

2001

Fire in Minnesota

Fire Reporting System



MINNESOTA DEPARTMENT OF PUBLIC SAFETY



STATE FIRE MARSHAL DIVISION
Thomas R. Brace
State Fire Marshal



MINNESOTA DEPARTMENT OF PUBLIC SAFETY



Office of the Commissioner

445 Minnesota Street, Suite 1000, North Central Life Tower, St. Paul, Minnesota 55101-5000

Phone: 651/296-6642 FAX: 651.297.5728 TTY: 651/282-6555

Internet: <http://www.dps.state.mn.us>

Alcohol &
Gambling
Enforcement

Bureau of
Criminal
Apprehension

Capitol Security

Driver & Vehicle
Services

Drug Policy &
Violence
Prevention

Emergency
Management/
Emergency
Response
Commission

State Fire
Marshal/
Pipeline Safety

State Patrol

Traffic Safety

The Honorable Jesse Ventura
Governor of the State of Minnesota
And Members of the Legislature
State Capitol Building
Saint Paul, Minnesota 55155

Dear Governor Ventura:

The Department of Public Safety, State Fire Marshal Division, is pleased to present *Fire in Minnesota – 2001* for your review.

The MN State Fire Marshal Division participates in the National Fire Incident Reporting System sponsored by the U.S. Fire Administration. Minnesota data is collected on a state-wide basis; in 2001 705 of 789 fire departments in the state reported their fire incidents. Through this reporting system we know that in calendar year 2001 a fire is reported in Minnesota every 34 minutes and fire dollar loss exceeds \$174 million dollars.

Fire in Minnesota provides the fire service, law enforcement, public officials and the general public with valuable information and statistics regarding fire loss in our state. We are also proud to note that this report has become a nation-wide model and is used by the U.S. Fire Administration for training purposes.

The State Fire Marshal Division is committed to serving the citizens of Minnesota to protect lives and property from fire. It is through their dedicated efforts that this report is made available.

Sincerely,

Charlie Weaver
Commissioner

STATE FIRE MARSHAL DIVISION MISSION STATEMENT

The mission of the State Fire Marshal Division is to protect lives and property by fostering a fire safe environment through investigation, enforcement, regulation, data collection and public education.

From the desk of State Fire Marshal Thomas R. Brace



I am pleased to present “Fire in Minnesota 2001.” Each fire department in the State of Minnesota can contribute to this report with information submitted through the Minnesota Fire Incident Reporting System (MFIRS). For 2001, 705 out of 789 fire departments reported. Our goal is to have all fire departments reporting into this mandated program. The quality of reporting statistics depends on the information submitted by each fire department. Complete information is an absolute necessity to make certain our data is a valid and accurate description of the fire problem in Minnesota.

A brief summary of 2001 fire statistics includes:

- 47 civilians fire deaths were recorded this year; deaths in residential settings increased by 50% in 2001, which represents 87% of Minnesota’s fire fatalities. Once again, we are thankful to report there were no on-duty firefighter fatalities this year.
- In 2001, 151 civilian injuries were reported; this number represents a 27% decrease from 2000. The MN Department of Health reports 1,429 non-fatal burns recorded by health care facilities in 2001.
- A fire is reported every 34 minutes and results in \$477,659 total fire dollar loss each day.
- Structure fires increased for the first time since 1997. There were 3,912 residential structure fires in 2001, which is a 23% increase over 2000. Residential fires accounted for 41% of total dollar loss and represent 67% of all structure fires in 2001.
- Cooking has become the leading cause of structure fires in 2001; 82% of those fires were contained cooking fires. Heating fires are the second leading cause of structure fires and incendiary follows as the third leading cause.

The State Fire Marshal Division is committed to protecting the lives and property of the citizens of this state from fire. State budget cuts have impacted our Division and force us to continually do more with less. Despite these fiscal constraints, our dedicated staff has made a significant and positive impact on the fire problems that occur in Minnesota.

This Division values and appreciates your continued support and we hope you find *Fire in Minnesota-2001* a valuable resource. For updated news and information about our Division, please check our web site: www.fire.state.mn.us.

TABLE OF CONTENTS

TOTAL IMPACT

Minnesota Fire Clock	2
Overall State Totals	3
Structure Fires by Property Type	5
Dollar Loss by Property	6
Summary	7

CAUSES

Leading Fire Causes	10
Agricultural Properties	12
Cause by Occupancy/Area	13
Summary	18

INCENDIARY TRENDS

Trends	20
Incendiary Structure Fires	21
Incendiary Fires by County	23
Summary	24

CASUALTIES

Feature	26
Smoke Detector Performance	27
Civilian Deaths	28
30 Year History/Firefighter Deaths	31
Civilian Injuries	32
Burn Injuries Reported by Health Care Facilities	34
Firefighter Injuries	37
Summary	38

PARTICIPATION

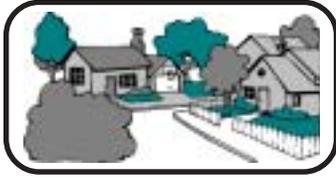
Fire Department Total Participation	40
Participation by Fire Department/County	41
Runs, Dollar Loss, and Deaths by County	50
Runs and Dollar Loss by City	52
Non-Reporting Departments	57

TABLE OF CONTENTS (Cont.)

STATE FIRE MARSHAL ANNUAL REPORT

History of the State Fire Marshal Division	60
State Fire Marshal Division Staff	61
Fire/Arson Investigations	64
Fire Safety Inspections	67
Public School Inspections	71
Fire Code Specialists/Tank Plan Review	72
Fire Protection	73
Public Display Fireworks Operator Certification	75
Fire Data	76
Public Education	77
Juvenile Firesetting	79
Administrative Support Services	82
Conclusion	82

If you would like a copy of this document in an alternate format, please contact: Connie Weaver at 651-215-0504.



3,912

RESIDENTIAL

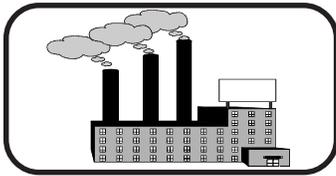
(Single family dwellings, apartments, mobile homes, hotels, motels)



592

PUBLIC AND MERCANTILE

(Stores, restaurants, institutions, churches, public facilities, education)



1,296

INDUSTRIAL, MANUFACTURING, OTHER BUILDINGS

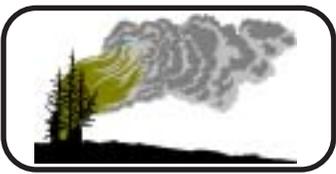
*(Basic industry, manufacturing, storage, residential garages,
vacant buildings, unknown)*



3,730

MOBILE PROPERTY

(Automobiles, trucks, trains, buses, boats)



5,933

OUTSIDE AND OTHER

(Dumpsters, trash, wildland, grass, trees)

15,463

TOTAL FIRES

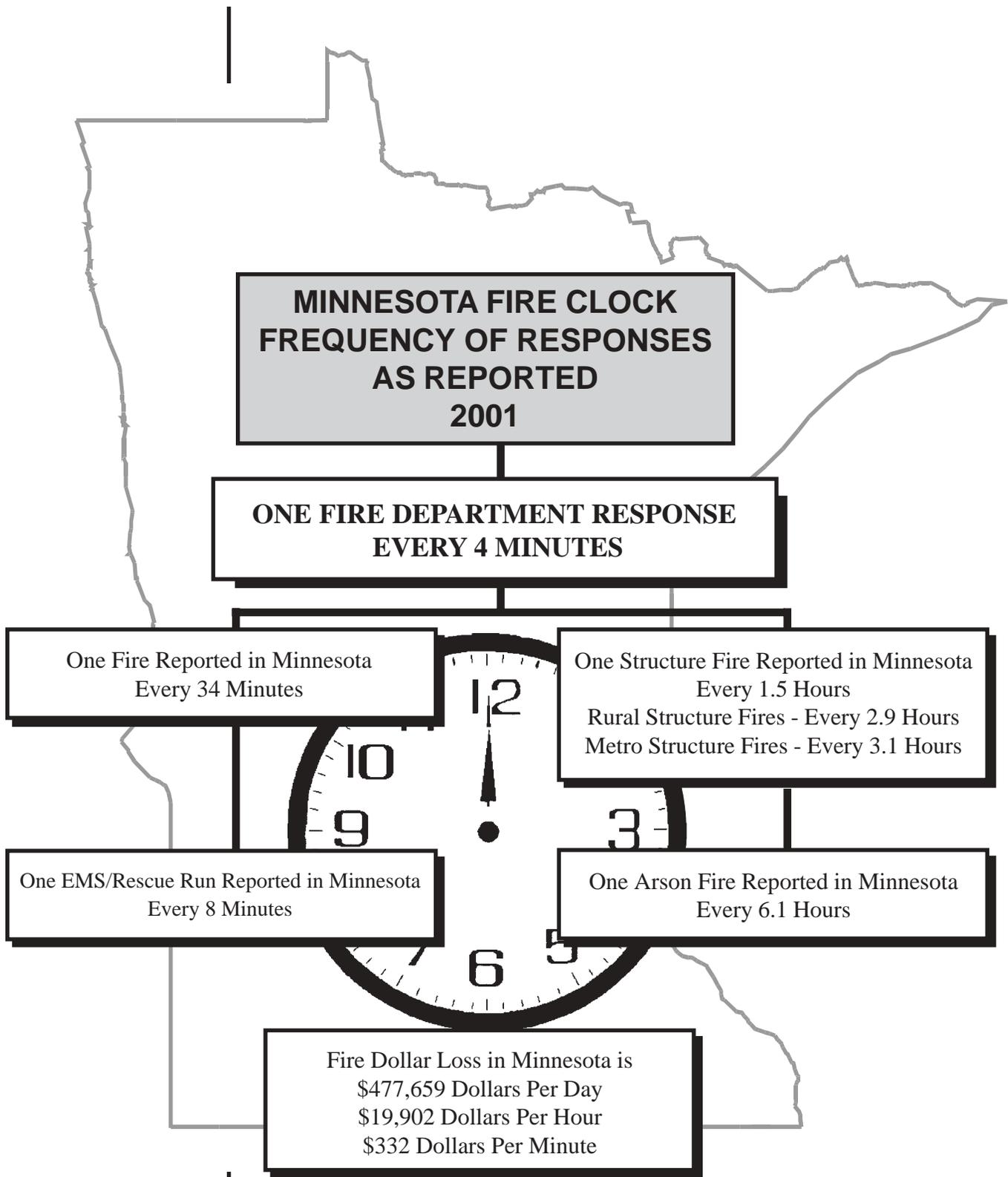
\$174,345,458

TOTAL DOLLAR LOSS

TOTAL IMPACT



Courtesy of Anoka-Hennepin Technical College Media Production Services



These figures represent the collective incidents reported by 705 of Minnesota's 789 fire departments.

OVERALL STATE TOTALS

Eighty-nine percent of the state's fire departments reported into the MFIRS program.

In 2001, 705 fire departments (89%) reported into the Minnesota Fire Incident Reporting System (MFIRS) which provides information on fire incidents and related activities. This year's figures represent a small increase in MFIRS participation over last year (when 700 departments reported). (See the section titled "Participation," for a breakdown of reporting and non-reporting departments.)

2001 REPORTED FIRE DEPARTMENT RESPONSES

Incidents Reported	7 County Metro Area	% State Total	Balance of State	% State Total	State Total
Structure Fires	2,804	48%	2,996	52%	5,800
Vehicle Fires	1,885	51%	1,845	49%	3,730
Other Fires	<u>2,663</u>	<u>45%</u>	<u>3,270</u>	<u>55%</u>	<u>5,933</u>
TOTAL FIRES	7,352	48%	8,111	52%	15,463
RESCUE/EMS CALLS	44,937	64%	25,061	36%	69,998
FALSE CALLS	14,533	69%	6,557	31%	21,090
MUTUAL AID GIVEN	1,248	35%	2,358	65%	3,606
OTHER INCIDENTS	<u>20,054</u>	<u>66%</u>	<u>10,345</u>	<u>34%</u>	<u>30,399</u>
TOTAL CALLS	88,124	63%	52,432	37%	140,556
Estimated Direct Dollar Loss Due to Fire	\$61,549,086	35%	\$112,796,372	65%	\$174,345,458

The total number of fire incidents reported by participating Minnesota fire departments in 2001 was 15,463, an 8% decrease from 2000. The number of all responses by the fire service increased 6% in 2001, for a total of 140,556. Even though the total number of incidents had increased, they still remain below pre-2000 levels, in part, due to a major metropolitan fire department reporting only a portion of 2001.

Total dollar loss decreased by \$1.3 million from 2000.

With minor year-to-year fluctuation in fire incident reporting, total fires continue to be at a six-year low. Total dollar loss decreased by \$1.3 million from 2000.

FIVE-YEAR OVERALL INCIDENT COMPARISONS
1997-2001

	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>00/01 Change + (-)</u>	<u>00/01 % Change + (-)</u>
FIRES							
Structure	6,372	5,585	5,533	5,020	5,800	780	16%
Vehicle	4,832	4,460	4,484	3,606	3,730	124	3%
Other Fires	<u>8,141</u>	<u>7,764</u>	<u>7,756</u>	<u>8,260</u>	<u>5,933</u>	<u>(2,327)</u>	<u>(28%)</u>
TOTAL FIRES	19,345	17,809	17,773	16,886	15,463	(1,423)	(8%)
OVERPRESSURE RUPTURES	555	535	825	1,035	947	(88)	(9%)
RESCUE/EMS CALLS	71,338	77,317	76,860	65,565	69,998	4,433	7%
HAZARDOUS CONDITION CALLS	9,578	10,177	8,823	7,914	9,647	1,733	22%
SERVICE CALLS	7,645	7,486	7,411	7,269	7,512	243	3%
GOOD INTENT CALLS	12,915	12,509	12,064	11,305	11,287	(18)	(<1%)
FALSE CALLS							
Malicious	1,441	1,346	1,304	1,278	1,636	358	28%
Other False	<u>20,713</u>	<u>21,539</u>	<u>21,064</u>	<u>17,223</u>	<u>19,454</u>	<u>2,231</u>	<u>13%</u>
TOTAL FALSE CALLS	22,154	22,885	22,368	18,501	21,090	2,589	14%
MUTUAL AID GIVEN	2,488	2,617	2,788	3,773	3,606	(167)	(4%)
ALL OTHER	713	753	783	817	1,006	189	23%
TOTAL CALLS	146,731	152,088	149,695	133,065	140,556	7,491	6%
TOTAL DOLLAR LOSS	\$141.5M	\$136.1	\$139.3	175.6	174.3	(\$1.3M)	(1%)

Though the total number of fire incidents decreased in 2001, overall responses actually increased.

For each of the past five years, residential structure fires have occurred at the rate of one for every 1,258 Minnesotans.

STRUCTURE FIRES BY PROPERTY TYPE

Fires in structures continue to occur most frequently in residential property, a category that includes houses, apartments, boarding houses, dorms, hotels/motels, etc. On average, 3,632 fires have occurred in residential structures each of the past five years. This is approximately one structure fire for every 1,258 Minnesota residents annually.

	1997	1998	1999	2000	2001	% increase (decrease) 2000-2001
Residential	4,021	3,564	3,493	3,169	3,912	23%
Educational/ Institutional	213	158	155	123	183	49%
Public Assembly/ Commercial	435	419	400	404	409	1%
Industrial/ Manufacturing	338	271	309	250	271	8%
Storage	1,124	954	944	792	771	(3%)
Special/Other	218	185	188	185	170	(8%)
Unclassified	23	34	44	97	84	(13%)
TOTAL	6,372	5,585	5,533	5,020	5,800	16%

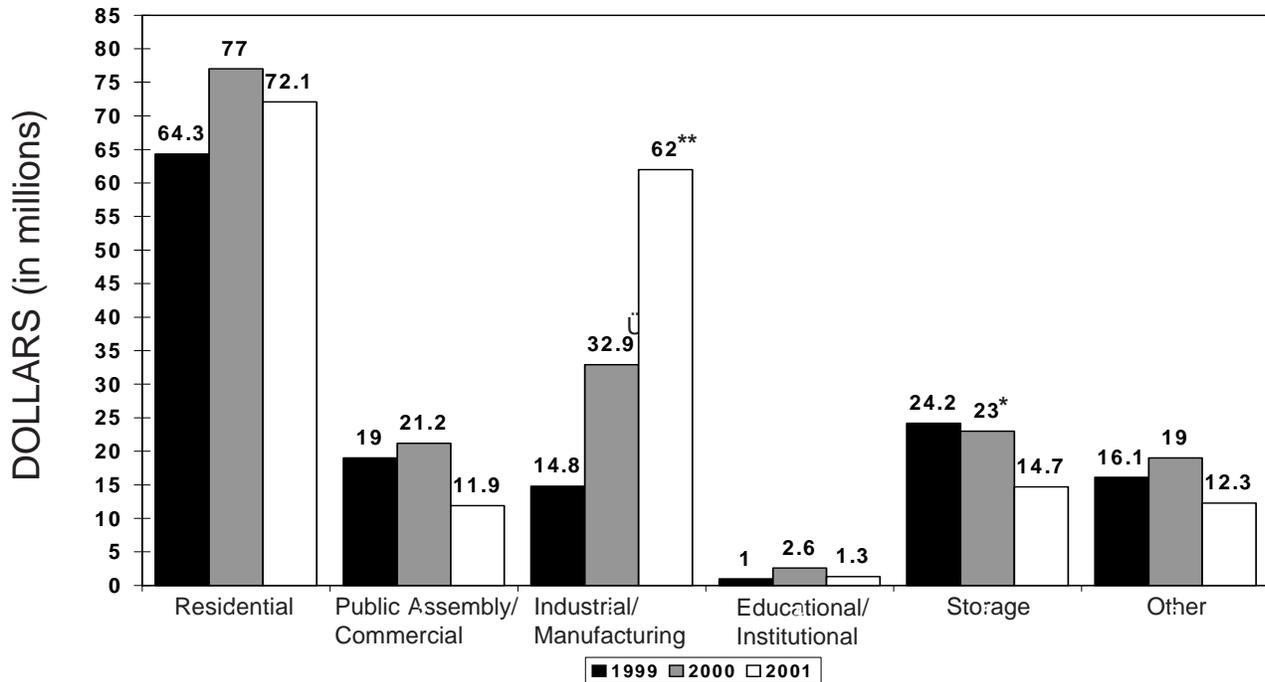
Structure fires increased for the first time since 1997.

Four of the seven categories showed an increase from 2000, with residential fires at their highest since 1997.

OVERALL STATEWIDE DOLLAR LOSS

Overall, average dollar loss per structure fire was nearly \$28,000 per incident.

DOLLAR LOSS BY PROPERTY TYPE



*Includes \$5 million seed/silage storage fire.

**Includes \$40 million manufacturing plant fire and \$10 million wood products mill fire.

ÜIncludes \$8 million ore mine fire and \$7 million manufacturing plant fire.

Residential fires accounted for 41% of total dollar loss and represent 67% of all structure fires in 2001.

The 2001 dollar loss in residential property decreased by \$4.9 million from 2000. Residential fires accounted for 67% of all structure fires and 41% of total dollar loss.

There was a large increase in dollar loss in industrial/manufacturing facilities of \$29.1 million in 2001, which included a \$40 million manufacturing plant fire and a \$10 million wood products mill fire.

Overall, average dollar loss per structure fire in 2001 was nearly \$28,000 per incident. Average dollar loss per residential fire was over \$18,000 per incident.

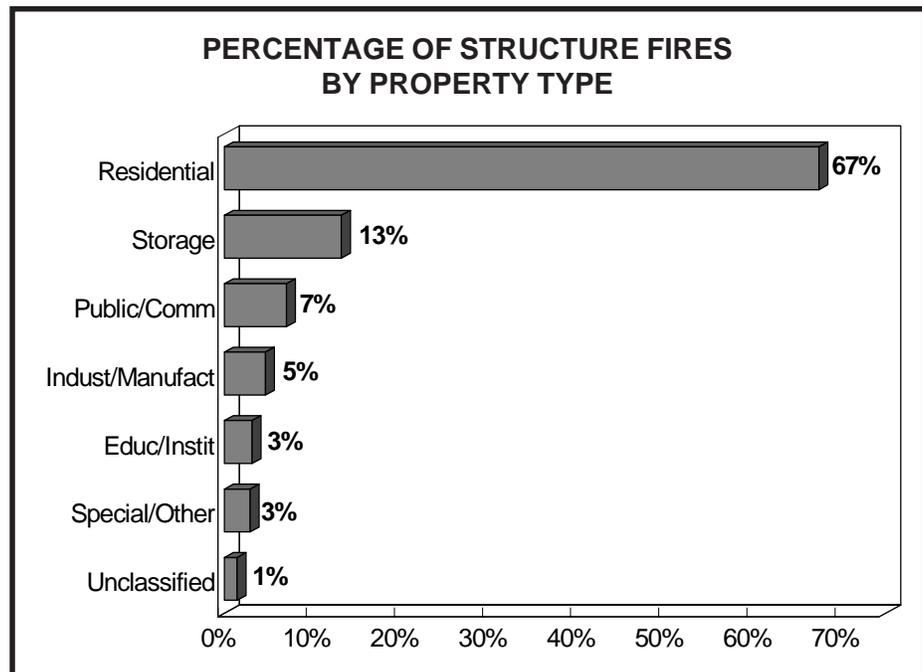
In the past 13 years, residential dollar loss amounted to over \$777 million dollars.

SUMMARY

Although the number of reporting Minnesota fire departments increased slightly, the number of fire incidents reported decreased by 8%. This was, in part, due to a major metro fire department that was able to report only partially in 2001. Dollar loss was in excess of \$174 million, a \$1.3 million decrease from 2000.

Fires occurred most frequently in residential-type properties. Residential fires occurred in significantly higher percentages than the next most reported property type - storage facilities.

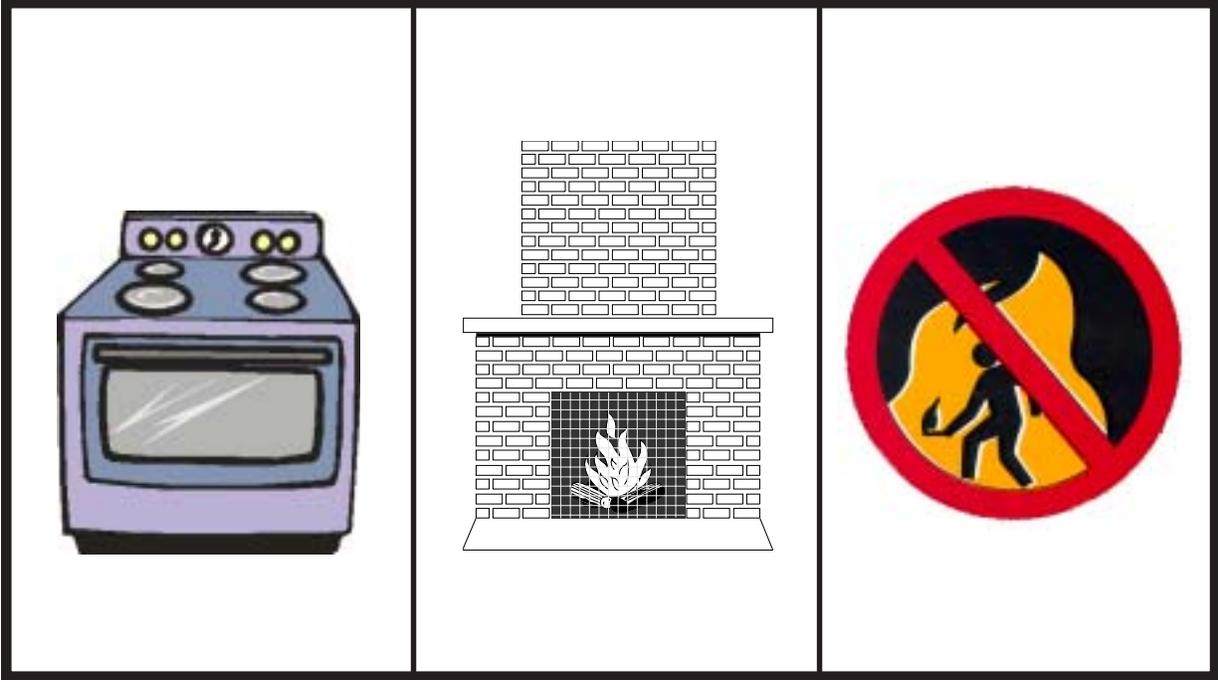
Residential fires accounted for 67% of all structure fires, 41% of total dollar loss, and **87%** of all fire deaths. These statistics continue to identify the home as the most dangerous place to be.



In the last 13 years, over \$1.7 billion in property was destroyed by fire; of that amount, 44%, or over \$777 million, occurred in residential property.

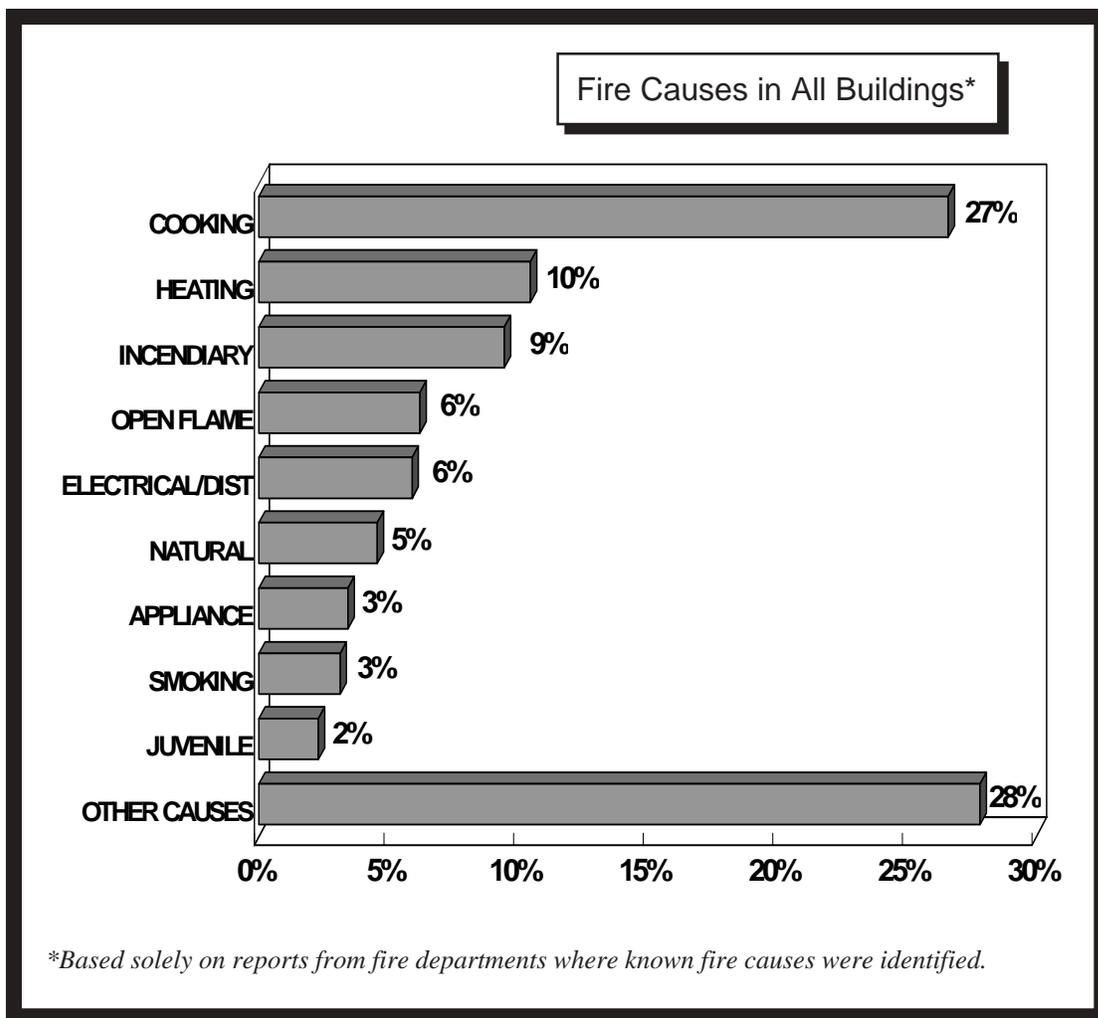
Active participation by all citizens in public education and fire prevention is the only way to stop the significant loss of life and property from fire. Statewide, dollar loss from fires continues to be a costly problem.

CAUSES



CAUSES

Cooking becomes the leading cause of all structure fires with known causes. Heating follows as 2nd and incendiary is 3rd.



When fire causes in all types of buildings are compared, cooking, heating and incendiary emerge as the top three causes. Cooking became the leading cause mainly due to the large number of contained cooking fires that were reported. This type of incident is a new category with the NFIRS 5 program.

Fires in residential property represent 67% of all structure fires, and 41% of total dollar loss. Forty-eight percent (48%) of incendiary fires occurred in residential properties, causing \$3.7 million in property loss. The Other Causes category increased from 9% to 28%, due mainly to incomplete reporting.

The large number of "other" and "unknown" causes represent a recurrent frustration; MFIRS data must, in every reported fire incident, reflect the best judgment of the fire service as to cause and dollar loss. Only with this information can statewide data be complete and valid.

Cooking was a cause in 27% of residential fires. The dollar loss in all residential fires totaled over \$72 million.

A Closer Look at Major Fire Causes . . .

Contained cooking fires are fires involving the contents of a cooking vessel without fire extension beyond the vessel.

. . . Cooking Fires

The leading cause of structure fires in 2001 was cooking. Eighty-two percent (82%) of those fires were contained cooking fires. The top three known factors of the remaining fires were: unattended equipment at 25%, combustibles too close at 12%, and accidentally turned on, not turned off at 7%. There were four cooking-related civilian fire deaths and 35 civilian injuries, as well as 2 firefighter injuries. Dollar loss from cooking fires for 2001 totalled \$2,596,622.

