



Boise Fire Metrics Report

2022 Year in Review

Compiled 3/14/2023 by Joanna Zibbell
Sources: Boise Fire NFIRS Reports and Ada County Computer-Aided Dispatch

Definitions

90th Percentile - The value where 90% of the data falls below. For example, if the 90th percentile for BFD response times is 8:00 minutes, BFD responds to 90% of calls faster than 8:00 minutes.

Average – the average set of data that is calculated by dividing the sum of the data by the number of items in the set.

Boise Response Area – Boise city limits and contracted areas.

Boise City Limits – BFD's response area excluding contracted areas.

Call volume – the number of incidents dispatched to a unit regardless of whether the unit went enroute or arrived on scene.

Contract Areas – Whitney, NACFR (Boise), and Sunset response areas.

Department response time – The time from department notification to arrival on scene for the first arriving apparatus.

Effective Response Force - The Effective Response Force (ERF) is the number of people and apparatus that are necessary for initial attack on a structure fire. Boise Fire has determined its ERF is three engines, one truck, one battalion chief, and one safety officer.

Emergent calls - Fire, EMS, hazmat, and explosive incidents with a priority code of P5 - Delta, P6 - DeltaPlus, or P7 – Echo (assigned by dispatch), that were traveled to with lights and sirens. The most common priority response fields in CAD include from lowest to highest priority: Omega, Alpha, Bravo, Charlie, Delta, Delta Plus, and Echo (life threatening).

Response reliability - The probability that the engine that is first due in an area will arrive first to incidents in that area. It is a measure of availability and busyness of engine companies.

Turnout time – The time from department notification to when the apparatus is enroute.

Travel time – The time from when the apparatus is enroute to arrival on scene.

Wildland urban interface – The zone of transition between unoccupied land and human development. It is the line, area or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

Highlights

Call Volume in Boise's Response Area

There were 5.05 % more incidents in 2022 than 2021. Call volumes have increased by 15.9% from 2018 to 2022.

From 2018 to 2022 Boise had 16% more calls, NACFR had 7% more calls, and Whitney had 26% more calls.

Quarter 3 and the month of July had the highest call volume in 2022.

Every first due saw an increase in calls except for Station 4, Station 7, Station 17, and Station 12.

In Boise's Response Area all NFIRS categories were up from 2021 to 2022 except for Hazmat and Fires:

- EMS increased by 4.8%
- Service Calls increased by 7.7%
- Good Intent Calls increased by 0.3%
- False Alarms increased by 18.5%
- Fires decreased by 4.4%
- Hazmat decreased by 3.6%

Safety officer responses increased by 26.8% from 2021 to 2022. Every category increased except for service calls.

Times

90th percentiles and averages are reported for call processing in Boise's response area, turnout times for calls in all jurisdictions, and travel and response times for Boise City Limits and contracted areas. 10 emergent incidents within the quarter are required to run the 90th percentile calculation. 90th percentiles:

Call processing time was 0:02:52 in Boise's Response Area.

Turnout times was 0:02:13 for responses to all jurisdictions.

Travel times in Boise city limits was 0:05:42 and 0:06:55 for contracted areas.

Response times in Boise city limits was 0:07:07 and 0:08:21 for contracted areas.

73 incidents met the criteria for an effective response force (ERF) in 2022 in Boise's Response Area. The 90th percentile for response time in Boise City Limits was 0:12:54. The NFPA goal is 0:09:20.

