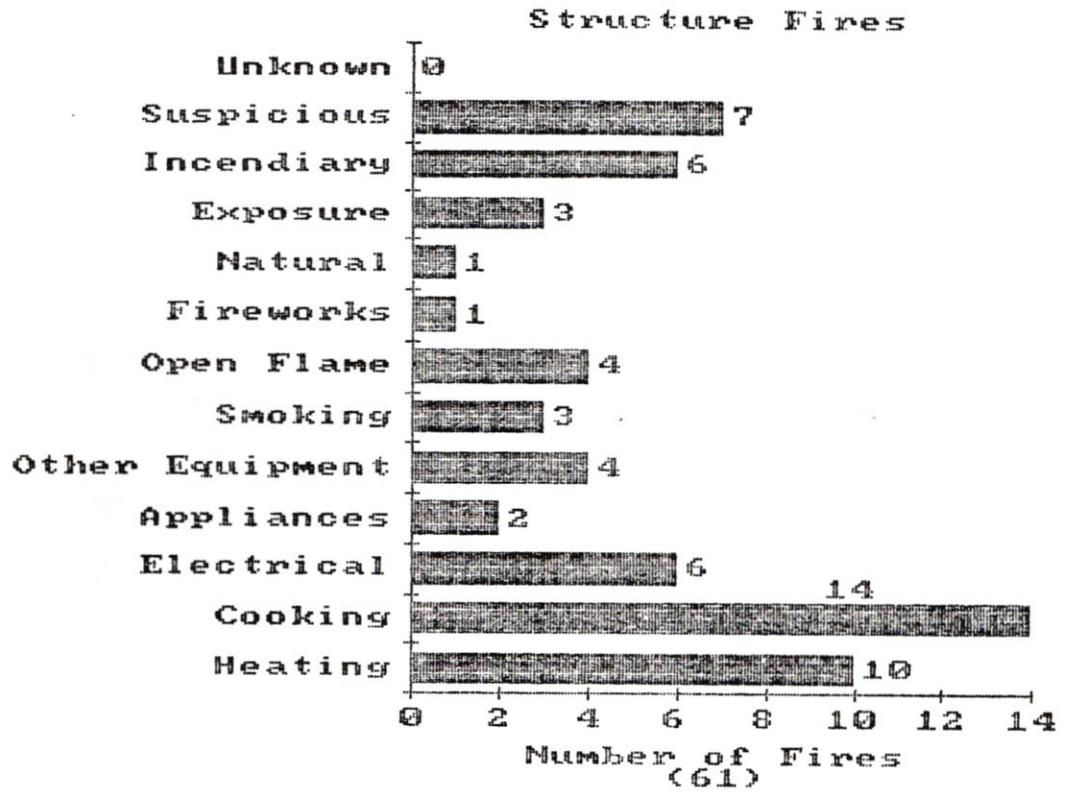
Residential Solid Fuel  
Heating Fires  
(1032 Fires)



