

DEPLOYMENT REPORT

2018

Spokane County Fire District 8

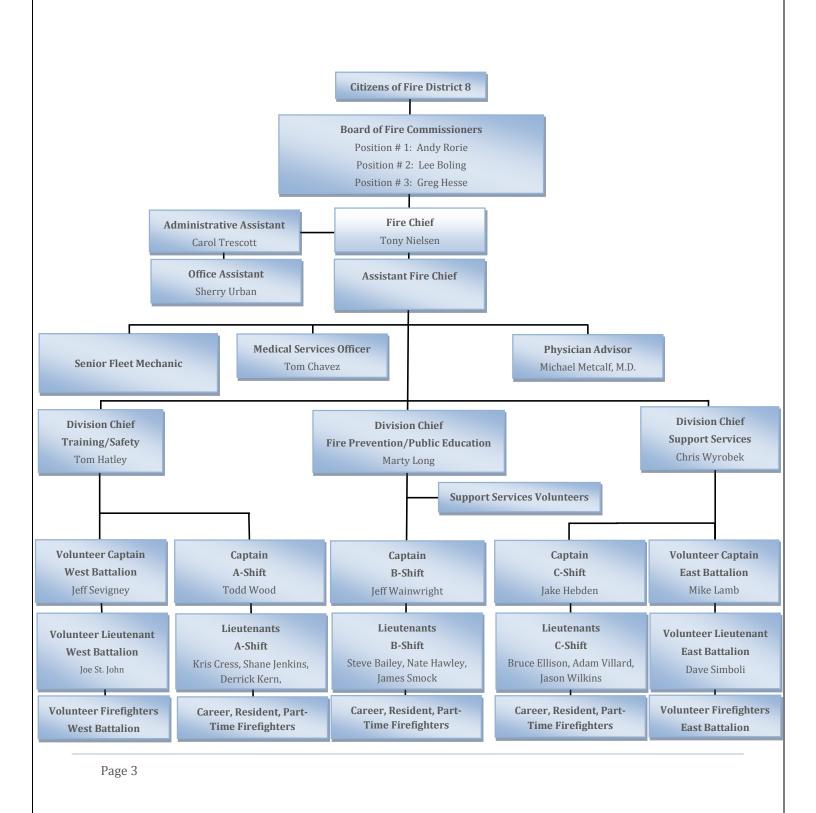
TABLE OF CONTENTS

Table of Contents

Organizational Chart
Expected Number of District Employees
Expected Functions of District Employees
Policy Statements
Emergency Response
RCW 35.103
Time Temperature Standard
Cardiac Arrest Survival Standard9
Total Emergency Incidents10
2017 Emergency Response by Area11
Emergency Response by Time of Day12
2017 Response Time Standards and Objectives13
Turnout Time
Arrival of First Engine at a Fire14
Arrival of Full First Alarm Assignment at a Fire15
Arrival of EMT or Higher Level at a Medical Scene16
Arrival of ALS Paramedic at an ALS Medical Scene17
Arrival of Wildland Firefighting – Trained and Equipped Personnel
Definition of Geographic Area19
Steps Necessary to Achieve Compliance
Appendix A21
Appendix B

ORGANIZATIONAL CHART

Organizational Chart



EXPECTED NUMBER OF DISTRICT EMPLOYEES

Expected Number of District Employees

Spokane County District 8 had the following employees in 2017:

Chief Officers:	5
Career Firefighters	31
Volunteer Firefighters	25
Part Time Firefighters	20
Administrative Staff	2
Firefighter/ Maintenance Technician	1
Support Services Volunteers	8

In 2018 the District plans to add the following positions:

Career Firefighters:	3
Volunteer Firefighters:	12
Part Time Firefighters:	4



EXPECTED FUNCTIONS OF DISTRICT EMPLOYEES

Expected Functions of District Employees

Spokane County Fire District 8 employees had the following expected functions in 2017:

- Firefighting
- Emergency Medical Services BLS & ALS
- Hazardous Materials Response Awareness Level
- Fire Inspections
- Public Education
- Fire Hydrant Inspections
- Pre-Fire Planning
- Low Angle Rescue



POLICY STATEMENTS

Policy Statements

The existence of the District was established by Resolution 47-212A (Appendix A). Resolution 74-1 (Appendix B) established the services the District is required to provide.



