

City of Scottsbluff, Nebraska

Monday, February 7, 2022

Regular Meeting

Item Reports3

Council to receive the 2021 Annual Fire Department Report.

Staff Contact: Thomas Schingle, Fire Chief

Agenda Statement

Item No.

For Meeting of: February 7, 2022

AGENDA TITLE: Council to receive the 2021 Annual Fire Department Report

SUBMITTED BY DEPARTMENT/ORGANIZATION: Fire

PRESENTATION BY: Thomas Schingle, Fire Chief

SUMMARY EXPLANATION: Council to receive a summary of the 2021 Fire Department activities and statistics

BOARD/COMMISSION/STAFF RECOMMENDATION: N/A

Does this item require the expenditure of funds? yes X no

Are funds budgeted? yes no

If no, comments:

Estimated Amount

Amount Budgeted

Department

Account Description

Approval of funds available

City Finance Director

EXHIBITS

Resolution ☐

Ordinance ☐

Contract ☐

Minutes ☐

Plan/Map ☐

Other (specify) 2021 Scottsbluff Fire Department Annual Report

NOTIFICATION LIST: Yes ☐ No ☐ Further Instructions ☐

Please list names and addresses required for notification.

APPROVAL FOR SUBMITTAL:

City Manager

Rev: 12/14/ City Clerk



Scottsbluff Fire Department

2021 Annual Fire Report

Thomas Schingle, Fire Chief

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Message from the Chief

Scottsbluff Fire Department

Organized in 1900

Protecting 6.6 square
miles

Population 14,278
(2020 census)

9 Firefighters

3 Lieutenants

3 Captains

1 Fire Prevention
Officer


1 Fire Chief

At the conclusion of 2021, we reflect on the events of the Scottsbluff Fire Department. We answered 2,270 calls for service (CFS); a decrease of 28 calls from 2020. There was a reduced volume of medical incidents, but fire incidents increased by approximately one hundred. Calls where COVID-19 was suspected or confirmed dropped dramatically, over seventy-five percent, an indicator that many sought medical help independently or did not have emergent effects; it is not an indication that the virus is gone.

Fire prevention and life safety efforts saw two improvements last year. First, we began utilizing The Compliance Engine, a web-based software by Brycer that assists in tracking certain fire and life safety inspections. They also assist in making contacts with owners/managers of occupancies to follow-up on inspections. Second, we were able to partner with the Aging Office of Western Nebraska to institute a Residential Knox Box loaner program. These boxes allow rapid access to a person's home, without having to break a door, window, or lock, in the event of an emergency. This has been a program we have been wanting to institute for some time, and with the generosity of the Aging Office, we were able to do so.

It is my privilege to submit the Scottsbluff Fire Department's 2021 Annual Report. As we have done for the past several years, we will continue to seek opportunities to serve the public and provide the highest level of service and professionalism.

Stay safe,



Tom

Mission Statement and Core Values

“The Scottsbluff Fire Department is committed to doing our job, treating people right, having an all-in attitude, and giving an all-out effort in the performance of our duties.”

Excellence- We will achieve professional excellence in all aspects of our duties.

Compassion- We believe in empathy and kindness towards the needs of those we serve.

Courage- We will display the mental strength and moral character to do what is right for the protection of our coworkers and community.

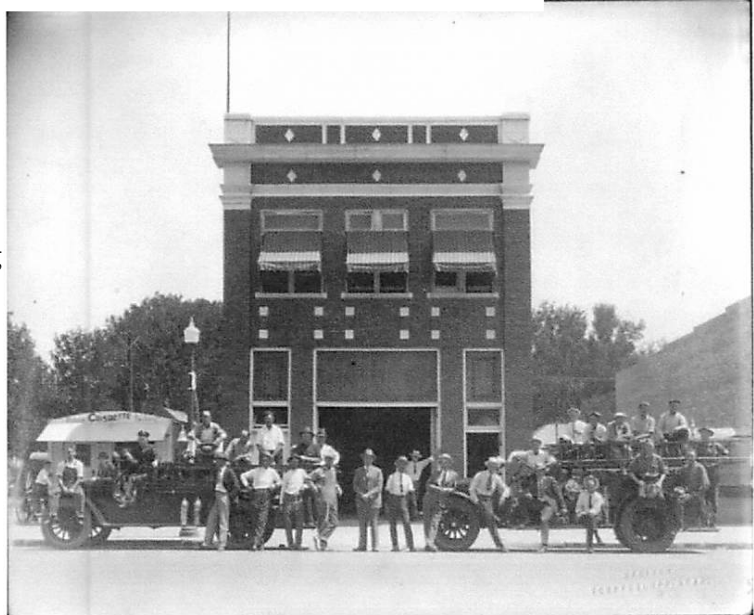
Respect- We will serve our community and each other with dignity, integrity, appreciation, and kindness.

Department History

The Scottsbluff Fire Department has a long and proud past. During the late 1840s and 1850s, thousands of people migrated west through the Scottsbluff area. By 1874, the Mormon Trail was established along the north side of the North Platte River. The City of Scottsbluff was founded in 1900. At this time, the City was protected by volunteer firefighters.

In 1916, the City hired its first firefighter. This individual maintained and drove the City's first motorized fire truck. This one individual assisted the volunteer contingent by responding during the business week. At other times, the volunteers were responsible for responding with the fire truck.

This approach met the needs of the community until early 1926, at which time three fire department shifts were created with one paid apparatus driver/operator per shift. It appears that the department was adversely impacted by the Great Depression and became all-volunteer. The department returned to paid firefighters in the late 1930s and evolved into 24-hour, paid coverage in the early 1940s. This coverage was complete with several paid officers.



The City of Scottsbluff and the Scottsbluff Rural Fire Protection District entered into an automatic-aid agreement by the late 1940s. This agreement was necessary due to a severe human resource shortage caused by World War II. In 1953, the City and the Scottsbluff Rural Fire Protection District entered into a formal agreement for joint operations. The contract called for the City to pay all necessary workers' compensation insurance fees for volunteer members, but no other money would be exchanged. This agreement continued until 1995, when the two separated.

The department continued to grow in the early to mid-1950s. However, in the late 1950s, the City experienced an economic downturn and the department experienced a substantial reduction in the department's paid-coverage. The department, again, increased its dependence on volunteer staffing to meet its needs.

In 1965, the community suffered a tragic event; a structure fire took the lives of two young children. The initial apparatus had been delayed in responding by a train. Following the fire, the City Council rapidly approved the purchase of a new fire apparatus and fire station, located on the south side of the railroad tracks. The City also approved paid staffing of the new station. By the late 1960s, paid staffing was seven personnel per shift.

In the 1970s, staffing levels continued to fluctuate. The station south of the tracks was no longer maintained and Station 1 was staffed with six personnel. The administrative staff included a fire chief, assistant fire chief, fire marshal, training chief, and a secretary.

Escalation of costs forced the deletion of the training officer position in 1995; the same year the City and Rural departments ceased joint operations. The secretary position was eliminated in 1996 and the fire marshal was transferred to Developmental Services. The lieutenant rank was also deleted in 1996. During this same time, the department was experiencing an increase in call volume. The department experimented with part-time, paid firefighters in an attempt to maintain staffing. An attempt to maintain volunteer ranks was also tried, yet several left to continue with Scottsbluff Rural after the split.