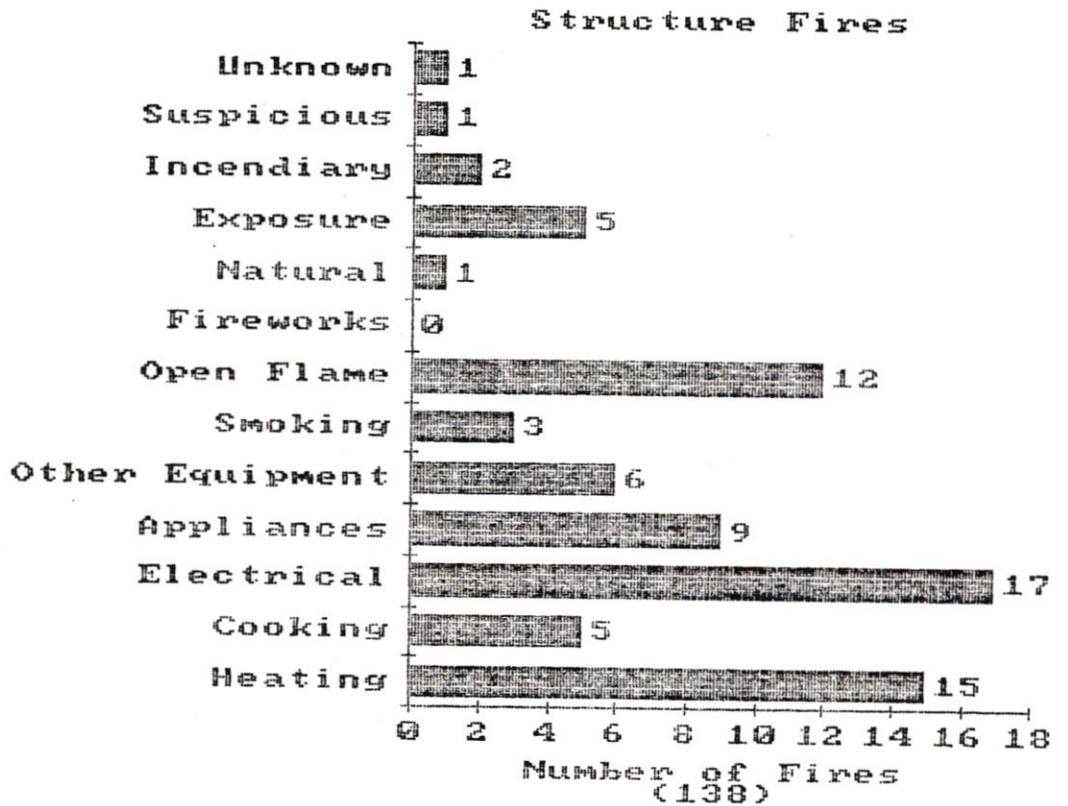


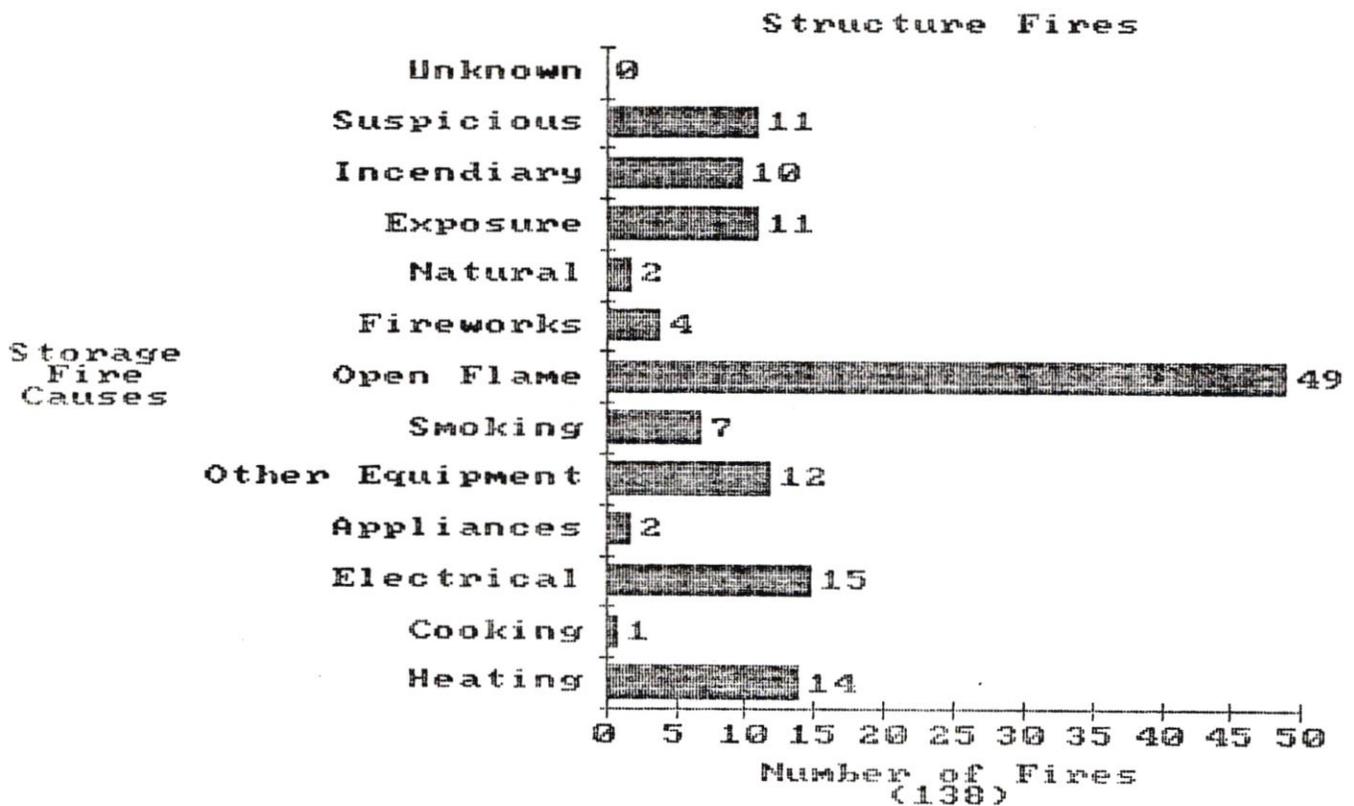
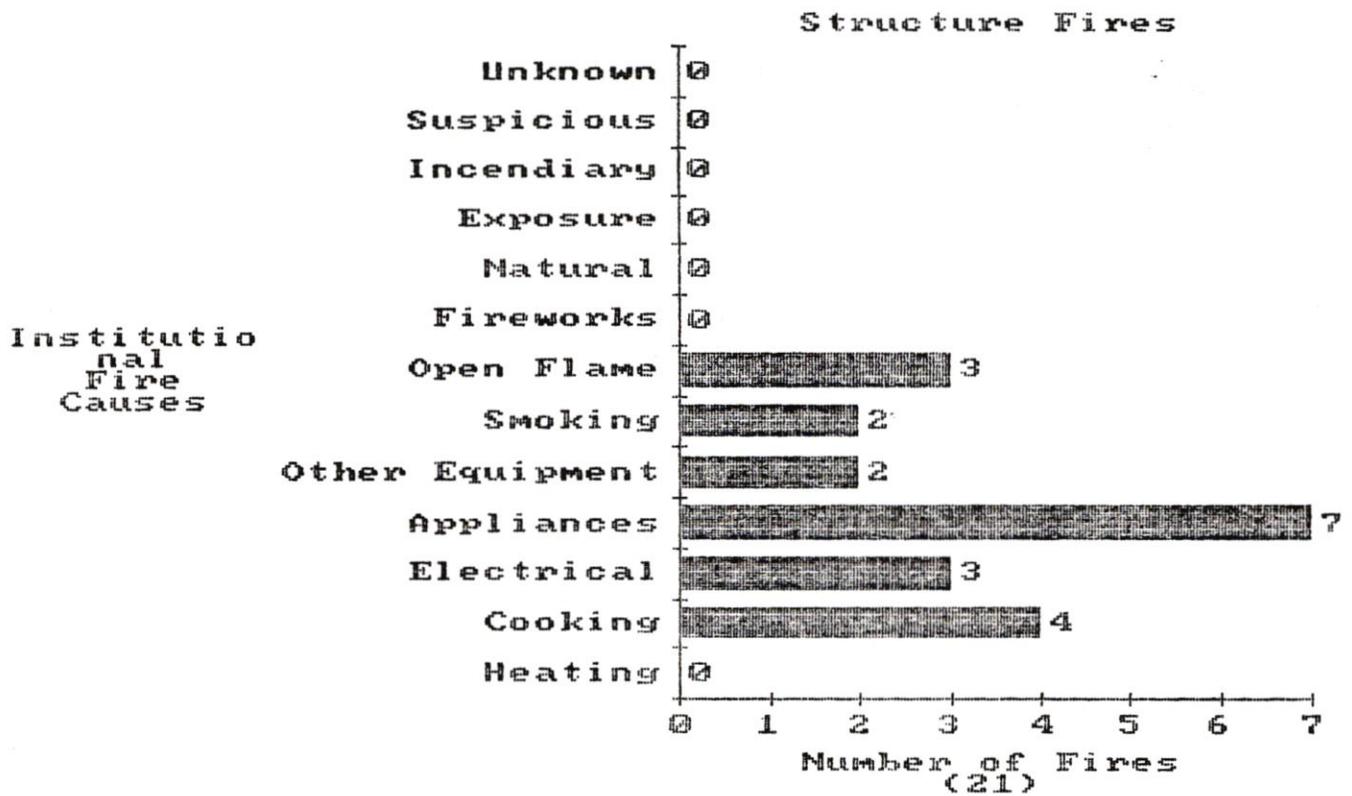
ANALYSIS: This is the first time this property type has been in the number two position under the dollar loss category. Schools accounted for \$6,565,399 of loss for the year even though there were only 12 fires. They are however very expensive properties so that any fire that goes undetected for a period of time is going to add up the dollars. In looking at the causes of fire it is interesting to see that there is a large percentage of incendiary (arson). I hope this is not a trend for this property type as, I know, it has always been subject to a lot of vandalism. Appliances are also a leader and after we done an investigation of one of these school fires it became evident that maintenance is the first line of defense to prevent these fires.