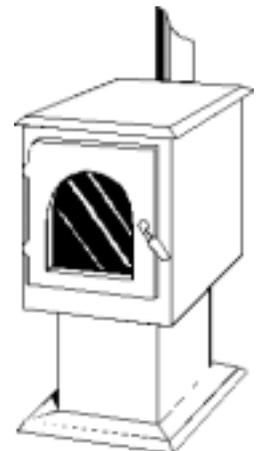
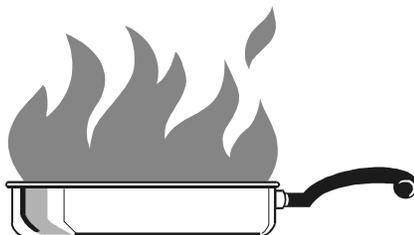
. . . Heating Fires

The majority of heating-related fires (408) occurred in residential properties. These fires decreased by 14% from last year (476 fires in 2000) and dollar loss decreased 25%. There were no heating-related civilian fire deaths in 2001.

HEATING FIRES IN RESIDENTIAL PROPERTIES ONLY

<u>Equipment</u>	<u># of Fire Incidents</u>	<u>% of Total</u>	<u>Dollar Loss</u>	<u>% of Total</u>
Fireplace/Chimney	262	64%	\$1,437,353	27%
Central Heating Units	46	11%	1,279,403	24%
Fixed Heating Units	44	11%	1,273,300	24%
Water Heaters	24	6%	746,100	14%
Portable Heaters	25	6%	433,000	8%
Other	6	2%	141,300	3%
Total	408	100%	\$5,310,456	100%

For the second consecutive year, there were no heating-related civilian fire deaths in 2001.

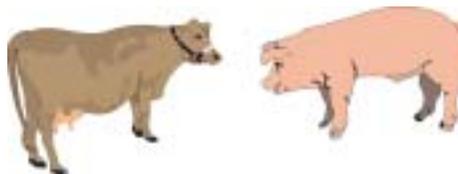


Total dollar loss in agricultural properties exceeded \$8.6 million.

AGRICULTURAL PROPERTIES

Agricultural properties are defined as those structures or open pieces of land on which the production of raw agricultural products and farming occurs. Agricultural production and storage properties do not include processing facilities. The new NFIRS reporting system has combined certain agricultural categories.

AGRICULTURAL PRODUCTION AND STORAGE		
<u>Type of Facility</u>	<u>No. of Incidents</u>	<u>Dollar Loss</u>
Livestock Production	107	\$5,528,650
Crop/Orchards	65	303,785
Grain Elevators/Silos	88	701,600
Livestock Storage	138	2,122,020
TOTAL	398	\$8,656,055



One livestock production fire accounted for \$3 million in dollar loss.

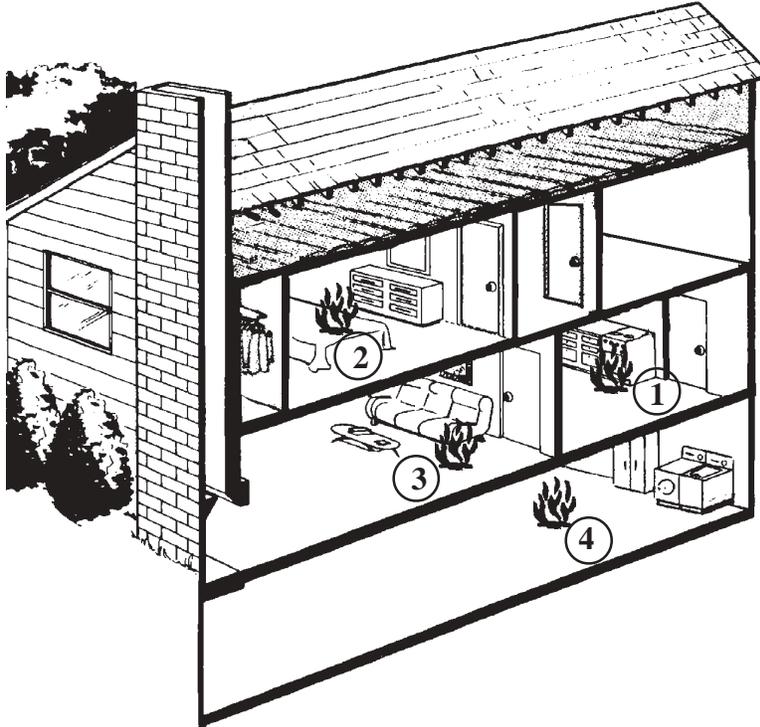
The total dollar loss for fires in agricultural properties exceeded \$8.6 million; \$3 million of that was the result of one livestock production fire. Overall, the number of fire incidents decreased by 17% and dollar loss decreased by 48%.

Areas of Origin by Occupancy Class

The following pages contain additional information about most common areas of fire origin. Separate data is included with an illustration of the property type, depicting, to the extent reported, which rooms in a given type of structure are most frequently found to be the origin of a fire. For example, in residential properties, the kitchen has been identified as the most hazardous area, where fires may result from any number of causes (e.g., cooking, heating, electrical causes, incendiary, etc.).

RESIDENTIAL PROPERTY

(Single Family Dwellings, Apartments, Hotels)



AREA OF FIRE ORIGIN

1. Kitchen/Cooking Area	42%
2. Sleeping Area	7%
3. Living Room	5%
4. Laundry Area	5%

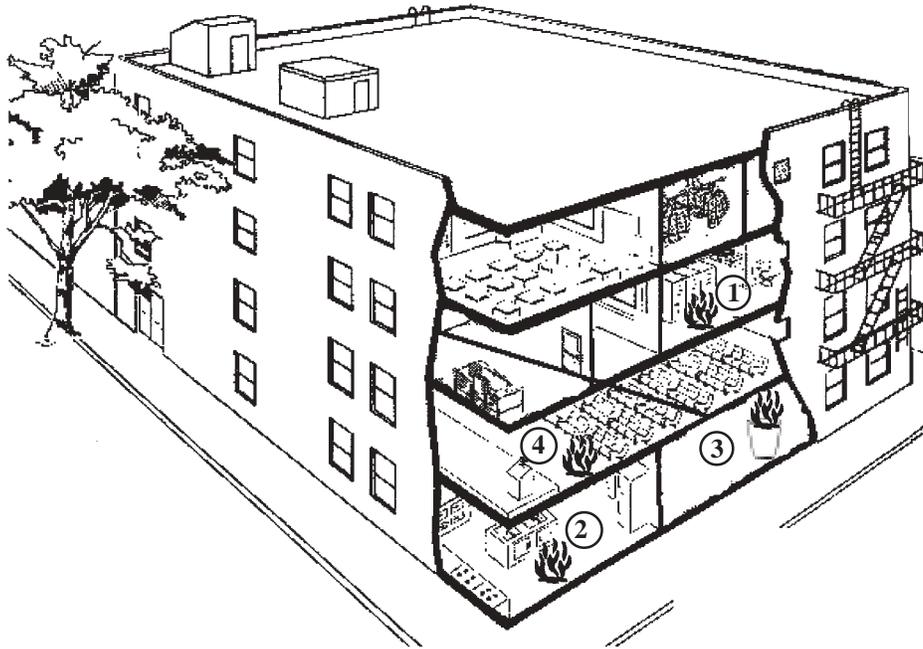
Other Areas of Fire Origin: 41%

	No. of Incidents	Firefighter Injuries	Civilian Injuries	Firefighter Deaths	Civilian Deaths	Dollar Loss
	3,912	78	112	--	41	\$72,056,686
% of Total	67%*	45%	74%	--	87%	41%

*Percent of structure fires

EDUCATIONAL PROPERTY

(Colleges, Universities, Public/Private Schools)



AREA OF FIRE ORIGIN

1. Lavatory/Locker Room	22%
2. Kitchen.....	16%
3. Trash Chute/Container	5%
4. Assembly	4%

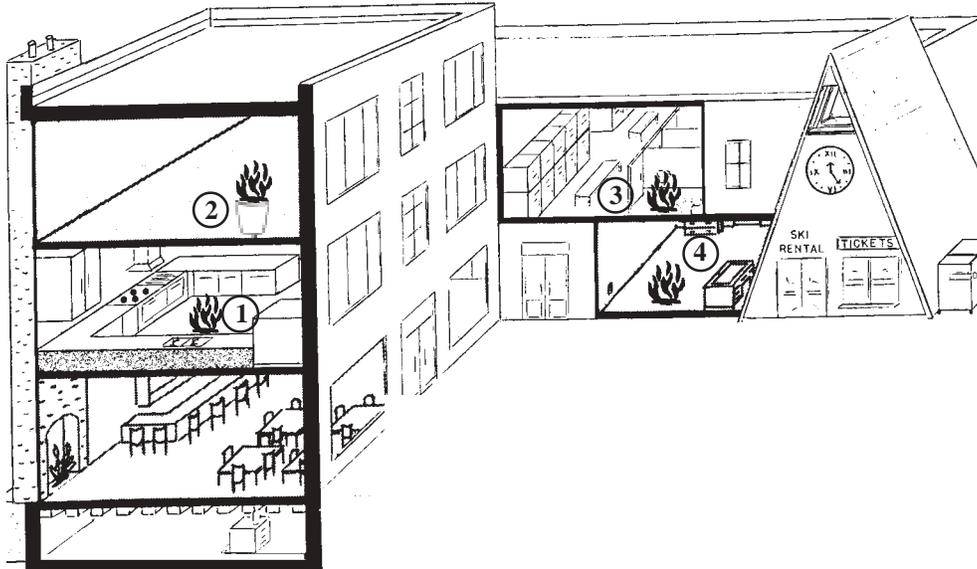
Other Areas of Fire Origin: 53%

	No. of Incidents	Firefighter Injuries	Civilian Injuries	Firefighter Deaths	Civilian Deaths	Dollar Loss
	92	1	--	--	--	\$392,450
% of Total	2%*	1%	--	--	--	<1%

*Percent of structure fires

PUBLIC ASSEMBLY PROPERTY

(Restaurants, Arenas, Churches, Theatres)



AREA OF FIRE ORIGIN

- 1. Kitchen/Cooking Area 34%
- 2. Trash Chute/Container 18%
- 3. Lavatory/Locker Room 6%
- 4. Laundry Room 4%

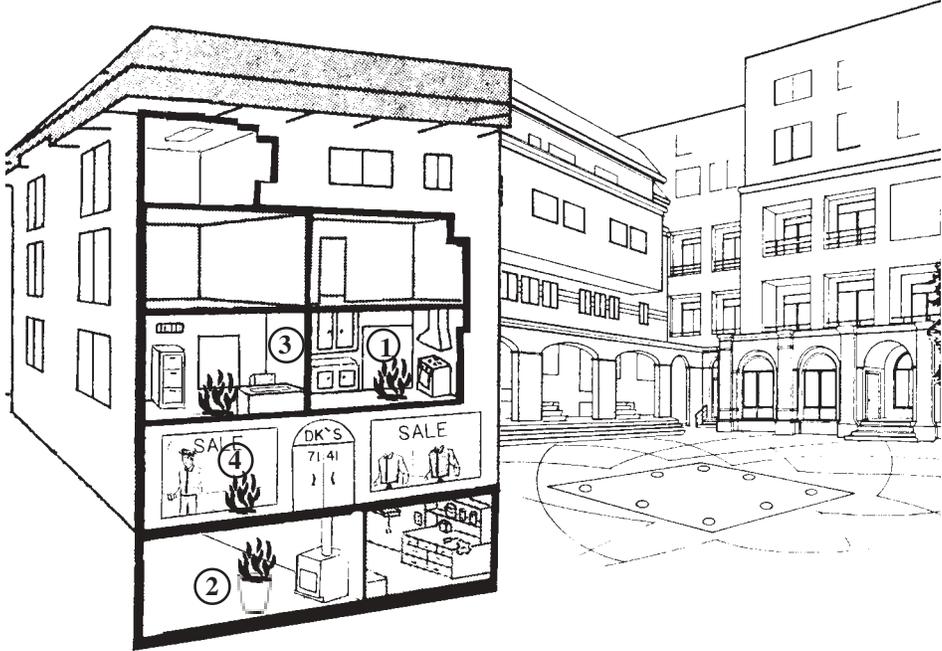
Other Areas of Fire Origin: 38%

	No. of Incidents	Firefighter Injuries	Civilian Injuries	Firefighter Deaths	Civilian Deaths	Dollar Loss
	187	2	3	--	--	\$4,459,577
% of Total	3%*	1%	2%	--	--	3%

*Percent of structure fires

STORE AND OFFICE PROPERTY

(Retail Shopping, Business Offices, Service Stations)



AREA OF FIRE ORIGIN

- 1. Kitchen/Cooking Area 18%
- 2. Trash Chute/Container 9%
- 3. Office 5%
- 4. Sales Area/Showroom 5%

Other Areas of Fire Origin: 63%

	No. of Incidents	Firefighter Injuries	Civilian Injuries	Firefighter Deaths	Civilian Deaths	Dollar Loss
	222	10	3	--	--	\$7,468,096
% of Total	4%*	6%	2%	--	--	4%

*Percent of structure fires

FIRE PREVENTION WEEK

Since 1925, the week containing October 9 has been designated as Fire Prevention Week in the United States, in memory of the Great Chicago Fire, which occurred on October 9, 1871.

The official sponsor of Fire Prevention Week since its inception has been the National Fire Protection Association (NFPA). Each year, NFPA develops a theme for the week and makes materials available to fire departments all over the nation to assist in getting the fire safety message to the American public. The theme for 2001 was "Cover the Bases: Strike Out Fire!" NFPA's goal during this week-long event was to increase the number of households actually practicing basic fire safety measures in their homes: maintaining smoke detectors, practicing home fire exit drills, and implementing safe behaviors in the areas of home heating, cooking, and electricity.

The State Fire Marshal encourages fire service personnel to lead fire prevention efforts in their own communities. Further information about this yearly event can be found on the NFPA web page at www.nfpa.org.

SUMMARY

In the year 2001, cooking fires caused the largest percentage of structure fires (27%), with heating and incendiary as second and third leading causes. The main reason for the great increase in cooking fires is most likely due to a new reporting category.

Cooking, heating and incendiary together accounted for 46% of total structure fires. Fires in residential spaces represent 67% of all structure fires, and 87% of fire deaths. Seventy-four percent (74%) of civilian injuries occurred in residential fires.

While careless smoking accounts for only 3% of structure fires, it nevertheless caused 21% of all fire fatalities, and 24% of residential fire deaths.

In 2001, MFIRS data, for the first time in thirteen years, reflected a smaller number of unknown/undetermined causes of fires (832). This, again, is probably due to the new types of incidents - i.e., contained cooking fires, confined chimney fires, confined fuel burner/boiler fires. Unfortunately, there are still a great number of fire reports that are not completely filled out to identify the correct cause. **Other Causes increased from 9% to 28%. In order to focus our fire prevention efforts where the greatest need exists, complete reporting of causes/ignition factors in the MFIRS program is absolutely essential.**

As always, Minnesotans continue to be in the greatest danger from fire in their own homes. Fire prevention efforts in the areas of cooking and heating must continue to be a top priority for the fire service community.

INCENDIARY TRENDS

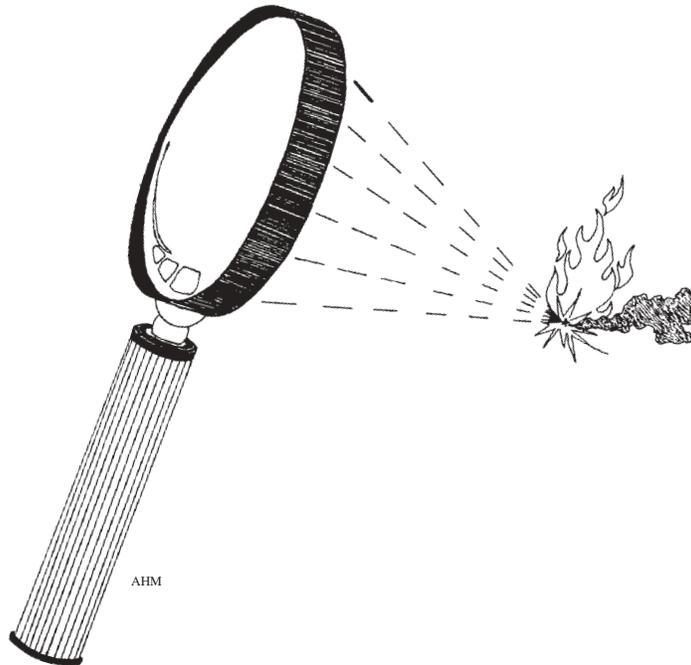
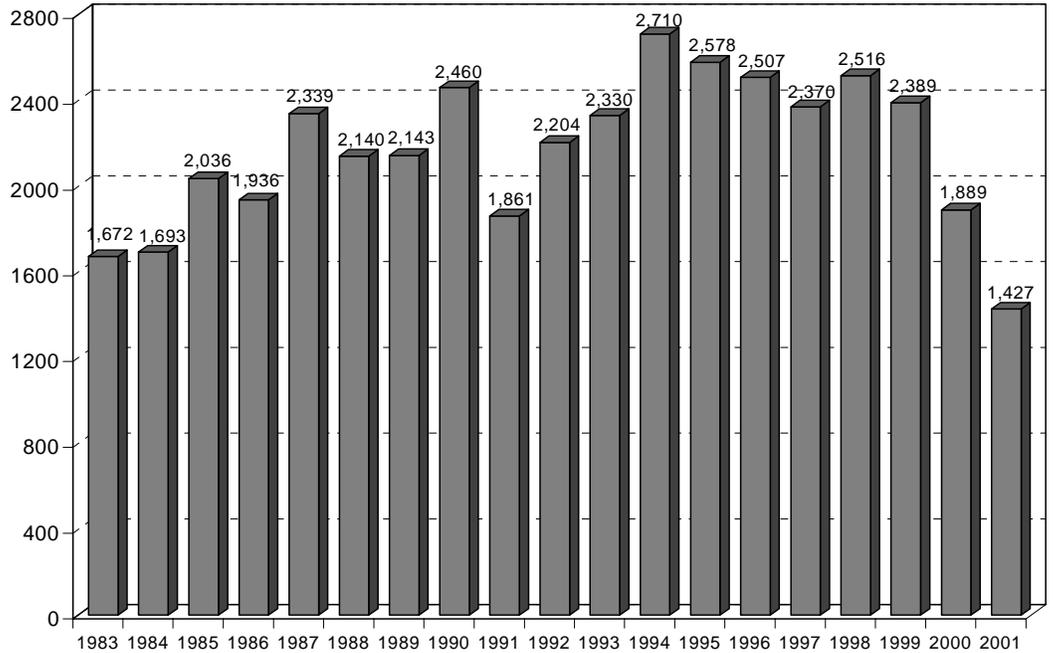


Photo by Coon Rapids Fire Department

24% fewer incendiary fires were reported in 2001. This figure is influenced in part by the different mode of reporting incendiary causes in the new NFIRS 5 system.

INCENDIARY TRENDS

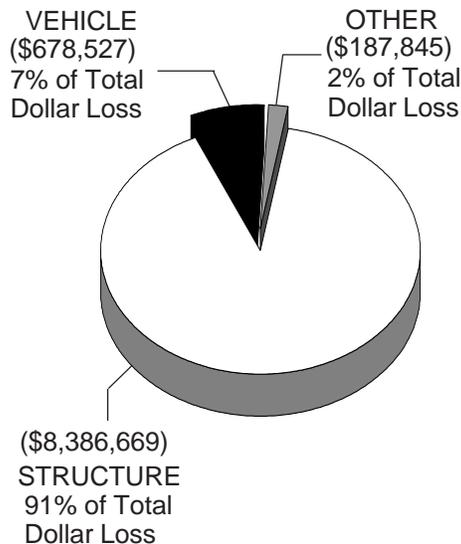
INCENDIARY FIRES IN MINNESOTA



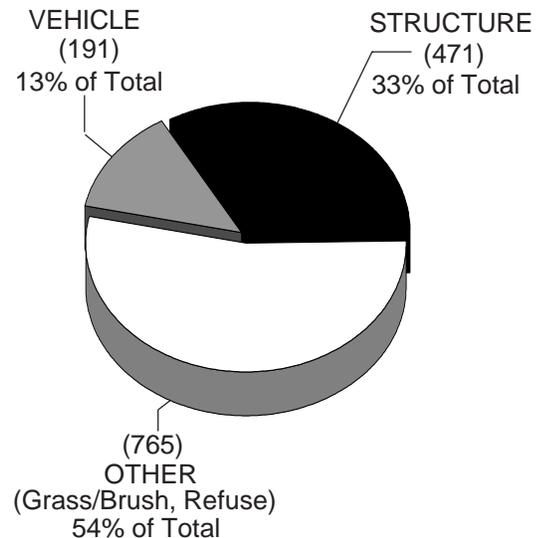
There were a total of 1,427 identified incendiary fires, a 24% decrease from 2000. The value of property destroyed was estimated at over \$9 million, which is a 9% decrease from last year. One reason for the significant drop in the past two years could be the reluctance of fire departments to report a fire as incendiary, rather than suspicious. The suspicious cause was eliminated in the NFIRS 5 program.

INCENDIARY FIRES BY DOLLAR LOSS AND TYPE

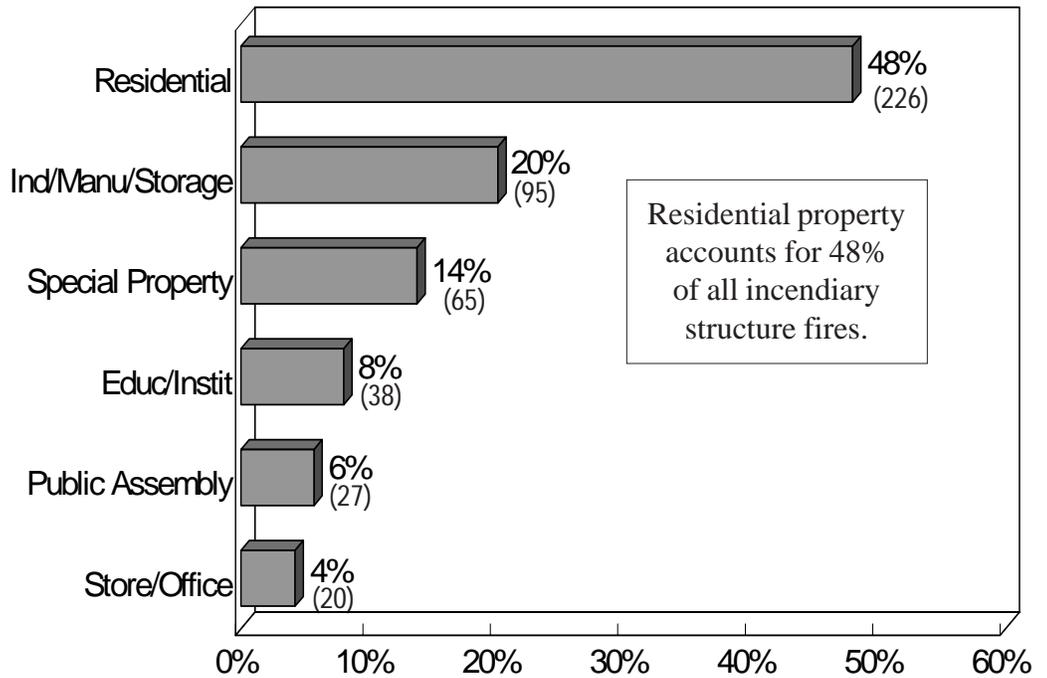
DOLLAR LOSS



TYPE OF FIRES



Incendiary Fire Incidents By Structure Type



Nearly half of all incendiary fires reported in 2001 (48%) occurred in residential properties. Dollar loss in those properties totalled \$3.7 million, or 44% of all incendiary dollar losses in structures.

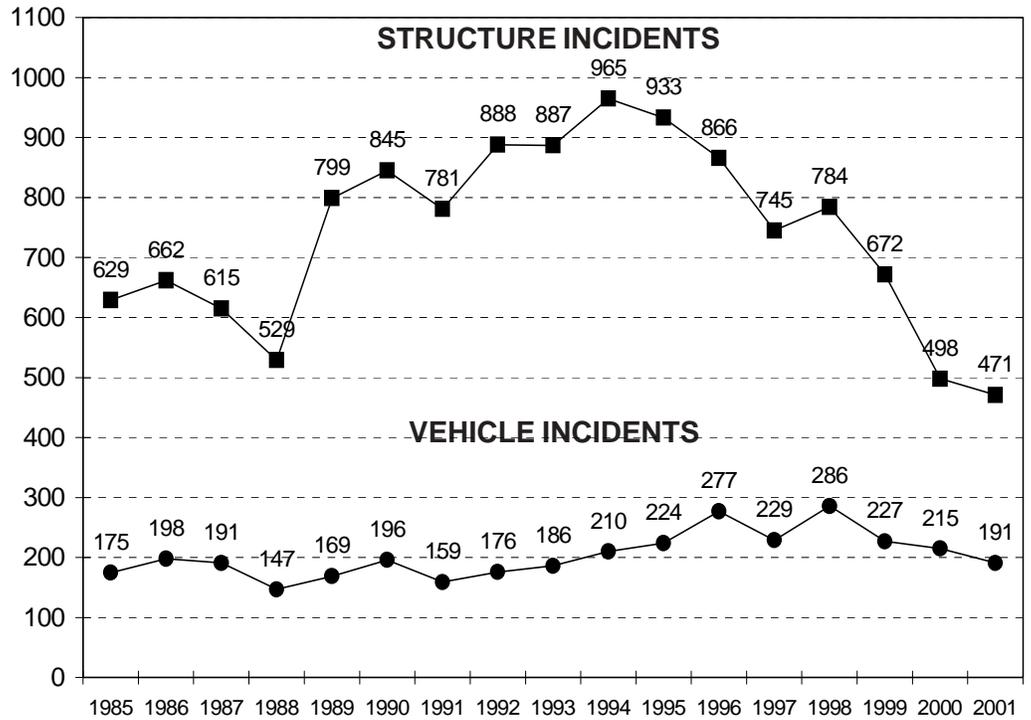
Incendiary Fire Dollar Loss (In Millions)

	Structure	Vehicle
1992	\$16.3	\$.5
1993	\$20.6	\$.8
1994	\$42.2	\$.8
1995	\$16.9	\$.9
1996	\$20.5	\$1.3
1997	\$13.8	\$.9
1998	\$11.1	\$1.3
1999	\$15.3	\$1.3
2000	\$8.1	\$1.1
2001	\$8.4	\$.7

Incendiary Fire Dollar Loss By Structure Type



INCENDIARY TREND IN STRUCTURE AND VEHICLE FIRES, 1985-2001



In 2001, incendiary was listed as the cause of 9% of all reported structure fires with known causes and 5% of all reported vehicle fires in Minnesota. Vehicle incendiary dollar loss represented 6% of total vehicle fire dollar loss, with an average dollar loss per incendiary vehicle fire of \$3,552. Fire investigators agree that incendiary vehicle fires are under-reported and may not receive the attention that structure fires do.

RESIDENTIAL STRUCTURE INCENDIARY FIRES

Property Type	2000		2001		% of Total Dollar Loss
	Incidents	Dollar Loss	Incidents	Dollar Loss	
One-Two Family Dwelling	151	\$4.8M	142	\$2.8M	76%
Apartment/Tenement/Flat	66	\$.737M	72	\$.941M	25%
Other Residential Occupancy	13	\$.057M	5	\$.008M	<1%
Hotel/Motel/Inn/Lodge	6	\$.043M	1	<\$.001M	<1%
Boarding/Rooming House	--	--	1	<\$.001M	<1%
Dormitories	5	\$.003M	5	\$.003M	<1%
TOTAL	241	\$5.6M	226	\$3.7M	100%

When looking at overall fires, residential structures are at greatest risk. These same structures are also at greatest risk from incendiary fires. The 226 residential incendiary incidents reported in 2001 accounted for 6% of all reported residential fires and 5% of the dollar loss for this property type.

INCENDIARY FIRE INCIDENTS AND DOLLAR LOSS BY COUNTY*

In some instances, the protection district of the reporting fire department goes beyond its county boundary, but the incident will still be recorded within the department's home county. Per capita data is calculated at a standard rate of incendiary fires per 100,000 people.