Response Reliability

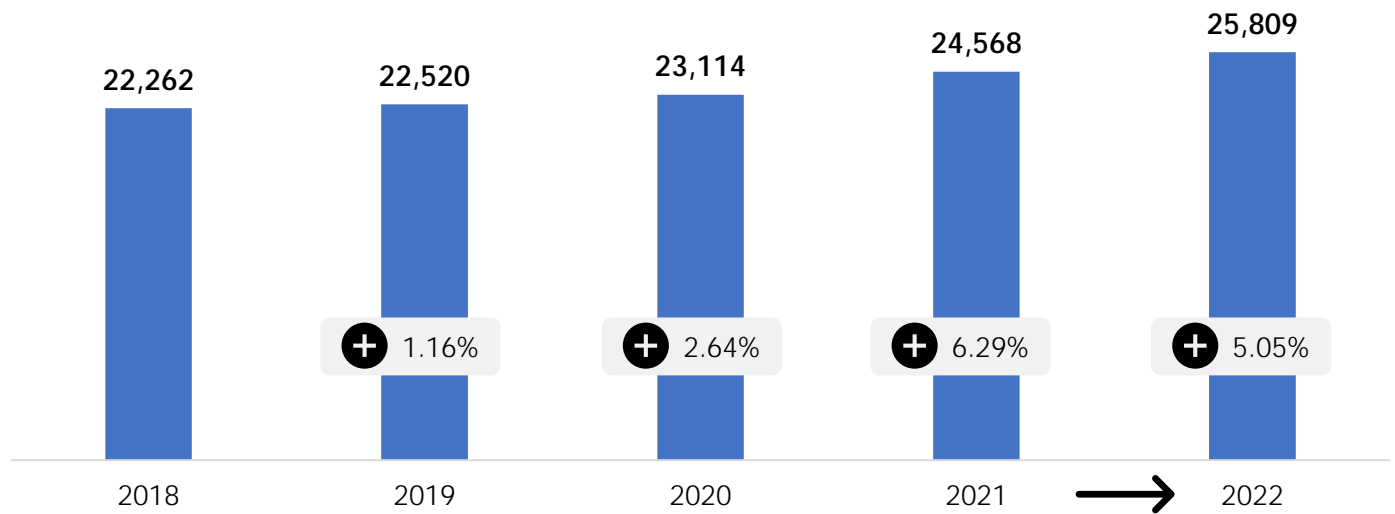
Engine 2 had the highest response reliability for arriving first in their own first due. Engine 2 also had the highest response reliability for emergent incidents in their own first due. The overall response reliability for the response area is 76.6%.

Casualties

Firefighter casualties decreased by 7.3% from 2022 to 2021. Injuries related to training have decreased by 45% from 2021 to 2022.

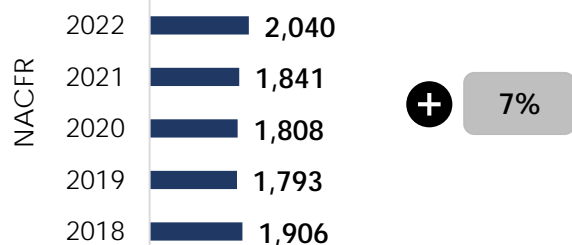
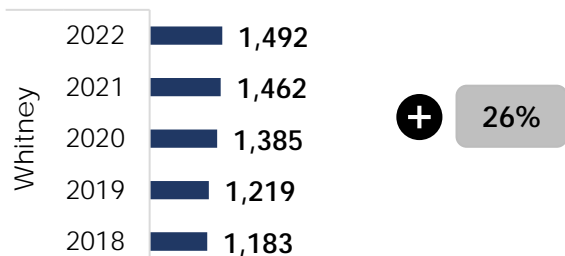
There were 10 civilian casualties in 2022, no deaths. The majority of civilian injuries occur in building fires. Overall, 0.05% of incidents result in a civilian casualty.

Call Volume Boise Response Area



Since 2018 Whitney Fire District has had the largest percent increase in incidents from 2018 to 2022 at 26%.

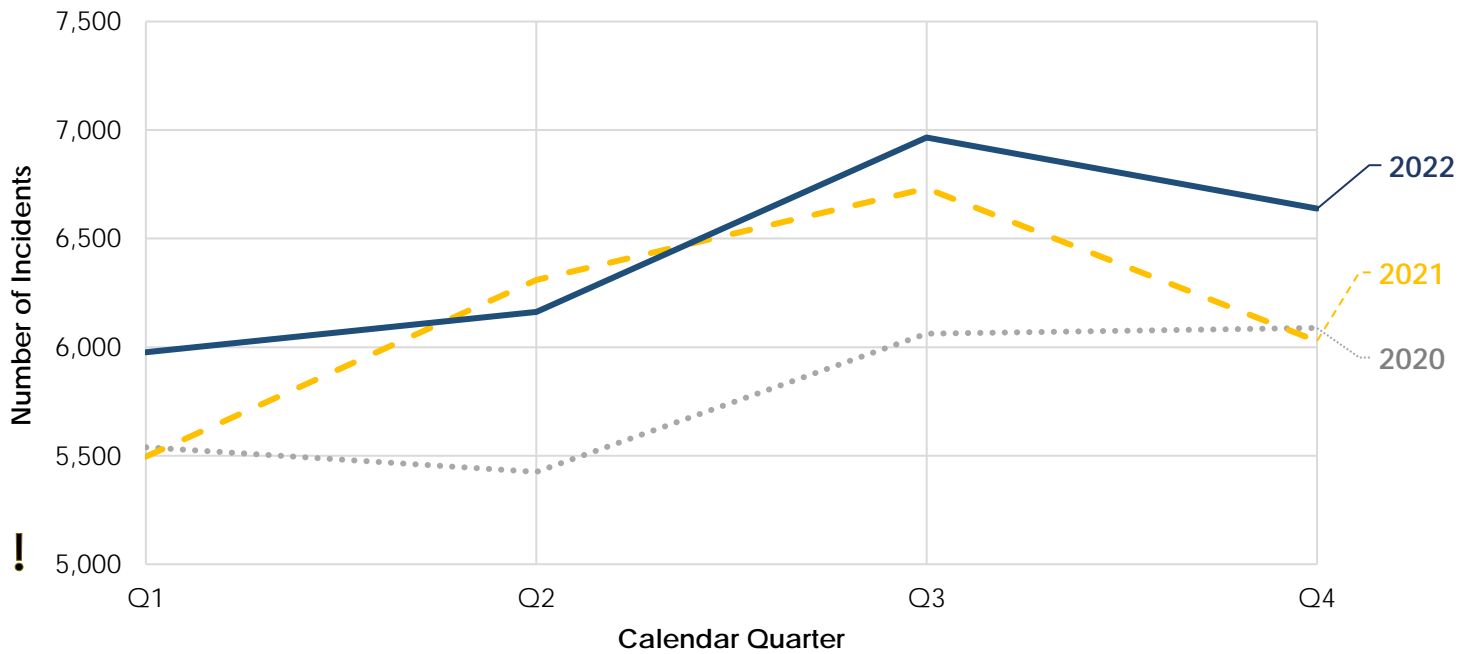
From 2021 to 2022 the number of incidents increased by 5.05%.