Emergency Response

RCW 35.103

During its 2005 session, the Washington State Legislature considered and then passed what has now been codified as Chapter 35.103 RCW. The law directs "substantially career fire departments" to evaluate their level of service and deployment delivery and response time on an annual basis. Specifically, the annual report shall include:

- The policy statements establishing the existence of the District, services the District provides, the basic organizational structure of the District, the expected number of employees, and the functions that the employees are expected to perform.
- The adopted standards of turnout and response for all applicable emergency incidents.
- An annual comparison of the adopted standards of turnout and response for all emergency incidents.
- Definition of the geographic areas and circumstances in which the requirements of the adopted departmental standards are not being met.
- Explain the predictable consequences of any deficiencies and address the steps that are necessary to achieve compliance with the district's adopted standards.

Intent of RCW 35.103

The legislature acknowledges the efforts of the International City/County Management Association the International Association of Fire Chiefs, and the National Fire Protection Association for the organization and deployment of resources for fire departments. The arrival of first responders with automatic external defibrillator capability before the onset of brain death, and the arrival of adequate fire suppression resources before flash-over are critical events during the mitigation of an emergency and in the public's best interest. For these reasons, this chapter contains performance measures relating to the organization and deployment of fire suppression operations, emergency medical operations, and special operations by substantially career fire departments. This chapter does not, and is not intended to, in any way modify or limit the authority of code cities to set levels of service.



Time - Temperature Standard

Time Temperature Standard

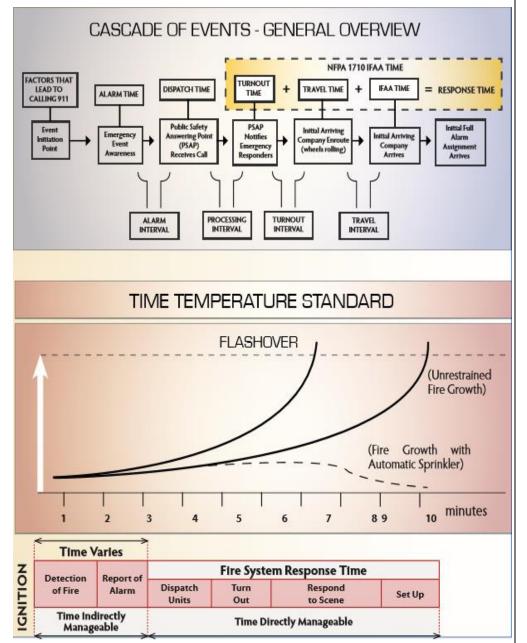
The "time-temperature curve" standard in the figure below is based on data from the National Fire Protection Association (NFPA) and the Insurance Services Organization (ISO) which have established that a

typical point source of ignition in a residential house will "flash over" at some time between 5 and 10 minutes after ignition, turning a typical "room and contents" fire into a structural fire of some magnitude

Time Temperature Curve

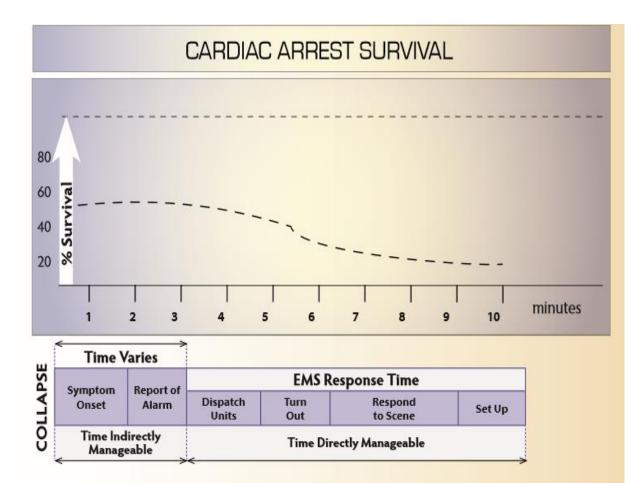
The utility of the timetemperature curve for fire station placement is contingent on a number of factors, including but not limited to the following:

- It does not account for the time required for the existence of a fire to be "discovered" and reported to the fire department via the 911 system
- The time from ignition to flashover varies widely (5-30 minutes depending on building characteristics)



Cardiac Arrest Survival Standard

In communities of where the fire service is the principal provider of Emergency Medical Services (EMS) first response, the "Chain of Survival" standard shown in the figure below was developed by the American Heart Association and is often used to provide guidance for distribution of resources. The Chain of Survival suggests that basic life support (CPR and defibrillation) should be available to the victim of a cardiac arrest within 4 minutes of the event. Early notification, distribution and concentration of emergency response services are thus paramount to successful resuscitation efforts.