<u>County</u>	<u>Incendiary Incidents</u>	<u>Incend. Fires/ 100,000 Pop.</u>	<u>Incendiary Dollar Loss</u>	<u>County</u>	<u>Incendiary Incidents</u>	<u>Incend. Fires/ 100,000 Pop.</u>	<u>Incendiary Dollar Loss</u>
Aitkin	5	40	\$0	Marshall	5	45	\$0
Anoka	87	36	\$131,325	Martin	8	35	\$295
Becker	20	72	\$61,000	Meeker	5	24	\$1,500
Beltrami	27	79	\$58,300	Mille Lacs	2	11	\$1
Benton	12	40	\$26,000	Morrison	5	17	\$15,000
Big Stone	1	16	\$0	Mower	10	27	\$46,950
Blue Earth	4	7	\$1,000	Murray	1	10	\$0
Brown	2	7	\$100,000	Nicollet	12	43	\$2,350
Carlton	1	3	\$0	Nobles	5	25	\$129,700
Carver	29	61	\$252,010	Norman	1	13	\$5,000
Cass	11	50	\$5,000	Olmsted	47	44	\$100,674
Chippewa	4	30	\$99,450	Otter Tail	9	18	\$4,600
Chisago	9	29	\$200	Pennington	5	38	\$10,000
Clay	11	22	\$3,200	Pine	7	33	\$80,000
Clearwater	4	48	\$0	Pipestone	2	19	\$5,500
Cook	0	0	\$0	Polk	27	83	\$52,000
Cottonwood	3	24	\$20,300	Pope	2	19	\$0
Crow Wing	11	25	\$32,500	Ramsey	300	62	\$2,475,590
Dakota	66	24	\$116,677	Red Lake	0	0	\$0
Dodge	4	25	\$0	Redwood	2	12	\$0
Douglas	4	14	\$5,000	Renville	1	6	\$0
Faribault	7	41	\$550	Rice	18	37	\$757,550
Fillmore	1	5	\$0	Rock	2	20	\$0
Freeborn	6	18	\$1,119,800	Roseau	4	27	\$0
Goodhue	10	25	\$23,000	St. Louis	137	69	\$1,754,799
Grant	0	0	\$0	Scott	22	38	\$25,100
Hennepin	227	22	\$953,363	Sherburne	19	45	\$7,000
Houston	0	0	\$0	Sibley	6	42	\$38,500
Hubbard	6	40	\$155,000	Stearns	45	38	\$49,700
Isanti	15	58	\$300	Steele	9	29	\$119,500
Itasca	16	39	\$41,300	Stevens	2	19	\$2,000
Jackson	3	26	\$20,000	Swift	1	9	\$75,000
Kanabec	0	0	\$0	Todd	2	9	\$0
Kandiyohi	4	10	\$1,000	Traverse	0	0	\$0
Kittson	2	35	\$0	Wabasha	4	20	\$24,000
Koochiching	3	18	\$10,000	Wadena	1	8	\$0
Lac Qui Parle	0	0	\$0	Waseca	3	17	\$0
Lake	0	0	\$0	Washington	33	23	\$172,455
Lake of the Woods	0	0	\$0	Watonwan	1	9	\$0
LeSueur	6	26	\$18,000	Wilkin	0	0	\$0
Lincoln	0	0	\$0	Winona	6	13	\$15,000
Lyon	2	8	\$0	Wright	20	29	\$2,002
McLeod	12	37	\$12,000	Yellow Medicine	0	0	\$0
Mahnomen	1	20	\$15,000				
				TOTAL	1,427	33	\$9,253,041

* Based on data received from 705 departments. See pages 41-48 for MFIRS participation by county.

SUMMARY

Incendiary fires and dollar losses from these fires took another significant drop from the previous year. One possible reason for this decline was the change in the NFIRS reporting system. This change involved eliminating the option of a suspicious fire. It appears some fire departments may be reluctant to report a fire as incendiary rather than suspicious. Incendiary fires were the cause of 9% of structure fires with known causes.

Forty-eight percent (48%) of all incendiary structure fires were in residential property. The dollar loss in residential incendiary fires decreased from the previous year and represented 44% of all incendiary dollar loss.

In the past thirteen years, incendiary fires caused 37 deaths and over \$228 million in property loss. Incendiary fires must be addressed through such efforts as the Arson Reward Program, the Arson Suspect Pointer System, and the Juvenile Firesetter Intervention programs being established throughout the state. Incendiary fires kill, maim, and destroy at an alarming rate. It is a crime against every Minnesotan.

CASUALTIES





ELECTRICITY: NO LONGER “PENNY CHEAP” . . .

....But bad wiring can cost you more than dollars!

As Minnesota jumps into the twenty-first century, electricity is such an integral part of our way of life that most of us can't remember a time when electric lights were a luxury. Today, a home without television, sound equipment, a washer and dryer, a dishwasher, and probably a computer has become an oddity. Wiring and circuitry present a complexity of color coding and connections that boggle the minds of middle-aged adults, but seem perfectly normal to younger people.

Electrically powered equipment and appliances continue to pervade our homes and workplaces; they keep us comfortable and simplify many tasks for us. But, just as our automobiles need oil changes and other preventive maintenance, so do our electrical systems need maintaining. In some ways, electrical systems are like carbon monoxide: they can be doing deadly damage long before the effects can be seen or felt. Furthermore, home wiring that met electrical code when the home was built might not be adequate for the stresses of today's multiple appliances; yet, it is as easy to neglect the “invisible” wiring as it is to put off that oil change. By the time a problem shows up, the damage has been done.

In 2001, eight Minnesotans (3 of them children, 1 a teen-ager) lost their lives in fires caused by electrical malfunction. One home caught fire because of wiring that had been rigged and repaired by the homeowner; the appliance worked for a time, but the problem was not resolved. The short recurred, this time causing a fatal fire. Another home was found to have multiple types of wiring patched together; the homeowner tried to deal with problems that occurred, and planned to call in an electrician. A fire with two child fatalities took place first.

Dollars to hire home maintenance personnel are often difficult to set aside. Many homeowners try the “do it yourself” approach to home maintenance, and many times they do a fine job. Sometimes, however, they treat the symptom, but not the problem.

The fire service community continually does a commendable job of educating the public about fire safe behaviors such as installing and maintaining smoke detectors, home escape planning, and encouraging residential sprinkler systems. Our plates are full enough already! Yet our charge must be to ensure public fire safety even as modern life becomes ever more technical and complex. Perhaps we need to explore community partnerships with our brothers and sisters in the electrical and construction trades, and encourage them to do their part in educating the homeowner/occupant about electrical safety. Expending that kind of time and energy is surely preferable to electrical energy gone awry; an ounce of prevention beats 30,000 gallons of water on a fatal fire by anybody's standards!

In 34% of fatalities in residential occupancies, smoke detectors were improperly maintained or absent altogether.

FIRE DEATHS AND SMOKE DETECTOR PERFORMANCE*

In 2001, 47 civilians lost their lives in fires. Deaths in residential settings increased by a substantial 50% in 2001, representing 87% of Minnesota's fire fatalities. In 34% of the casualties in dwellings, smoke detectors (required in every dwelling since 1993) were either absent or non-operating. In another 29% of the dwelling cases, it was not possible to determine whether a smoke detector was present or operating.

FIRE DEATHS IN RESIDENTIAL DWELLINGS

	<u>Fatalities</u>	<u>% of Dwell. Fires</u>	<u>% of Total Deaths</u>
No Smoke Detectors Present	7	17%	15%
Inoperable Smoke Detectors Present	7	17%	15%
Working Smoke Detectors Present	6	15%	13%
Unk. if Detectors Present/Working	12	29%	26%
Not a Factor/Suicides, Explosions, etc.	9	22%	19%
Total Deaths in Dwellings	41	100%	88%
Other Fire Deaths (Including vehicles, outdoors, other structures, etc.)	6	--	13%
Total Fire Deaths	47	--	100%

SIX FATALITIES WHERE THERE WERE WORKING SMOKE DETECTORS: WHY DIDN'T THEY GET OUT?

	<u>Fatalities</u>	<u>Percent.</u>
40-50 yrs - BAL over legal limit	1	17%
30-39 yrs - 1 w/BAL under limit, but on painkillers	2	34%
Under 10 yrs	3	50%
TOTAL:	6	100%

Since August 1, 1993, smoke detectors have been required in every dwelling in Minnesota that has a sleeping area.

*All charts and information on this page have been taken from the State Fire Marshal Division's 2001 fire death database, which is based on fire death investigations done by this office and MFIRS data.

CIVILIAN FIRE DEATHS: WHO AND WHEN

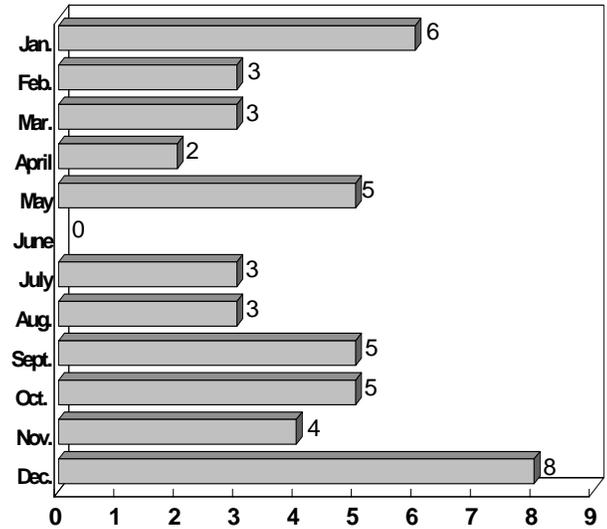
Almost 50% percent of fire deaths occurred between the hours of midnight and 6:00 a.m.. Thirty percent (30%) of all fire deaths in 2001 occurred in January and December.

FIRE DEATHS BY TIME OF DAY

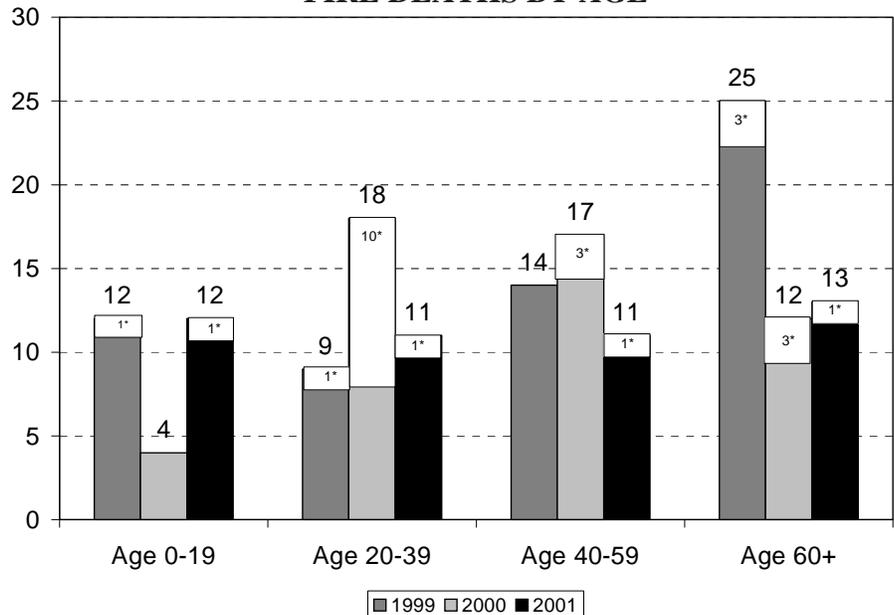
	TOTAL	0000-0600	0600-1200	1200-1800	1800-2400
Careless Smoking	10	3	3	2	2
Electrical Malfunct.	8	6	1	1	0
Improper Candle Use	4	3	0	1	0
Cooking	4	1	0	1	2
Arson/Suspicious	2	0	1	0	1
Natural/LP Gas Explos.	2	1	0	1	0
Suicide	2	0	1	0	1
Vehicle	2	2	0	0	0
Child Play	1	0	0	0	1
Other	3	1	1	0	1
Undetermined	8	5	0	3	0
Total	46*	22	7	9	8

*One cause (other) had no time listed.

FIRE DEATHS BY MONTH



FIRE DEATHS BY AGE



*Fire deaths listed as suicides or motor vehicle fire incidents.

Deaths in the vulnerable 0-19 yr. group rebounded to 1999 level.

It is distressing to report that 2001 fire deaths in the 0-19 age group equalled those in 1999, which is a 200% increase over the year 2000. On the other hand, the age groups from 20-39 years and 40-59 years decreased substantially, by 39% and 36% respectively. The over-60 numbers increased by one fatality, which still represents a drop of almost 100% from 1999.

While it is encouraging to see progress in the active age groups from 20-59 years, the increase in deaths in the vulnerable age group under 19 continues to be of concern.

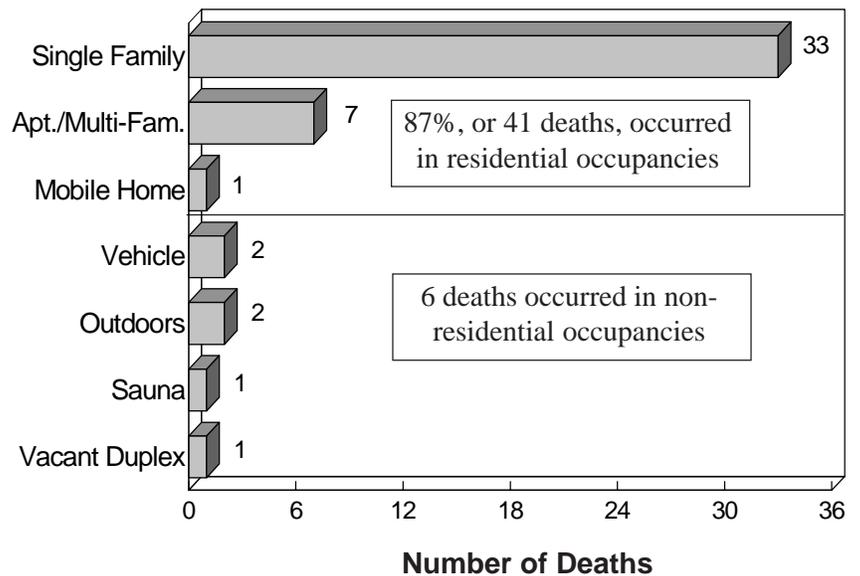
CIVILIAN FIRE DEATHS: WHERE AND WHY

87% of fire deaths occurred on residential property.

Careless smoking was identified as the cause of 21% of all fire deaths. Sixty percent (60%) of those careless smoking deaths were also alcohol or drug-related.

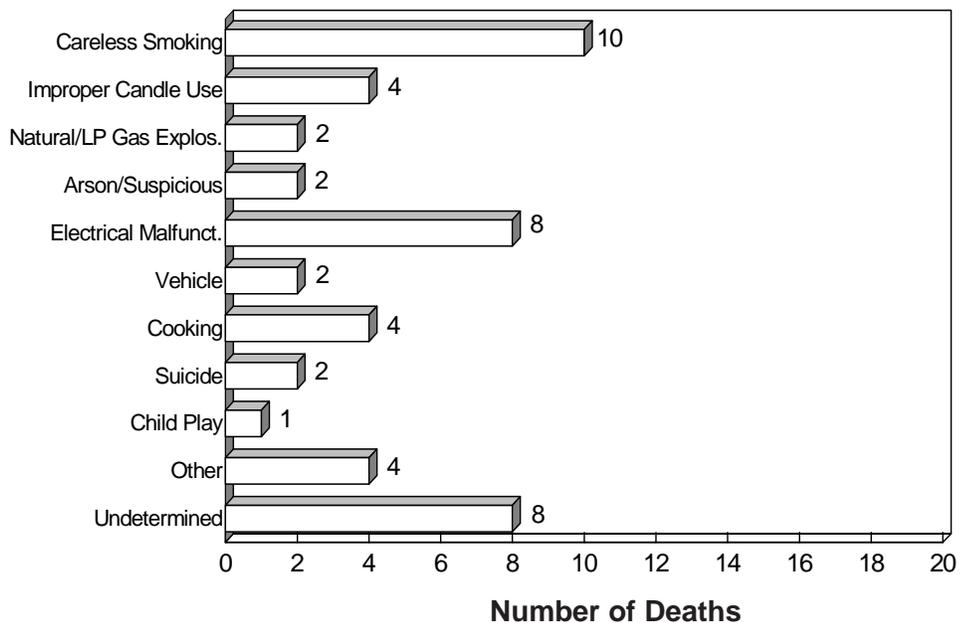
Alcohol/Drugs was clearly a factor in 30% of all fire deaths.

Civilian Deaths By Location



Eighty-seven percent (87%) of the 2001 fire deaths occurred where people generally feel safest - at home. This is an increase of 32% percent reported in 2000.

Civilian Deaths By Cause

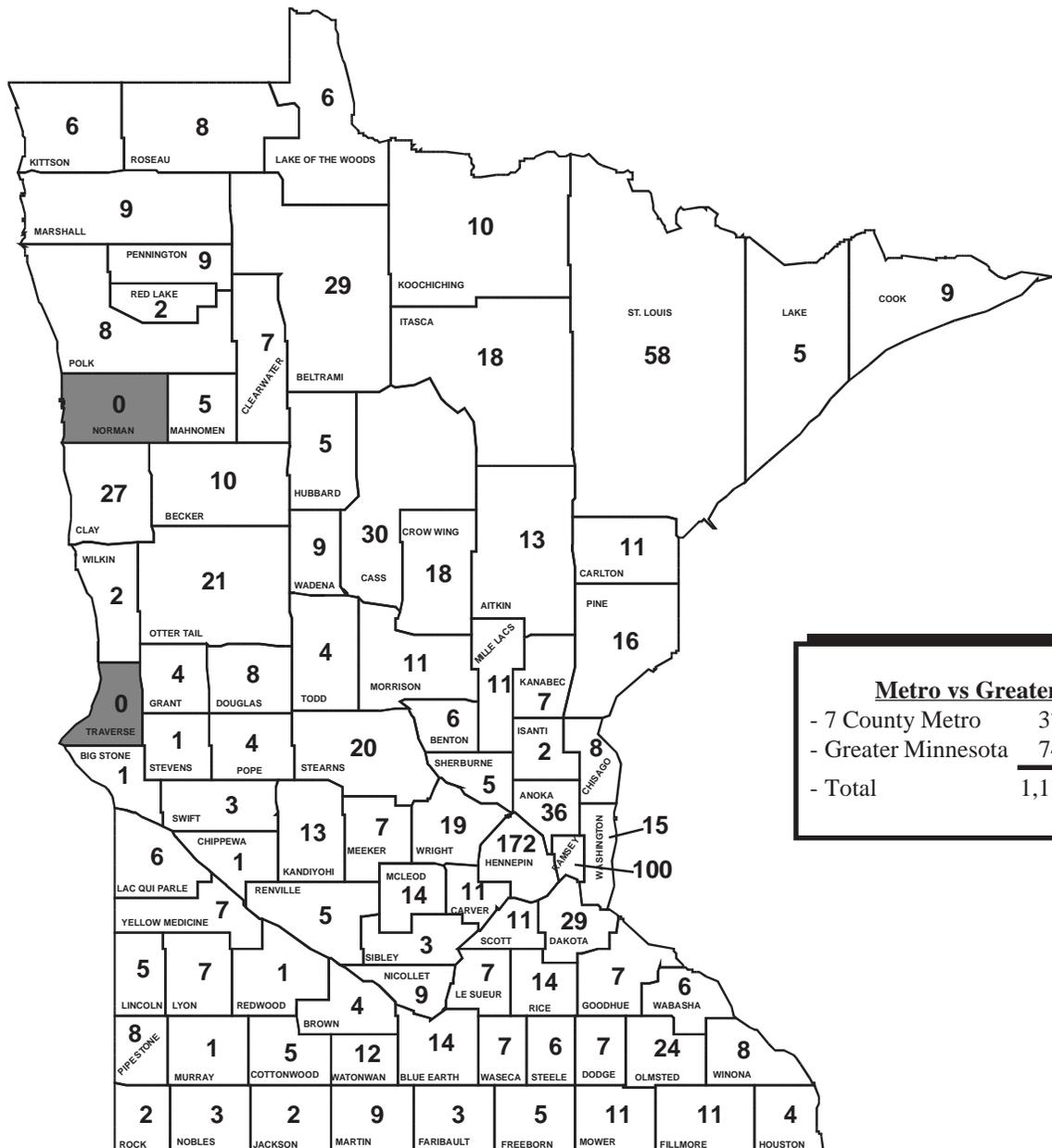


Careless smoking was the leading cause of civilian fire deaths in 2001 as it had been in most previous years. It was identified as the cause of 21% percent of all fire deaths. Alcohol or other drug use was present or identified as an impairing factor in 30% of all fire deaths (14 deaths) and 60% of fire deaths attributed to careless smoking.

Fire deaths in greater Minnesota outpace those in the seven county metro area by a rate of two to one.

CIVILIAN DEATH RATES

In the past 18 years, 1,114 Minnesota civilians have died in fires (see distribution by county below). During that time, fire deaths in greater Minnesota have outpaced those in the seven-county metro area by a rate of two to one. In 2001, greater Minnesota represented 46% of the state's population and experienced a per capita death rate of 1.2 for every 100,000 people. The per capita rate for the metro area in 2001 was 0.9 per 100,000, while the rate for the state as a whole was 1.0 per 100,000. (The United States consistently has among the highest per capita death rates in the world.) Two counties in the state have remained fatality free for 18 years; they are Norman and Traverse.



Metro vs Greater MN		
- 7 County Metro	374	34%
- Greater Minnesota	740	66%
- Total	1,114	100%

30 YEARS OF FIRE DEATH HISTORY

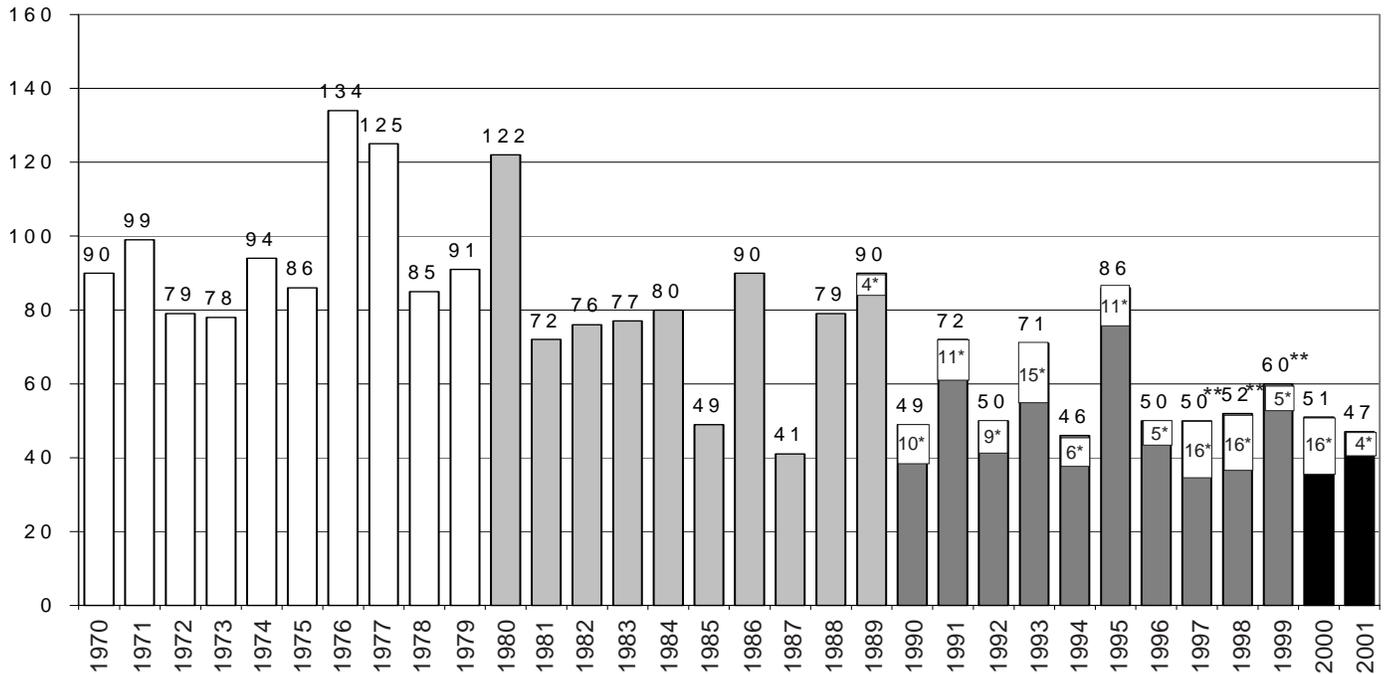
As Minnesota's population has continued to grow, from 3.8 million in 1970, to 4.9 in 2000, fire deaths have decreased. During the decade of the eighties, fire deaths in Minnesota dropped 19% from the levels of the 1970's. The nineties show a further decrease of 25% from the levels in the eighties. This trend continues as we begin the 21st century.

Minnesota's Fire Deaths

1970's 961 deaths
1980's 776 deaths
1990's 585 deaths

Many of the factors contributing to this decline in the fire death rate must be attributed to the fire service community. Since the mid-seventies, the promotion of fire protection technology (smoke detectors, sprinkler systems, etc.) has become widespread in Minnesota. Also, during this time, the state has mandated new inspection/code enforcement programs targeting hotels, motels, schools, health care, and day care facilities. Fire safety awareness and public education efforts have also begun to reach wider populations.

FIRE DEATHS 1970 - 2001



*Number of vehicle/suicide fires.

**Does not include firefighter deaths.

FIREFIGHTER DEATHS

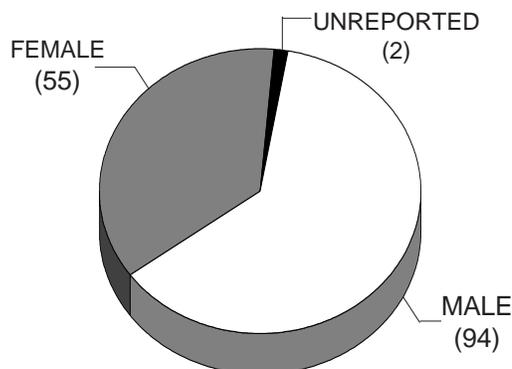
We are pleased to announce again that there were no on-duty firefighter deaths in Minnesota during the year 2001.

As a fire service community, we must rejoice in this two-year reprieve from tragic losses among our number. As a fire service serving a wider community, we must be continually committed to guarding the health and safety practices of our members, just as we would be for members of the military services who risk their lives for us.

In 2001, 151 civilians were injured in Minnesota fires. Injuries to males were 62%, compared with 36% to females.

CIVILIAN INJURIES

In 2001, 151 civilian injuries were reported through the MFIRS system, a 27% decrease from 2000. The numbers do not represent the actual number of fire injuries occurring in the state, as it includes only those victims who have direct contact with the fire department. Many burn victims are taken to emergency rooms by private car or ambulance.



<u>AGE OF VICTIM</u>	<u>NO. OF VICTIMS</u>
0-19	29
20-39	49
40-59	43
60-OVER	15
UNREPORTED	15
TOTAL	151

A breakdown of reported injuries by gender shows there were nearly two-thirds more injuries to males than females.

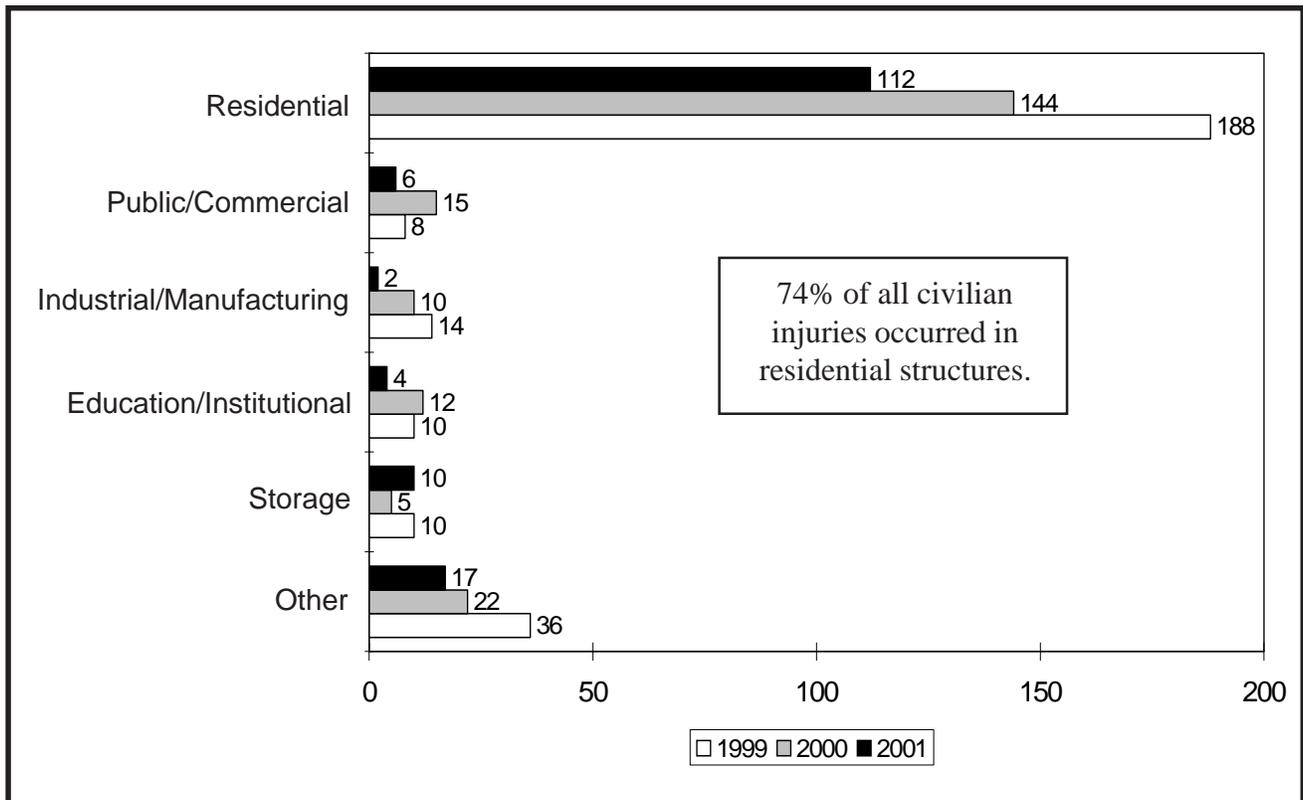
ACTIVITY AT TIME OF FIRE

People trying to control a fire accounted for 33% of all civilian fire injuries; these numbers indicate an ongoing need to educate citizens of all ages on how to react to a fire. "Get Out and Stay Out" cannot be emphasized enough!

Thirty-three percent of all injuries were to people trying to control or extinguish a fire.

CIVILIAN INJURIES BY ACTIVITY		
<u>Activity</u>	<u>#</u>	<u>%</u>
Fire Control	50	33%
Escape	20	13%
Sleeping	15	10%
Rescue attempt	5	3%
Irrational act	5	3%
Unable to act	5	3%
Other	8	5%
Unkn/Unrep	43	28%
	<u>151</u>	<u>100%</u>

CIVILIAN INJURIES BY PROPERTY TYPE



As with fire fatalities, more civilian fire injuries occur in residential structures than any other property.