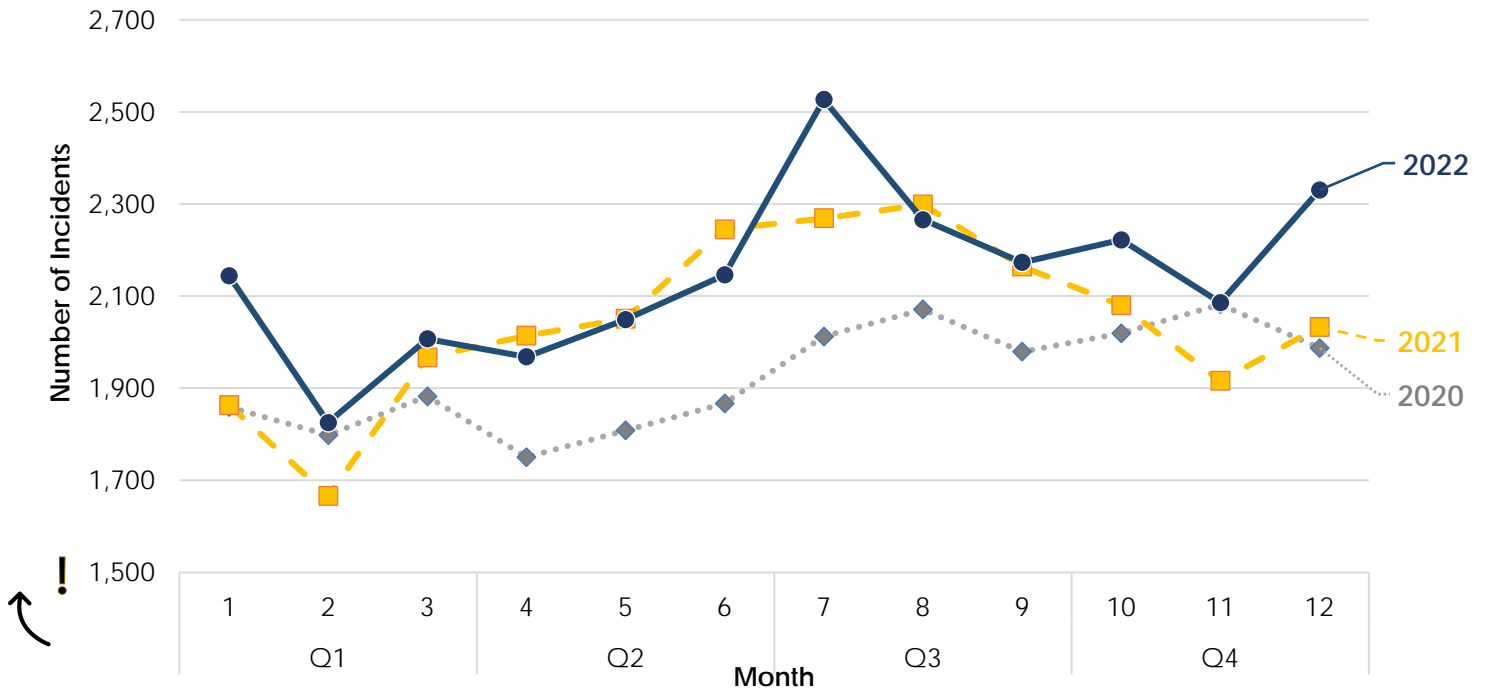
Even though the former BFD station 20 first due is no longer in Boise's response area, calls to NACFR still increased from 2021 to 2022.