In 2003, the part-time firefighter program ended and the fire marshal was moved back to the fire department. This brought the total career force to 17; a fire chief, a fire marshal, three captains, and twelve firefighters. However, in 2006, one career position was cut, bringing the total number of firefighters to eleven.

In 2012, the need to change the volunteer-side of the department was evident. Nationally, there was a trend of far fewer volunteers than in years past. Locally, the number of active volunteers in the department had declined to four personnel. In January of 2013, shift-work began for volunteers where they would work a 12- or 24-hour shift with the paid firefighters.

Unfortunately, the volunteer ranks continued to dwindle and in 2018, the volunteer program was cancelled.

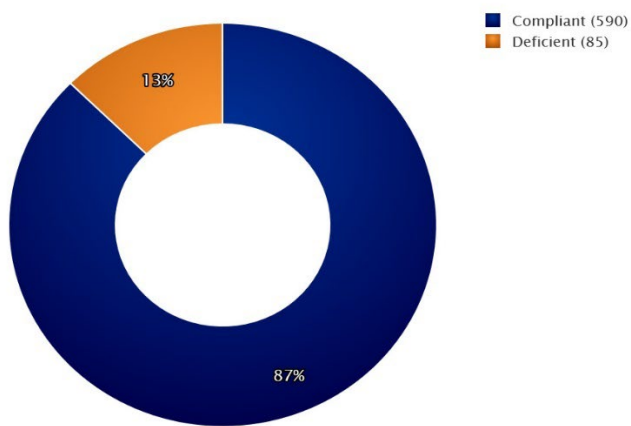


Today, the department is all-career, one of seven in the State of Nebraska (Bellevue, Grand Island, Lincoln, Omaha, Omaha Airport, and Scottsbluff). Staffing levels remain at 17, with a

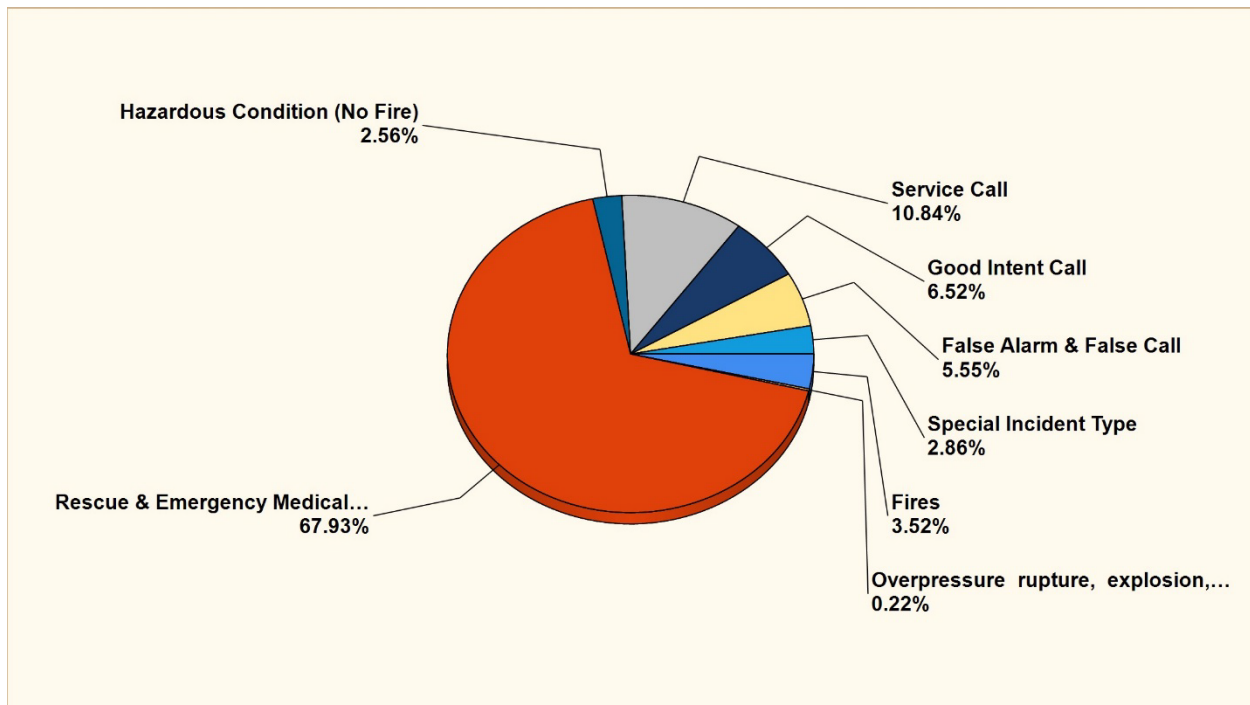
fire chief, fire prevention officer, three captains, three lieutenants, and nine firefighters. Through an automatic-aid agreement established in 2009, the Gering Fire Department and the City respond to all structure fires in each of the respective response districts.

Fire Prevention and Life Safety

Compliant vs. Deficient Systems



Calls for Service: Response Category



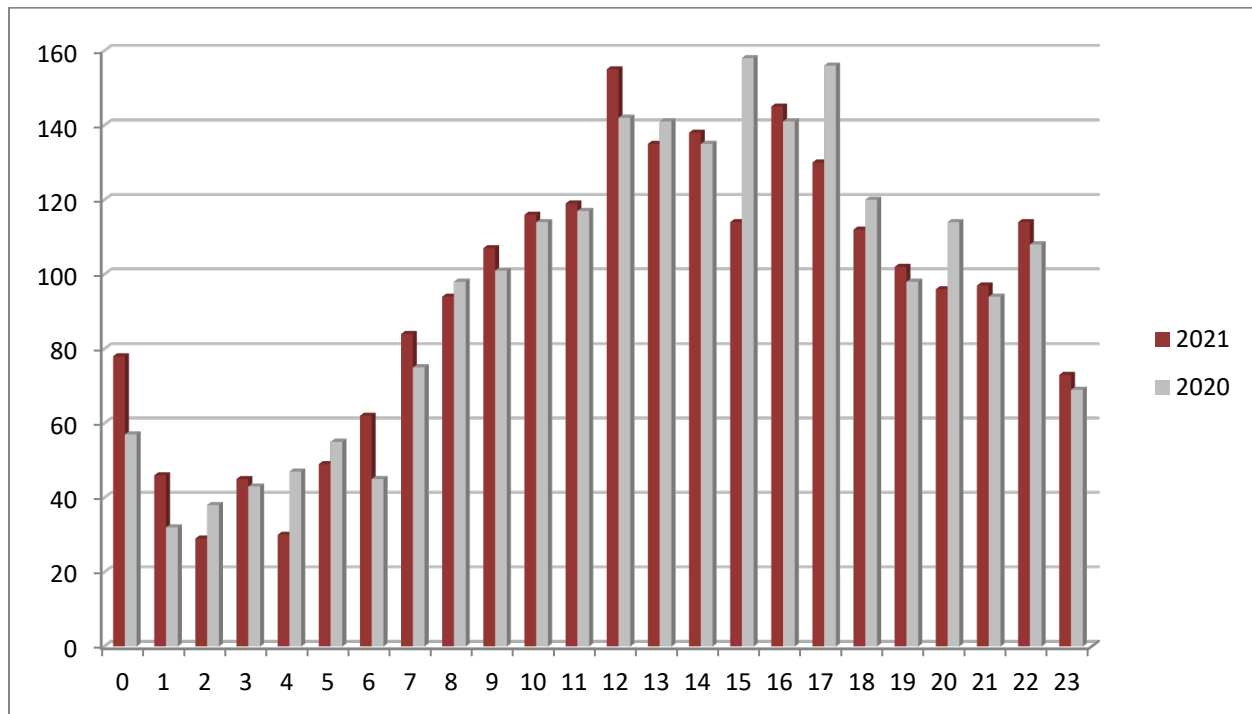
MAJOR INCIDENT TYPE	2021 #CFS	% of TOTAL	2020 #CFS	% of TOTAL
Fires	80	3.52%	85	3.70%
Overpressure rupture, explosion, overheating - no fire	5	0.22%	9	0.39%
Rescue & Emergency Medical Service	1542	67.93%	1663	72.37%
Hazardous Condition (No Fire)	58	2.56%	82	3.57%
Service Call	246	10.84%	159	6.92%
Good Intent Call	148	6.52%	163	7.09%
False Alarm & False Call	126	5.55%	82	3.57%
Special Incident Type	65	2.86%	55	2.39%
TOTAL	2270	100%	2298	100%