CIVILIAN INJURIES BY ACTIVITY AND STRUCTURE

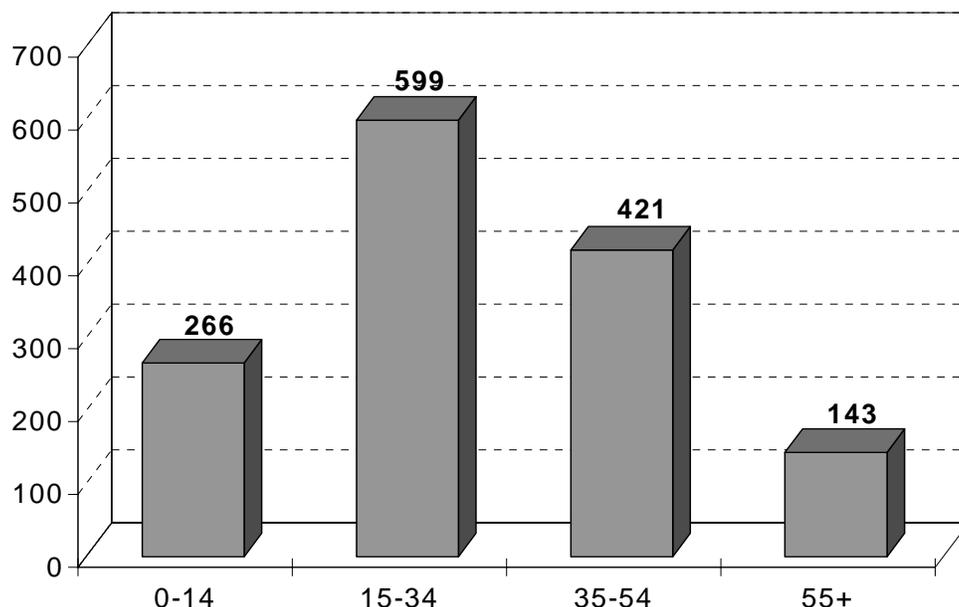
	<u>Residential</u>	<u>Pub/Comm</u>	<u>Indus/Manu</u>	<u>Educ/Inst</u>	<u>Storage</u>	<u>Other</u>
Fire Control	39	3	--	--	--	8
Escaping	11	1	--	1	7	--
Sleeping	15	--	--	--	--	--
Rescue Attempt	5	--	--	--	--	--
Irrational Action	4	--	--	--	1	--
Unable to Act	3	--	--	--	1	1
Other	5	2	--	--	--	1
Unknown	<u>30</u>	<u>--</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>7</u>
TOTAL	112	6	2	4	10	17

BURN INJURIES REPORTED BY HEALTH CARE FACILITIES

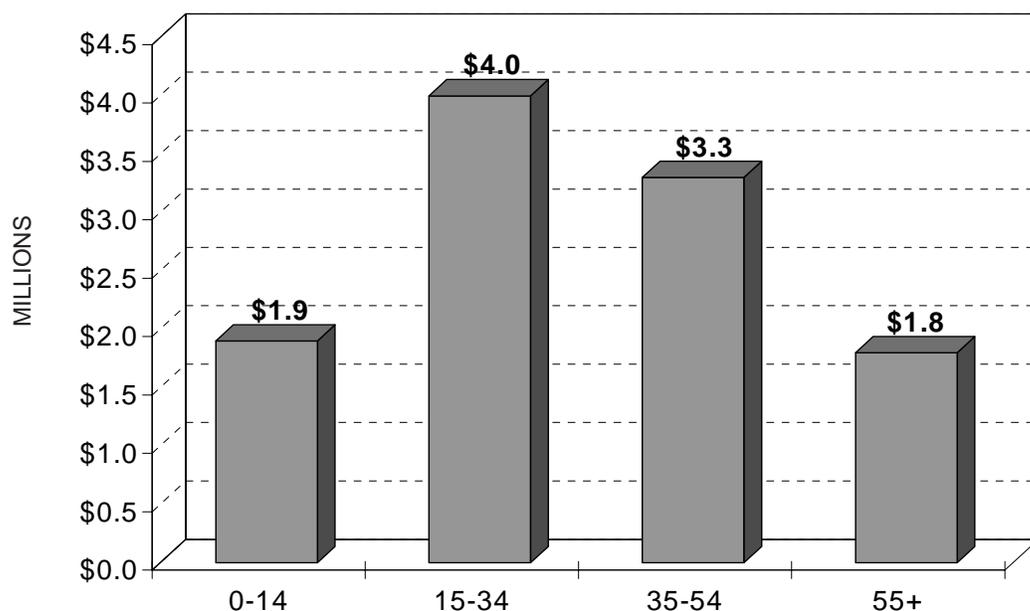
The charts and tables below and on the next two pages reflect civilian burn injuries that were reported to the Minnesota Department of Health by Minnesota health care facilities.

Of the total reported burn injuries (1,429), 42% were in the 15-34 age group (599).

CIVILIAN BURN INJURIES BY AGE



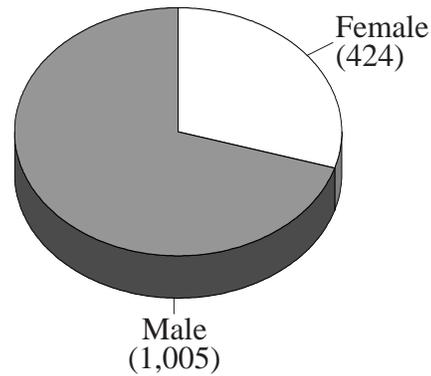
CIVILIAN BURN INJURIES COSTS BY AGE



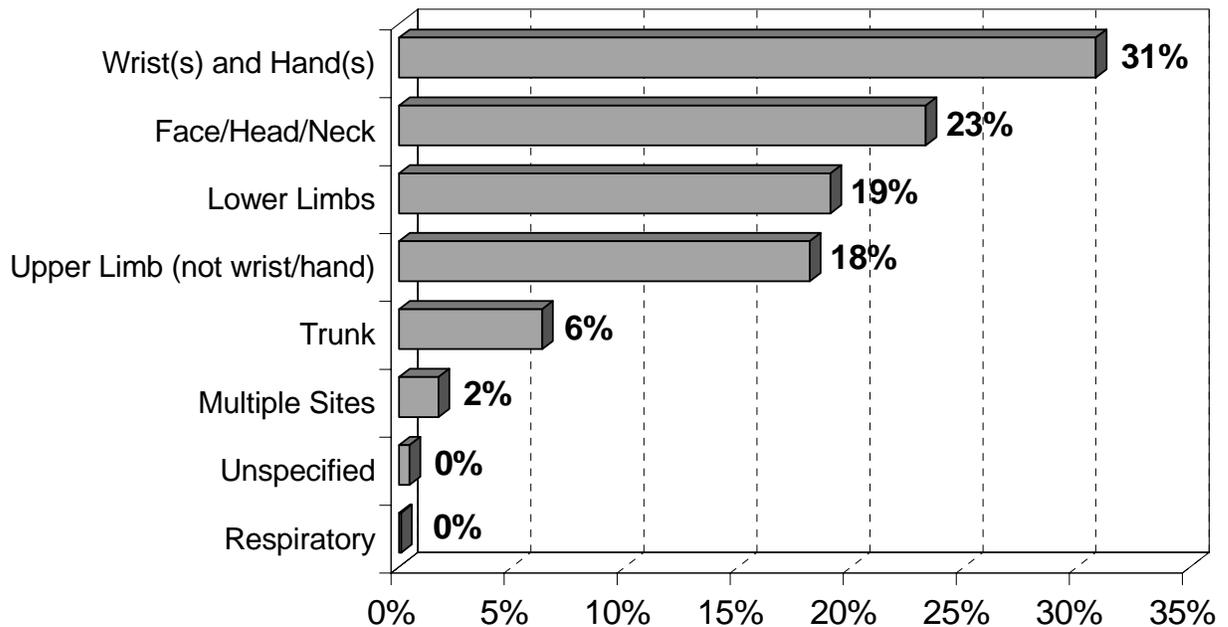
Total cost of reported burn injuries was \$11 million.

There were 70% male burn injuries compared to 30% female burn injuries.

CIVILIAN BURN INJURIES BY GENDER



CIVILIAN BURN INJURIES BY BODY AREA



Wrists and Hands were the leading burn areas at 31%.

CIVILIAN BURN INJURIES BY INCOME LEVEL

Income Level	Number of Injuries	Rate (Per 100,000 Pop.)
\$0-\$24,999	206	50
\$25,000-\$49,000	941	30
\$50,000-\$74,999	264	20
\$75,000+	5	20

CIVILIAN BURN INJURIES AND COSTS BY COUNTY (reported by health care facilities)

Per capita data is calculated at a standard rate of burn injuries per 100,000 people.

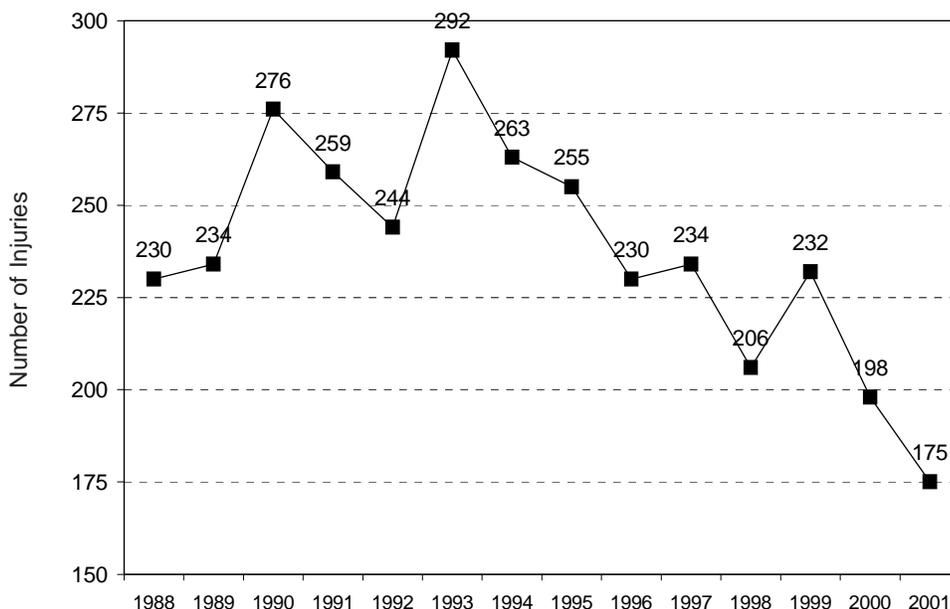
<u>County</u>	<u>Burn Injuries</u>	<u>Burn Injuries/ 100,000 Pop.</u>	<u>Burn Injury Costs</u>	<u>County</u>	<u>Burn Injuries</u>	<u>Burn Injuries/ 100,000 Pop.</u>	<u>Burn Injury Costs</u>
Aitkin	13	110	\$5,867	Marshall	0	0	\$0
Anoka	97	32	\$103,526	Martin	7	31	\$1,748
Becker	14	49	\$21,735	Meeker	8	35	\$1,549
Beltrami	14	32	\$4,607	Mille Lacs	34	133	\$40,643
Benton	0	0	\$0	Morrison	9	30	\$8,197
Big Stone	0	0	\$0	Mower	0	0	\$0
Blue Earth	25	44	\$19,694	Murray	0	0	\$0
Brown	6	22	\$2,198	Nicollet	0	0	\$0
Carlton	14	42	\$4,909	Nobles	6	37	\$11,854
Carver	15	24	\$5,694	Norman	0	0	\$0
Cass	1	5	\$137	Olmsted	61	50	\$44,250
Chippewa	2	17	\$649	Otter Tail	3	6	\$455
Chisago	0	0	\$0	Pennington	11	80	\$1,375
Clay	0	0	\$0	Pine	7	28	\$2,647
Clearwater	0	0	\$0	Pipestone	0	0	\$0
Cook	0	0	\$0	Polk	10	37	\$4,021
Cottonwood	1	11	\$173	Pope	1	9	\$18,371
Crow Wing	31	63	\$29,658	Ramsey	211	43	\$4,706,865
Dakota	49	14	\$81,924	Red Lake	0	0	\$0
Dodge	0	0	\$0	Redwood	0	0	\$0
Douglas	6	21	\$2,376	Renville	0	0	\$0
Faribault	0	0	\$0	Rice	10	18	\$5,258
Fillmore	0	0	\$0	Rock	0	0	\$0
Freeborn	0	0	\$0	Roseau	0	0	\$0
Goodhue	13	30	\$7,010	St. Louis	106	58	\$716,286
Grant	1	8	\$133	Scott	26	29	\$10,387
Hennepin	360	33	\$4,882,357	Sherburne	0	0	\$0
Houston	0	0	\$0	Sibley	0	0	\$0
Hubbard	0	0	\$0	Stearns	60	44	\$70,479
Isanti	18	70	\$25,504	Steele	10	30	\$9,638
Itasca	29	76	\$10,836	Stevens	1	6	\$1,994
Jackson	0	0	\$0	Swift	4	45	\$13,589
Kanabec	0	0	\$0	Todd	0	0	\$0
Kandiyohi	25	62	\$42,284	Traverse	0	0	\$0
Kittson	0	0	\$0	Wabasha	0	0	\$0
Koochiching	0	0	\$0	Wadena	4	29	\$1,529
Lac Qui Parle	5	88	\$6,531	Waseca	0	0	\$0
Lake	4	42	\$777	Washington	19	9	\$18,313
Lake of the Woods	2	40	\$882	Watonwan	0	0	\$0
LeSueur	11	54	\$2,849	Wilkin	0	0	\$0
Lincoln	1	21	\$187	Winona	14	29	\$2,465
Lyon	12	51	\$8,976	Wright	23	28	\$23,951
McLeod	13	38	\$5,525	Yellow Medicine	2	21	\$1,178
Mahnomen	0	0	\$0				
				TOTAL	1,429	30	\$10,994,040

Of the 175 firefighter injuries, 124 (71%) occurred in the course of fighting fires.

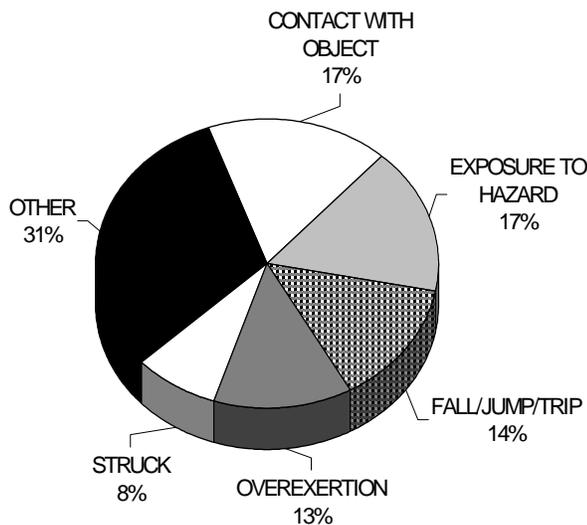
FIREFIGHTER INJURIES

In 2001, 175 Minnesota firefighters were injured while responding to, involved in, or returning from emergency situations, representing a decrease of 12% from last year. Of these 175 injuries, 124, or 71%, were directly fire related. (This does not include injuries that occur during training or at the stations.) Sixty-three percent (63%) of these fire-related injuries occurred while firefighters were fighting residential structure fires. It is encouraging to see the number of firefighter injuries continue to decrease.

FOURTEEN-YEAR HISTORY OF MINNESOTA FIREFIGHTER INJURIES



MINNESOTA FIREFIGHTER INJURIES: CAUSES



The main injury cause category was Other at 31% and the second main injury cause in 2001 was tied - Contact with Object and Exposure to Hazard at 17%.

SUMMARY

Historically, Minnesotans have been at greatest risk for fire death and injury in their own homes. In 2001, 87% of the state's fire deaths, and 74% of civilian injuries occurred in residential settings. The presence or absence of a working smoke detector is often a critical factor in fire fatalities. In 34% of fire deaths occurring in dwellings, no smoke detectors were present or they were present, but not working. In 29% of residential deaths, it was not known whether detectors were present or functioning.

Careless smoking was the most common cause of fire fatalities at 21%. Alcohol or drug use was an impairing factor in 30% of all fire deaths (14 deaths) and particularly in careless smoking deaths, where 60% of victims showed alcohol/drug impairment.

In 2001, fire deaths for most age groups decreased or went up only slightly, except for the very young (0-19 years), which rebounded back to its 1999 figure.

Thirty-three percent (33%) of civilian fire injuries occurred while fighting the fire, indicating a continuing need for efforts in educating our citizens in fire safe behaviors in the home, such as getting out as quickly as possible and not re-entering the home once outside must be emphasized to all age groups.

Seventy-one percent (71%) of firefighter injuries took place while fighting fires; sixty-three percent (63%) of these fire-related injuries occurred fighting residential structure fires. It is encouraging to see the number of firefighter injuries decrease in the past few years.

Statewide, fire deaths have decreased over the past twenty-two years, even as Minnesota's population has grown. However, many preventable tragedies continue to occur. **Prevention efforts, and education efforts, particularly those targeting populations identified as vulnerable, are essential to reducing the continuing needless tragic losses from fire.**

PARTICIPATION

MINNESOTA FIRE INCIDENT REPORTING SYSTEM

"FIGHTING
FIRES
WITH FACTS!"



MINNESOTA
FIRE
DEPARTMENTS

A thumbnail image of the MFIRS-1 (Minnesota Fire Incident Reporting System) form. The form is a complex grid with various sections labeled A through U, containing checkboxes, text boxes, and tables for recording fire incident data. The title 'MFIRS-1' is visible in the center of the form.

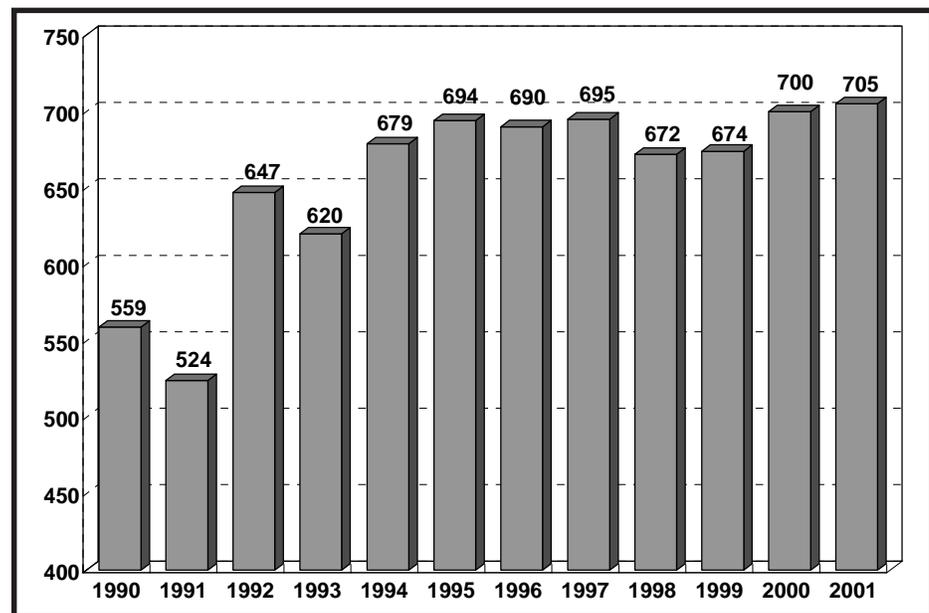
PARTICIPATION - Minnesota Fire Incident Reporting System

The Minnesota State Fire Marshal Division appreciates the efforts of the fire departments who submitted Minnesota Fire Incident Reporting System (MFIRS) reports in 2001. MFIRS input tells us where you have been, and what you have done. This information is essential if we are to understand and effectively combat the fire problem in Minnesota. It allows the Division to focus on real fire problems, rather than popular perceptions. On the local level, this data provides knowledge to intelligently focus prevention efforts; it also documents needs when making budget requests for staffing or equipment.

Fire information is requested on a weekly basis by the media, the public, the fire service and the fire protection community. It is used to support legislative initiatives and to guide public fire safety campaigns.

The reporting history of Minnesota fire departments from 1997 - 2001 is listed on the following pages. Departments are listed by county, with the total percent of those reporting in 2001 indicated. In 36 counties, 100% of the fire departments reported to the MFIRS system.

FIRE DEPARTMENTS' MFIRS PARTICIPATION



Not only the state, but also national organizations are requiring fire departments to report using their state's reporting system. There are a number of grants that are given to fire departments, with the requirement that they report their incidents, including fire grants from the United States Fire Administration (USFA) and Department of Natural Resources (DNR) grants. Any department wishing more information on reporting may call Nora Gierok at 651-215-0529.

Fire information is requested on a weekly basis by the media, the public, the fire service and the fire protection community.

Thirty-seven percent of reporting fire departments used FIREHOUSE Software® in 2001.

AITKIN COUNTY

83% Reporting

97 98 99 00 01

* * * * * AITKIN
* * * * * HILL CITY
* * * * * JACOBSON
* * * * * MCGREGOR VOL
* * * * * PALISADE VOL
* * * * * McGrath

ANOKA COUNTY

93% Reporting

* * * * * ANDOVER
* * * * * ANOKA-CHAMPLIN
* * * * * CENTENNIAL
* * * * * COLUMBIA HEIGHTS
* * * * * COON RAPIDS
* * * * * EAST BETHEL
* * * * * FRIDLEY
* * * * * HAM LAKE
* * * * * LEXINGTON
* * * * * LINWOOD VOL
* * * * * OAK GROVE
* * * * * RAMSEY
* * * * * SPRING LAKE PARK
* * * * * ST FRANCIS
* * * * * Bethel

BECKER COUNTY

(9) - 100% Reporting

* * * * * AUDUBON
* * * * * CALLAWAY
* * * * * CARSONVILLE VOL
* * * * * DETROIT LAKES
* * * * * FRAZEE
* * * * * LAKE PARK
* * * * * OGEMA
* * * * * WHITE EARTH VOL
* * * * * WOLF LAKE

BELTRAMI COUNTY

67% Reporting

97 98 99 00 01

* * * * * ALASKA
* * * * * BEMIDJI
* * * * * BLACKDUCK
* * * * * KELLIHER VOL
* * * * * Red lake
* * * * * Solway

BENTON COUNTY

(3) - 100% Reporting

* * * * * FOLEY
* * * * * RICE
* * * * * SAUK RAPIDS

BIG STONE COUNTY

83% Reporting

* * * * * BEARDSLEY
* * * * * CLINTON
* * * * * CORRELL
* * * * * GRACEVILLE
* * * * * ORTONVILLE
* * * * * Odessa

BLUE EARTH COUNTY

(12) - 100% Reporting

* * * * * AMBOY
* * * * * EAGLE LAKE VOL
* * * * * GOOD THUNDER
* * * * * LAKE CRYSTAL
* * * * * MADISON LAKE
* * * * * MANKATO
* * * * * MAPLETON
* * * * * PEMBERTON
* * * * * SKYLINE
* * * * * SOUTH BEND
* * * * * ST CLAIR
* * * * * VERNON CENTER

BROWN COUNTY

80% Reporting

97 98 99 00 01

* * * * * COMFREY
* * * * * NEW ULM
* * * * * SLEEPY EYE
* * * * * SPRINGFIELD VOL
* * * * * Hanska

CARLTON COUNTY

79% Reporting

* * * * * BARNUM VOL
* * * * * CARLTON VOL
* * * * * CLOQUET
* * * * * CROMWELL VOL
* * * * * KETTLE RIVER
* * * * * MAHTOWA
* * * * * MOOSE LAKE
* * * * * PERCH LAKE VOL
* * * * * SCANLON VOL
* * * * * THOMSON TWP
* * * * * WRENSHALL
* * * * * Blackhoof
* * * * * Holyoke Vol
* * * * * Wright Vol

CARVER COUNTY

(12) - 100% Reporting

* * * * * CARVER
* * * * * CHANHASSEN
* * * * * CHASKA
* * * * * COLOGNE
* * * * * HAMBURG
* * * * * MAYER
* * * * * NEW GERMANY
* * * * * NORWOOD
* * * * * VICTORIA
* * * * * WACONIA
* * * * * WATERTOWN
* * * * * YOUNG AMERICA

KEY

* Fire Departments submitting MFIRS each year.

CASS COUNTY

73% Reporting

97 98 99 00 01
 * * * * * BACKUS VOL
 * * * * * BENA
 * * * * * CASS LAKE
 * * * * * HACKENSACK AREA
 * * * * * LONGVILLE VOL
 * * * * * PILLAGER AREA
 * * * * * PINE RIVER
 * * * * * REMER
 * * * * * Crooked Lake Vol
 * * * * * Federal Dam
 * * * * * Walker

CHIPPEWA COUNTY

80% Reporting

* * * * * CLARA CITY
 * * * * * MAYNARD
 * * * * * MONTEVIDEO
 * * * * * WATSON
 * * * * * Milan

CHISAGO COUNTY

91% Reporting

* * * * * ALMELUND
 * * * * * CENTER CITY
 * * * * * HARRIS
 * * * * * LINDSTROM
 * * * * * NORTH BRANCH
 * * * * * RUSH CITY
 * * * * * SHAFER
 * * * * * STACY
 * * * * * TAYLORS FALLS
 * * * * * WYOMING
 * * * * * Chisago City

CLAY COUNTY

(9) - 100% Reporting

* * * * * BARNESVILLE
 * * * * * DILWORTH
 * * * * * FELTON COMM
 * * * * * GLYNDON VOL
 * * * * * HAWLEY
 * * * * * HITTERDAL
 * * * * * MOORHEAD
 * * * * * SABIN-ELMWOOD
 * * * * * ULEN

CLEARWATER COUNTY

86% Reporting

97 98 99 00 01
 * * * * * BAGLEY
 * * * * * BEAR CREEK
 * * * * * CLEARBROOK
 * * * * * GONVICK
 * * * * * ITASCA TWP
 * * * * * SHEVLIN
 * * * * * Hangaard Twp

COOK COUNTY

56% Reporting

* * * * * GUNFLINT TRAIL
 * * * * * LUTSEN TWP VOL
 * * * * * MAPLE HILL
 * * * * * SCHROEDER
 * * * * * TOFTE
 * * * * * Colvill Area
 * * * * * Grand Marais Vol
 * * * * * Grand Portage
 * * * * * Hovland

COTTONWOOD COUNTY

(5) - 100% Reporting

* * * * * JEFFERS
 * * * * * MOUNTAIN LAKE
 * * * * * STORDEN
 * * * * * WESTBROOK
 * * * * * WINDOM

CROW WING COUNTY

93% Reporting

* * * * * BRAINERD
 * * * * * CROSBY VOL
 * * * * * CUYUNA
 * * * * * DEERWOOD
 * * * * * EMILY VOL
 * * * * * FIFTY LAKES
 * * * * * GARRISON
 * * * * * IDEAL TWP
 * * * * * IRONTON
 * * * * * MISSION TWP
 * * * * * NISSWA
 * * * * * PEQUOT LAKES
 * * * * * RIVERTON
 * * * * * Crosslake

DAKOTA COUNTY

(14) - 100% Reporting

97 98 99 00 01
 * * * * * APPLE VALLEY
 * * * * * BURNSVILLE
 * * * * * EAGAN
 * * * * * FARMINGTON
 * * * * * HAMPTON
 * * * * * HASTINGS
 * * * * * INVER GROVE HTS
 * * * * * LAKEVILLE
 * * * * * MENDOTA HEIGHTS
 * * * * * MIESVILLE VOL
 * * * * * RANDOLPH
 * * * * * ROSEMOUNT
 * * * * * SOUTH ST PAUL
 * * * * * WEST ST PAUL

DODGE COUNTY

(6) - 100% Reporting

* * * * * CLAREMONT
 * * * * * DODGE CENTER
 * * * * * HAYFIELD
 * * * * * KASSON
 * * * * * MANTORVILLE
 * * * * * WEST CONCORD

DOUGLAS COUNTY

(11) - 100% Reporting

* * * * * ALEXANDRIA
 * * * * * BRANDON
 * * * * * CARLOS
 * * * * * EVANSVILLE
 * * * * * FORADA
 * * * * * GARFIELD
 * * * * * KENSINGTON
 * * * * * LEAF VALLEY TWP
 * * * * * MILLERVILLE
 * * * * * MILTONA
 * * * * * OSAKIS

FARIBAULT COUNTY

91% Reporting

97	98	99	00	01	
*	*	*	*	*	BLUE EARTH
*	*	*	*	*	BRICELYN
*	*	*	*	*	DELAVAN VOL
*	*	*	*	*	EASTON VOL
*	*	*	*	*	ELMORE
*	*	*	*	*	KIESTER
*	*	*	*	*	MINNESOTA LAKE
*	*	*	*	*	WALTERS VOL
*	*	*	*	*	WELLS
*	*	*	*	*	WINNEBAGO VOL
*	*	*			Frost

FILLMORE COUNTY

(11) - 100% Reporting

*				*	CANTON
*	*	*	*	*	CHATFIELD
*	*	*	*	*	FOUNTAIN
*	*	*	*	*	HARMONY
*	*	*	*	*	LANESBORO
*	*	*	*	*	MABEL VOL
*	*	*	*	*	OSTRANDER
*				*	PRESTON
*	*	*	*	*	RUSHFORD
*	*	*	*	*	SPRING VALLEY
*	*	*	*	*	WYKOFF

FREEBORN COUNTY

69% Reporting

*	*	*	*	*	ALBERT LEA
*	*	*	*	*	ALBERT LEA TWP
*	*	*	*	*	ALDEN
			*	*	CONGER
*	*	*	*	*	FREEBORN
*	*	*	*	*	HARTLAND
			*	*	HOLLANDALE
*	*			*	LONDON
*	*	*	*	*	MANCHESTER
*	*	*	*	*	MYRTLE
	*	*	*	*	TWIN LAKES
					Clarks Grove Vol
*	*	*	*	*	Emmons
					Geneva
*	*	*			Glenville
*					Hayward