Incidents in Boise Response Area by [Calendar Quarter](#)



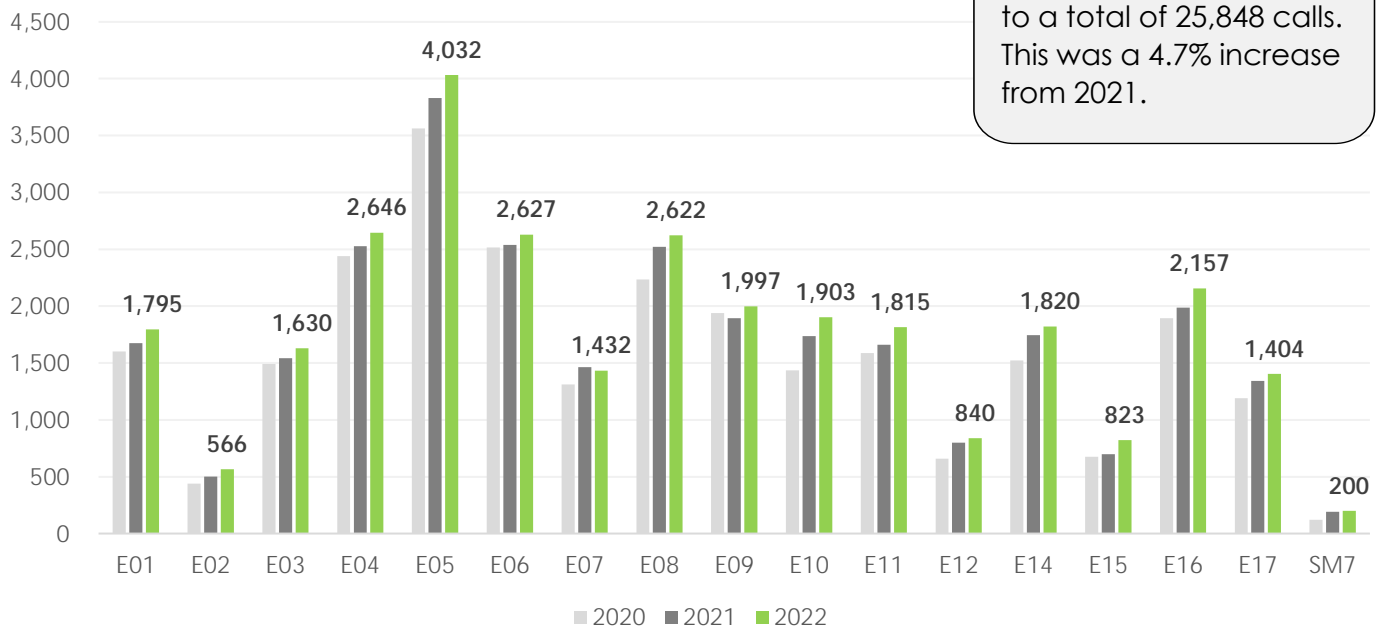
Incidents in Boise Response Area by [Month](#)



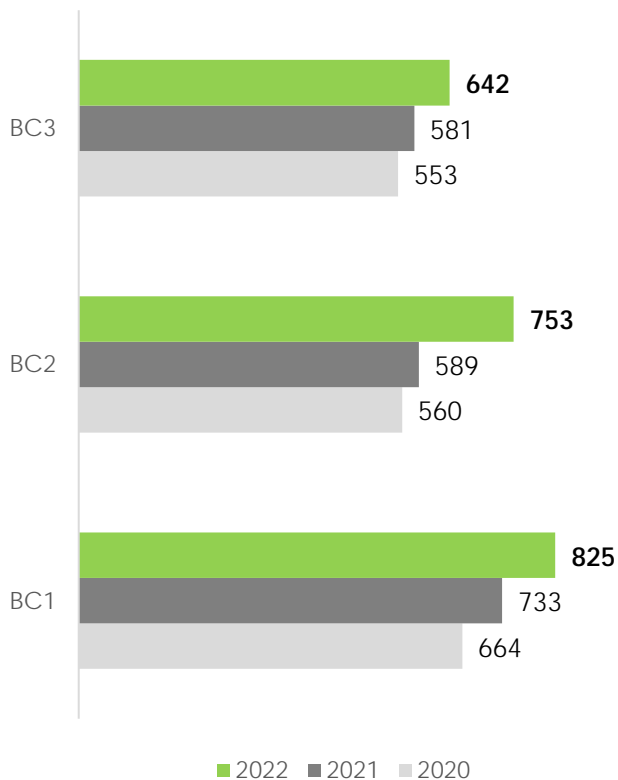
Note the axis does not start at 0 to more effectively illustrate changes between quarters and months