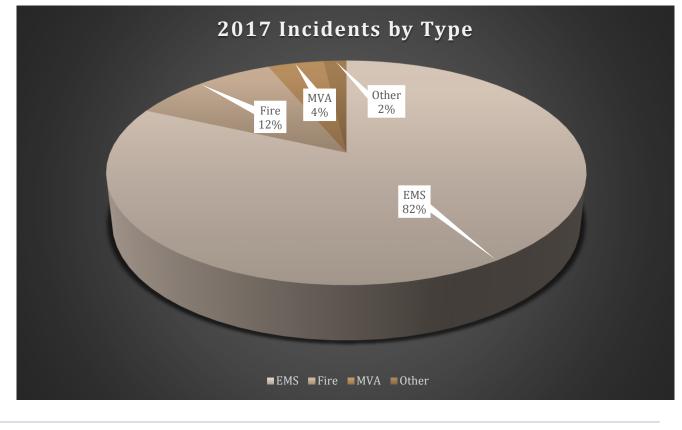
The Golden Hour Standard

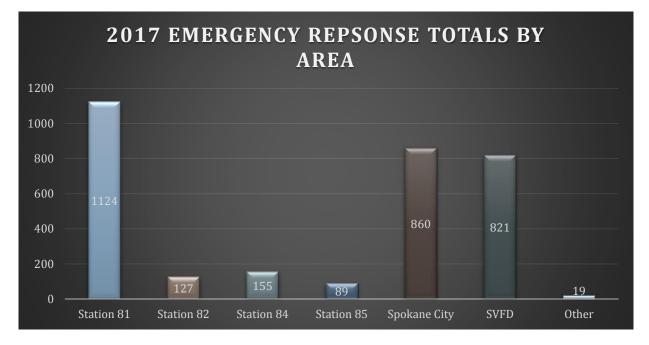
In trauma events, the golden hour is the historic benchmark applied to victims with significant critical traumatic injuries. The golden hour reflects the concept that survivability decreases significantly if the patient isn't in the operating room within one hour of receiving a critical traumatic injury.



Total Emergency Incidents

Year	EMS	Fire	MVA	Other	Total
2017	2612	381	144	58	3195
2016	2375	339	109	34	2857
2015	2055	510	133	68	2766
2014	1664	273	91	41	2069
2013	1296	259	81	39	1675

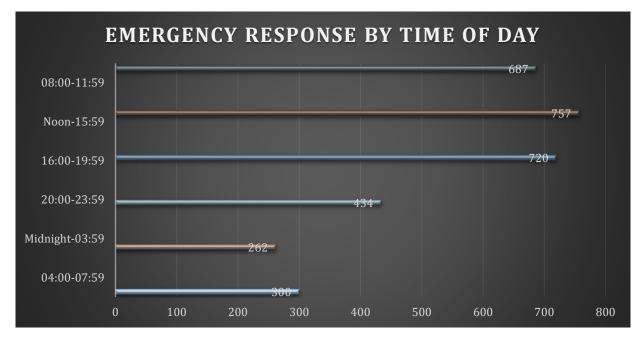




2017 Emergency Response by Area



Emergency Response by Time of Day



Emergencies take place day and night. Unforeseen events can lead to emergencies at a moment's notice and is not effected by the time of day. For that reason, Spokane County Fire District 8 staffs four fire stations, 24 hours a day/ 365 days a year, in order to respond immediately.





2017 Response Time Standards and Objectives

Spokane County District 8 has established response time standards for four (4) categories of demand zones within its jurisdictional boundaries. The demand zones, derived from National Fire Protection Association (NFPA) guidelines, are defined by the following demographics:

- Urban (> 1,000 persons per square mile)
- Suburban (500 to 1,000 persons per square mile)
- Rural (<500 persons per square mile)
- Remote Rural

Turnout Time

Turnout time is the time from the receipt of a dispatched alarm by the firefighting or emergency medical crew, until they actually indicate (verbally or electronically) that they are en route to the incident.