The nine major categories are established by the National Fire Incident Reporting System (NFIRS), which are further broken down into sub-categories. The following page shows the CFS for each sub-category for each month of 2021.

Calls for Service: Category (cont.)

INCIDENT TYPE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Accident, potential accident	1							1		1		
Attempted burning, illegal action											1	
Chemical release, reaction, or toxic condition	1	1	1	1	1			1	3			3
Citizen complaint		1	1	2	1	28	27	1		1	3	
Combustible/flammable spills & leaks	1	3	4	2	2	5		2	3	1	2	3
Controlled burning				1				1				
Dispatched and canceled en route	9	9	5	6	5	13	7	6	11	10	7	7
Electrical wiring/equipment problem	2	1	1	2	1	1	2	1		1	1	1
Emergency medical service (EMS) Incident	113	96	123	125	146	116	139	137	134	138	135	133
Excessive heat, scorch burns with no ignition							1	1				
Explosion (no fire)							1	1	1			
Extrication, rescue											1	1
False alarm and false call, other				1	1	1						1
Fire, other					1							
Good intent call, other				1					1			
Malicious, mischievous false alarm			1	1				1		3		
Medical assist				1								
Mobile property (vehicle) fire	2				1	4		2		1		1
Natural vegetation fire	2	1			1	1	1	4	3		1	
Outside rubbish fire	2		1	1		4	1	1		1	1	2
Person in distress								1				
Public service assistance	16	10	15	14	16	26	42	24	21	16	19	18
Rescue or EMS standby						1						1
Search for lost person									1			
Smoke, odor problem	1											
Special outside fire				1								
Steam, other gas mistaken for smoke	2	2		2	2	2	2	3	3	3	3	4
Structure Fire	2	3	2	4	4	7	4	2	2	3	2	4
System or detector malfunction	2	7	5		3	4	7	2		5	5	2
Unauthorized burning									3			2
Unintentional system/detector operation (no fire)	6	4	6	5	4	7	11	5	6	7	8	5
Water or ice-related rescue										1		
Water problem		1	1									
Wrong location, no emergency found	1	1	4	2		2	2	4	4			1
Total	163	140	170	172	189	222	247	201	196	192	189	189

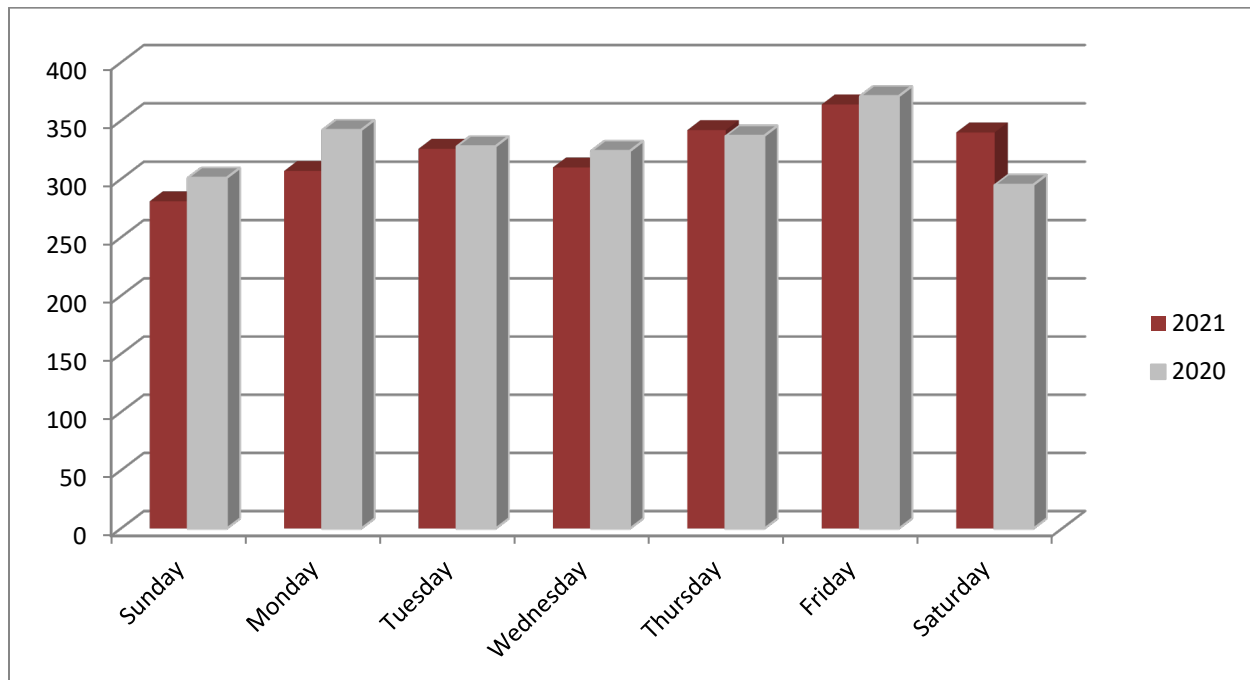
Calls for Service: Time of Day



2021				2020			
HOUR (A.M.)	#CFS	HOUR (P.M.)	#CFS	HOUR (A.M.)	#CFS	HOUR (P.M.)	#CFS
12:00 a.m.	78	12:00 p.m.	155	12:00 a.m.	57	12:00 p.m.	142
1:00 a.m.	46	1:00 p.m.	135	1:00 a.m.	32	1:00 p.m.	141
2:00 a.m.	29	2:00 p.m.	138	2:00 a.m.	38	2:00 p.m.	135
3:00 a.m.	45	3:00 p.m.	114	3:00 a.m.	43	3:00 p.m.	158
4:00 a.m.	30	4:00 p.m.	145	4:00 a.m.	47	4:00 p.m.	141
5:00 a.m.	49	5:00 p.m.	130	5:00 a.m.	55	5:00 p.m.	156
6:00 a.m.	62	6:00 p.m.	112	6:00 a.m.	45	6:00 p.m.	120
7:00 a.m.	84	7:00 p.m.	102	7:00 a.m.	75	7:00 p.m.	98
8:00 a.m.	94	8:00 p.m.	96	8:00 a.m.	98	8:00 p.m.	114
9:00 a.m.	107	9:00 p.m.	97	9:00 a.m.	101	9:00 p.m.	94
10:00 a.m.	116	10:00 p.m.	114	10:00 a.m.	114	10:00 p.m.	108
11:00 a.m.	119	11:00 p.m.	73	11:00 a.m.	117	11:00 p.m.	69

Scottsbluff Fire was busiest at 11:00 a.m. (same as 2020) and 12:00 p.m. (compared to 3:00 p.m. in 2020), and busier in the afternoon/evening hours compared to the morning hours. There was a significant increase at the 12:00 a.m. hour compared to previous years. Our numbers are similar to the national statistics reported to NFIRS.