Public  
Assembly  
Properties

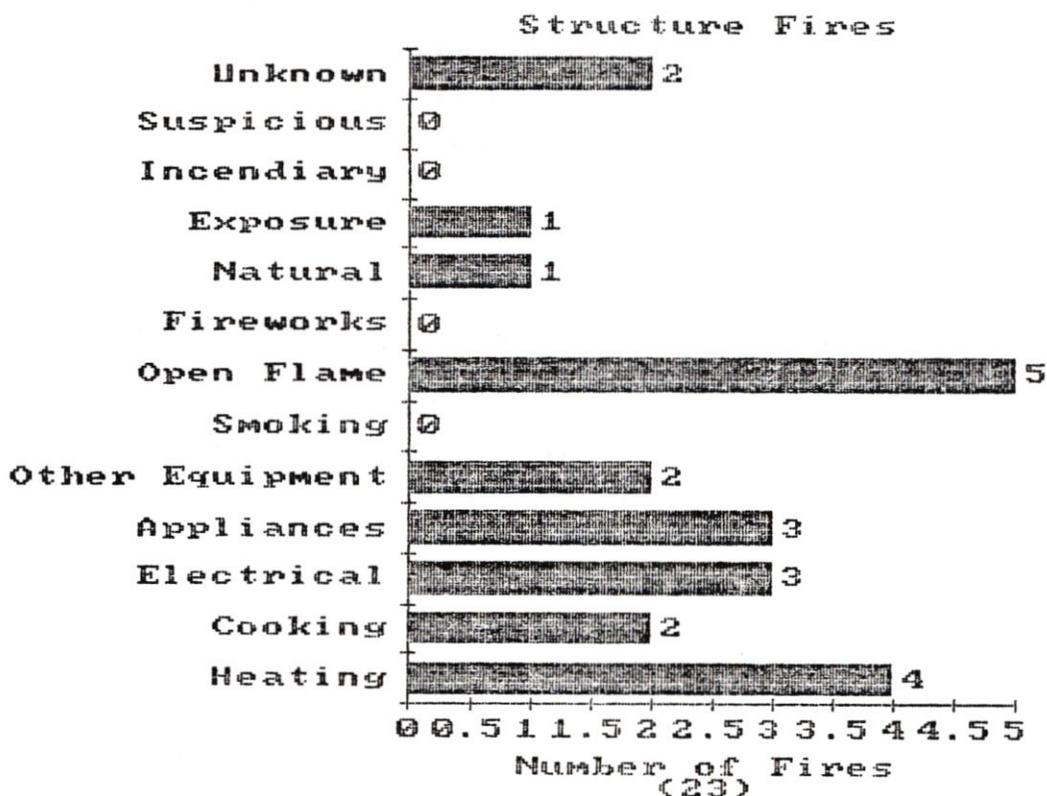


Store/Offi  
ce  
Fire  