2014



	TURNUUT TIME
Γ)	'ime unit assigned to en route)
Spokane Cou	Inty Fire District 8 turnout time standard
i	s 90 seconds, 90% of the time
YEAR	AVERAGE TT, 90%
	OF TIME
2017	82 seconds
2016	94 seconds
2015	84 seconds

81 seconds

TURNOUT TIME

Arrival of First Engine at a Fire

URBAN DEMAND ZONE

(Time unit assigned to first engine at fire) Spokane County Fire District 8 response time standard is 8:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	5:03 min/sec
2016	6:19 min/sec
2015	5:56 min/sec
2014	6:19 min/sec

SUBURBAN DEMAND ZONE

(Time unit assigned to first engine at fire) Spokane County Fire District 8 response time standard is 10:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	6:09 min/sec
2016	5:58 min/sec
2015	7:19 min/sec
2014	8:32 min/sec

RURAL DEMAND ZONE

(Time unit assigned to first engine at fire) Spokane County Fire District 8 turnout time standard is 14:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	8:56 min/sec
2016	8:59 min/sec
2015	9:23 min/sec
2014	9:02 min/sec

REMOTE RURAL DEMAND ZONE

(Time unit assigned to first engine at fire) Spokane County Fire District 8 turnout time standard is 20:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	none
2016	none
2015	13:03 min/sec
2014	14:47 min/sec

Arrival of Full First Alarm Assignment at a Fire

Spokane County Fire District 8 full first alarm assignment includes a minimum of three engine companies and one response chief.

URBAN DEMAND ZONE

(Time units assigned to full first alarm on-scene) Spokane County Fire District 8 response time standard is 11:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	26:13 min/sec*
2016	13:26 min/sec
2015	13:58 min/sec
2014	15:32 min/sec
	*one incident in 2017

SUBURBAN DEMAND ZONE

(Time units assigned to full first alarm on-scene) Spokane County Fire District 8 response time standard is 15:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	19:00 min/sec*
2016	none
2015	none
2014	None
	*one incident in 2017

RURAL DEMAND ZONE

(Time units assigned to full first alarm on-scene) Spokane County Fire District 8 turnout time standard is 20:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	none
2016	20:19 min/sec*
2015	17:32 min/sec
2014	17:07 min/sec
	*One incident in 2016

REMOTE RURAL DEMAND ZONE

(Time units assigned to full first alarm on-scene) Spokane County Fire District 8 turnout time standard is 25:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	none
2016	none
2015	none
2014	26:04 min/sec*
	*One incident in 2014

Arrival of Emergency Medical Technician or Higher Level at a Medical Scene

URBAN DEMAND ZONE

(Dispatch to on-scene) Spokane County Fire District 8 response time standard is 6:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	4:08 min/sec
2016	4:37 min/sec
2015	4:29 min/sec
2014	4:13 min/sec

SUBURBAN DEMAND ZONE

(Dispatch to on-scene)

Spokane County Fire District 8 response time standard is 8:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	6:50 min/sec
2016	6:12 min/sec
2015	6:13 min/sec
2014	6:10 min/sec

RURAL DEMAND ZONE

(Dispatch to on-scene)

Spokane County Fire District 8 response time standard is 12:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	6:32 min/sec
2016	7:51 min/sec
2015	6:42 min/sec
2014	7:25 min/sec

REMOTE RURAL DEMAND ZONE

(Dispatch to on-scene)

Spokane County Fire District 8 response time standard is 20:00 minutes/seconds, 90% of the time

AVERAGE ARRIVAL 90% OF TIME
11:20 min/sec*
14:46 min/sec
10:27 min/sec
8:05 min/sec
*one incident in 2017

Arrival of Advanced Life Support Paramedics at an ALS Emergency Medical Scene

URBAN DEMAND ZONE

(Dispatch to on-scene)

Spokane County Fire District 8 response time standard is 6:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	3:35 min/sec
2016	4:05 min/sec
2015	4:28 min/sec
2014	4:01 min/sec

SUBURBAN DEMAND ZONE

(Dispatch to on-scene)

Spokane County Fire District 8 response time standard is 8:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	6:46 min/sec
2016	6:13 min/sec
2015	6:53 min/sec
2014	5:57 min/sec

RURAL DEMAND ZONE

(Dispatch to on-scene)

Spokane County Fire District 8 response time standard is 12:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	7:48 min/sec
2016	9:20 min/sec
2015	8:23 min/sec
2014	7:14 min/sec

REMOTE RURAL DEMAND ZONE

(Dispatch to on-scene)