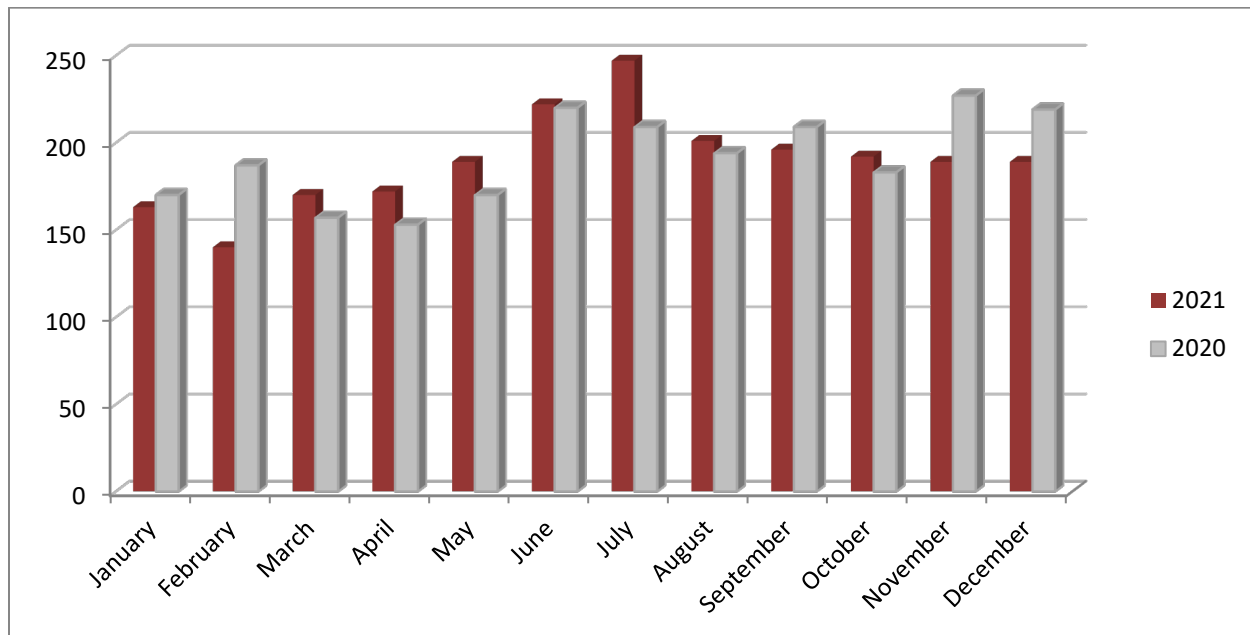
Calls for Service: Day of Week



DAY OF THE WEEK	2021 # CFS	2020 # CFS
Sunday	281	301
Monday	307	342
Tuesday	326	328
Wednesday	310	324
Thursday	342	337
Friday	364	371
Saturday	340	295

Scottsbluff Fire responded to more calls for service on Fridays, followed by Thursdays and Saturdays, respectively, in 2021, compared to Fridays, Mondays, and Thursdays in 2020. Sundays were the least busy day in 2021 compared to Saturdays in 2020.

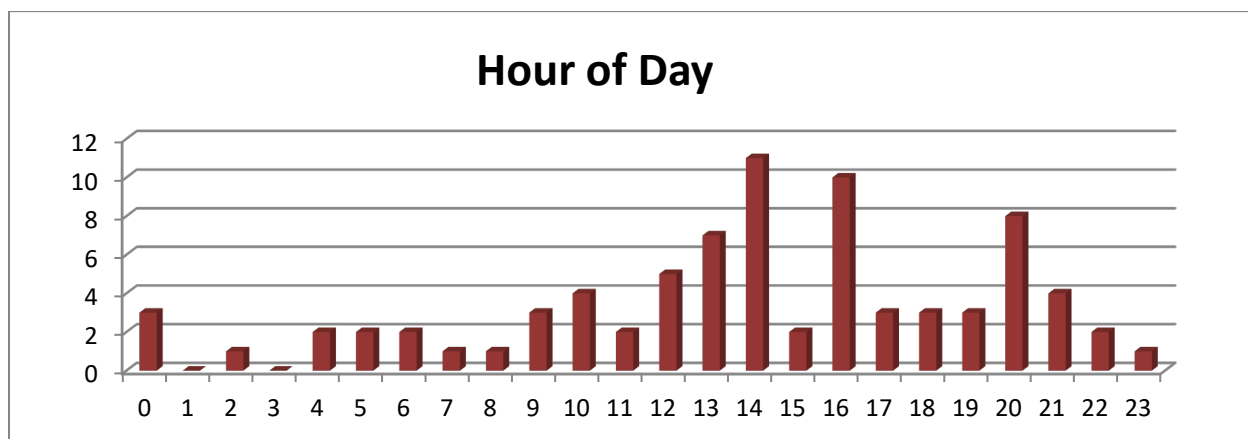
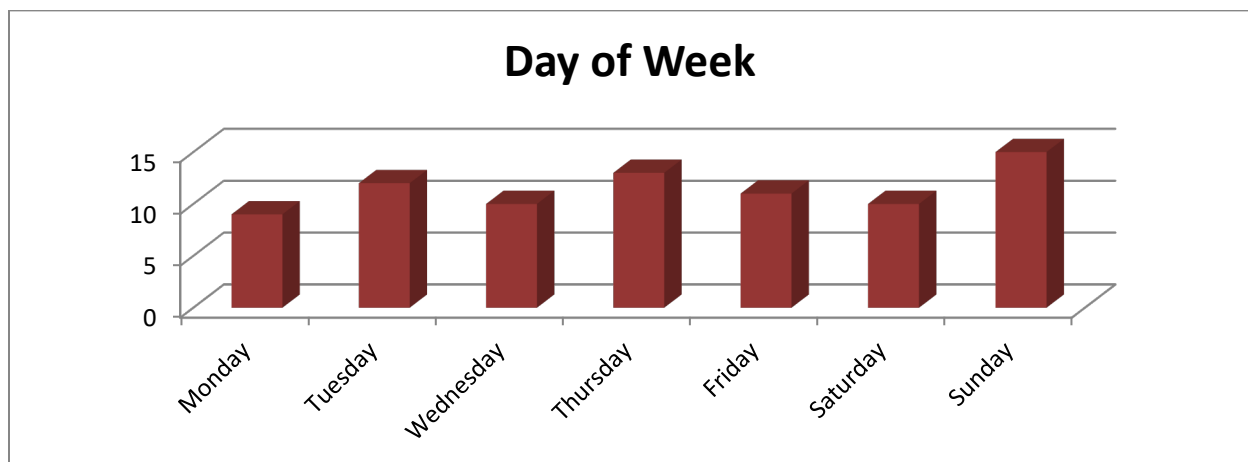
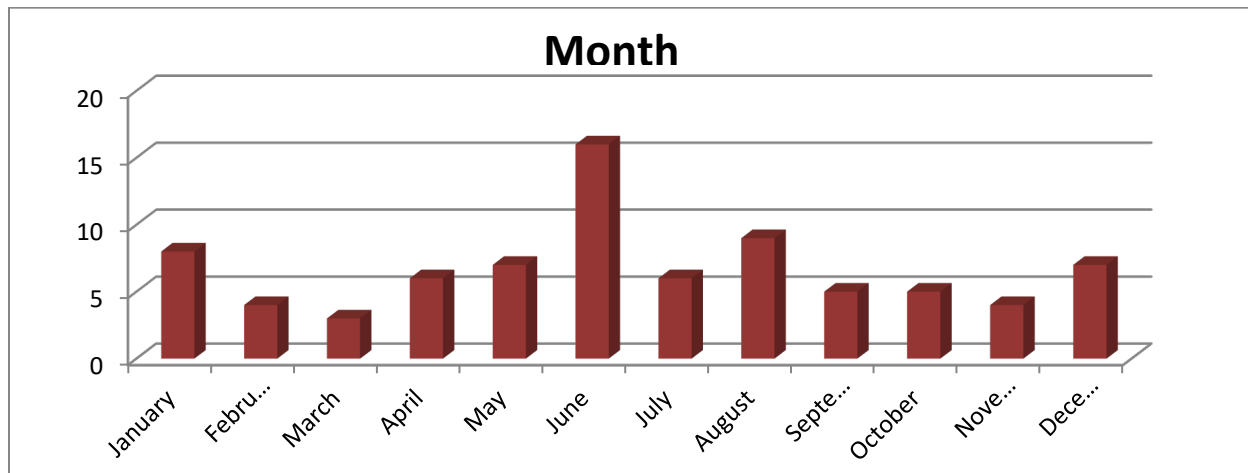
Calls for Service: Month