Causes

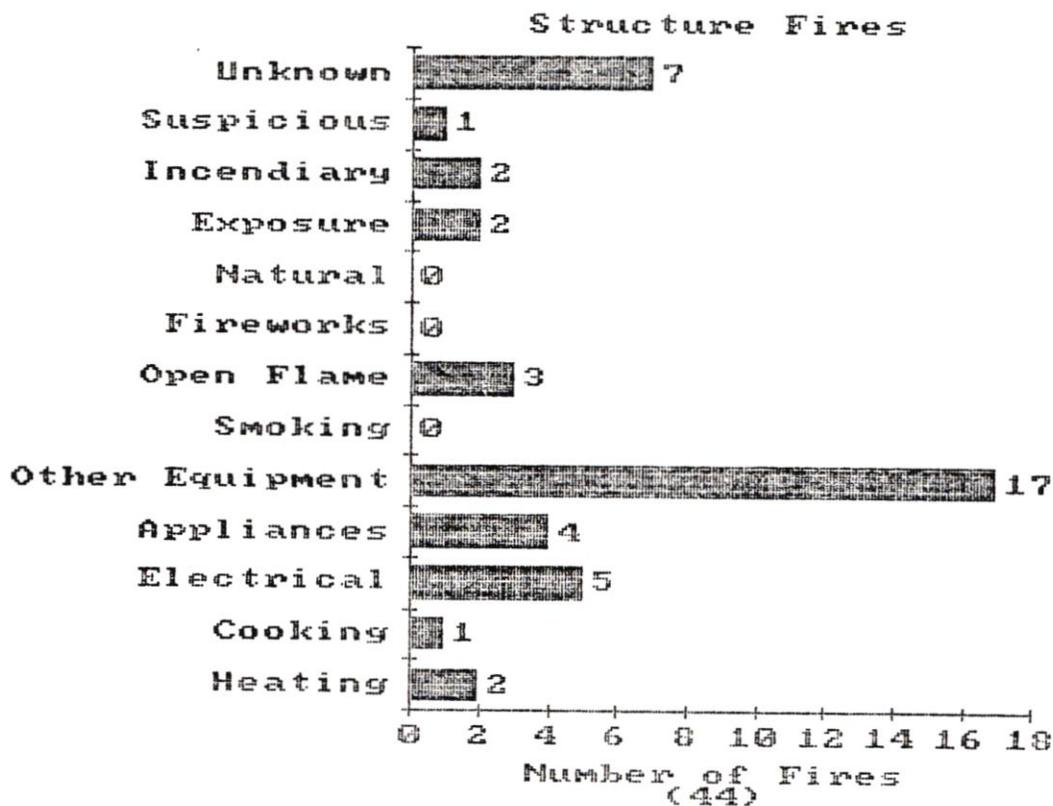




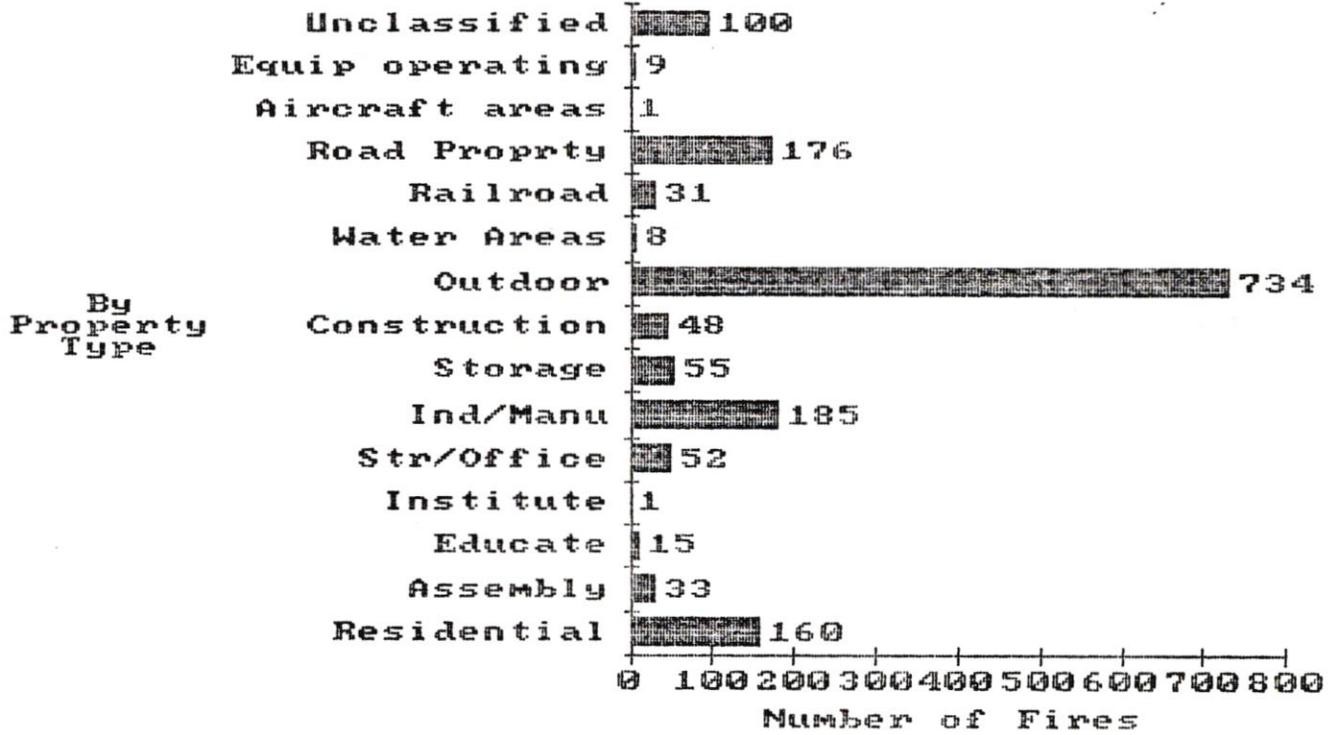