Spokane County Fire District 8 response time standard is 20:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	12:03 min/sec
2016	12:52 min/sec
2015	9:55 min/sec
2014	10:25 min/sec*
	*one incident in 2014

Arrival of Wildland Firefighting - Trained and Equipped Personnel

URBAN DEMAND ZONE		
(Dispatch to on-scene) Spokane County Fire District 8 response time standard is 8:00 minutes/seconds, 90% of the time		
YEAR	AVERAGE ARRIVAL 90% OF TIME	
2017	11:20 min/sec*	
2016	12:06 min/sec	
2015	6:46 min/sec	
2014	7:02 min/sec *one incident in 2017	

SUBURBAN DEMAND ZONE

(Dispatch to on-scene) Spokane County Fire District 8 response time standard is 10:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	none
2016	none
2015	4:57 min/sec
2014	none

RURAL DEMAND ZONE

(Dispatch to on-scene)

Spokane County Fire District 8 response time standard is 14:00 minutes/seconds, 90% of the time

YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	9:09 min/sec
2016	11:51 min/sec
2015	12:55 min/sec
2014	10:08 min/sec

REMOTE RURAL DEMAND ZONE

(Dispatch to on-scene)

Spokane County Fire District 8 response time standard is 20:00 minutes/seconds, 90% of the time

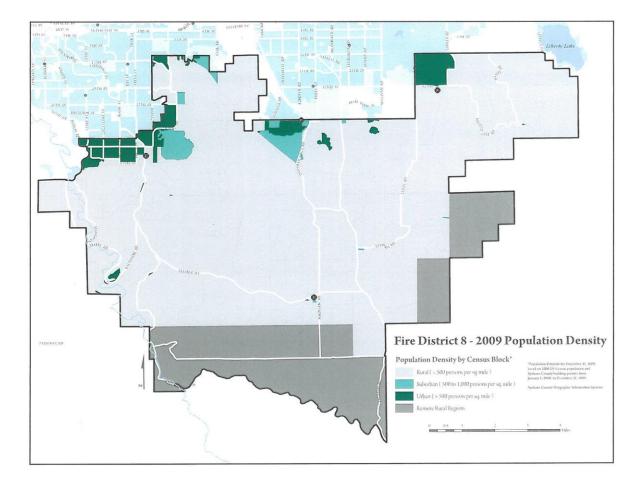
YEAR	AVERAGE ARRIVAL 90% OF TIME
2017	none
2016	24:16 min/sec*
2015	16:56 min/sec*
2014	15:00 min/sec*
	*one incident in 2014, 2015, & 2016

MAP OF FIRE DISTRICT 8

Definition of Geographic Areas and Circumstances Where Adopted Standards Are Not Being Met

Figure One: Defines the District's geographic demand zones. The District is bisected by mountains, which cannot be traversed. Response units are forced to drive around the mountains to reach other station areas. Travel times between station areas, on average, are approximately fifteen minutes.

Figure One: District 8 Demand Zones.



STEPS TO ACHIEVE COMPLIANCE

Steps Necessary to Achieve Compliance

Steps necessary to achieve compliance with the District's adopted standards may include the following:

- Addition of staffed fire stations
- Continued community risk reduction efforts
- Staff training to reduce turnout times
- Utilizing agreement with Spokane City Fire Department and Spokane Valley Fire Department for closest resource response
- Continued automatic aid with neighboring fire/EMS agencies
- January 1, 2017 all response vehicles received status bar in service on mobile radios to capture accurate response times and on-scene times.



APPENDIX A

21

No 47-212A

BEFORE THE BOARD OF COUNTY COMMISSIONERS OF SPOKANE COUNTY, WASHINGTON IN THE MATTER OF THE FORMATION OF FIRE PROTECTION) DISTRICT NO. 8 LOCATED IN MORAN AND VALLEYFORD AREA) RESOLUTION SPOKANE COUNTY, WASHINGTON)

WHEREAS, It has been certified to this Board by the Spokane County Election Board, that an election has been held in and for Fire Protection District No. 8. and that atsaid election more than three-fifths of the votes were cast in favor of the formation of Fire Protection District No. 8 and that William C. Bahme, C. M. Meenach and A. B. Crisler received the highest number of votes for Fire Commissioner,

NOW, THEREFORE, BE IT RESOLVED that the lands embraced in the following boundaries be, and the same hereby are, duly organized as Fire Protection District No. 8:

Begin at NW corner of Sec. 26 T 25 R 43, thence S along W lines of sections 26 and 35 to the SW corner of Sec. 35 T 25 R 43, thence W along N line of Sec. 3 T 24 R 43 to the NW corner of said section 3, thence S along W lines of sections 3 - 10 - 15 - 22 - 27 and 34 of T 24 R 43 to SW corner of said section 34, thence E to SE corner of said section 34 being also the NW corner of section 2 T 23 R 43, thence S to SW corner of said section 2; thence E along S lines of sections 2 and 1 to SE corner of section 1 T 23 R 45 being also the NW corner of section 7 T 23 R 44, thence S to SW corner of said section 7, thence E to SE corner of section 8, thence S to W corner of N¹/₂ of section 16, thence E to center of said section, thence S to the SW corner of N¹/₂ of SE¹/₄ of section, thence E to SE corner of N¹/₂ of section, thence S to SE corner of said section 16 T 23 R 44, thence E to the N¹/₄ corner of SE corner of said section 2 T 25 R 44, thence E to the N¹/₂ corner of section 22 T 23 R 44, thence S to the center of said section 22, thence E to the E¹/₄ corner of said section 22, thence S to the SW corner of section 23 T 25 R 44, thence E

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APPENDIX A

to the SE corner of said section 25, thence N along the E lines of sections 23 - 14 - 11 and 2 of T 23 R 44 and the E lines of sections 35 - 26 - 23 - 14 - 11 and 2 of T 24 R 44 to the NE corner of said section 2, thence W along the N lines of sections 2 - 3 - 4 and 5 to the Si corner of section 32 T 25 R 44, thence N to the Ni corner of said section 32, thence continuing N to the NE corner of the SEi of SWi of Section 29 T 25 R 44, thence W to the NW corner of SEi of SWi, thence N to the NE corner of the Wi of NWi of said 29, thence W along the N lines of sections 29 and 30 T 25 R 44 and the N lines of sections 25 and 26 T 25 R 43 to POB.

BE IT FURTHER RESLOVED that Willdam C. Bahme, C. M. Meenach and A. B. Crièler are the duly elected First Fire Commissioners of said District.

PASSED BY THE BOARD, this 29th day of August, 1947.

BOARD OF COUNTY COMMISSIONERS OF SPOKANE COUNTY, WASHINGTON. Wylie W. Brown, Chairman

T. T. Grant

H. A. Raymond

<u>Seal</u> County Commissioners Court Seal Spokane County Washington

Attest: Frank J. Glover Clerk of the Board

> by L. Freedlund Deputy

> > Filed for Record Sept 11, 1947 10:27 AM Request of County Commissioners Frank J. Glover, Spokane County Recorder.

> > > P.1

APPENDIX B

SPOKANE COUNTY FIRE PROTECTION DISTRICT NO. 8

RESOLUTION 74-1

A resolution providing for the creation, organization, regulation and maintenance of a fire department, and to repeal all resolutions or motions in conflict therewith.

Be it resolved by the Board of Fire Commissioners of Spokane County Fire Protection District No. 8, State of Washington:

DISTRICT FIRE DEPARTMENT

The District shall maintain and operate a District Fire Department composed of volunteer and classified service firefighters and other paid personnel, stations, and equipment at such locations as the Commissioners may deem adequate and sufficient.

SERVICES

The District Fire Department shall provide the following services pursuant to the protection of life and property from fire and other hazard:

<u>Fire Prevention</u>. Review and recommend the adoption and enforcement of appropriate fire prevention codes and ordinances, including requirements for automatic fire detection and extinguishing equipment and manual means for controlling or extinguishing fire until the arrival of the District Fire Department.

<u>Fire Suppression</u>. Provide a trained firefighting force to remove life hazard, confine, control, and extinguish fire, minimize damage, and assure maximum salvage and safety.

Other Municipal Services. Provide basic first aid medical attention and provide aid within the District to prevent life hazard and minimize property damage or loss in situations other than fire.

<u>Mutual Aid</u>. Act in accordance with existing mutual aid agreements when authorized by the officer in charge of the District.

Other Emergencies. Respond to emergency calls from unprotected or non-mutual aid areas when authorized by the officer in charge of the District.

ORGANIZATION

The District Fire Department shall consist of the Chief and as many subordinate officers, firefighters, and members as the Commissioners shall prescribe. The District Fire Department shall be organized as shown on the organizational chart on the following page.