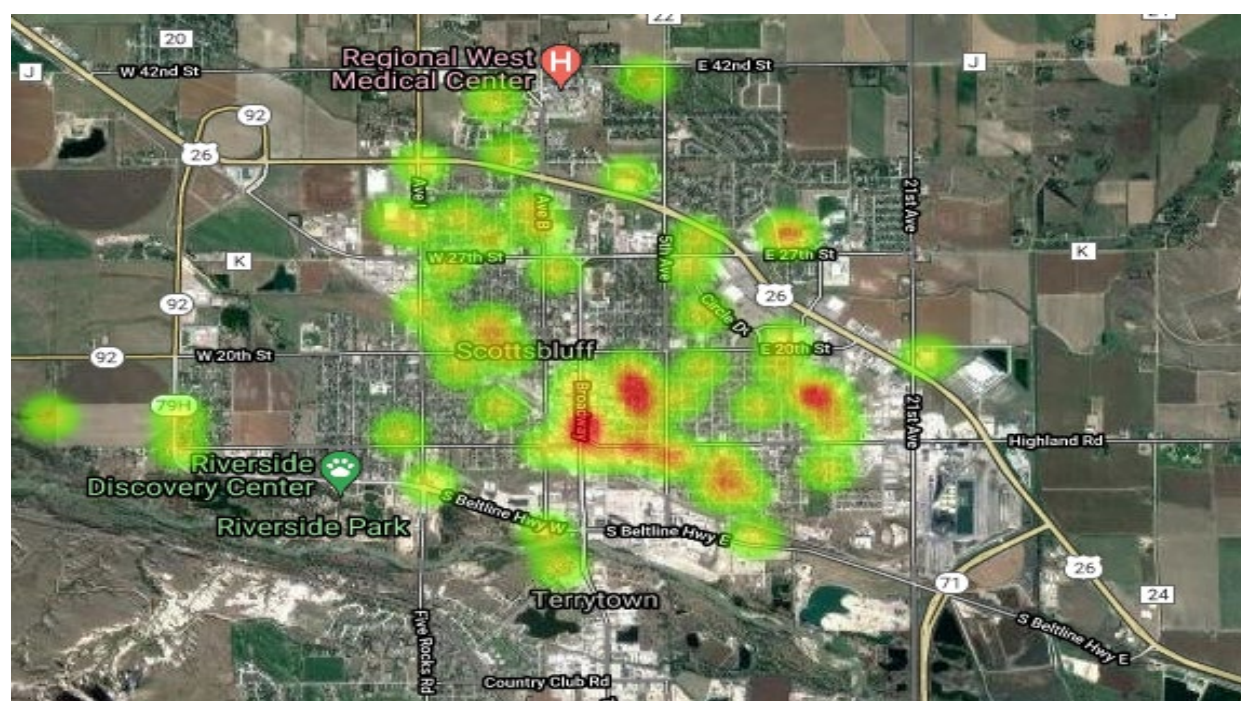
MONTH	2021 #CFS	2020 #CFS
January	163	170
February	140	187
March	170	157
April	172	153
May	189	170
June	222	220
July	247	209
August	201	194
September	196	209
October	192	183
November	189	227
December	189	219

The busiest month in 2021 was July, compared to November in 2020. Looking at the CFS numbers, July 2021 had an increase in medical emergencies and public assistance calls compared to July 2020. On average, there were three (3) structure fires per month with the majority in June (seven).

Calls for Service: When Fires Occurred

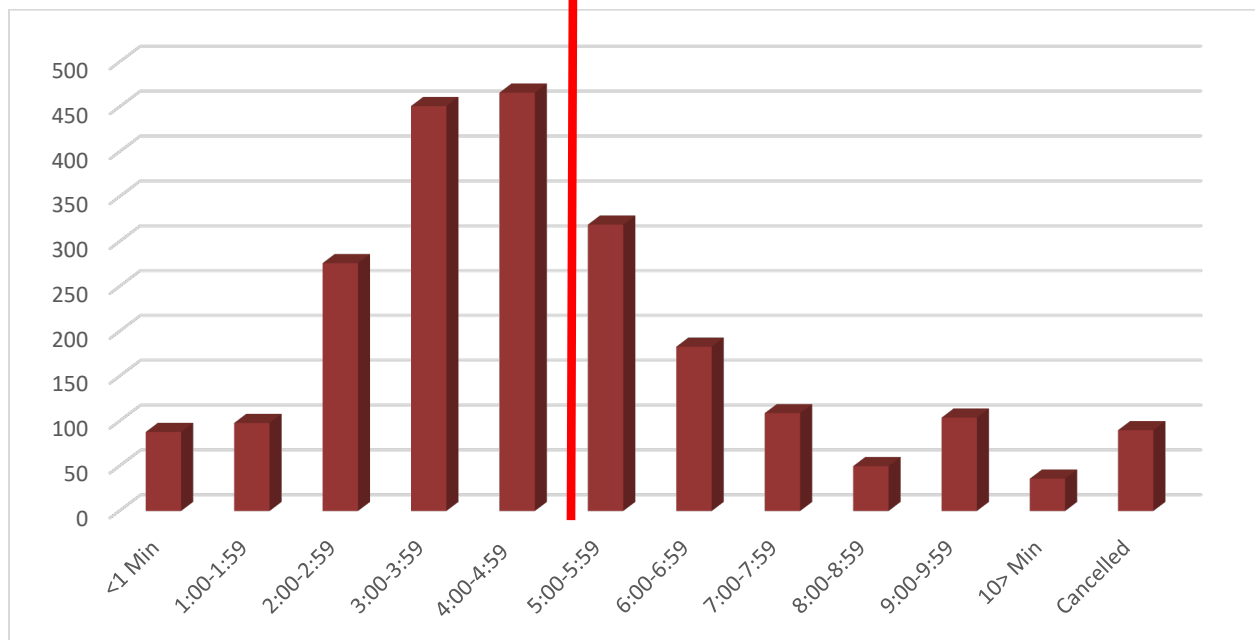


In 2021, approximately 18 percent of all fires occurred in the month of June, approximately 18 percent of all fires occurred on a Sunday, and approximately 28 percent of all fires occurred between 2:00 and 4:00 p.m..