Basic  
Industrial  
Fire  
Causes



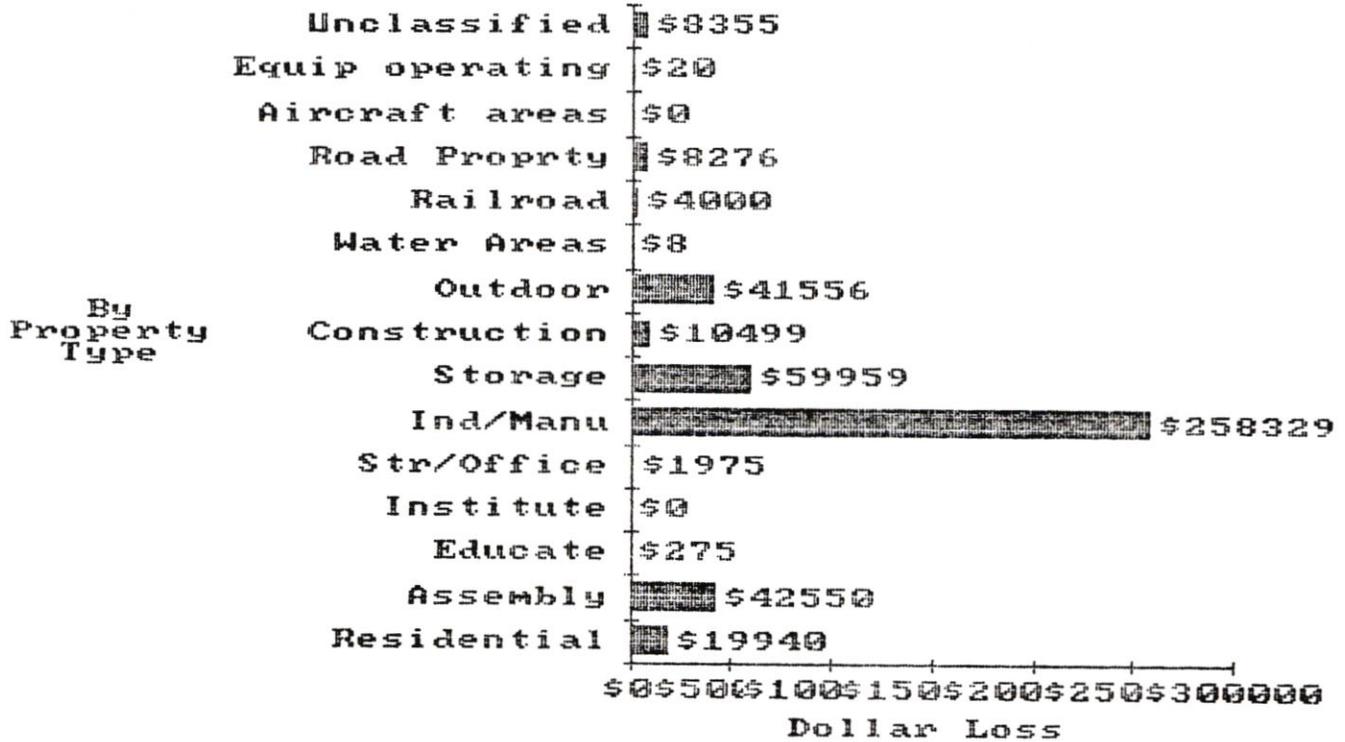
Manufactur  
ing  