GOODHUE COUNTY

75% Reporting

97	98	99	00	01	
*	*	*	*	*	CANNON FALLS
*				*	DENNISON
*	*	*	*	*	GOODHUE
*	*	*	*	*	PINE ISLAND
*	*	*	*	*	RED WING
*		*	*	*	ZUMBROTA
					Kenyon
					Wanamingo

GRANT COUNTY

(6) - 100% Reporting

*	*		*	*	ASHBY
*			*	*	BARRETT
*	*	*	*	*	ELBOW LAKE
*	*	*	*	*	HERMAN VOL
*	*	*	*	*	HOFFMAN
*	*	*	*	*	WENDELL

HENNEPIN COUNTY

97% Reporting

*	*	*	*	*	BLOOMINGTON
*	*	*	*	*	BROOKLYN CENTER
*	*	*	*	*	BROOKLYN PARK
*	*	*	*	*	CRYSTAL
*	*	*	*	*	DAYTON
*	*	*	*	*	EDEN PRAIRIE
*	*	*	*	*	EDINA
*	*	*	*	*	EXCELSIOR
*	*	*	*	*	GOLDEN VALLEY
*	*	*	*	*	HAMEL
*		*	*	*	HANOVER
*	*	*	*	*	HOPKINS
*	*	*	*	*	LONG LAKE
*	*	*	*	*	LORETTO VOL
*	*	*	*	*	MAPLE GROVE
*	*	*	*	*	MAPLE PLAIN
*	*	*	*	*	MINNEAPOLIS
*	*	*	*	*	MINNETONKA
*	*	*	*	*	MOUND
*	*	*	*	*	MPLS/ST PAUL INT'L
					AIRPORT
*	*	*	*	*	NEW HOPE
*	*	*	*	*	OSSEO
*	*	*	*	*	PLYMOUTH
*	*	*	*	*	RICHFIELD
*	*	*	*	*	ROBBINSDALE
*	*	*	*	*	ROGERS
*	*	*	*	*	ST ANTHONY
*	*	*	*	*	ST BONIFACIUS

97 98 99 00 01

*	*	*	*	*	ST LOUIS PARK
*	*	*	*	*	WAYZATA
*	*	*	*	*	Medicine Lake

HOUSTON COUNTY

86% Reporting

*	*	*	*	*	BROWNSVILLE
*	*	*	*	*	CALEDONIA
*	*	*	*	*	HOKAH VOL
*	*	*	*	*	HOUSTON
*	*	*	*	*	LACRESCENT
*	*	*	*	*	SPRING GROVE
					Eitzen

HUBBARD COUNTY

80% Reporting

*	*		*	*	EAST HUBBARD CO
*	*	*	*	*	LAPORTE/LAKEPORT
				*	NEVIS
*	*	*	*	*	PARK RAPIDS
*	*				Lake George

ISANTI COUNTY

75% Reporting

*	*	*	*	*	CAMBRIDGE
*	*	*	*	*	DALBO
*	*	*	*	*	ISANTI VOL
*					Braham

ITASCA COUNTY

88% Reporting

*	*	*	*	*	BALSAM VOL
*	*	*	*	*	BEARVILLE TWP
*	*	*	*	*	BOVEY
*	*	*	*	*	CALUMET
*	*	*	*	*	COHASSET
*	*	*	*	*	COLERAINE
*	*	*	*	*	DEER RIVER
*	*	*	*	*	GRAND RAPIDS
*	*	*	*	*	KEEWATIN VOL
*	*	*	*	*	MARBLE
*	*	*	*	*	NASHWAUK
*	*	*	*	*	SQUAW LAKE
*	*	*	*	*	TACONITE
*	*	*	*	*	WARBA
					Bigfork Vol
*	*	*	*	*	Goodland

JACKSON COUNTY

80% Reporting

97 98 99 00 01
 * * * * * ALPHA
 * * * * * HERON LAKE VOL
 * * * * * JACKSON
 * * * * * LAKEFIELD
 Okabena

KANABEC COUNTY

(3) - 100% Reporting

* * * * * GRASSTON
 * * * * * MORA
 * * * * * OGILVIE

KANDIYOHI COUNTY

82% Reporting

* * * * * BLOMKEST
 * * * * * KANDIYOHI
 * * * * * NEW LONDON
 * * * * * PENNOCK
 * * * * * PRINSBURG
 * * * * * RAYMOND
 * * * * * SPICER
 * * * * * SUNBURG
 * * * * * WILLMAR
 * * * * * Atwater
 Lake Lillian

KITTSON COUNTY

(5) - 100% Reporting

* * * * * HALLOCK
 * * * * * KARLSTAD VOL
 * * * * * KENNEDY
 * * * * * LAKE BRONSON
 * * * * * LANCASTER

KOOCHICHING COUNTY

(6) - 100% Reporting

* * * * * BIG FALLS VOL
 * * * * * BIRCHDALE RURAL
 * * * * * INTERNATIONAL FLLS
 * * * * * LITTLEFORK
 * * * * * LOMAN RURAL
 * * * * * NORTHOME

LAC QUI PARLE COUNTY

71% Reporting

97 98 99 00 01
 * * * * * BELLINGHAM
 * * * * * BOYD
 * * * * * DAWSON
 * * * * * MADISON
 * * * * * NASSAU
 Louisburg
 * Marietta

LAKE COUNTY

75% Reporting

* * * * * FINLAND
 * * * * * SILVER BAY
 * * * * * TWO HARBORS
 * * * * * Beaver Bay Vol

LAKE OF THE WOODS COUNTY

(3) - 100% Reporting

* * * * * BAUDETTE
 * * * * * NORTHWEST ANGLE
 * * * * * WILLIAMS

LESUEUR COUNTY

(8) - 100% Reporting

* * * * * CLEVELAND
 * * * * * ELYSIAN
 * * * * * KASOTA
 * * * * * KILKENNY
 * * * * * LE CENTER
 * * * * * LESUEUR
 * * * * * MONTGOMERY
 * * * * * WATERVILLE

LINCOLN COUNTY

80% Reporting

* * * * * ARCO
 * * * * * IVANHOE
 * * * * * LAKE BENTON
 * * * * * TYLER
 Hendricks

LYON COUNTY

(10) - 100% Reporting

97 98 99 00 01
 * * * * * BALATON
 * * * * * COTTONWOOD
 * * * * * GARVIN
 * * * * * GHENT
 * * * * * LYND
 * * * * * MARSHALL
 * * * * * MINNEOTA
 * * * * * RUSSELL
 * * * * * TAUNTON
 * * * * * TRACY

MCLEOD COUNTY

88% Reporting

* * * * * BROWNTON VOL
 * * * * * GLENCOE
 * * * * * HUTCHINSON
 * * * * * LESTER PRAIRIE
 * * * * * PLATO
 * * * * * SILVER LAKE
 * * * * * STEWART
 * * * * * Winsted

MAHNOMEN COUNTY

75% Reporting

* * * * * ELBOW-TULABY LKS
 * * * * * MAHNOMEN
 * * * * * TWIN LAKES VOL
 Waubun

MARSHALL COUNTY

75% Reporting

* * * * * ALVARADO VOL
 * * * * * ARGYLE
 * * * * * NEWFOLDEN
 * * * * * OSLO
 * * * * * STEPHEN
 * * * * * WARREN
 * Grygla
 Middle River

MARTIN COUNTY

89% Reporting

97	98	99	00	01	
*	*	*	*	*	CEYLON
*	*	*	*	*	DUNNELL
*	*	*	*	*	FAIRMONT
	*	*	*	*	NORTHROP
*	*		*	*	SHERBURN
*	*	*	*	*	TRIMONT
*	*	*	*	*	TRUMAN
*			*	*	WELCOME
	*	*	*		Granada

MEEKER COUNTY

(6) - 100% Reporting

*	*	*	*	*	COSMOS
*	*	*	*	*	DASSEL
*	*	*	*	*	EDEN VALLEY
*	*	*	*	*	GROVE CITY
*	*	*	*	*	LITCHFIELD
*	*	*	*	*	WATKINS

MILLE LACS COUNTY

80% Reporting

*	*	*	*	*	FORESTON
*	*	*	*	*	MILACA
*	*	*	*	*	ONAMIA
*	*	*	*	*	PRINCETON
*					Isle

MORRISON COUNTY

90% Reporting

*	*	*	*	*	BOWLUS
*	*	*	*	*	FLENSBURG
*	*	*	*	*	LITTLE FALLS
*	*	*	*	*	MOTLEY
*	*	*	*	*	PIERZ
*	*	*	*	*	RANDALL
*	*	*	*	*	ROYALTON
*	*	*	*	*	SCANDIA VALLEY
*	*	*	*	*	SWANVILLE
	*	*			Upsala

MOWER COUNTY

78% Reporting

97	98	99	00	01	
*	*	*	*	*	ADAMS VOL
*	*	*	*	*	AUSTIN
*	*	*	*	*	BROWNSDALE
*	*		*	*	DEXTER VOL
		*	*	*	LE ROY
*	*		*	*	LYLE
*	*	*	*	*	ROSE CREEK AREA
	*				Grand Meadow
					Mapleview

MURRAY COUNTY

88% Reporting

	*		*	*	AVOCA
*	*	*	*	*	CHANDLER
*	*	*	*	*	CURRIE VOL
*	*	*	*	*	DOVRAY
*	*	*	*	*	FULDA
*	*	*	*	*	LAKE WILSON
*	*	*	*	*	SLAYTON
*	*				Iona

NICOLLET COUNTY

(5) - 100% Reporting

*	*	*	*	*	COURTLAND
*	*	*	*	*	LAFAYETTE
*	*	*	*	*	NICOLLET
*	*	*	*	*	NORTH MANKATO
*	*	*	*	*	ST PETER

NOBLES COUNTY

80% Reporting

*	*	*	*	*	ADRIAN
*	*	*	*	*	BIGELOW
*	*	*	*	*	BREWSTER
*	*	*	*	*	ELLSWORTH
*	*	*	*	*	LISMORE
*	*	*	*	*	RUSHMORE
*	*	*	*	*	WILMONT
*	*	*	*	*	WORTHINGTON
*					Dundee
					Round Lake

NORMAN COUNTY

88% Reporting

97	98	99	00	01	
*	*	*	*	*	ADA
*	*	*	*	*	BORUP
*	*	*	*	*	GARY VOL
*	*	*	*	*	HALSTAD
*		*	*	*	HENDRUM
*	*	*	*	*	SHELLY
*	*	*	*	*	TWIN VALLEY
*	*	*			Perley-Lee Twp

OLMSTED COUNTY

88% Reporting

*	*	*	*	*	BYRON
*	*	*	*	*	DOVER
*	*	*	*	*	EYOTA VOL
*	*	*	*	*	ORONOCO
*	*	*	*	*	ROCHESTER
*		*	*	*	ROCHESTER ARPT
*	*	*	*	*	STEWARTVILLE
*	*	*	*	*	Rochester Rural

OTTER TAIL COUNTY

76% Reporting

*	*	*	*	*	CLITHERALL
*	*	*	*	*	DALTON
*	*	*	*	*	DEER CREEK
*	*	*	*	*	ELIZABETH
*	*	*	*	*	FERGUS FALLS
*	*	*	*	*	HENNING VOL
*	*	*	*	*	NEW YORK MILLS
*	*	*	*	*	OTTERTAIL
*	*	*	*	*	PARKERS PRAIRIE
*	*	*	*	*	PELICAN RAPIDS VOL
*	*	*	*	*	PERHAM
*	*	*	*	*	UNDERWOOD
*	*	*	*	*	VERGAS
					Battle Lake
					Bluffton
		*	*		Dent
*	*	*	*	*	Vining

PENNINGTON COUNTY

(3) - 100% Reporting

*	*	*	*	*	GOODRIDGE AREA
*	*	*	*	*	ST HILAIRE
*	*	*	*	*	THIEF RIVER FALLS

PINE COUNTY

91% Reporting

97 98 99 00 01
 * * * * * ASKOV VOL
 * * * * * BROOK PARK
 * * * * * BRUNO
 * * * * * DUXBURY
 * * * * * FINLAYSON
 * * * * * HINCKLEY VOL
 * * * * * PINE CITY
 * * * * * SANDSTONE VOL
 * * * * * STURGEON LAKE
 * * * * * WILLOW RIVER
 * Kerrick

PIPESTONE COUNTY

(6) - 100% Reporting

* * * * * EDGERTON
 * * * * * HOLLAND
 * * * * * JASPER
 * * * * * PIPESTONE
 * * * * * RUTHTON
 * * * * * WOODSTOCK

POLK COUNTY

92% Reporting

* * * * * BELTRAMI
 * * * * * CLIMAX
 * * * * * CROOKSTON
 * * * * * EAST GRAND FORKS
 * * * * * FERTILE
 * * * * * FISHER
 * * * * * FOSSTON
 * * * * * MCINTOSH
 * * * * * MENTOR
 * * * * * NIELSVILLE
 * * * * * WINGER
 * * * * * Erskine

POPE COUNTY

83% Reporting

* * * * * GLENWOOD
 * * * * * LOWRY
 * * * * * SEDAN
 * * * * * STARBUCK
 * * * * * VILLARD VOL
 * * * * * Cyrus

RAMSEY COUNTY

(11) - 100% Reporting

97 98 99 00 01
 * * * * * FALCON HEIGHTS
 * * * * * FIRE MARSHAL
 * * * * * CENTRAL OFFICE
 * * * * * LAKE JOHANNA
 * * * * * LITTLE CANADA
 * * * * * MAPLEWOOD
 * * * * * NEW BRIGHTON
 * * * * * NORTH ST PAUL
 * * * * * ROSEVILLE
 * * * * * ST PAUL
 * * * * * VADNAIS HEIGHTS
 * * * * * WHITE BEAR LAKE

RED LAKE COUNTY

33% Reporting

* * OKLEE
 Plummer
 Red Lake Falls

REDWOOD COUNTY

(14) - 100% Reporting

* * * * * BELVIEW
 * * * * * CLEMENTS
 * * * * * LAMBERTON
 * * * * * LUCAN
 * * * * * MILROY
 * * * * * MORGAN
 * * * * * REDWOOD FALLS
 * * * * * REVERE
 * * * * * SANBORN
 * * * * * SEAFORTH
 * * * * * VESTA
 * * * * * WABASSO VOL
 * * * * * WALNUT GROVE
 * * * * * WANDA

RENVILLE COUNTY

(10) - 100% Reporting

* * * * * BIRD ISLAND
 * * * * * BUFFALO LAKE
 * * * * * DANUBE
 * * * * * FAIRFAX
 * * * * * FRANKLIN
 * * * * * HECTOR
 * * * * * MORTON
 * * * * * OLIVIA
 * * * * * RENVILLE
 * * * * * SACRED HEART

RICE COUNTY

80% Reporting

97 98 99 00 01
 * * * * * FARIBAULT
 * * * * * MORRISTOWN
 * * * * * NERSTRAND VOL
 * * * * * NORTHFIELD
 * * * * * Lonsdale

ROCK COUNTY

83% Reporting

* * * * * HARDWICK
 * * * * * HILLS
 * * * * * KENNETH VOL
 * * * * * LUVERNE
 * * * * * MAGNOLIA
 * * * * * Beaver Creek

ROSEAU COUNTY

(4) - 100% Reporting

* * * * * BADGER
 * * * * * GREENBUSH
 * * * * * ROSEAU
 * * * * * WARROAD

ST LOUIS COUNTY

93% Reporting

* * * * * ALBORN
 * * * * * ARROWHEAD
 * * * * * AURORA
 * * * * * BABBITT VOL
 * * * * * BIWABIK VOL
 * * * * * BIWABIK TWP VOL
 * * * * * BREITUNG
 * * * * * BREVATOR
 * * * * * BRIMSON AREA VOL
 * * * * * BUHL VOL
 * * * * * BUYCK COMM VOL
 * * * * * CANOSIA VOL
 * * * * * CENTRAL LKS VOL
 * * * * * CHERRY TWP
 * * * * * CHISHOLM
 * * * * * CLIFTON TWP
 * * * * * CLINTON VOL
 * * * * * COLVIN TWP
 * * * * * COOK
 * * * * * COTTON VOL
 * * * * * CRANE LAKE
 * * * * * CULVER

97 98 99 00 01

* * * * * DULUTH
 * * * * * EAGLES NEST
 * * * * * ELLSBURG
 * * * * * ELMER
 * * * * * ELY
 * * * * * EMBARRASS VOL
 * * * * * EVELETH
 * * * * * EVERGREEN
 * * * * * FAYAL
 * * * * * FLOODWOOD
 * * * * * FREDENBERG
 * * * * * FRENCH VOL
 * * * * * GILBERT
 * * * * * GNESEN VOL
 * * * * * GRAND LAKE VOL
 * * * * * GREENWOOD TWP
 * * * * * HERMANTOWN VOL
 * * * * * HIBBING
 * * * * * HOYT LAKES
 * * * * * INDUSTRIAL VOL
 * * * * * KABETOGAMA
 * * * * * KELSEY VOL
 * * * * * KINNEY-GREAT SCOTT
 * * * * * LAKEWOOD TWP
 * * * * * MAKINEN
 * * * * * MC DAVITT
 * * * * * MC KINLEY VOL
 * * * * * MEADOWLNDs AREA
 * * * * * MORSE VOL
 * * * * * MOUNTAIN IRON
 * * * * * NETT LAKE
 * * * * * NORMANNA VOL
 * * * * * NORTH STAR TWP
 * * * * * NORTHLAND
 * * * * * ORR VOL
 * * * * * PALO TWP
 * * * * * PIKE-SANDY BRITT
 * * * * * PROCTOR
 * * * * * RICE LAKE VOL.
 * * * * * SILICA AREA
 * * * * * SOLWAY RURAL
 * * * * * TOIVOLA TWP
 * * * * * TOWER
 * * * * * VERMILLION LAKE
 * * * * * VIRGINIA
 Bois Forte
 * Greaney-Rauch-
 Silverdale
 * * * * * Lakeland Vol
 * * * * * Pequaywan Lake
 * * * * * Sturgeon Twp

SCOTT COUNTY

(7) - 100% Reporting

97 98 99 00 01

* * * * * BELLE PLAINE
 * * * * * JORDAN
 * * * * * NEW MARKET
 * * * * * NEW PRAGUE
 * * * * * PRIOR LAKE
 * * * * * SAVAGE
 * * * * * SHAKOPEE

SHERBURNE COUNTY

(5) - 100% Reporting

* * * * * BECKER VOL
 * * * * * BIG LAKE
 * * * * * CLEAR LAKE
 * * * * * ELK RIVER
 * * * * * ZIMMERMAN

SIBLEY COUNTY

(7) - 100% Reporting

* * * * * ARLINGTON
 * * * * * GAYLORD
 * * * * * GIBBON
 * * * * * GREEN ISLE
 * * * * * HENDERSON
 * * * * * NEW AUBURN
 * * * * * WINTHROP VOL

STEARNS COUNTY

(23) - 100% Reporting

* * * * * ALBANY
 * * * * * AVON
 * * * * * BELGRADE
 * * * * * BROOTEN
 * * * * * COLD SPRING
 * * * * * ELROSA
 * * * * * FREEPORT
 * * * * * HOLDINGFORD
 * * * * * KIMBALL
 * * * * * LAKE HENRY
 * * * * * MELROSE
 * * * * * NEW MUNICH
 * * * * * PAYNESVILLE
 * * * * * RICHMOND
 * * * * * ROCKVILLE
 * * * * * SARTELL-LESAUK
 * * * * * SAUK CENTRE
 * * * * * ST CLOUD
 * * * * * ST JOHN'S UNIV

97 98 99 00 01

* * * * * ST JOSEPH VOL
 * * * * * ST MARTIN
 * * * * * ST STEPHEN
 * * * * * WAITE PARK

STEELE COUNTY

75% Reporting

* * * * * BLOOMING PRAIRIE
 * * * * * MEDFORD VOL
 * * * * * OWATONNA
 Ellendale Vol

STEVENS COUNTY

(4) - 100% Reporting

* * * * * CHOKIO
 * * * * * DONNELLY
 * * * * * HANCOCK
 * * * * * MORRIS

SWIFT COUNTY

(8) - 100% Reporting

* * * * * APPLETON
 * * * * * BENSON
 * * * * * CLONTARF
 * * * * * DANVERS
 * * * * * DEGRAFF
 * * * * * HOLLOWAY
 * * * * * KERKHOVEN
 * * * * * MURDOCK

TODD COUNTY

88% Reporting

* * * * * BERTHA
 * * * * * BROWERVILLE
 * * * * * CLARISSA
 * * * * * GREY EAGLE
 * * * * * HEWITT
 * * * * * LONG PRAIRIE
 * * * * * STAPLES
 Eagle Bend

TRAVERSE COUNTY

75% Reporting

* * * * * BROWNS VALLEY
 * * * * * DUMONT
 * * * * * WHEATON
 Tintah

WABASHA COUNTY

(7) - 100% Reporting

97 98 99 00 01
 * * * * * ELGIN
 * * * * * KELLOGG
 * * * * * LAKE CITY
 * * * * * MAZEPPA VOL
 * * * * * PLAINVIEW
 * * * * * WABASHA
 * * * * * ZUMBRO FALLS

WADENA COUNTY

50% Reporting

* * * * * VERNDALE
 * * * * * WADENA
 Menagha
 * Sebek

WASECA COUNTY

(4) - 100% Reporting

* * * * * JANESVILLE
 * * * * * NEW RICHLAND
 * * * * * WALDORF
 * * * * * WASECA

WASHINGTON COUNTY

(14) - 100% Reporting

* * * * * BAYPORT
 * * * * * COTTAGE GROVE
 * * * * * FOREST LAKE
 * * * * * HUGO
 * * * * * LAKE ELMO
 * * * * * LOWER ST CROIX VLY
 * * * * * MAHTOMEDI
 * * * * * MARINE ON ST CROIX
 * * * * * NEW SCANDIA
 * * * * * NEWPORT
 * * * * * OAKDALE
 * * * * * ST PAUL PARK VOL
 * * * * * STILLWATER
 * * * * * WOODBURY

WATONWAN COUNTY

63% Reporting

97 98 99 00 01
 * * * * * DARFUR
 * * * * * LASALLE
 * * * * * LEWISVILLE
 * * * * * ODIN
 * * * * * ST JAMES
 Butterfield
 * * * * * Madelia
 * Ormsby

WILKIN COUNTY

50% Reporting

* * * * * FOXHOME
 * * * * * ROTHSA Y
 * * * * * WOLVERTON
 * Breckenridge
 * Campbell
 * * Kent-Abercrombie

WINONA COUNTY

85% Reporting

* * * * * ALTURA
 * * * * * DAKOTA
 * * * * * LEWISTON
 * * * * * MINNESOTA CITY
 * * * * * NODINE VOL
 * * * * * PICKWICK AREA
 * * * * * RIDGEWAY COMM
 * * * * * ROLLINGSTONE
 * * * * * ST CHARLES
 * * * * * WILSON VOL
 * * * * * WINONA
 * * * * * Goodview
 * Hidden Valley

WRIGHT COUNTY

(14) - 100% Reporting

97 98 99 00 01
 * * * * * ALBERTVILLE
 * * * * * ANNANDALE
 * * * * * BUFFALO
 * * * * * CLEARWATER
 * * * * * COKATO
 * * * * * DELANO VOL
 * * * * * HOWARD LAKE
 * * * * * MAPLE LAKE
 * * * * * MONTICELLO
 * * * * * MONTROSE
 * * * * * ROCKFORD
 * * * * * SOUTH HAVEN
 * * * * * ST MICHAEL
 * * * * * WAVERLY

YELLOW MEDICINE COUNTY

(8) - 100% Reporting

* * * * * CANBY
 * * * * * CLARKFIELD
 * * * * * ECHO
 * * * * * GRANITE FALLS
 * * * * * HANLEY FALLS
 * * * * * PORTER
 * * * * * ST LEO
 * * * * * WOODLAKE

Thirty-eight fire departments began participating in 2001.

We welcome new and returning departments reporting in 2001:

Albert Lea Twp.	Houston
Altura	Isanti Vol.
Annandale	Karlstad Vol.
Browns Valley	Kenneth Vol.
Canton	Kilkenny
Climax	Kinney-Great Scott
Cold Spring	Lewisville
Cuyuna	London
DeGraff	Madison Lake
Dennison	Maple Hill
Dexter Vol.	Mapleton
East Hubbard Co.	Minneapolis
Eyota Vol.	Moose Lake
Felton Comm.	Nevis
Fifty Lakes	Northome
Fosston	Ogema
Foxhome	Tower
Garfield	Tyler
Granite Falls	Welcome

We lost the following departments in 2001 and encourage them to report next year.

Atwater	Kerrick
Colvill Area	Lakeland Vol.
Crosslake	Madelia
Dent	Marietta
Emmons	McGrath
Erskine	Medicine Lake
Federal Dam	Milan
Frost	Odessa
Glenville	Ormsby
Goodland	Pequaywan Lake
Goodview	Perley-Lee Twp.
Granada	Red Lake
Grand Portage	Rochester Rural
Grygla	Sebeka
Hanska	Upsala
Hayward	Vining
Hidden Valley	Winsted
Hovland	Wright Vol.
Kent-Abercrombie	

FIRE DEPARTMENT RUNS, DOLLAR LOSSES, AND FIRE DEATHS PER COUNTY IN ORDER OF TOTAL DOLLAR LOSS

In some instances, the protection district of the reporting fire department goes beyond its county boundary, but the incident will still be recorded within the department's home county. (*Fire rate = one fire for number of persons indicated. For example, in Freeborn County in 2001, there was one fire for every 370 people.*)

<u>County</u>	<u>Population</u>	<u>Total Fire Runs</u>	<u>Total Other Runs</u>	<u>Total Co. Dollar Loss</u>	<u>Fire Rate</u>	<u>Average Dollar Loss/Fire</u>	<u>Fire Deaths</u>
Freeborn	32,584	97	399	\$42,033,670	370	\$477,655	
Hennepin	1,116,200	2,747	31,432	\$19,933,740	428	\$7,643	9
St. Louis	200,528	1,102	11,598	\$18,474,198	205	\$18,928	1
*Ramsey	511,035	1,934	15,353	\$16,431,220	269	\$8,653	4
*Dakota	355,904	917	9,486	\$6,613,720	403	\$7,490	1
*Scott	89,498	366	1,519	\$5,417,100	271	\$16,415	
Anoka	298,084	1,046	11,629	\$4,962,385	304	\$5,053	2
*Carver	70,205	166	2,816	\$4,190,016	520	\$31,037	1
*Washington	201,130	607	8,116	\$4,000,905	391	\$7,769	3
*Stearns	133,166	623	2,514	\$3,531,744	241	\$6,398	2
Otter Tail	57,159	248	419	\$3,289,450	256	\$14,751	1
Rice	56,665	142	214	\$2,538,900	408	\$18,265	
*Wright	89,986	310	1,755	\$2,248,452	330	\$8,236	
Goodhue	44,127	177	1,084	\$2,206,388	269	\$13,454	
Itasca	43,992	251	658	\$2,017,600	209	\$9,608	
Mille Lacs	22,330	144	338	\$2,001,601	182	\$16,273	4
Cass	27,150	149	196	\$1,649,850	194	\$11,785	2
*Douglas	32,821	178	346	\$1,337,100	208	\$8,463	
Polk	31,369	166	1,311	\$1,249,340	199	\$7,907	
Martin	21,802	96	165	\$1,175,595	287	\$15,468	
Mower	38,603	124	295	\$1,132,405	364	\$10,683	1
*Kanabec	14,996	67	37	\$1,089,225	242	\$17,568	1
*Cottonwood	12,167	39	14	\$1,086,710	338	\$30,186	
Carlton	31,671	152	1,088	\$1,014,050	251	\$8,048	
Olmsted	124,277	283	5,621	\$993,037	447	\$3,572	
*Sherburne	64,417	227	798	\$962,702	337	\$5,040	
Steele	33,680	128	416	\$941,000	285	\$7,975	
Crow Wing	55,099	180	542	\$876,300	347	\$5,511	
*Blue Earth	55,941	264	2,368	\$839,895	222	\$3,333	
*Redwood	16,815	91	58	\$825,050	205	\$10,062	
*Lyon	25,425	121	186	\$780,600	279	\$8,578	
Houston	19,718	62	161	\$768,499	429	\$16,707	
Morrison	31,712	94	140	\$757,000	365	\$8,701	
Pine	26,530	144	163	\$755,400	231	\$6,569	
Cook	5,168	11	2	\$734,500	574	\$81,611	
Todd	24,426	102	127	\$724,400	317	\$9,408	
*LeSueur	25,426	94	323	\$712,501	289	\$8,097	
Beltrami	39,650	132	841	\$712,500	303	\$5,439	
*Swift	11,956	65	77	\$684,550	234	\$13,423	
Nobles	20,832	84	156	\$636,030	274	\$8,369	
Lac Qui Parle	8,067	47	49	\$618,700	212	\$16,282	
*Wabasha	21,610	88	268	\$602,250	277	\$7,721	
Winona	49,985	154	1,512	\$579,300	373	\$4,323	2
*Clay	51,229	154	1,803	\$553,138	346	\$3,737	
Brown	26,911	74	115	\$552,320	379	\$7,779	

<u>County</u>	<u>Population</u>	<u>Total Fire Runs</u>	<u>Total Other Runs</u>	<u>Total Co. Dollar Loss</u>	<u>Fire Rate</u>	<u>Average Dollar Loss/Fire</u>	<u>Fire Deaths</u>
*Renville	17,154	69	48	\$518,350	272	\$8,228	
Hubbard	18,376	48	20	\$490,002	399	\$10,652	
*Koochiching	14,355	51	26	\$452,150	299	\$9,420	
Faribault	16,181	97	122	\$448,600	216	\$5,981	1
Clearwater	8,423	56	111	\$426,000	175	\$8,875	2
*Benton	34,226	102	303	\$403,062	364	\$4,288	
*Waseca	19,526	77	237	\$387,500	349	\$6,920	
*Dodge	17,731	70	112	\$377,335	296	\$6,289	
*Fillmore	21,122	82	148	\$376,550	282	\$5,021	
Isanti	31,287	103	416	\$372,100	323	\$3,836	
*Becker	30,000	224	310	\$359,000	173	\$2,075	
Lake	11,058	30	101	\$355,000	1,843	\$59,167	
Aitkin	15,301	76	71	\$325,650	225	\$4,789	2
*Meeker	22,644	87	263	\$288,090	404	\$5,144	1
*Pennington	13,584	66	106	\$274,100	226	\$4,568	
*Lake of the Woods	4,522	11	3	\$273,600	565	\$34,200	
*Nicollet	29,771	82	211	\$272,175	377	\$3,445	
Chisago	41,101	188	456	\$265,200	274	\$1,768	
Kandiyohi	41,203	130	346	\$206,000	352	\$1,761	
Marshall	10,155	65	87	\$183,100	178	\$3,212	
*Stevens	10,053	40	41	\$155,100	287	\$4,431	
Murray	9,165	48	58	\$147,500	229	\$3,688	
Rock	9,721	33	36	\$145,500	442	\$6,614	
Wadena	13,713	24	19	\$144,000	571	\$6,000	
*Pipestone	9,895	55	76	\$143,100	206	\$2,981	
*Sibley	15,356	65	105	\$139,400	284	\$2,581	
*Grant	6,289	31	32	\$138,100	233	\$5,115	
Traverse	4,134	8	4	\$130,000	517	\$16,250	
Chippewa	13,088	32	28	\$119,950	451	\$4,136	
*Roseau	16,338	63	94	\$117,000	272	\$1,950	1
Watonwan	11,876	23	48	\$92,200	660	\$5,122	
*Yellow Medicine	11,080	59	36	\$91,808	205	\$1,700	
Big Stone	5,820	21	33	\$89,000	277	\$4,238	
Jackson	11,268	33	69	\$84,500	402	\$3,018	
Wilkin	7,138	15	28	\$70,400	595	\$5,867	
McLeod	34,898	127	630	\$64,250	320	\$589	3
Mahnomen	5,190	16	26	\$55,500	519	\$5,550	1
Norman	7,442	44	29	\$44,300	182	\$1,080	
*Kittson	5,285	37	60	\$31,150	189	\$1,113	
Lincoln	6,429	24	5	\$29,100	280	\$1,265	1
Pope	11,236	68	76	\$25,000	234	\$521	
Red Lake	4,299	8	0	\$0	717	\$0	1
		<u>17,035</u>	<u>123,538†</u>	<u>\$175,345,458</u>	<u>318</u>	<u>\$11,340</u>	<u>47</u>

*Indicates counties with 100% participation.