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Calls for Service: Response Times



The Scottsbluff Fire Department responds to the majority of calls for service (61%) within five minutes or less with an average response time* of four minutes, thirty seconds (4:30). The average response time to medical incidents was four minutes, nine seconds (4:09), where the average response time to fire incidents was five minutes, one second (5:01).

The National Fire Protection Association standard for response time is five minutes (5:00) for medical incidents and five minutes, twenty seconds (5:20) for fires ninety percent (90%) of the time. The standard allows a turnout time (ability to receive the call and get on the truck) of one minute for medical incidents and one minute, twenty seconds for fire incidents and a drive time of four minutes. The majority of the northeast and southeast zones of the city cannot be covered in a four-minute drive time from the station. The addition of a second station in the northeast zone would alleviate these gaps, based on data we collected in 2020 (map on next page).

There are a few conditions that prevent meeting the five-minute response goal such as overlapping incidents, in which we could not respond due to being engaged with another incident. Overlap occurred 20.75 percent of the time which accounts for nearly half of all calls for service over the five-minute response time. Other factors include distance (outside of city limits) and inclement weather.

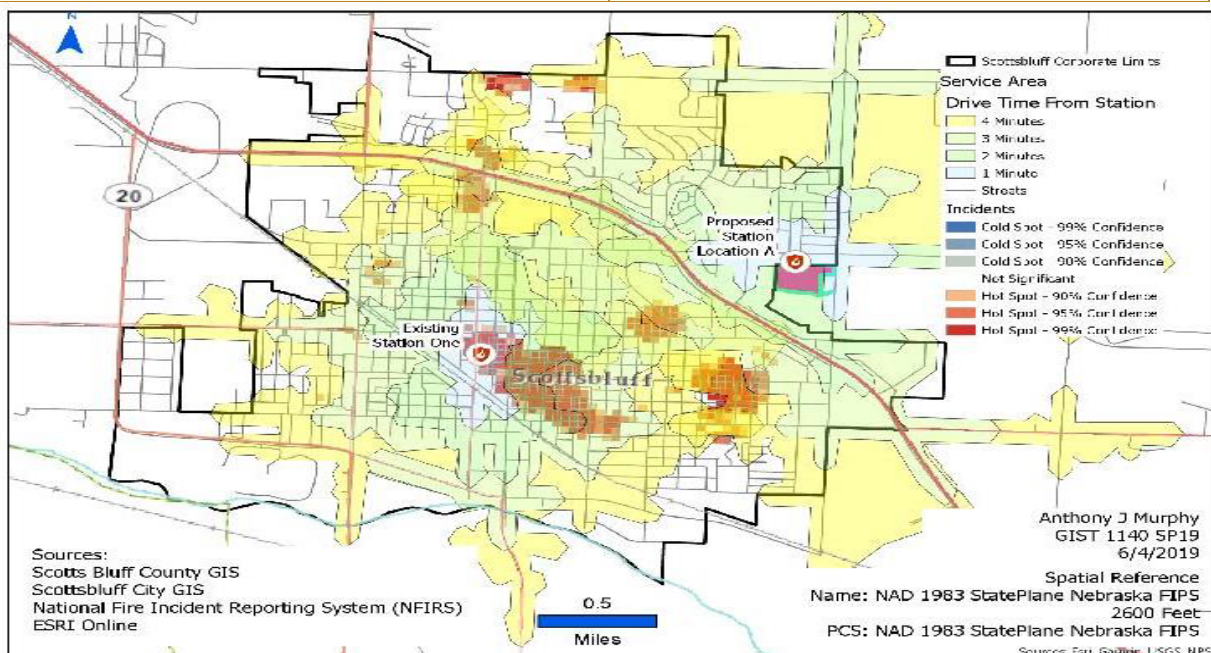
*Response time is calculated from time of alarm (when the fire department is notified) to time of arrival.

Calls for Service: Response Times (cont.)



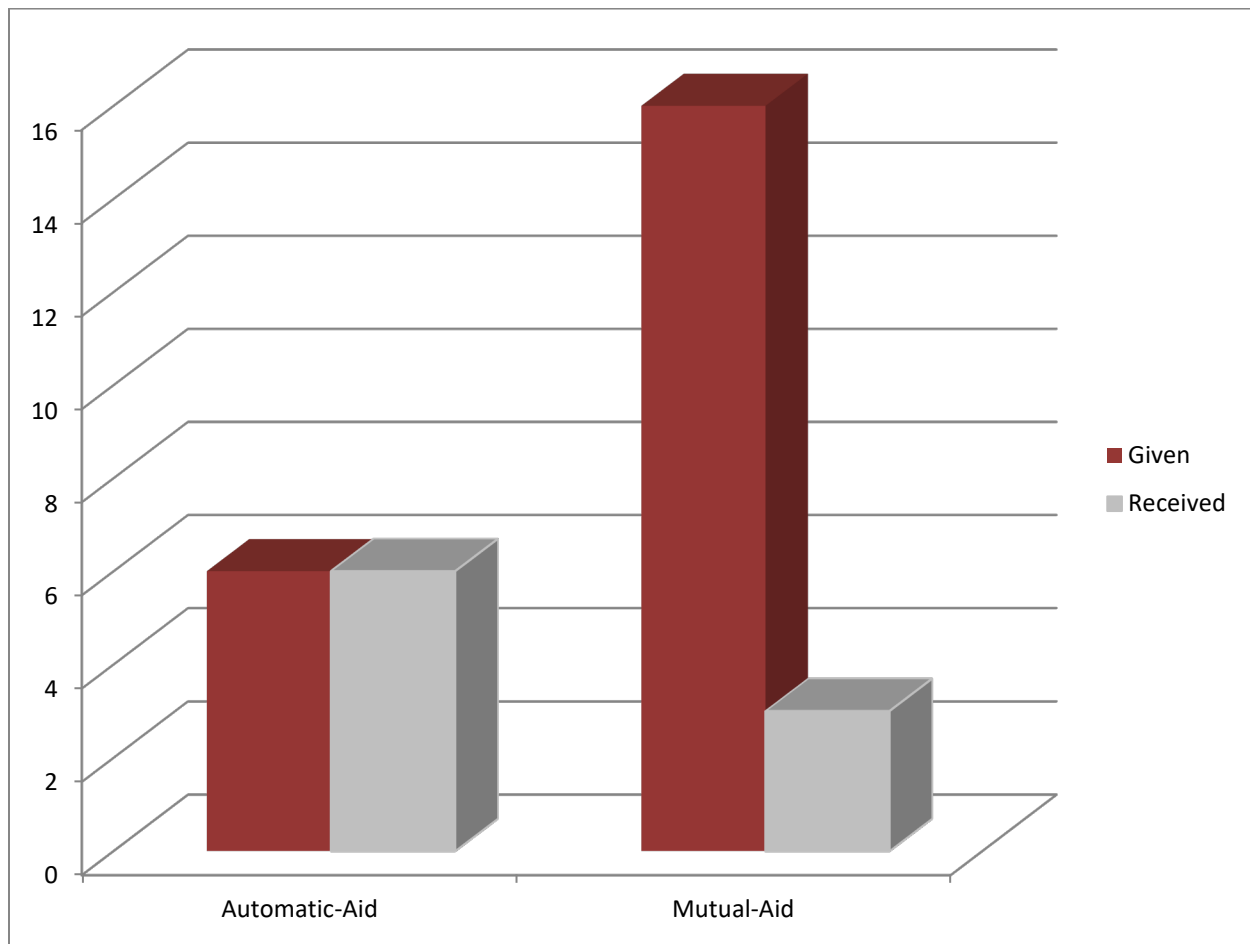
The east/west dividing line is Broadway Avenue. The North Zones are defined north of 27th Street and the South Zones are defined by south of Overland. Between 27th Street and Overland is identified as the Central Zones. These zones are for tracking purposes. The map below shows four-minute drive coverage from a second station near WNCC.