Fire  
Causes

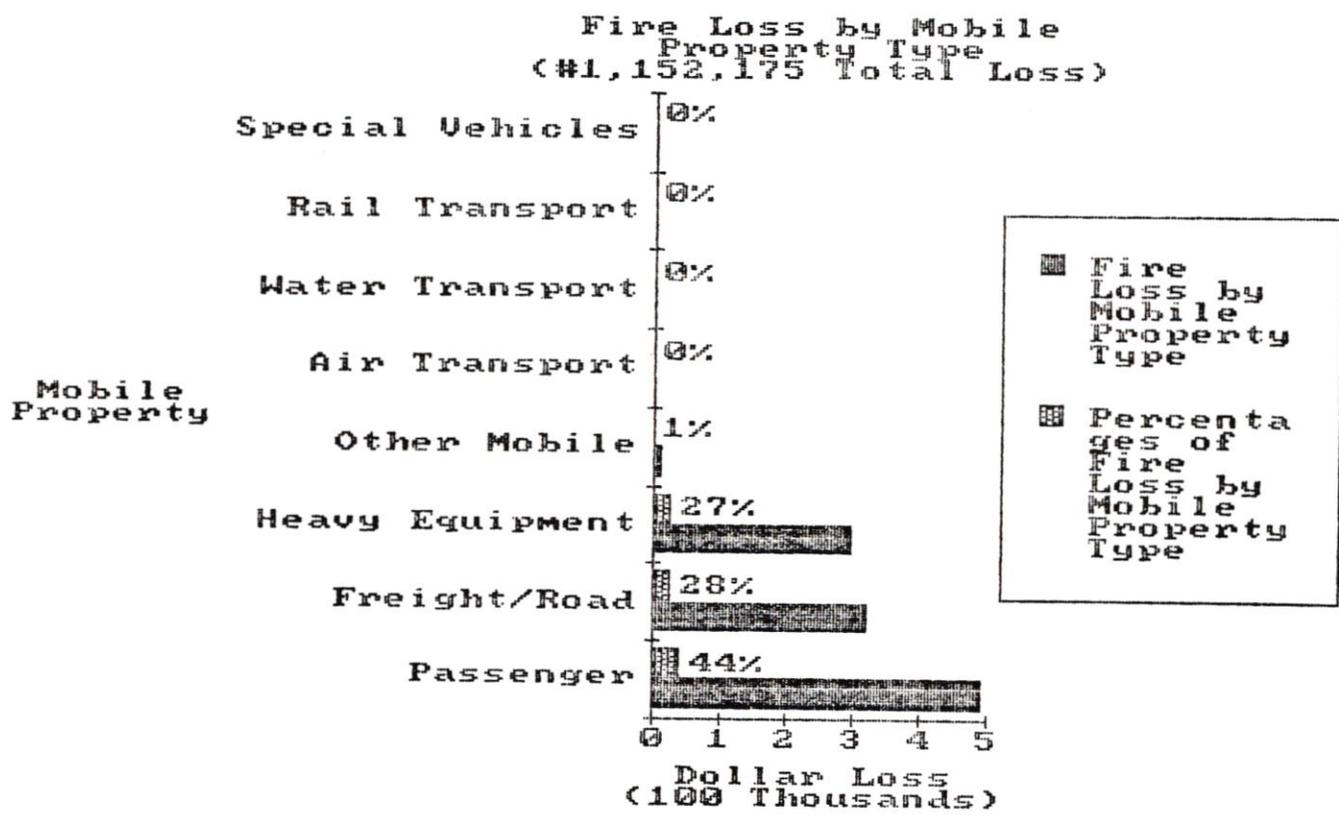
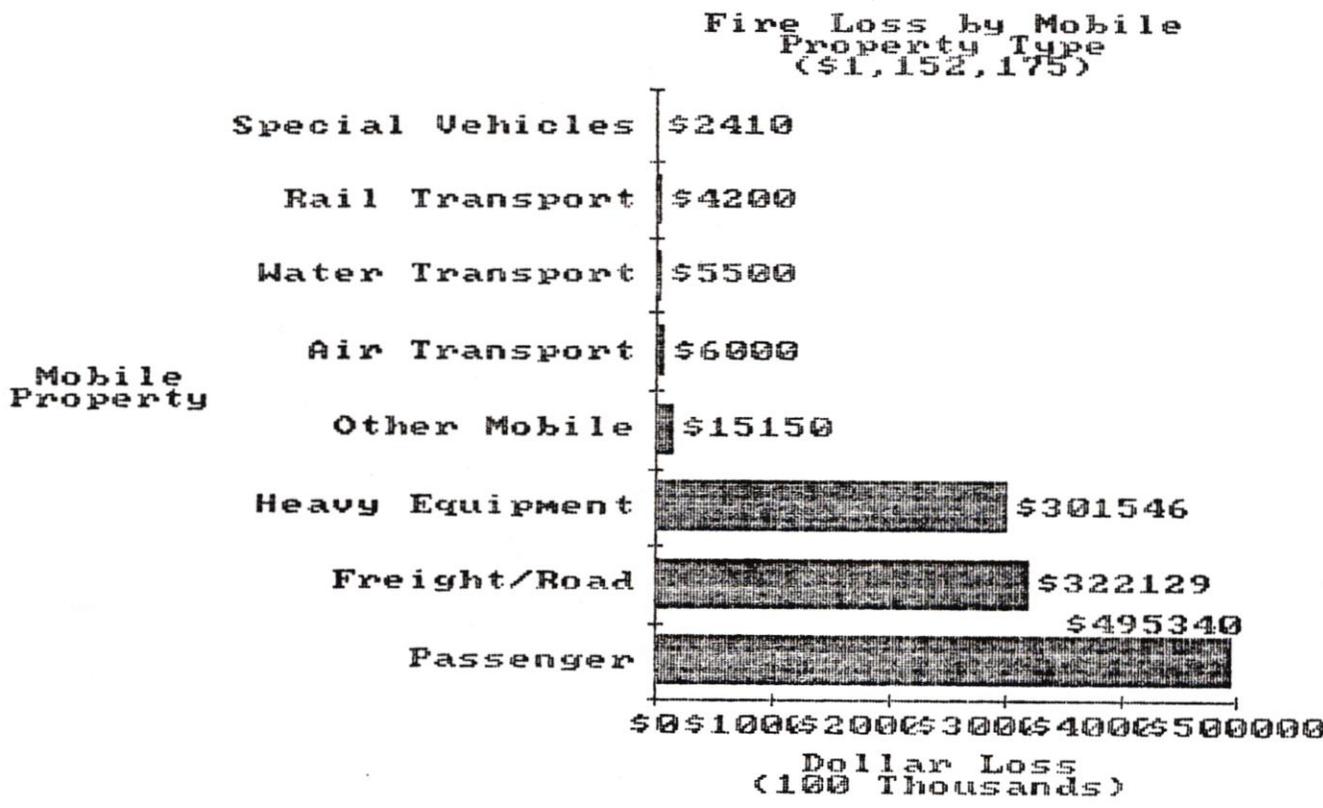