†Total may not equal "other non-fire" run totals due to statistical inconsistencies in elements from the Minnesota Fire Incident Reporting System.

FIRE DEPARTMENT RESPONSES AND DOLLAR LOSS AS REPORTED BY MFIRS DATA

City	Total Fire Runs	Total Other Runs	Dollar Loss	City	Total Fire Runs	Total Other Runs	Dollar Loss	City	Total Fire Runs	Total Other Runs	Dollar Loss
ADA	16	8	\$17,600	BEARVILLE TWP.	3	1	\$0	BUHL	4	8	\$75,600
ADAMS	6	14	\$251,000	BECKER	29	199	\$125,000	BURNSVILLE	173	1,398	\$927,150
ADRIAN	11	26	\$1,500	BELGRADE	11	4	\$297,000	BUYCK	1	0	\$500
AITKIN	15	11	\$105,050	BELLE PLAINE	27	68	\$60,000	BYRON	8	32	\$20,000
ALASKA	5	0	\$52,500	BELLINGHAM	8	17	\$210,500	CALEDONIA	23	31	\$140,499
ALBANY	18	80	\$0	BELTRAMI	6	6	\$110,500	CALLAWAY	7	0	\$2,000
ALBERT LEA	70	327	\$41,690,770	BELVIEW	5	2	\$0	CALUMET	15	66	\$0
ALBERTVILLE	24	189	\$334,500	BEMIDJI	117	834	\$537,000	CAMBRIDGE	59	71	\$0
ALBORN	7	30	\$10,000	BENSON	27	34	\$196,000	CANBY	9	0	\$33,800
ALDEN	12	64	\$91,500	BERTHA	12	0	\$0	CANNON FALLS	40	173	\$1,221,700
ALEXANDRIA	75	99	\$427,000	BIG FALLS	3	0	\$0	CANOSIA TWP.	5	18	\$0
ALMELUND	14	3	\$129,200	BIG LAKE	52	127	\$173,702	CANTON	2	3	\$0
ALPHA	3	15	\$0	BIGELOW	8	0	\$0	CARLOS	8	67	\$76,500
ALTURA	1	0	\$37,000	*BIRCHDALE RURAL	0	0	\$0	CARLTON	14	30	\$8,200
ALVARADO	7	22	\$0	BIRD ISLAND	4	1	\$750	CARSONVILLE	29	56	\$2,000
AMBOY	11	32	\$15,000	BIWABIK	8	10	\$32,500	CARVER	1	12	\$0
ANDOVER	55	793	\$819,775	BIWABIK TWP.	3	1	\$0	CASS LAKE	71	33	\$0
ANNANDALE	22	140	\$420,002	BLACKDUCK	5	3	\$36,000	CENTENNIAL	3	65	\$5,200
ANOKA-CHAMPLIN	116	521	\$702,600	BLOMKEST	14	0	\$0	CENTER CITY	13	11	\$0
APPLE VALLEY	82	894	\$407,830	BLOOMING PRAIRIE	20	26	\$282,800	CENTRAL LAKES	1	0	\$0
APPLETON	17	21	\$263,550	BLOOMINGTON	253	1,004	\$2,102,382	CEYLON	5	0	\$30,400
*ARCO	0	0	\$0	BLUE EARTH	33	47	\$70,600	CHANDLER	2	22	\$0
ARGYLE	10	35	\$0	BORUP	1	0	\$2,500	CHANHASSEN	12	785	\$1,189,925
ARLINGTON	4	5	\$0	BOVEY	15	73	\$0	CHASKA	53	864	\$2,886,091
ARROWHEAD	0	25	\$0	BOWLUS	4	0	\$41,500	CHATFIELD	13	36	\$50,100
ASHBY	1	7	\$0	BOYD	9	12	\$11,700	CHERRY TWP.	11	34	\$1,000
ASKOV	10	4	\$0	BRAINERD CITY	52	194	\$476,700	CHISHOLM	41	53	\$150,000
AUDUBON	27	23	\$0	BRANDON	14	36	\$70,000	CHOKIO	10	2	\$72,000
AURORA	8	17	\$176,137	BREITUNG TWP.	7	1	\$1,000	CLARA CITY	10	8	\$10,500
AUSTIN	89	254	\$745,405	BREVATOR TWP.	15	35	\$0	CLAREMONT	14	27	\$900
AVOCA	0	1	\$0	BREWSTER	7	18	\$3,150	CLARISSA	8	33	\$222,000
AVON	19	82	\$60,000	BRICELYN	5	3	\$3,000	CLARKFIELD	14	16	\$0
BABBITT	12	27	\$149,000	BRIMSON	7	17	\$0	CLEAR LAKE	22	133	\$7,500
BACKUS	9	11	\$83,100	BROOK PARK	10	1	\$154,600	CLEARBROOK	9	55	\$0
BADGER	17	2	\$44,500	BROOKLYN CENTER	97	870	\$566,020	CLEARWATER	24	157	\$571,600
BAGLEY	22	25	\$142,000	BROOKLYN PARK	364	1,021	\$602,480	CLEMENTS	4	1	\$434,000
BALATON	17	23	\$49,500	BROOTEN	19	13	\$0	CLEVELAND	11	54	\$338,700
BALSAM VOL.	10	44	\$170,000	BROWERVILLE	14	22	\$123,000	CLIFTON TWP.	3	6	\$50,000
BARNESVILLE	23	10	\$0	*BROWNS VALLEY	0	0	\$0	*CLIMAX	0	0	\$0
BARNUM	18	94	\$0	BROWNSDALE	7	3	\$0	CLINTON	0	2	\$0
BARRETT	2	2	\$0	BROWNSVILLE	4	21	\$4,500	CLINTON TWP.	11	1	\$154,500
BAUDETTE	7	1	\$208,000	BROWNTON	9	53	\$0	CLONTARF	3	1	\$11,000
BAYPORT	43	437	\$448,500	BRUNO	8	2	\$1,200	CLOQUET	48	627	\$576,350
BEARDSLEY	7	1	\$76,000	BUFFALO	13	47	\$50,600	COHASSET	29	104	\$142,000
*BEAR CREEK	0	0	\$0	BUFFALO LAKE	2	0	\$20,000	COKATO	19	37	\$0

<u>City</u>	<u>Total Fire Runs</u>	<u>Total Other Runs</u>	<u>Dollar Loss</u>	<u>City</u>	<u>Total Fire Runs</u>	<u>Total Other Runs</u>	<u>Dollar Loss</u>	<u>City</u>	<u>Total Fire Runs</u>	<u>Total Other Runs</u>	<u>Dollar Loss</u>
COLD SPRING	21	27	\$0	DUXBURY	0	1	\$0	FOLEY	26	173	\$0
COLERAINE	6	78	\$0	EAGAN	122	710	\$1,028,250	FORADA	5	28	\$125,000
COLOGNE	12	75	\$15,000	EAGLE LAKE	11	71	\$0	FOREST LAKE	81	277	\$1,037,825
COLUMBIA HEIGHTS	70	1,959	\$798,550	EAGLES NEST	1	1	\$0	FORESTON	9	35	\$13,500
COLVIN TWP.	5	2	\$50,000	EAST BETHEL	50	406	\$0	FOSSTON	26	36	\$0
COMFREY	10	4	\$61,000	EAST GRAND FORKS	28	885	\$522,140	FOUNTAIN	3	6	\$0
CONGER	2	0	\$6,000	EAST HUBBARD CO	2	0	\$0	FRANKLIN	6	5	\$10,000
COOK	31	28	\$243,000	EASTON	6	15	\$0	FRAZEE	34	30	\$141,000
COON RAPIDS	194	3,715	\$528,255	ECHO	2	0	\$3,000	FREDENBERG TWP.	16	46	\$6,000
CORRELL	1	4	\$0	EDEN PRAIRIE	72	1,206	\$1,796,343	FREEBORN	1	0	\$60,000
COSMOS	8	21	\$0	EDEN VALLEY	14	24	\$0	FREEPORT	7	0	\$356,375
COTTAGE GROVE	78	1,464	\$175,000	EDGERTON	9	13	\$13,300	FRENCH TWP.	7	7	\$39,000
COTTON VOL.	4	31	\$20,000	EDINA	113	3,960	\$629,400	FRIDLEY	109	2,155	\$379,275
COTTONWOOD	11	0	\$369,000	ELBOW LAKE	12	14	\$83,100	FULDA	13	16	\$0
COURTLAND	10	27	\$130,000	ELBOW-TULABY LKS	3	2	\$40,000	GARFIELD	14	5	\$111,000
CRANE LAKE	8	0	\$208,000	ELGIN	11	4	\$170,500	GARRISON	25	119	\$0
CROMWELL	5	10	\$32,000	ELIZABETH	18	22	\$6,000	GARVIN	8	1	\$0
CROOKSTON	57	291	\$291,200	ELK RIVER	60	287	\$159,500	GARY	4	0	\$7,500
CROSBY	26	44	\$271,600	ELLSBURG VOL	6	18	\$0	GAYLORD	16	6	\$23,000
CULVER	6	3	\$0	ELLSWORTH	6	34	\$8,000	GHENT	11	11	\$0
CURRIE	4	5	\$0	ELMER	1	1	\$0	GIBBON	17	2	\$6,000
*CUYUNA	0	0	\$0	ELMORE	3	3	\$0	GILBERT	3	0	\$0
DAKOTA	8	0	\$9,800	ELROSA	5	15	\$0	GLENCOE	30	68	\$12,000
DALBO	9	45	\$0	ELY	23	23	\$475,300	GLENWOOD	36	46	\$0
DALTON	11	4	\$8,000	ELYSIAN	9	40	\$0	GLYNDON	7	11	\$4,100
DANUBE	6	2	\$10,000	EMBARRASS	13	48	\$37,000	GNESEN TWP.	11	49	\$17,890
DANVERS	4	3	\$77,000	EMILY	7	17	\$7,000	GOLDEN VALLEY	65	696	\$1,303,838
DARFUR	3	10	\$16,100	EVANSVILLE	13	39	\$220,000	GONVICK	12	27	\$38,000
DASSEL	24	146	\$0	EVELETH	16	87	\$90,000	GOOD THUNDER	13	64	\$28,000
DAWSON	13	2	\$162,500	EVERGREEN	3	0	\$100	GOODHUE	11	5	\$70,988
DAYTON	18	191	\$36,500	EXCELSIOR	11	406	\$10,000	GOODRIDGE	7	1	\$40,300
DEER CREEK	8	26	\$85,500	EYOTA	7	10	\$5,000	GRACEVILLE	4	15	\$13,000
DEER RIVER	48	30	\$396,500	FAIRFAX	2	0	\$6,500	GRAND LAKE TWP.	26	101	\$137,000
DEERWOOD	16	16	\$61,000	FAIRMONT	62	133	\$508,195	GRAND RAPIDS	90	130	\$1,003,350
DEGRAFF	2	0	\$0	FALCON HEIGHTS	24	71	\$26,000	GRANITE FALLS	23	16	\$10,000
DELANO	27	286	\$0	FARIBAULT	36	6	\$525,600	GREEN ISLE	12	26	\$28,000
DELAVAN	3	0	\$1,100	FARMINGTON	30	123	\$0	GREENBUSH	7	9	\$72,500
DETROIT LAKES	78	178	\$0	FAYAL	11	66	\$23,000	GREENWOOD TWP.	3	0	\$60,000
*DEXTER	0	0	\$0	FELTON	8	0	\$35,000	GREY EAGLE	17	3	\$145,800
DILWORTH	10	17	\$15,000	FERGUS FALLS	69	155	\$1,629,650	GROVE CITY	8	10	\$0
DODGE CENTER	16	32	\$171,500	FERTILE	18	17	\$13,500	GUNFLINT TRAIL VOL.	7	1	\$353,500
DONNELLY	2	6	\$30,000	FIFTY LAKES	1	0	\$37,500	HACKENSACK	7	6	\$2,000
DOVER	8	11	\$48,000	FINLAND	3	9	\$50,000	HALLOCK	8	33	\$1,000
DOVRAY	2	1	\$0	FINLAYSON	17	61	\$24,500	HALSTAD	5	6	\$4,500
DULUTH	442	6,327	\$3,830,545	FISHER	3	0	\$20,000	HAM LAKE	57	299	\$0
DUMONT	1	0	\$0	FLENSBURG	4	0	\$1,500	HAMBURG	2	37	\$0
DUNNELL-LK FREMONT	3	8	\$0	FLOODWOOD	11	12	\$45,700	HAMEL	17	152	\$445,250

<u>City</u>	<u>Total Fire Runs</u>	<u>Total Other Runs</u>	<u>Dollar Loss</u>	<u>City</u>	<u>Total Fire Runs</u>	<u>Total Other Runs</u>	<u>Dollar Loss</u>	<u>City</u>	<u>Total Fire Runs</u>	<u>Total Other Runs</u>	<u>Dollar Loss</u>
HANCOCK	16	4	\$2,750	JORDAN	32	65	\$3,000,000	LINWOOD TWP.	19	163	\$60,500
*HANLEY FALLS	0	0	\$0	KABETOGEEMA	1	2	\$300	LISMORE	4	0	\$0
HANOVER	30	74	\$0	KANDIYOHI	11	39	\$1,500	LITCHFIELD	24	51	\$282,840
HARDWICK	1	0	\$8,000	KARLSTAD	4	15	\$0	LITTLE CANADA	38	162	\$240,100
HARMONY	18	13	\$46,000	KASOTA	17	72	\$17,000	LITTLE FALLS	10	0	\$40,000
HARRIS	15	15	\$88,000	KASSON	13	20	\$52,900	LITTLEFORK	14	2	\$26,250
*HARTLAND	0	0	\$0	KEEWATIN	5	77	\$40,100	*LOMAN RURAL	0	0	\$0
HASTINGS	88	447	\$529,539	KELLIHER	5	4	\$87,000	*LONDON	0	0	\$0
HAWLEY	26	15	\$0	KELLOGG	12	8	\$0	LONG LAKE	38	281	\$18,500
HAYFIELD	17	16	\$143,035	KELSEY TWP.	6	0	\$104,000	LONG PRAIRIE	26	47	\$209,000
HECTOR	12	11	\$207,500	KENNEDY	3	3	\$15,000	LONGVILLE	9	7	\$0
HENDERSON	6	53	\$40,000	KENNETH	1	0	\$0	LORETTO	25	156	\$2,260,000
HENDRUM	3	1	\$0	KENSINGTON	7	7	\$80,700	LOWER ST. CROIX VLY	21	297	\$195,600
HENNING	10	5	\$44,500	KERKHOVEN	11	18	\$137,000	LOWRY	10	2	\$0
HERMAN	3	0	\$6,500	KETTLE RIVER	6	1	\$52,000	LUCAN	8	0	\$21,100
HERMANTOWN	28	129	\$784,500	KIESTER	2	0	\$0	LUTSEN	3	1	\$1,000
HERON LAKE	8	9	\$6,500	KILKENNY	9	1	\$0	LUVERNE	19	29	\$34,500
HEWITT	3	0	\$24,600	KIMBALL	13	110	\$17,000	LYLE	10	7	\$136,000
HIBBING	67	1,678	\$156,726	KINNEY-GREAT SCOTT	5	4	\$0	LYND	4	0	\$0
HILL CITY	16	31	\$0	LACRESCENT	3	79	\$0	MABEL	7	0	\$4,000
HILLS	4	3	\$101,000	LAFAYETTE	9	9	\$50,000	MADISON	12	18	\$106,500
HINCKLEY	30	32	\$0	LAKE BENTON	10	2	\$18,100	MAGNOLIA	8	4	\$2,000
HITTERDAL	6	0	\$85,500	LAKE BRONSON	11	3	\$15,050	MAHNOMEN	11	24	\$500
HOFFMAN	4	0	\$27,500	LAKE CITY	28	50	\$252,250	MAHTOMEDI	25	511	\$11,000
HOKAH	9	3	\$0	LAKE CRYSTAL	26	48	\$202,500	MAHTOWA	2	0	\$155,500
HOLDINGFORD	13	68	\$2,000	LAKE ELMO	58	326	\$218,300	MAKINEN	2	0	\$34,000
HOLLAND	4	5	\$0	*LAKE HENRY	0	0	\$0	MANCHESTER	3	0	\$83,400
HOLLANDALE	1	0	\$100,000	LAKE JOHANNA	93	501	\$3,917,225	MANKATO	146	1,947	\$570,995
HOPKINS	55	503	\$453,600	LAKE PARK	10	12	\$78,500	MANTORVILLE	4	15	\$4,000
HOUSTON	14	21	\$606,500	LAKE WILSON	8	2	\$95,000	MAPLE GROVE	136	720	\$504,650
HOWARD LAKE	17	75	\$249,500	LAKEFIELD	10	18	\$22,000	*MAPLE HILL	0	0	\$0
HOYT LAKES	8	0	\$10,120,750	LAKEVILLE	87	606	\$618,270	MAPLE LAKE	40	97	\$521,950
HUGO	30	244	\$202,000	LAKEWOOD TWP.	12	59	\$119,000	MAPLE PLAIN	19	271	\$114,100
HUTCHINSON	50	324	\$0	LAMBERTON	8	17	\$98,000	MAPLETON	19	26	\$0
IDEAL TWP.	12	17	\$7,500	LANCASTER	11	6	\$100	MAPLEWOOD	63	2,312	\$528,199
INDUSTRIAL	8	29	\$213,900	LANESBORO	4	12	\$50,500	MARBLE	3	27	\$0
INTERNATIONAL FLLS	28	19	\$425,900	LAPORTE/LAKEPORT	10	3	\$208,800	MARINE ON ST. CROIX	10	52	\$0
INVER GROVE HGTS	104	764	\$580,800	LASALLE	1	0	\$0	MARSHALL	35	113	\$5,000
IRONTON	3	3	\$0	LEAF VALLEY TWP.	3	0	\$4,400	MAYER	10	55	\$2,000
ISANTI	35	300	\$372,100	LECENTER	2	3	\$10,000	MAYNARD	2	1	\$0
*ITASCA TWP	0	0	\$0	LEROY	12	17	\$0	MAZEPPA	2	66	\$0
IVANHOE	7	0	\$0	LESTER PRAIRIE	12	95	\$2,250	MCDAVITT	6	19	\$108,000
JACKSON	12	27	\$56,000	LESUEUR	23	26	\$285,000	MCGREGOR	31	20	\$220,600
JACOBSON	5	9	\$0	LEWISTON	15	16	\$189,500	MCINTOSH	15	43	\$236,000
JANESVILLE	12	127	\$0	LEWISVILLE	1	0	\$0	MCKINLEY	0	3	\$0
JASPER	6	11	\$5,800	LEXINGTON	7	128	\$250	MEADOWLANDS	9	6	\$57,000
JEFFERS	1	0	\$0	LINDSTROM	12	26	\$0	MEDFORD	11	68	\$41,000

<u>City</u>	<u>Total Fire Runs</u>	<u>Total Other Runs</u>	<u>Dollar Loss</u>	<u>City</u>	<u>Total Fire Runs</u>	<u>Total Other Runs</u>	<u>Dollar Loss</u>	<u>City</u>	<u>Total Fire Runs</u>	<u>Total Other Runs</u>	<u>Dollar Loss</u>
MELROSE	32	72	\$152,000	NEW YORK MILLS	20	81	\$73,500	PIERZ	27	23	\$420,500
MENDOTA HEIGHTS	40	200	\$582,250	NEWFOLDEN	17	1	\$23,100	PIKE-SANDY-BRITT	14	3	\$67,900
MENTOR	9	33	\$25,000	NEWPORT	25	63	\$351,500	PILLAGER	20	105	\$1,217,250
MIESVILLE	6	25	\$1,500	NICOLLET	14	45	\$60,000	PINE CITY	26	27	\$488,000
MILACA	46	70	\$239,000	*NIELSVILLE	0	0	\$0	PINE ISLAND	22	147	\$220,400
MILLERVILLE	9	1	\$40,000	NISSWA	18	17	\$0	PINE RIVER	20	22	\$307,500
MILROY	2	0	\$20,000	NODINE	8	32	\$10,000	PIPESTONE	24	46	\$112,500
MILTONA	11	37	\$5,000	*NORMANNA	0	0	\$0	PLAINVIEW	16	28	\$167,000
MINNEAPOLIS	425	5,336	\$2,110,926	NORTH BRANCH	31	55	\$0	PLATO	4	31	\$0
MINNEOTA	17	14	\$303,600	NORTH MANKATO	18	82	\$1,000	PLYMOUTH	181	1,190	\$759,550
MINNESOTA CITY	5	0	\$0	NORTH ST. PAUL	27	273	\$89,500	PORTER	6	4	\$5,000
MINNESOTA LAKE	10	10	\$0	NORTH STAR TWP.	0	10	\$0	PRESTON	9	10	\$30,100
MINNETONKA	98	596	\$2,635,350	NORTHFIELD	92	203	\$1,942,000	PRINCETON	66	193	\$1,417,101
MISSION TWP.	9	84	\$15,000	NORTHLAND TWP.	2	1	\$24,500	PRINSBURG	6	5	\$10,400
MONTEVIDEO	15	19	\$0	NORTHOME	6	5	\$0	PRIOR LAKE	90	499	\$734,400
MONTGOMERY	10	17	\$4,500	NORTHROP	2	1	\$0	PROCTOR	27	61	\$67,850
MONTICELLO	63	238	\$0	*NORTHWEST ANGLE	0	0	\$0	RAMSEY	101	210	\$175,000
MONTROSE	15	111	\$0	NORWOOD-YNG AMER	17	188	\$29,000	RANDALL	3	5	\$205,000
MOORHEAD	59	1,742	\$161,538	OAK GROVE	56	113	\$0	RANDOLPH	14	7	\$16,200
MOOSE LAKE	23	85	\$0	OAKDALE	51	1,391	\$391,750	RAYMOND	14	0	\$0
MORA	52	29	\$915,675	ODIN	3	1	\$0	RED WING	87	735	\$525,300
MORGAN	14	7	\$30,500	OGEMA	20	3	\$15,000	REDWOOD FALLS	24	27	\$0
MORRIS	12	29	\$50,350	OGILVIE	15	8	\$173,550	REMER	13	12	\$40,000
MORRISTOWN	9	3	\$71,300	OKLEE	8	0	\$0	RENVILLE	9	8	\$5,000
MORSE TWP VOL	8	2	\$180,000	OLIVIA	18	15	\$62,600	*REVERE	0	0	\$0
MORTON	5	1	\$110,000	ONAMIA	23	40	\$332,000	RICE	14	24	\$103,562
MOTLEY	22	99	\$41,000	ORONOCO	5	10	\$0	RICE LAKE TWP.	22	108	\$0
MOUND	66	548	\$60,000	ORR	3	0	\$45,000	RICHFIELD	119	3,283	\$697,996
MOUNTAIN IRON	23	24	\$7,000	ORTONVILLE	9	11	\$0	RICHMOND	8	0	\$67,500
MOUNTAIN LAKE	3	0	\$880,000	OSAKIS	19	27	\$177,500	RIDGWAY COMM	12	23	\$0
MPLS/STP INT'L ARPT	53	2,644	\$31,100	OSLO	2	1	\$0	ROBBINSDALE	77	289	\$82,950
MURDOCK	1	0	\$0	OSSEO	4	0	\$7,500	ROCHESTER AIRPORT	0	44	\$0
MYRTLE	7	8	\$2,000	OSTRANDER	6	3	\$1,350	ROCHESTER	218	5,472	\$733,037
NASHWAUK	20	21	\$265,650	OTTERTAIL	9	4	\$0	ROCKFORD	16	269	\$0
NASSAU	5	0	\$127,500	OWATONNA	97	322	\$617,200	ROCKVILLE	13	72	\$170,013
NERSTRAND	5	2	\$0	PALISADE	9	0	\$0	ROGERS	47	270	\$125,500
NEVIS	1	0	\$0	PALO TWP.	7	60	\$23,750	ROLLINGSTONE	10	27	\$49,800
*NEW AUBURN	0	0	\$0	PARK RAPIDS	35	17	\$281,202	*ROSE CREEK	0	0	\$0
NEW BRIGHTON	67	338	\$513,000	PARKERS PRAIRIE	10	13	\$22,500	ROSEAU	26	52	\$0
NEW GERMANY	4	50	\$0	PAYNESVILLE	18	10	\$10,300	ROSEMOUNT	19	349	\$0
NEW LONDON	22	33	\$158,000	PELICAN RAPIDS	25	11	\$0	ROSEVILLE	77	624	\$380,950
NEW MARKET	14	126	\$20,000	PEMBERTON	6	25	\$0	ROTHSAY	12	27	\$70,400
NEW MUNICH	3	12	\$11,500	PENNOCK	7	15	\$4,000	ROYALTON	20	6	\$0
NEW PRAGUE	48	66	\$463,500	PEQUOT LAKES	11	31	\$0	RUSH CITY	22	43	\$25,000
NEW RICHLAND	15	23	\$243,500	PERCH LAKE TWP	8	39	\$186,000	RUSHFORD	3	27	\$0
NEW SCANDIA TWP.	13	72	\$78,600	PERHAM	38	53	\$112,300	RUSHMORE	5	8	\$110,000
NEW ULM	40	86	\$216,268	PICKWICK AREA	3	3	\$0	*RUSSELL	0	0	\$0

City	Total Fire Runs	Total Other Runs	Dollar Loss	City	Total Fire Runs	Total Other Runs	Dollar Loss	City	Total Fire Runs	Total Other Runs	Dollar Loss
RUTHTON	6	1	\$11,500	ST. MICHAEL	1	1	\$25,000	WALDORF	4	5	\$0
SABIN-ELMWOOD	8	7	\$251,000	ST. PAUL	1,405	10,149	\$9,163,561	WALNUT GROVE	6	0	\$25,000
SACRED HEART	5	5	\$86,000	ST. PAUL PARK	30	45	\$100,000	*WALTERS	0	0	\$0
SANBORN	4	1	\$0	ST. PETER	31	48	\$31,175	WANDA	2	0	\$5,000
SANDSTONE	23	24	\$82,100	ST. STEPHEN	10	74	\$58,750	WARBA-FEELEY-SAGO	7	2	\$0
SARTELL	31	91	\$177,200	STACY-LENT	23	44	\$1,000	WARREN	21	18	\$98,000
SAUK CENTRE	43	43	\$407,250	STAPLES	22	22	\$0	WARROAD	13	31	\$0
SAUK RAPIDS	62	106	\$299,500	STARBUCK	22	28	\$25,000	WASECA	46	82	\$144,000
SAVAGE	42	317	\$703,000	STEPHEN	8	10	\$62,000	WASTERTOWN	25	252	\$33,000
SCANDIA VALLEY	1	7	\$0	STEWART	4	0	\$50,000	WATERVILLE	13	110	\$57,301
SCANLON	5	45	\$0	STEWARTVILLE	37	42	\$187,000	WATKINS	9	11	\$5,250
SCHROEDER	1	0	\$380,000	STILLWATER	66	873	\$337,200	WATSON	5	0	\$109,450
*SEAFORTH	0	0	\$0	STORDEN	4	0	\$21,500	WAVERLY	12	90	\$75,300
*SEDAN	0	0	\$0	STURGEON LAKE	7	5	\$0	WAYZATA	30	220	\$71,400
SHAFER	12	39	\$0	SUNBURG	3	0	\$0	WELCOME	2	0	\$112,500
SHAKOPEE	113	378	\$436,200	SWANVILLE	3	0	\$7,500	WELLS	20	27	\$245,200
SHELLY	2	7	\$0	TACONITE	0	5	\$0	WENDELL	9	9	\$21,000
SHERBURN	3	6	\$0	TAUNTON	1	0	\$0	WEST CONCORD	6	2	\$5,000
SHEVLIN	13	4	\$246,000	TAYLORS FALLS	5	5	\$0	WEST METRO FIRE	105	1,194	\$1,466,673
SILICA AREA	5	3	\$0	THIEF RIVER FALLS	52	71	\$168,800	WEST ST. PAUL	78	2,155	\$1,770,160
SILVER BAY	4	21	\$0	THOMSON TWP	13	123	\$0	WESTBROOK	8	5	\$22,010
SILVER LAKE	18	59	\$0	*TOFTE	0	0	\$0	WHEATON	7	4	\$130,000
*SKYLINE	0	0	\$0	TOIVOLA TWP	1	0	\$200	WHITE BEAR LAKE	75	348	\$681,285
SLAYTON	19	11	\$52,500	TOWER	2	0	\$10,500	WHITE EARTH	3	0	\$65,000
SLEEPY EYE	15	8	\$90,850	TRACY	17	24	\$53,500	WILLIAMS	4	2	\$65,600
SOLWAY TWP.	16	45	\$0	TRIMONT	3	0	\$505,000	WILLMAR	44	237	\$32,100
SOUTH BEND	13	41	\$8,500	TRUMAN	16	17	\$19,500	WILLOW RIVER	13	6	\$5,000
SOUTH HAVEN	17	18	\$0	TWIN LAKES	3	0	\$15,000	WILMONT	9	3	\$45,700
SOUTH ST. PAUL	74	1,808	\$151,771	TWIN VALLEY	13	7	\$12,200	WILSON TWP.	9	27	\$8,800
SPICER	9	17	\$0	TWO HARBORS	23	71	\$305,000	WINDOM	23	9	\$163,200
SPRING GROVE	9	6	\$17,000	TYLER	7	3	\$11,000	WINGER	4	0	\$31,000
SPRING LAKE PARK	181	895	\$1,375,305	ULEN	7	1	\$1,000	WINNEBAGO	15	17	\$128,700
SPRING VALLEY	16	38	\$194,500	UNDERWOOD	19	44	\$73,000	WINONA	78	1,366	\$274,400
SPRINGFIELD	9	17	\$184,202	VADNAIS HEIGHTS	54	575	\$891,400	WINTHROP	10	13	\$42,400
*SQUAW LAKE	0	0	\$0	VERGAS	11	1	\$1,234,500	WOLF LAKE	16	8	\$55,500
ST. ANTHONY	44	858	\$209,215	VERMILLION LAKE	5	4	\$0	WOLVERTON	3	1	\$0
ST. BONIFACIUS	30	78	\$0	VERNDALE	5	2	\$0	WOOD LAKE	5	0	\$40,008
ST. CHARLES	5	18	\$0	VERNON CENTER	3	8	\$0	WOODBURY	76	2,064	\$453,630
ST. CLAIR	16	106	\$14,900	VESTA	6	0	\$191,450	WOODSTOCK	6	0	\$0
ST. CLOUD	260	1,250	\$1,559,156	VICTORIA	13	187	\$14,000	WORTHINGTON	34	67	\$467,680
ST. FRANCIS	28	207	\$117,675	*VILLARD	0	0	\$0	WRENSHALL	10	34	\$4,000
ST. HILLAIRE	7	34	\$65,000	VIRGINIA	24	2,215	\$266,550	WYKOFF	1	0	\$0
ST. JAMES	15	37	\$76,100	WABASHA	4	55	\$0	WYOMING	41	215	\$22,000
ST. JOHN'S UNIV.	23	162	\$200	WABASSO	8	3	\$0	ZIMMERMAN	64	52	\$497,000
ST. JOSEPH	32	242	\$37,000	WACONIA	17	311	\$21,000	ZUMBRO FALLS	15	57	\$12,500
ST. LOUIS PARK	155	3,415	\$832,517	WADENA	19	17	\$144,000	ZUMBROTA	17	24	\$168,000
ST. MARTIN	7	11	\$16,000	WAITE PARK	17	76	\$132,500				

*These fire departments reported as having no fire/nonfire runs for 2001.