ZONE	AVERAGE RESPONSE TIME in minutes (Dispatch to Arrived)
10 - Northwest City	04:58
20 - Northeast City	05:46
30 - West Central City	03:47
40 - East Central City	04:12
50 - Southwest City	04:43
60 - Southeast City	05:35
70 - Outside City Limits	18:37

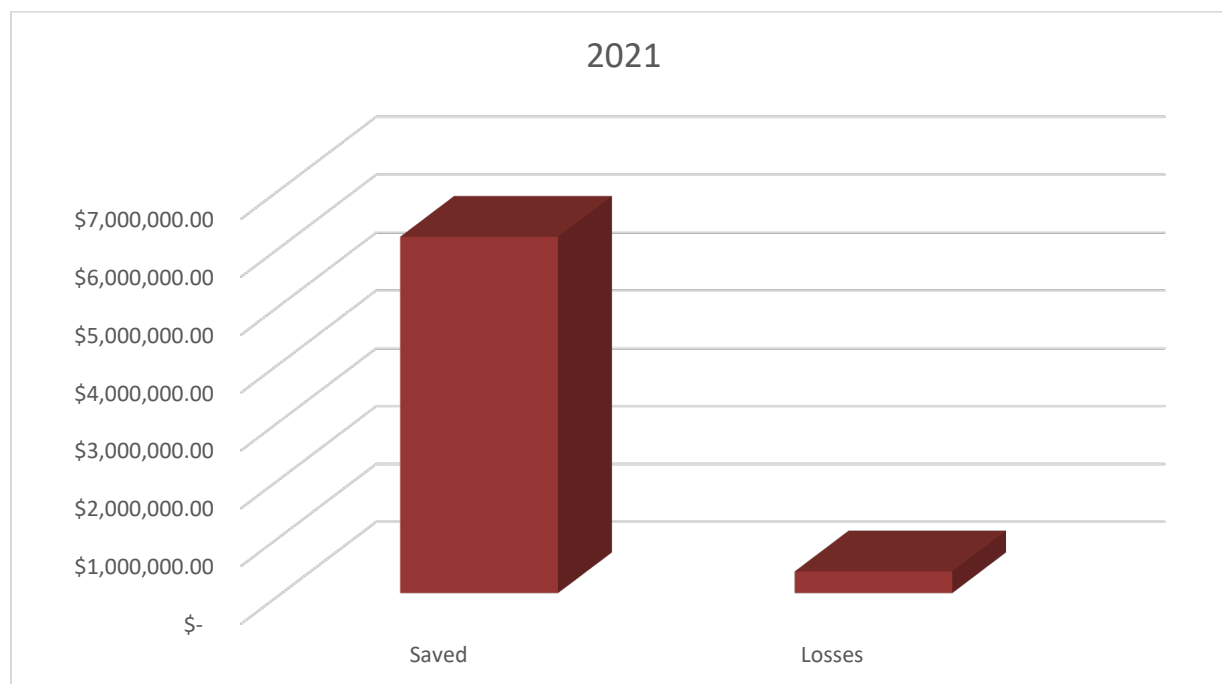


Calls for Service: Aid Given and Received

Scottsbluff Fire Department has an automatic-aid agreement with Gering Fire Department in which both agencies are simultaneously dispatched (automatically) for all structure fires. All public safety agencies in Scotts Bluff County have a mutual-aid agreement in which resources may be requested and sent, if available. We thank our fellow agencies for the assistance we provide each other and our great working relationship.



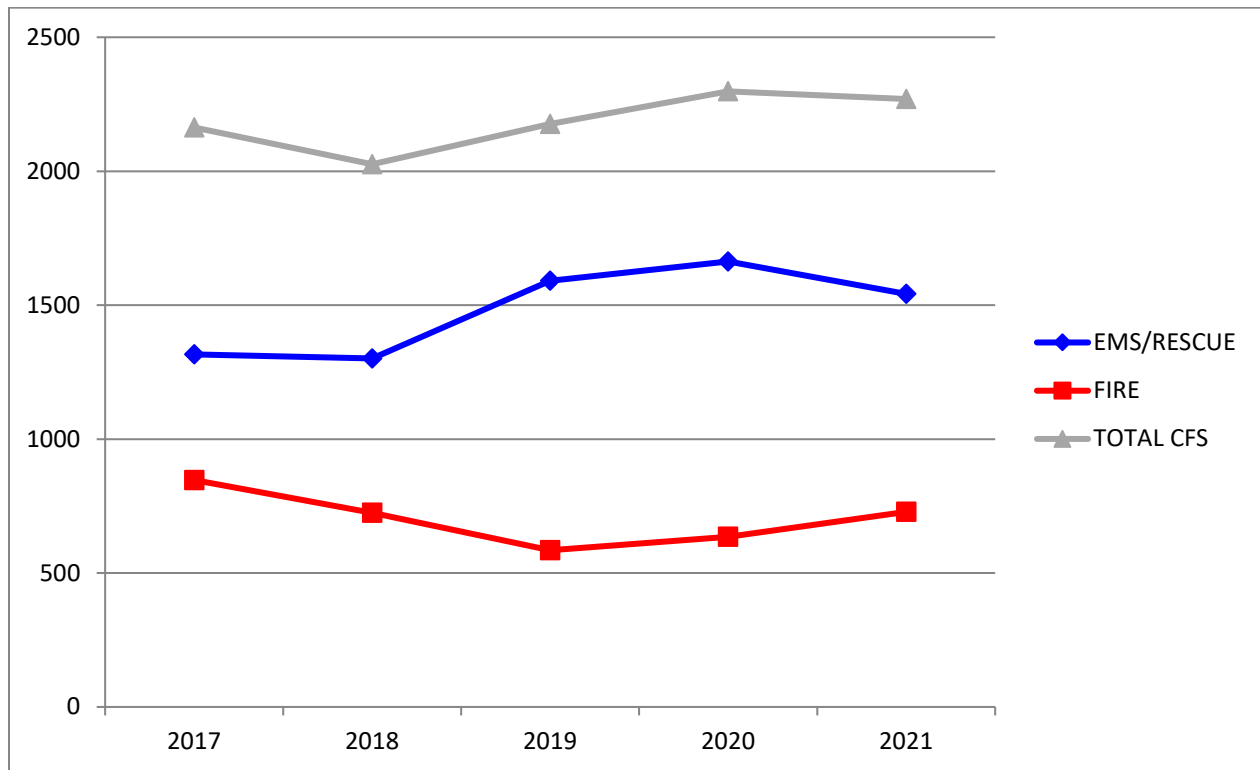
Calls for Service: Estimated Fire Loss



In 2021, it is estimated that there were \$375,580 in property loss resulting from fire in Scottsbluff. The estimated property valuation of those fires was \$6,535,692 indicating ninety-four percent (94%) of property was saved. Comparing to 2020, the property loss resulting from fire was an estimated \$162,970 of an estimated \$120,587,327 property valuation. This equates to ninety-nine percent of property value being saved.