Outside Fires  
(1612 Total Fires)

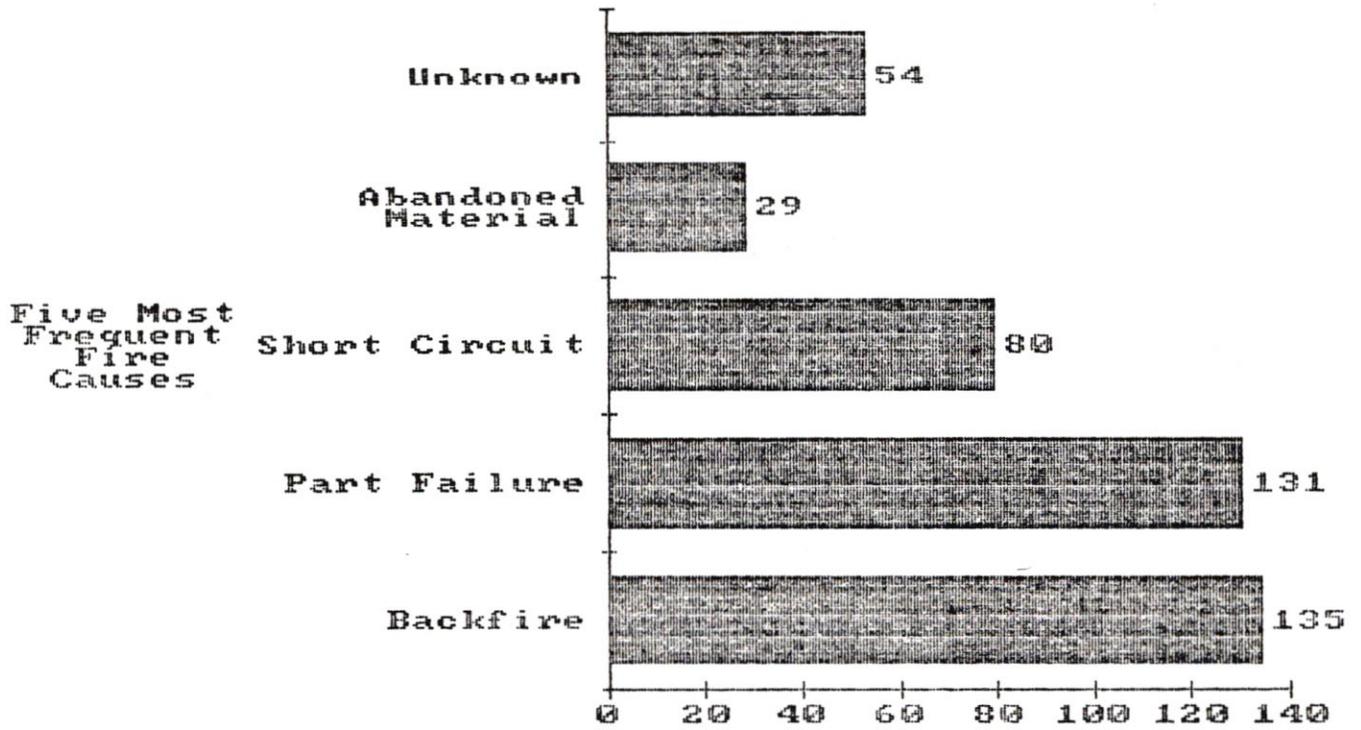


Outside Fire Losses  
(\$464,985)





Vehicle Fires  
(Mobile Property)



**INCENDIARY AND SUSPICIOUS  
FIRES - 1984**

TIME OF DAY:	Incendiary	Suspicious	Total	\$Loss
0001-0400	24	39	63	\$1402045.00
0401-0800	17	18	35	\$579274.00
0801-1200	14	28	42	\$90550.00
1201-1600	23	34	57	\$155870.00
1601-2000	41	61	102	\$528697.00
2001-2400	34	44	78	\$1653170.00
Total	153	224	377	\$4409606.00

DAY OF WEEK:	Incendiary	Suspicious	Total	\$Loss
Sunday	19	39	57	\$65524.00
Monday	21	25	46	\$855070.00
Tuesday	22	24	46	\$454225.00
Wednesday	18	26	44	\$809905.00
Thursday	26	32	58	\$1538570.00
Friday	30	29	59	\$284337.00
Saturday	17	49	67	\$401975.00
Total	153	224	377	\$4409606.00

FIXED PROPERTY USE:	Incendiary	Suspicious	Total	\$Loss
Public Assembly	11	19	30	\$458570.00
Educational	7	5	12	\$62604.00
Institutional		1	1	
Residential	45	47	92	\$1165132.00
Store/Office	6	6	12	\$2200.00
Basic Industry	7	6	13	\$52600.00
Manufacturing	4	2	6	\$524500.00
Storage	13	16	29	\$2085100.00
Special	50	108	158	\$45100.00
Unclassified	10	14	24	\$13800.00
Total	153	224	377	\$4409606.00

STATE TOTALS-	153	224	377	\$4409606.00
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# CASUALTY REPORT - 1984

TOTAL CASUALTIES BY:	Fire Service	Civilian	Total
SEX: MALE	72	47	119
FEMALE		27	27
PART OF BODY INJURED			Total 146
Head/Neck	8	4	12
Body, Trunk, Back	7	1	8
Arm	1	3	4
Leg	9	3	12
Hand	10	8	18
Foot	5	1	6
Internal	26	28	54
Multiple Parts	6	22	28
Other		4	4
			Total 146
NATURE OF INJURY			
Burns & Smoke	1	19	20
Burns Only	5	23	28
Smoke Only	20	21	41
Wound, Bleeding	14	6	20
Dislocation/Fracture	4	2	6
Pain	6		6
Shock	3		3
Other	8		8
	11	3	14
			Total 146
ACTIVITY AT INJURY			
Escaping	1	10	11
Rescue Attempt	4	4	8
Fire Control	53	20	73
Response/Return	4		4
Cleanup/Salvage	6	3	9
Sleeping		13	13
Unable to Act		3	3
Other	4	23	25
			Total 146
SEVERITY OF INJURY			
INJURY	72	56	128
DEATH		18	18
			Total 146