NON-REPORTING FIRE DEPARTMENTS

ATWATER
BATTLE LAKE
BEAVER BAY VOL.
BEAVER CREEK
BETHEL
BIGFORK VOL.
BLACKHOOF
BLUFFTON
BOIS FORTE
BRAHAM
BRECKENRIDGE
BUTTERFIELD
CAMPBELL
CHISAGO CITY
CLARKS GROVE VOL.
COLVILL AREA
CROOKED LAKE VOL.
CROSSLAKE
CYRUS
DENT
DUNDEE
EAGLE BEND
EITZEN
ELLEDALE VOL.
EMMONS
ERSKINE
FEDERAL DAM
FROST

GENEVA
GLENVILLE
GOODLAND
GOODVIEW
GRANADA
GRAND MARAIS VOL.
GRAND MEADOW
GRAND PORTAGE
GREANEY-RAUCH-SILVERDALE
GRYGLA
HANGAARD TWP.
HANSKA
HAYWARD
HENDRICKS
HIDDEN VALLEY
HOLYOKE VOL.
HOVLAND
IONA
ISLE
KENT-ABERCROMBIE
KENYON
KERRICK
LAKE GEORGE
LAKELILLIAN
LAKELAND VOL.
LONSDALE
LOUISBURG
MADELIA

MAPLEVIEW
MARIETTA
MCGRATH
MEDICINE LAKE
MENAGHA
MIDDLE RIVER
MILAN
ODESSA
OKABENA
ORMSBY
PEQUAYWAN LAKE
PERLEY-LEE TWP.
PLUMMER
RED LAKE
RED LAKE FALLS
ROCHESTER RURAL
ROUND LAKE
SEBEKA
SOLWAY
STURGEON TWP.
TINTAH
UPSALA
Vining
WALKER
WANAMINGO
WAUBUN
WINSTED
WRIGHT VOL.

STATE FIRE MARSHAL ANNUAL REPORT



HISTORY MILESTONES OF THE STATE FIRE MARSHAL DIVISION

- 1905** Legislation authorizing Governor to appoint State Fire Marshal for two-year term. Funding through tax levy on Insurance companies. (Town Mutuals Exempt)
- 1907** Amendment authorizing two deputy State Fire Marshals. Authorization to pay fire departments \$1 for reports submitted to the State Fire Marshal.
- 1913** All former acts repealed and new State Fire Marshal Department was created. Governor appointed Fire Marshal and two deputies.
- 1919** The Appointing Authority was given to the Commissioner of Insurance.
- 1925** Legislative action made the Commissioner of Insurance the Ex-Officio State Fire Marshal.
- 1937** Tax levy to fund the State Fire Marshal Department was raised to ½% of all insurance premiums to include Town Fire Insurance Company and Farmers Mutuals.
- 1941** Legislature directed all monies collected by the State Fire Marshal for tax and license fees, etc., to be turned over to the General Fund. Fire Marshal Department to be operated under an appropriation by legislative action.
- 1969** Legislative action created a Department of Public Safety.
- 1970** The State Fire Marshal Department moved into the Department of Public Safety to be known as the State Fire Marshal Division (SFMD).
- 1975** Legislature authorized adoption of the Minnesota Uniform Fire Code (MUFC).
- 1978-79** Legislative action enabled local fire departments to enforce the MUFC without local adoption.
- 1978** Ten positions added to implement hotel/motel/resort inspection program.
- 1980** Minnesota is the first state in the nation to require smoke detectors in new and rental residential properties.
- 1989** 1988 MUFC was adopted. Three more positions were added to the SFMD: Two day care inspectors and one public educator/data.
- 1990** Legislation added five new positions to the SFMD to conduct school inspections in Minnesota.
- 1992** New program added to license fire sprinkler contractors, designers, and fitters. New program to develop operation of Hazardous Material Response Teams.
- 1993** Legislative action updated arson statutes. Legislation requires a smoke detector in every dwelling.
- 1995** Licensing of operators of public fireworks displays. One fire investigator position added.
- 1996** The Attorney General formed a task force to study the crime of arson in Minnesota. The Division received a grant of \$400,000 to study arson as it relates to the criminal or abusive use of alcohol and/or drugs.
- 1998** As a result of the Arson Task Force, two new positions were added to the SFMD: One arson investigation trainer and one juvenile firesetter interventionist.
- 1998** One inspector for the Fire Protection Team was added to start July 1, 1998.
- 1999** The arson data specialist position was filled. Legislation added funding for a part-time code specialist position, to be hired in FY 01.
- 2000** Nationwide NFIRS 5 standard introduced in Minnesota and implementation begun.

STATE OF MINNESOTA
DEPARTMENT OF PUBLIC SAFETY
STATE FIRE MARSHAL DIVISION

COMMISSIONER
 CHARLES R. WEAVER, JR.

DEPUTY COMMISSIONER
 MANCEL MITCHELL

STATE FIRE MARSHAL
 TOM BRACE

Connie Weaver
 OFFICE
 MANAGER

FIRE INCIDENT
 REPORTING
 (MFIRS)
 (2)

Patrick Sheehan
 BUREAU CHIEF

Bob Dahm
 BUREAU CHIEF

Patricia Bell
 SUPERVISOR
 SUPPORT

Jon Nisja
 SUPERVISOR
 SCHOOL
 INSPECTIONS

Glen Bergstrand
 SUPERVISOR
 RESIDENTIAL
 INSPECTIONS

Robert Imholte
 SUPERVISOR
 HEALTH CARE
 INSPECTIONS

CODE
 SPECIALISTS

David Stegura
 SUPERVISOR
 SPRINKLER
 LICENSING

PUBLIC
 EDUCATION

FIREWORKS
 OPERATOR
 CERTIFICATION

Richard Kleis
 CHIEF
 INVESTIGATOR
 INVESTIGATIONS

SUPPORT
 STAFF
 (5)

FIRE SAFETY
 INSPECTORS
 (4)

FIRE SAFETY
 INSPECTORS
 (7)

FIRE SAFETY
 INSPECTORS
 (8)

DEPUTY STATE
 FIRE MARSHALS
 (1.5)

PLAN
 REVIEWERS/
 INSPECTOR
 (3)

JUVENILE
 FIRESETTER
 INTERVENTIONST
 (1)

DATA SYSTEMS
 MANAGEMENT

FIRE/ARSON
 INVESTIGATORS
 (11)

STATE FIRE MARSHAL DIVISION

444 Cedar Street, Suite 145

St. Paul, MN 55101-5145

(651) 215-0500

FAX: (651) 215-0525 or (651) 215-0541

ACKERMAN, Doug
Deputy – Inspector
Doug.Ackerman@state.mn.us
651-215-0518

BERGSTRAND, Glen
Deputy – Supervisor
Glen.Bergstrand@state.mn.us
651-215-0518

BERNARDY, Dan
Juvenile Firesetter Interventionist
Daniel.Bernardy@state.mn.us
651-215-1754

BRACE, Tom
State Fire Marshal
Tom.Brace@state.mn.us
651-215-0500

CHRISTENSEN, Terry
Deputy – Investigator
Terry.Christensen@state.mn.us
651-215-0500

DAHM, Bob
Bureau Chief
Robert.Dahm@state.mn.us
651-215-0505

DE MARS, Denise
Deputy – Investigator
Denise.R.Demars@state.mn.us
651-215-0500

EDGERLY, Linton
Deputy – Inspector
Linton.Edgerly@state.mn.us
651-215-0518

EIBNER, John
Deputy – Sprinkler Plan Reviewer
John.Eibner@state.mn.us
651-215-0515

ERICKSON, Todd
Deputy – Investigator
Todd.Erickson@state.mn.us
651-215-0500

GERGEN, John
Deputy – Inspector
John.Gergen@state.mn.us
651-215-0502

GERMAIN, Mark
Deputy – Investigator
Mark.Germain@state.mn.us
651-215-0500

HALVORSON, Clint
Deputy – Inspector
Clint.Halvorson@state.mn.us
651-215-0502

HEFTI, Hal
Deputy – Inspector
Hal.Hefti@state.mn.us
651-215-0518

IMHOLTE, Bob
Deputy – Supervisor
Bob.Imholte@state.mn.us
651-215-0518

JUNTUNEN, Jeff
Deputy – Inspector
Jeffrey.Juntunen@state.mn.us
651-215-0502

KASTELLA, Kurt
Deputy – Inspector
Kurt.Kastella@state.mn.us
651-215-0502

KEEPERS, David
Deputy – Inspector
Dave.Keepers@state.mn.us
651-2151-0518

KELLEN, Steve
Deputy – Investigator
Steve.Kellen@state.mn.us
651-215-0500

KLEIS, Richard
Deputy – Chief Investigator
Richard.Kleis@state.mn.us
651-215-0500

KREYE, Nathan
Deputy – Investigator
Nathan.Kreye@state.mn.us
651-215-0500

LARSON, Richard
Deputy – Inspector
Richard.P.Larson@state.mn.us
651-215-0523

LEGER, Robert
Deputy – Inspector
Robert.Leger@state.mn.us
651-215-0518

LeTOURNEAU-BJORGE, Katie
Deputy – Sprinkler Plan Reviewer
Katie.Letourneau-Bjorge@state.mn.us
651-215-0508

LINHOFF, Tom
Deputy – Inspector
Tom.Linhoff@state.mn.us
651-215-0502

LUNDQUIST, Brad
Deputy-Inspector
Bradley.Lundquist@state.mn.us
651-215-0518

McLAUGHLIN, Bruce
Deputy – Investigator
Bruce.Mclaughlin@state.mn.us
651-215-0500

NISJA, Jon
Deputy – Supervisor
Jon.Nisja@state.mn.us
651-215-0518

PETERSON, Ralph
Deputy – Inspector
Ralph.Peterson@state.mn.us
651-215-0519

PLAGGE, Jerry
Deputy – Inspector
Jerry.Plagge@state.mn.us
651-215-0502

RAHMAN, Ron
Deputy – Investigator
Ronald.Rahman@state.mn.us
651-215-0500

REINTJES, William
Deputy – Inspector
William.Reintjes@state.mn.us
651-215-0518

SHEEHAN, Patrick
Bureau Chief
Pat.Sheehan@state.mn.us
651-215-0506

SORENSEN, Richard
Deputy – School Plan Reviewer
Richard.Sorensen@state.mn.us
651-215-0518

SOUTH, Patricia
Deputy – Inspector
Patricia.South@state.mn.us
651-215-0518

STEGURA, David
Deputy – Supervisor
Dave.Stegura@state.mn.us
651-215-0514

STEINBACH, John
Deputy – Investigator
John.Steinbach@state.mn.us
651-215-0500

STOTTS, Casey
Deputy – Investigator
Casey.Stotts@state.mn.us
651-215-0500

WATSON, Christie
Deputy – Inspector
Chris.Watson@state.mn.us
651-215-0518

WEAVER, Connie
Office Operations Manager
Connie.Weaver@state.mn.us
651-215-0504

WHITE, Jerome
Deputy – Inspector
Jerome.White@state.mn.us
651-215-0502

WILLIAMS, Forrest
Deputy – Inspector
Forrest.Williams@state.mn.us
651-215-0518

WOLF, Steven
Deputy – Investigator
Steven.Wolf@state.mn.us
651-215-0500

ZIELIN, Francis “Skip”
Deputy – Inspector
Francis.Zielin@state.mn.us
651-215-0518

CLERICAL SUPPORT STAFF

BELL, Patricia
Supervisor
Pat.L.Bell@state.mn.us
651-215-0522

ANFANG, Andrea
Support – Sprinkler Team
Andrea.Anfang@state.mn.us
651-215-0519

BLYDENBURGH, Terry
Receptionist
Terry.Blydenburg@state.mn.us
651-215-0500

GIEROK, Nora
Support – Data/MFIRS
Nora.Gierok@state.mn.us
651-215-0529

MOORE, Irene
Support – Data/MFIRS
Irene.Moore@state.mn.us
651-215-0528

SAMUELSON, Randi
Support – Residential/Schools
Randi.Samuelson@state.mn.us
651-215-0518

WHITNEY, Marian
Support – Health Care Team
Marian.Whitney@state.mn.us
651-215-0502

FIRE/ARSON INVESTIGATION TEAM

The Fire/Arson Investigation Team maintained the same personnel strength for 2001 as the previous year; this team consists of one (1) chief investigator and eleven (11) investigators. Each investigator works from a regional office, which is located within the primary area of their assigned territory. This regional system was designed to provide requesting agencies with an arson investigator within a two-hour response average. Staffing reductions in 1999 and 2000 resulted in two investigator positions being lost; therefore, response time has periodically increased from the two-hour average.

The Bureau of Criminal Apprehension (BCA) arson series classes, available to fire and law enforcement agencies, are very well attended. Two investigators are assigned to coordinate and implement the BCA arson series in Minnesota. This training is provided twice a year; one class is given in the metro area and the other class alternates between northern and southern Minnesota. Future budget restrictions may force the BCA to provide only one class per year. Less extensive arson training classes are still available throughout the State at State Fire Schools, the Minnesota Fire Department Annual Conference, the Minnesota Fire Chief Conference and to local fire and law enforcement agencies based upon requests and time constraints.

The arson pointer system database continues to be updated with information provided by fire service and law enforcement. We ask that all agencies participate in providing information for this program. Questions about the system and how to submit information can be answered by contacting the headquarters office in St. Paul at 651-215-0500.

Metro investigation on-call for weekends and holidays continues to be an important commitment for our staff. Weekend/holiday on-call was initiated because of the high population and call volume within the metro area. Four investigators rotate through the on-call procedure on a monthly basis.

Investigation field service booklets are printed and distributed at several conferences throughout the year. This booklet provides response and request guidelines to fire and law enforcement and also provides important "How to Contact" phone numbers 24 hours a day/7 days a week.

To contact a fire/arson investigator or to request an investigation, please call:

State Fire Marshal Division **651-215-0500**
Monday through Friday 8:00 a.m. – 4:30 p.m.

BCA Dispatch **651-642-0610**
Holidays, weekends, and after 4:30 p.m.

Do not attempt to request a fire investigation through the Minnesota Duty Officer, which is primarily a Department of Emergency Management Haz-Mat contact.

Education continues to be a priority for the fire/arson investigator team.

There were 443 fires investigated in 2001; 163 of those were determined to be incendiary.

State Fire Marshal investigators assisted fire officials and law enforcement agencies by investigating 443 fires in 2001, which resulted in almost \$98 million in property loss. The total dollar loss represents a 44% increase from 2000. Arson dollar loss decreased by 6%. Of the 443 fires investigated, 163 were determined to be arson.

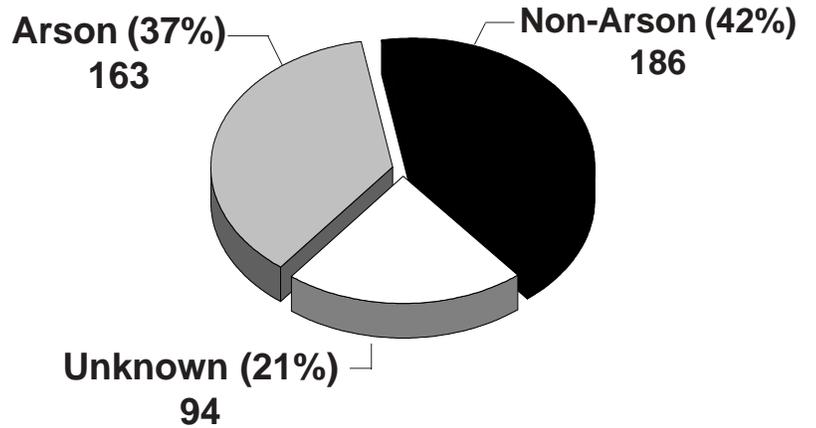
FIRE/ARSON INVESTIGATIONS BY PROPERTY TYPE

	<u>1999 Causes</u>		<u>2000 Causes</u>		<u>2001 Causes</u>			
	<u>Total Fires</u>	<u>Total Arson</u>	<u>Total Fires</u>	<u>Total Arson</u>	<u>Total Fires</u>	<u>Total Dollar Loss</u>	<u>Total Arson</u>	<u>Arson Dollar Loss</u>
One/Two Family Dwellings	279	94	244	87	257	\$26,058,195	77	\$ 5,888,907
Apartments	23	10	34	8	20	9,359,548	9	675,800
Hotels/Motels/Resorts	2	1	5	4	1	330,000	0	0
Institutional	0	0	5	1	3	1,040,000	1	20,000
Educational	5	5	4	4	6	616,000	5	615,000
Places of Assembly	8	5	15	5	16	3,057,500	9	1,202,500
Restaurants	4	1	4	1	7	1,475,000	2	200,000
Retail/Office	25	13	23	7	24	5,600,500	6	2,486,000
Industrial/Manufacturing	10	1	10	1	14	42,604,400	4	335,000
Agricultural	7	0	7	0	3	117,000	1	2,000
Storage Facilities	71	20	50	14	49	6,580,000	15	1,886,000
Special Structures/Other	23	13	14	8	4	80,500	4	80,500
Mobile/Vehicle Property	23	13	37	27	39	894,865	30	464,365
TOTAL	480	176	452	167	443	\$97,813,508	163	\$13,856,072

Last year's dollar loss average per investigation fire was \$150,253; this year's average was \$220,798.

Dollar loss for Industrial/Manufacturing increased greatly due to a large manufacturing plant fire. Almost \$14 million in property loss is attributed to arson in 2001. The average investigation arson fire dollar loss for 2001 was \$85,007 and, overall, the average investigation fire dollar loss was \$220,798. Last year, the average was \$150,153. That is an increase of 47%. Time spent on each case is increasing; advanced technology and more in-depth investigations allow for a full effort to increase the number of arson convictions.

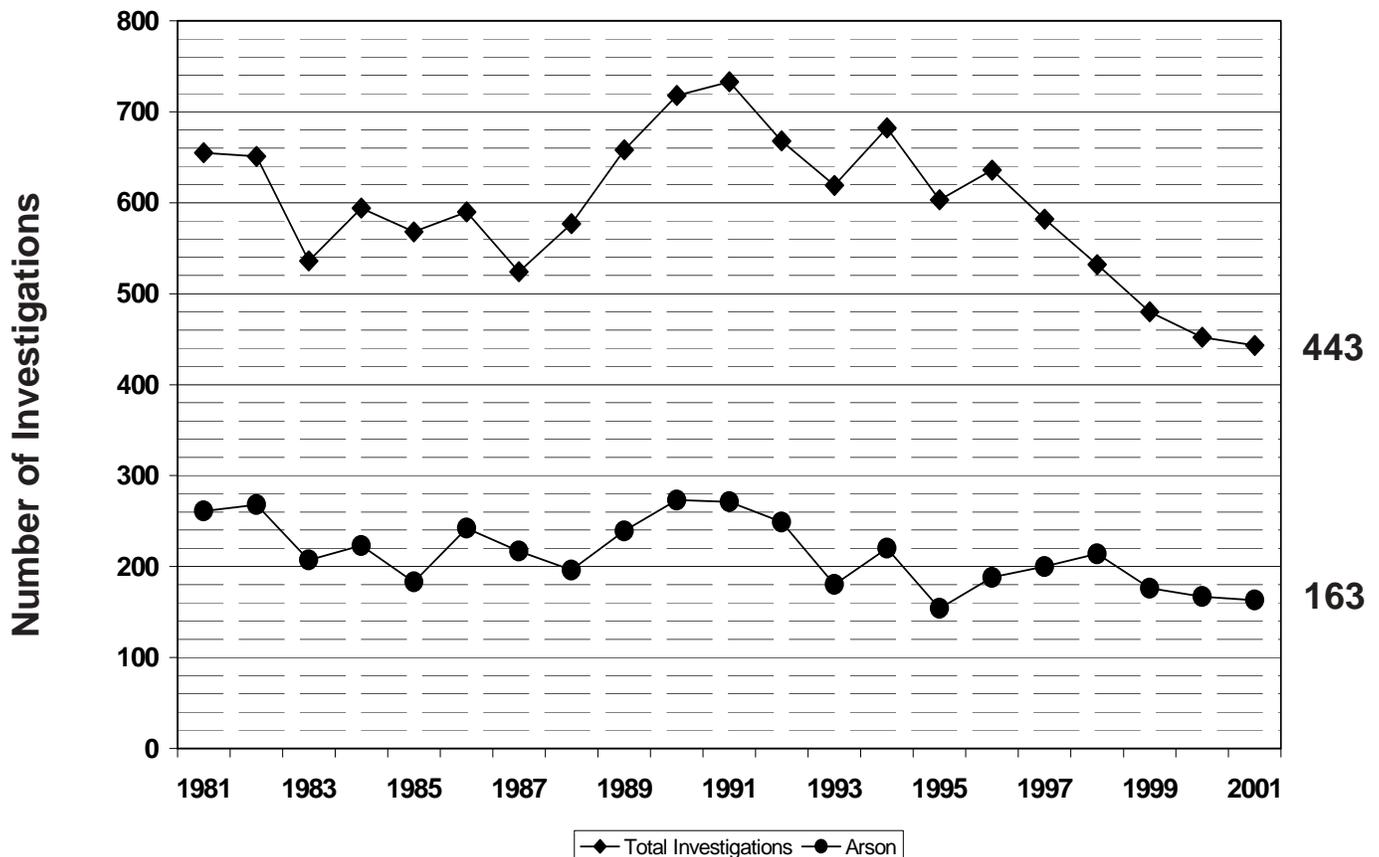
2001 Fire Investigation Accidental vs. Incendiary



Breakdown of Arson Investigations:

	Arson	Non-arson	Unknown	Total
Structure	133	179	92	404
Vehicle	30	7	2	39
Total	163	186	94	443

Fire Investigation 1981 - Present



FIRE SAFETY INSPECTIONS

13,790 violations were found in 6,727 inspections in 2001.

Deputy State Fire Marshal Inspectors conducted a total of 6,727 inspections and follow-up inspections in 2001.

SFMD FIRE SAFETY INSPECTIONS 2001, BY TYPE OF OCCUPANCY

	<u>No. of Facilities</u>	<u>No. of Follow-ups</u>	<u>No. of Bldg. Inspections</u>	<u>No. of Orders</u>	<u>No. of Violations</u>
<u>CHILD CARE</u>					
Family child care	1,056	203	1,057	161	3,928
Foster child care	252	127	253	88	1,035
Child care centers	56	34	56	12	180
	1,364	364	1,366	261	5,143
<u>LICENSED HEALTH CARE FACILITIES</u>					
Nursing homes	565	33	578	7	141
Supervised living facilities >7	199	17	218	15	60
Adult foster care facilities	456	20	458	17	1,142
Class B nursing homes	47	3	51	1	4
Supervised living facilities <6	90	5	90	0	7
Group homes	7	1	7	2	13
Adult day care facilities	5	0	5	0	2
Hospitals	155	20	160	15	111
Surgical centers	14	0	14	1	18
	1,538	99	1,581	58	1,498
<u>HOTELS/MOTELS/RESORTS</u>					
Resorts	351	417	533	228	1,271
Motels	299	312	319	222	1,161
Hotels	119	185	124	99	670
	769	914	976	549	3,102
<u>RESIDENTIAL</u>					
Boarding/Lodging	51	25	57	16	135
Apartments	25	29	25	10	43
One/two family dwellings	18	15	19	8	56
Dormitories	33	27	35	14	84
	127	96	136	48	318
<u>EDUCATIONAL FACILITIES</u>					
Schools	399	641	400	286	3,250
<u>COMMERCIAL</u>					
Public assembly	26	19	27	14	122
Offices	28	7	29	7	35
Restaurants	6	2	6	4	55
Industrial/Manufacturing	10	7	10	5	23
Service stations	3	5	3	2	0
Retail	8	9	8	4	30
	81	49	83	36	265
<u>OTHER PROPERTY</u>					
Flammable/Combustible liquid	41	49	41	25	79
Prisons/Jails	56	12	150	20	105
Special properties	3	1	3	2	0
Storage	3	0	3	1	0
L.P. facilities	0	1	0	0	0
Fire Stations	0	2	0	0	0
Other properties	82	13	88	2	29
Special Structures	2	34	4	1	1
	187	99	289	51	214
TOTAL INSPECTIONS	4,465	2,262	4,831	1,289	13,790

FIRE AND LIFE SAFETY INSPECTION

- **Residential Team**

The Residential Team has the responsibility, as assigned by State Statute, to inspect all hotels and motels within the state every 3 years, all resorts every 4 years, and most newly licensed child care facilities, including day care and foster care. The Residential Team also tries to respond to all complaints involving fire safety issues that are received by the State Fire Marshal Division. With reduction in staff levels, it is not possible to inspect all of these facilities within the mandated time frames. This past year, many of the complaints sent to the State Fire Marshal Office were returned with letters explaining “sorry, we do not have the staff available to conduct your requested fire safety inspection at this time.” We have tried to prioritize letters of complaint and conduct fire safety inspections on those complaints that list specific, serious fire safety or hazardous situations. In many instances, we have also contacted local fire departments asking if they have someone available to conduct a fire safety inspection on a complaint we received within their jurisdiction. With projected budget shortfalls, this situation will probably not improve in the foreseeable future. The dedication and the work effort everyone in the Residential Team has put forth trying to conduct thorough fire safety inspections on as many facilities as possible is a source of great pride to the Division.