A major difference in these numbers is the type of property, where three of the fires in 2020 were high valuation, commercial properties with fire protection systems. The majority property loss due to fire is found in residential structures where no fire protection systems exist. Residential sprinkler systems would help to increase life safety and reduce property loss.

Calls for Service: Five Year Comparison



A comparison of calls for service shows a slight decrease in emergency medical (EMS) calls from the year previous, but a slight increase in fires, fire alarms and other emergency incidents. The overall trend, compared to the past five years, shows an increase in EMS incidents and steady numbers for fire incidents. Since 2018, we have been experiencing an average of two-hundred additional calls for service each of the last three years.

Apparatus

Apparatus	Year/Make/Model	Features/Use
Engine 1	2016 KME Pumper	Primary pumper, 1500 GPM pump, 750 gallons of water, extrication equipment
Engine 2	1996 Becker/Freightliner Pumper	Reserve pumper, 1500 GPM pump, 750 gallons of water
Rescue 1	2017 SVI/Freightliner	Basic Life Support, technical rescue, hazardous materials response, extrication equipment
Tower 1	2010 Pierce Arrow XT	Aerial platform (100 foot), 1500 GPM pump, 300 gallons of water
Brush 1	2008 Dodge 3500	Type 6 engine, 300 gallons of water, forestry hose, 250 GPM pump,
Unit 1	2017 Ford F150	Fire Investigation/Inspection vehicle
Unit 2	2020 Chevy 1500	Fire Chief/Investigation/Response vehicle
Unit 11	2000 Chevrolet G30	Passenger Van/Personnel Carrier
Dive Bus	2000 Bluebird	Dive Rescue equipment, breathing air cascade
Zodiac	1998 Zodiac Rubber Inflatable Boat	Used to get divers to dive areas and negotiate waters
SeaDoo	2002 Sea Doo, personal watercraft	Used to clear dive areas
Hazmat Trailer	1998 Pace, 28 foot enclosed trailer	Hazmat response, decontamination equipment, breathing air cascade
UTV	2005 Polaris UTV	Utility vehicle with snow plow



Personnel Hours

Department Statistics

Average Years of
Service: 10.1 years

Average age of
members: 40.18 years

Average time on-scene
of incident: 18 minutes

Average CFS per
person: 320.28

Average number of
responding personnel to
structure fires: 4.25

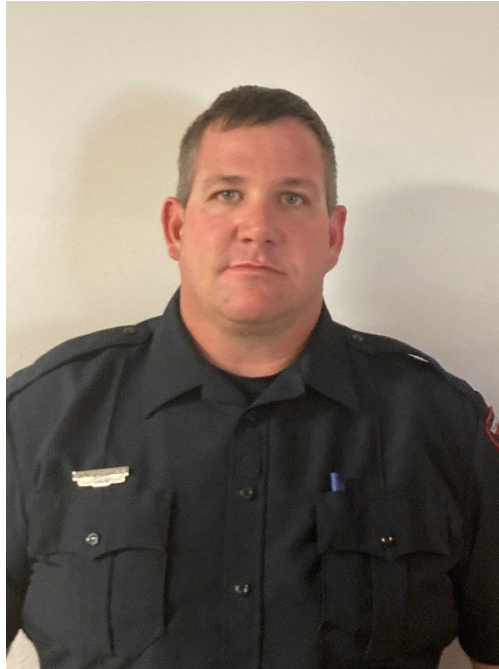
Average number of
responding personnel to
all CFS: 3.31

Activity	Total Hours
Calls For Service	2165.75 hours
Training	2403.75 hours
Public Education	170.50 hours
Fire Prevention	225 hours
Maintenance	1590 hours
EMT/Paramedic Ride-Along	322.5 hours



Personnel Hired, Promoted and Retired

The Scottsbluff Fire Department hired one new member in 2021 to replace a member that left to pursue other opportunities. We welcomed our newest member Joseph Sittner on July 19, 2021, and he was assigned to Shift C. There were no promotions and no official retirements in 2021.



Joseph Sittner
C Shift
July 19, 2021

Special Operations Teams

The Scottsbluff Fire Department is equipped to handle a variety of specialized operations which include hazardous materials, technical and dive rescue emergencies, and brush/wildfires.

In 2021, the Scotts Bluff County Mutual Aid Association came together to develop dive rescue, technical rescue and hazmat as county-wide teams. The concept was to utilize a few people from each agency so as not to deplete the resources of any one agency on any of these lengthy-type incidents. The teams started with training and are moving to the next phase of developing procedures.



Scottsbluff Fire is one of ten State Emergency Response Teams (SERT) that handle hazardous materials response in the State of Nebraska. The Scottsbluff Fire Department, when requested and authorized, covers the 11 counties of the Panhandle to mitigate hazardous materials releases. In 2021 we were able to upgrade the chemical identifier to a more compact and robust model to the amount of \$65,000.

Last year was very dry and hot, which produced several fires in the area. Scottsbluff Fire provided resources on six significant wildfires, two of which were in the neighboring counties of Dawes and Morrill. Cumulatively these fires burned over an estimated 22,000 acres and possibly as much as 24,000 acres. The picture to the right shows the Buffalo Creek Fire from the command post.



Public Protection Classification

The City of Scottsbluff has a Public Protection Classification (PPC) rating of 3; a rating maintained since 2001. This rating is established through an assessment performed by the Insurance Services Organization (ISO), who determines the level of fire protection services in a community. The last assessment was performed in 2017. A lower rating potentially lowers insurance rates for the community. The following is the historical trend of the PPC rating for the City of Scottsbluff (Community Risk Reduction was not part of the assessment in 2013 and 2001; it only became an assessment in recent years).

	2017	2013	2001	Total Possible
Emergency Communications	8.59	8.3	7.07	10
Fire Department	33.74	32.52	32.29	50
Water Supply	32.75	33.39	38.51	40
Community Risk Reduction	3.45	-	-	5.5
Divergence	-2.88	-3.69	-6.34	-
Total	75.65	70.52	71.53	105.5

PPC	Points
1	90.00 +
2	80.00 to 89.99
3	70.00 to 79.99
4	60.00 to 69.99
5	50.00 to 59.99
6	40.00 to 49.99
7	30.00 to 39.99
8	20.00 to 29.99
9	10.00 to 19.99
10	0.00 to 9.99

Throughout 2021, we continued to work toward gaining points to decrease our PPC rating. Over the past years we have established a hose testing program and a hydrant maintenance program (in partnership with the Water Department). We have great equipment and have ensure testing of ladders, pumps, and breathing apparatus. In 2021, we continued our efforts to focus on



decreasing the PPC rating by establishing training guidelines that meet the evaluation criteria. The training program is constantly being evaluated to improve this area. Communications will be improving in the coming year with a major, and much needed, radio upgrade. We believe that our score will improve in the areas of emergency communications, water supply and community risk reduction. We should improve slightly in the fire department

category, with the exception our daily staffing levels are not adequate to gain significant points. We will continue these efforts through 2022 and we anticipate our next evaluation sometime in the coming year.