The Residential Team includes:

Randi Samuelson – clerical support in the St. Paul office

Patti South (Counties of: Kittson, Roseau, Lake of the Woods, Koochiching, Beltrami, Marshal, Pennington, Red Lake, Polk, Norman, Mahnommen, Clearwater, Hubbard, Wadena, Clay, Becker)

Robert Leger (Counties of: Itasca, Northern St. Louis, Northern Lake, Aitkin)

Skip Zielin (Counties of: Wilkin, Becker, Ottertail, Grant, Traverse, Douglas, Todd, Big Stone, Stevens, Pope, Swift, Chippewa, Lac Qui Parle)

Hal Hefti (Counties of: Cass, Crow Wing, Morrison, Mille Lacs)

Dave Keepers (Counties of: Stearns, Benton, Sherburne, Wright, Meeker, Kandiyohi, Mcleod, Carver, ½ of Hennepin)

Chris Watson (Counties of: Cook, Southern half of Lake, Pine, Kanabec, Isanti, Anoka, Chisago, ½ of Hennepin)

Douglas Ackerman (Counties of: Washington, Dakota, Rice, Goodhue, Wabasha, Steele, Dodge, Olmstead, Winona, Mower, Fillmore, Houston)

Forrest Williams (Counties of: Renville, Yellow Medicine, Sibley, Scott, LeSueur, Nicollet, Brown, Redwood, Lyon, Lincoln, Pipestone, Murray, Cottonwood, Watowan, Blue Earth, Waseca, Rock, Nobles, Jackson, Martin, Faribault, Freeborn)

Glen Bergstrand (Supervisor and Counties of: Southern ½ of St. Louis, Carlton)

The vast majority of residential inspections are for day care and child care facilities.

Child Care Facilities:

In 2001, the Residential Team inspected 1,364 child care facilities citing 5,143 fire safety violations. With the correction of these fire safety violations, children in the child care facilities are in a significantly better fire safe environment. Residential deputies also provided training on fire safety to child care licensors and child care providers throughout the state. These combined efforts allow Minnesota to maintain a relatively low number of serious fire incidents in child care facilities. Child care facilities are an environment with potential high risks. Studies show time available for escaping a fire is usually between 1 and 3 minutes after a smoke detector activates. In a child care facility, fire safety needs to be at an optimum to reduce the risk from fire. Fire drills need to be practiced and be routine to evacuate up to 14 children within 1 to 3 minutes. Many of these children are toddlers that need to be carried or assisted in evacuation. Child care providers have done a good job in evacuating children involved in fires in child care facilities in the last couple of years.

Hotels/Motels/Resorts/Board and Lodging/Apartments/Dormitories:

In 2001, the Residential Team inspected 896 residential-type properties citing 3,420 fire safety violations. Fire safety in facilities where people sleep is dramatically improved as a result of these on-going inspections. Historically some of the most disastrous fires - those that have claimed the most lives in Minnesota - have been in facilities where people sleep. Even though the overall fire safety in these residential facilities is vastly improved, it is necessary for guests in hotels, motels and board and lodging facilities to take the time to check the smoke detector in their lodging room to ensure it is operational and review the paths to exits. If a fire occurs while guests are sleeping, there may not be time available to become familiar with alternate exits. Everyone holds some responsibility to be cognizant of his or her fire safety behavior.

Places of assembly, offices, restaurants, industrial/manufacturing, service stations and retail:

In 2001, the Residential Team inspected 81 commercial type facilities as a result of complaints received or because the commercial facility was part of a residential complex. These inspections resulted in correction of 265 fire safety violations.

Every hospital, health care facility, and licensed residential group home in Minnesota is inspected annually.

- **Health Care Team**

The Health Care Section of the State Fire Marshal Division is responsible for conducting annual fire and life safety inspections in Minnesota's healthcare facilities - hospitals, nursing homes, surgical centers and state regional treatment centers (formerly known as state hospitals). There are roughly 600 such facilities in the state. In addition, the Health Care Team is responsible for inspections of some 400 supervised living facilities. As requested by the Minnesota Department of Health and Department of Human Services, inspections are also conducted in adult day care centers, adult foster care homes, developmental achievement centers, board and care homes, hospices and outpatient treatment facilities (e.g., hemodialysis, chemical dependency and alcohol treatment facilities).

The Health Care Team is supervised by Robert Imholte. The team includes one clerical support person in the headquarters office and seven deputies, who operate out of home offices located throughout the state.

The Health Care Team enforces the Minnesota Uniform Fire Code as part of the Minnesota Department of Health (MDH) licensing regulations for health care facilities. The team also enforces the 1985 Life Safety Code and other federal fire safety regulations promulgated by the Centers for Medicare and Medicaid Services (CMS - formerly known as the Health Care Financing Administration) in facilities participating in the federal Medicare/Medicaid programs. This would include nursing homes, supervised living facilities and hospitals not covered by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). At the request of CMS, however, complaint and "walk-behind" inspections (called validation surveys) are sometimes conducted at JCAHO-accredited hospitals. These federal inspections are conducted under a contract with MDH, which administers the federal enforcement program in Minnesota. Eight such surveys were conducted in 2001.

In addition to inspection duties, the health care inspectors regularly provide fire safety in-service training to facility staff, give presentations at health care associations' conferences, and provide demonstrations on sprinkler systems using the fire sprinkler demonstration trailer that is now owned by the State Fire Marshal Division.

Since 1996, under a contract with the Minnesota Department of Corrections, one member of the Health Care Team has been assigned responsibility for inspecting Minnesota's eleven state-owned prisons and one privately-owned facility. Other members of the team provide back-up for this inspector, so that the healthcare inspections in his district are kept up-to-date. In 1999, the team assumed responsibility for inspection of the state's county jails. While the prisons are inspected on an annual basis, the jails are inspected on a request basis. County jail inspections, as well as the annual inspection of the Federal Correctional Facility in Waseca, are conducted by the inspector in whose district the facility is located.

During 2000, the Health Care Team inspected 1,581 buildings in 1,538 hospitals and health care facilities, as well as 150 buildings in the eleven prison facilities.

PUBLIC SCHOOL INSPECTION PROGRAM

School inspections revealed 3,250 fire code violations in 399 schools in 2001.

The Public School Inspection Program completed eleven years of operation in 2001. This program was established by the Minnesota State Legislature in 1990 and requires the State Fire Marshal to inspect each of the state's roughly 1,770 schools once every three years. These inspections cover public elementary schools, secondary schools (middle schools, junior high schools and high schools), area learning centers, and charter schools.

The primary focus of this program is to eliminate the fire and life safety violations in public school buildings that have historically contributed to disastrous events. Emphasis is placed on the life safety of the school's occupants: students, teachers, other school staff, and members of the community. Due to the age, construction, and use of many of the state's school buildings, policies were developed which allow the use of automatic fire protection systems (primarily automatic sprinklers and automatic fire alarms) as alternatives to correct many of the fire and life safety deficiencies found in these buildings. The State Fire Marshal is proud to report that dozens of school fires have been detected early and, in many other cases, extinguished by fire protection systems that have been installed as a result of this program.

The 1990 legislation also allowed local fire departments to continue to inspect the schools in their jurisdiction under a contract with the State Fire Marshal. In 2001, there were about 14 fire departments that conducted their own school inspections.

The Public School Inspection Program is staffed by a Fire Safety Supervisor, three field-based Deputy State Fire Marshals, one School Plan Reviewer, and a part-time clerical support person. The program works closely with, and is funded through, an inter-agency agreement with the Minnesota Department of Children, Families and Learning (DCFL).

In the 2000-2001 school year, there were 340 school districts in Minnesota, 1,778 school buildings, and about 70 charter schools. These school districts provided education to almost 860,000 students in grades K-12. In addition, there are approximately 55,000 teachers and administrators plus thousands more employed in staff support roles. Many of the state's school buildings also function as community education and recreation facilities after normal school hours. This program provides enhanced fire and life safety for almost two million students, staff, and citizens who occupy the state's school buildings.

School inspections in 2001 revealed 3,250 violations in the 399 school facilities inspected. The following is a breakdown of the types of fire and life safety deficiencies observed:

Exiting/Egress Deficiencies:	760
Problems with Fire Protection Systems/Features:	591
Improper Fire-rated Construction:	292
Excessive or Improper Storage of Combustibles:	362
Electrical Hazards:	384
Other Fire/Life Safety Deficiencies:	807

In addition to conducting inspections, the School Inspection Team also conducted 641 follow-up inspections to ensure that the items identified on previous inspections had been corrected. Another important function of the School Inspection Program is performing plan reviews of major school construction and renovation projects. This is a unique function of the State Fire Marshal Division that works closely with DCFL to ensure that appropriate fire safety features are being installed and that school districts are not paying for unnecessary or overly expensive fire protection. This program has paid for itself over the years by saving districts hundreds of thousands of dollars annually.

There were 178 plan reviews conducted on 2001; the majority of these were for remodeling projects in public schools. Additions to school buildings and projects to comply with fire code orders also generated a significant number of these plan reviews. The school plan reviewer maintains a close working relationship with the State Building Codes and Standards Division and spends many hours each week consulting with school officials, architects, engineers, and contractors.

During 2001, there were 5 school fires resulting in a loss of \$10,000 or more. On a very positive note, none of these fires resulted in the loss of the use of the building; this is the second year in a row that there has been no significant fire loss in a school inspected by the State Fire Marshal. The fires in school buildings occurred in the following:

<u>Name of School</u>	<u>City</u>	<u>Dollar Loss</u>
Creek Valley Elementary School	Edina	\$65,000
Sauk Rapids High School	Sauk Rapids	\$20,000
Falcon Heights Elementary School	Falcon Heights	\$10,000
Hastings Middle School	Hastings	\$10,000
Woodbury High School	Woodbury	\$10,000

FIRE CODE SPECIALISTS/TANK PLAN REVIEW

The Fire Code Specialist/Tank Plan Review Section of the State Fire Marshal Division is staffed by two Deputy State Fire Marshal – Fire Code Specialists. One of these two deputies is also a registered Fire Protection Engineer. These positions provide consultation and technical assistance in matters related to fire safety to state fire marshal staff, local fire and building officials, property owners/managers, architects, engineers, contractors and the general public.

In an average month, the fire code specialists handle over 500 requests for information regarding fire safety statutes, fire code requirements, and fire-safe practices. As a way to streamline the process of answering these requests, a specific e-mail address, firecode@state.mn.us, was created to allow anyone to state their question in writing and then receive a written answer that could also electronically include specific facts sheets or other information.

The fire code specialists also conduct plan reviews of certain types of hazardous installations, specifically aboveground fuel storage tanks and liquefied petroleum (LP) gas installations. In, 2001 there were 120 plan reviews conducted.

In addition to the consultation and plan review duties, the fire code specialists conduct fire safety training for fire service groups, safety professionals and the public. Each year, fire safety information is provided to hundreds of people through these fire safety presentations.

Following the adoption of the 1998 Minnesota Uniform Fire Code, the State Fire Marshal Division created the compact disk, "1998 MUFC Handbook on CD," which is an impressive collection of resources for fire code enforcement and fire prevention in an electronic format. Copies of this CD are still available from State Fire Marshal Division.

Also completed during 2000 was the inclusion of the "1998 MUFC Handbook on CD" in the State Fire Marshal Division web-site. The web-site address is now shortened to www.fire.state.mn.us.

As a normal part of their duties, the fire code specialists interact with many other safety officials. They represent the State Fire Marshal Division on committees and task forces. As such, they are an integral part of the Division and often called upon for their expertise. The fire code specialists are very knowledgeable about emerging trends and new technologies in fire protection. One notable project that the Fire Protection Engineer was involved in during 2001 was the Light Rail Project.

The importance of this function was highlighted in 2001 by Deputy State Fire Marshals from the Residential and Health Care Inspection teams helping to fill-in, in addition to their normal duties, answering code questions for nearly 10 weeks during the absence of one of the assigned code specialists.

FIRE PROTECTION SECTION

The Minnesota Fire Protection Contractor Licensing Law (Minnesota Statute 299M.01-12) authorizes the State Fire Marshal to regulate the fire sprinkler industry. The law requires the licensing of contractors and certification of sprinkler fitters. The Rules that were promulgated as a result of the law require fees to be collected for licensing and permitting of fire protection-related work. The Fire

Program calls for licensing fire protection contractors who sell, design, install, modify, or inspect fire protection systems.

Protection Licensing Section also investigates complaints, inspects sprinkler installations, and provides education and information services to the sprinkler industry, public officials, and the public.

The Fire Protection Licensing Section is headed by Bureau Chief Bob Dahm, supervised by Dave Stegura, and includes two plan review/code specialists, one field inspector and one clerical support person.

Licensing of fire sprinkler contractors and certifying journeyman sprinkler fitters began on February 21, 1994. In 2001, 58 contractors and 4 design contractors were licensed. In addition, 530 journeyman sprinkler fitters and 45 limited journeyman sprinkler fitters were certified during the year. In 2001, the State Fire Marshal, Thomas Brace, convened a special Sprinkler Rules Advisory Council. The purpose of the Council was to review the existing Rules and make recommendations to the State Fire Marshal for changes to these Rules. As of the summer of 2002, the process is continuing.

The State Fire Marshal Division performs sprinkler system plan review and issues permits for 640 communities in Minnesota. Cities may issue fire protection system permits if they meet program and training documentation requirements. The Division issues fire protection system permits for all installations not performed by cities and the State Building Codes Division. In 2001, the Fire Protection Licensing Section performed the following activity:

	1996	1997	1998	1999	2000	2001
Licenses/Certificates:						
Sprinkler Contractors	56	59	53	59	59	58
Design Contractors	3	4	7	8	4	4
Journeyman	476	490	481	508	519	530
Limited Journeyman	68	61	63	43	43	45
Permits Issued	352	327	364	386	427	457
School Review Assistance	25	11	6	6	15	21
Complaint Investigation	62	13	29	20	23	7
Field Inspections	34	17	38	142	298	281
Generated Revenue:						
	1996	1997	1998	1999	2000	2001
Permits	\$102,756	\$119,465	\$137,149	\$156,161	\$151,792	\$180,254
Surcharges	106,951	119,889	111,961	180,620	163,289	154,693
Licenses	78,460	79,900	78,825	78,425	79,250	76,950
Misc.			2,801	14,339	5,586	5,534
TOTAL	\$288,167	\$319,254	\$330,736	\$429,545	\$399,917	\$417,431

The Fire Protection Licensing Section supports training and education through seminars and presentations. The Advisory Council on Fire Protection Systems provides input regarding training and education needs. In 2001, the staff provided presentations at seven association conferences/seminars or classes.

PUBLIC DISPLAY FIREWORKS OPERATOR CERTIFICATION

The Minnesota State Legislature passed a law (MN Statute 624.22) effective January 1, 1996 requiring the State Fire Marshal Division to adopt guidelines relating to fireworks display safety and develop a process for certification of fireworks operators.

The law requires fireworks displays conducted in Minnesota be supervised by a fireworks operator certified by the State Fire Marshal Division. Fireworks operators may become certified by passing a written examination administered or approved by the State Fire Marshal. This examination is based on statutes, codes and nationally recognized standards relating to the safe practices of storage, handling and display of fireworks. Examinations are conducted at State Fire Marshal headquarters in St. Paul.

Currently there are 341 certified fireworks display operators. Of those, 231 are certified for outdoor fireworks displays, 10 are certified for proximate (indoor) displays and 100 are certified to conduct both outdoor and proximate fireworks displays.

Following every fireworks display, the certified operator is required to submit a Fireworks Display Report to the State Fire Marshal Division. In 2001, 510 display reports were submitted. These reports provide information on the type, size and quantity of pyrotechnic devices used, property damage, injuries and product defects. This information is used to assess the impact of controlled fireworks displays and to help identify operational problems and defective products.

Through fireworks display reporting and other fireworks reporting data, we have learned that since 1989 (when records first began being kept) through 2001, there have been 445 reported injuries, most of which were male youth between 1 and 19 years of age. During this same period, there was over \$1.6 million in property destroyed.

Prior to 2002, the fireworks statute stated “it shall be unlawful for any person to offer for sale, expose for sale, sell at retail or wholesale, possess, advertise, use, or explode any fireworks.” The term “fireworks” included firecrackers, bottle rockets, roman candles, sparklers, party poppers, whipper snappers, and snap-n-pops. The only legal items in the state were fireworks for public display (for which a permit is required) and caps for toy guns. *(This law changed in 2002 to allow certain types of “consumer fireworks”. Information about this new law will be included in the 2002 Fire in Minnesota annual report.)*

341 Fireworks Operators have been certified since the certification program began.

In Minnesota, a state where fireworks are illegal, fireworks losses since 1989 caused:

- over \$1.6 million loss*
- 445 injured*
- most of the injuries were children*

MFIRS data collection is critical in determining where life safety efforts and resources are placed.

FIRE DATA

The fire data analysis team collects and analyzes approximately 150,000 incident reports annually; they provide technical assistance to 789 Minnesota Fire Departments and track major fire incidents as they occur. The data team provides data and information to the local fire service and the media, on a regular basis, regarding incident trends and similarities.

Fire incident report statistics are used by the State Fire Marshal Division and local fire departments for comparative data for budget justifications, public education, and/or community efforts to further the adoption of local codes and ordinances. Arson statistics, compiled by this team, are used to develop strategic plans and trend analysis for combating this problem. Incidents in high-risk fire death groups, the elderly, disabled, and young children, are monitored to provide information on how best to address the fire safety concerns of these targeted groups. These special report statistics are available immediately to fire departments using software to do their incident reporting.

Data collection through the Minnesota Fire Incident Reporting System (MFIRS) is a major program in the Division. As outlined above, data is critical in determining where efforts and resources should be placed. The number of fire departments participating in MFIRS has increased significantly in the past five years. The information provided from these reports has a major impact on the direction of statewide fire and emergency response efforts. There were 705 fire departments reporting in 2001; 700 fire departments reported in 2000. While we added several new departments this year, we lost many departments that reported in 2000. We have 89% of our fire departments reporting; our goal is to have 95% to 100% participation. During this past year, letters were sent to non-reporting departments that had not reported for three or more years; our concern was that these non-reporting departments may no longer be active departments. Over 30 letters were sent out, but only two departments were noted as non-active. Of the departments who did report, 313 did so electronically and they provided 93% of all reports in 2001. Electronic reporting represented 79% of the total fire dollar loss. Clearly, we are making progress in automating the reporting process. We anticipate electronic incident reporting to continue to increase with the distribution of FIREHOUSE Software® in Minnesota.

The data team cannot emphasize enough the importance of reporting. Let us hear from you - join our efforts and support the MFIRS system. **Fire incident reporting is mandated for all fire departments.** Please contact our office for assistance in getting started with MFIRS reporting; the Fire Data Team members are always ready to help with technical or other reporting questions. Data Team members are: Nora Gierok, 651-215-0529; Irene Moore, 651-215-0528; and Connie Weaver, 651-215-0504.

Departments reporting by electronic means provided 93% of all reports in 2001.

The State Fire Marshal Division remains committed to public education efforts to reduce the Minnesota fire problem.

PUBLIC EDUCATION

For many years the State Fire Marshal Division has provided guidance and served as a resource to the Minnesota fire service in an effort to make fire and life safety a way of life for the citizens of our state. With the hands on support and participation of the fire departments throughout the state, our division has made great strides in creating a safer and healthier environment for Minnesotans.

Pro-active fire and life safety education is an on-going challenge that requires an understanding of what constitutes the difference between information, awareness, and education. There is definitely a need for each of these components in a comprehensive plan for a successful program, however they must be identified and put into practice as they are intended to maximize their effectiveness in the overall plan.

In addition, there are many ways to reach the public with an educational message. Studies have proven the value of in-school curriculum, public service announcements, station tours, public presentations, and printed materials. Each of these hold a very significant worth, yet until combined to create a specific outcome, they independently will not produce the attitude and behavior changes necessary to protect the people of our communities.

There is no doubt that the duty to stop a fire before it happens, and the responsibility to ensure that each citizen knows the proper reaction to these tragic events when they occur, belongs to every member of the Minnesota fire service. It is with these philosophies in mind that the State Fire Marshal Division dedicates many hours of training, planning, and acquiring resources for the fire service to enhance their abilities to aid their communities with fire and life safety education. Some of the ways we have accomplished this mission in 2001 include:

- Media events and press conferences throughout the year
- Promoting legislation supporting fire safety
- Public Fire and Life Safety Annual Conference
- Educational and clerical support to various fire service associations
- Presenting at State Fire Schools and State Conferences
- On-going smoke alarm and battery campaigns
- Assistance with local event planning and implementation efforts
- Securing grants and providing training for in-school curriculum
- Providing leadership and hands on support for public events

Throughout the year the State Fire Marshal Division works in conjunction with many pro-active members of the fire service, industry, and concerned community partners to provide lasting messages to the public. Each year many new and exciting ideas are explored and a few are listed below:

Win the Race Against Fire... The third annual event, the Brainerd Fire Department works along side many other Cayuna Range area firefighters, the

DNR, and the State Fire Marshal Division to teach race fans the dangers of flammable liquids, the value of residential sprinkler systems, the importance of planning and practicing home escape plans, and the proper way to build and extinguish campfires.

Fire Safety with the Saints... Another great opportunity for those concerned with fire safety to team up and educate citizens on camping safety, escape planning and practicing, smoke alarm maintenance, and home hazard inspections. Baseball fans enjoyed the chance to learn from our presentations and also brought home a fun activity book filled with safety information to the theme of "Strike Out Fire" sponsored by Verizon Directories.

Firefighter Night at the Races... Now in its third year, the event moved to Shakopee's "Raceway Park" where Shakopee Fire Marshal Tom Pitschneider hosted a fantastic event filled with educational opportunities similar to the previous activities.

3rd Annual Governor's Fire Prevention Day... With the help and support of many major influences such as the Insurance Federation of Minnesota, Hennepin County Medical Center, Regions Hospital, the National Fire Sprinkler Association, the Department of Natural Resources, the Minnesota Department of Building Code Officials, the FMAM, IAAI, MSFCA, MSFDA, MNSCU, and many more, this event continues to reach new heights. In 2001, 46 fire departments from throughout the state helped to comprise the 426 volunteers who shared of their talents teaching fire and life safety to the over 123,000 fairgoers. The Minneapolis Fire Department was featured and they provided the Honor Guard that dazzled and inspired teary-eyed crowds at the flag raising/memorial service that morning. Educational opportunities spread to all corners of the fairgrounds included many unique firefighting apparatus displays, a seniors fire safety program, a fire service history area with a functional 1906 hand pumper for the public to put to the test, safe escape trailers, the popular Fire Explorer Challenge, the "Are You a Survivor" game at the new Teen Fair, and many more exciting exhibits. This premiere fire safety extravaganza has sparked such an interest that the USFA sent two dignitaries from the National Fire Academy to document the event and enjoy the day observing the hard work and dedication of the professionals giving of their time and talents.

An incredibly effective relationship was also formed this year when several State Fire Marshal Deputies and many fire service partners developed a bond with Channel 4 Dimension series reporter Trish VanPilsum. In the aftermath of a tragic fatal fire which consumed the lives of 3 young boys, a documentary was developed which brought to the public the understanding of the effectiveness and importance of both fire sprinkler systems, and the need to plan and practice home escape planning. This graphic expose' not only opened the eyes of the public, but those of the fire service as well.

Children using fire inappropriately is still a major cause for concern.

In 2001, the State Fire Marshal Division also developed a state level team of professionals to act as a State Champion Management Team and submitted a proposal to the NFPA for 5 communities in the state to become Risk Watch® communities. After receiving the grant, the team trained these communities in the implementation and evaluation of the Risk Watch® curriculum, an in-school all injury prevention program. The 5 communities include Duluth, Henning, Mendota Heights, Perham, and Red Wing. The commitment made by our division to this program will continue to grow with a goal of adding 200 classrooms per year until each student in Minnesota has had the benefit of this valuable education.

The State Fire Marshal Division continues to make educating the public a priority and to make a fire safe community for all who live, work, play, and worship in our great state, and would like to thank the Minnesota fire service and all dedicated community partners for their past, present, and future efforts in fire and life safety education.

For information or to share an idea on any fire and life safety issue, please feel free to contact Deputy State Fire Marshal Daniel Bernardy at (651)215-1754 or daniel.bernardy@state.mn.us

JUVENILE FIRE SETTING

Children who start fires are categorized in one of four general areas. The areas begin with curiosity, a normal but still dangerous fascination with fire. Next is the crisis category; in this category a child is attempting to reach out due to some traumatic occurrence in his or her life. The delinquent category occurs when a child has set the fire with intent to draw attention from peers or authorities to his/her “power” through destruction. Finally, the pathological category is a truly psychological disorder with a variety of symptoms and other problems. No matter what the reason for this unlawful behavior, the result is the same — injury, death, and property loss.



Fires Involving Children Playing With Fire	
	<u>2001</u>
Fires	200
Deaths	1
Civilians Injured	15
Firefighters Injured	4
Dollar Loss	\$2.5 Million

No matter what the reason for the behavior, the result is injury, death, and property loss.

Within which category they belong is determined through a structured interview and assessment process. It is extremely critical to perform a thorough and complete interview of the child and his/her parents, as well as to examine their environment, to come to an appropriate conclusion of their situation.

What is principally important is that every child who has set a fire is identified, taken through a comprehensive fire safety program, is made accountable to the justice system, receives the appropriate referral, and complies with a restitution plan. Referral may be made to one of many agencies (mental health, social services, child protection, etc.). The available statistical data shows that up to 81% of the children who set fires will repeat this behavior if proper intervention is not attained. This leads us to conclude that early intervention and treatment will prevent future criminal behavior and save countless injuries, lives, and dollars of property loss.

After a great deal of research and development the Minnesota Juvenile Firesetter Program was completed and introduced in October of 1998. Beginning with Hennepin County, a modified version was put into action by their Juvenile Firesetter Task Force. The Hennepin County F.I.R.E.S. (Fire Intervention and Related Educational Support) Program is the product of a very dedicated and concerned group of professionals who through perseverance and diligence organized and trained instructors from various agencies throughout the county. To date there have been several successful intervention classes involving the firesetting youth and their guardians, as well as an avenue for referral. The F.I.R.E.S. program, both through its development and its implementation, has served as somewhat of a pilot to aid in the construction of the statewide model.

The strategic plan for implementation includes developing regional task forces that will provide all of the components necessary for successful intervention. The success of this program depends on the support and cooperative efforts of many agencies within the regions. The task forces will be comprised of several agencies including the fire service, the juvenile justice system, police departments, mental health agencies, and various social service divisions.

The release of the program to the other regions, which took place in October of 1999, marked the beginning of the statewide implementation. These regions are supported and divided by the boundaries of the Minnesota Service Cooperatives, formerly known as the ECSU (Educational Cooperative Service Units) system and will be housed at their regional headquarters in Thief River Falls, Virginia, Fergus Falls, St. Cloud, Staples, Marshall, North Mankato, and Rochester. Over 80% of the metro area communities now have programs operating and providing "mutual aid" opportunities to those still building their programs. Other regions operating and offering to their neighbors are Duluth, Virginia, and Glencoe. A great deal of hard work and commitment by task force members from a multitude of state, county, and local government, as well as private agencies, has paid off and the programs are helping their communities. Regions will be prioritized for implementation by statistics and demographics, striving to have all regions operational soon. Once in place, these coalitions must continually evaluate and modify their programs to ensure their effectiveness.

This statewide program model is a step by step guide designed to assist with an intervention from identification through follow up. To completely understand the model and the process it provides, and to utilize it to its fullest potential, simply read the manual in its entirety. No experience or training is required to follow this model; however, attending training when the opportunity presents itself would certainly benefit your agency. Of course, feel free to contact the State Fire Marshal's office with any questions that may arise.

What can be done by the parents/caregivers?

Teaching the child about his/her role with fire and the dangers of it must be done at the very earliest opportunity. Children usually begin to grasp this type of information at about age three. As children grow older, the messages will grow with them: Not touching matches and lighters, advancing to stop, drop & roll, crawling low under smoke, and home escape drills. Adults must take this initiative and not expect that a child will learn it somewhere else.

Taking responsibility by setting a good example is also very important. Using fire starting devices properly and controlling a child's access to these devices will greatly reduce the risk. Parents/Caregivers should point out how they use safety rules in everything they do; this will help to make fire safety "second nature" to the child.

Remember, a single match can be as deadly as a loaded gun in the hands of a child. It can destroy lives, property and dreams at an incredibly rapid speed.

How do I get information on the program?

Task Force information may be achieved by contacting the State Fire Marshal Division directly, or by visiting the website at www.dps.state.mn.us/fmarshal/JFS/firejuven.html. We have also incorporated a toll free helpline for use by both professionals and the public to aid in getting the process moving as quickly as possible.



**Juvenile Firesetter Helpline
1-800-500-8897**

For assistance with an intervention, or to receive materials, brochures, training, or support in organizing this important project in your community contact:

Daniel Bernardy, Deputy State Fire Marshal
State Fire Marshal Division
444 Cedar St., Suite 145
St. Paul, MN 55101
Office: 651-215-1754
Fax 651-215-0525
daniel.bernardy@state.mn.us

ADMINISTRATIVE SUPPORT SERVICES

This dedicated group assures that the internal functions of the office run effectively and efficiently. They provide exceptional service to our staff; the fire service, and the general public. Persons responsible for specific programs are:

Pat Bell, Clerical Support Supervisor - Pat provides clerical support to the fire/arson investigators, keeps Division payroll records and is familiar with all office functions.

Andrea Anfang - provides support for the fire protection/sprinkler section.

Terry Blydenburgh - is the main receptionist for the State Fire Marshal Division and Office of Pipeline Safety.

Randi Samuelson - generates inspection reports and corrective orders for the residential and school inspection team. She also provides support to fire service organizations such as the Governor's Council on Fire Prevention & Control.

Marian Whitney - is responsible for the support functions of the health care inspection team.

The day care support position is vacant at this time.

The competent assistance of these exceptional employees allows the individual teams to complete their duties and assignments. Fire Marshal management and professional staff gratefully acknowledge our invaluable support staff.

IN CONCLUSION...

We hope this report will assist you in identifying the services, programs, and resources available through our Division and encourage you to contact us with any comments or concerns.

We look forward to working with the fire service, law enforcement agencies, and other organizations as we continue to address the fire safety issues facing the citizens of Minnesota.