Call Volume by Apparatus – All Jurisdictions

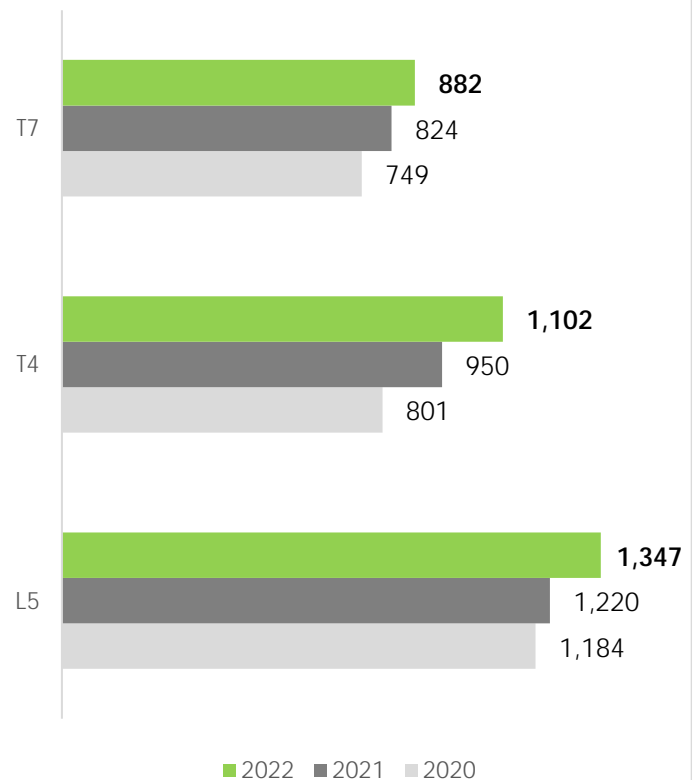
Call Volume by Engine



Call Volume by BC

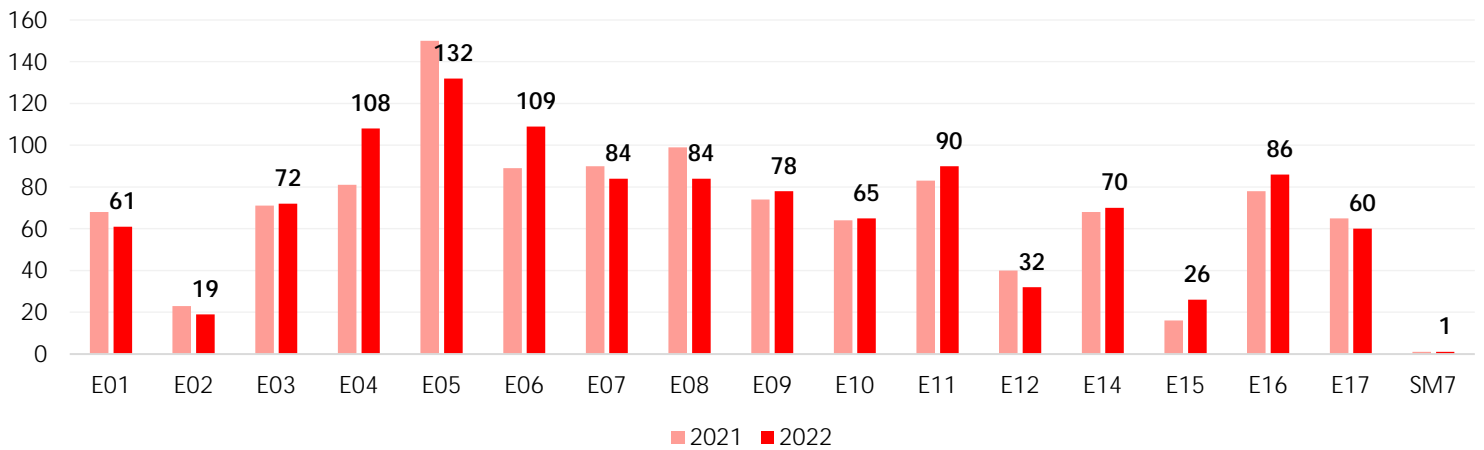


Call Volume by Truck

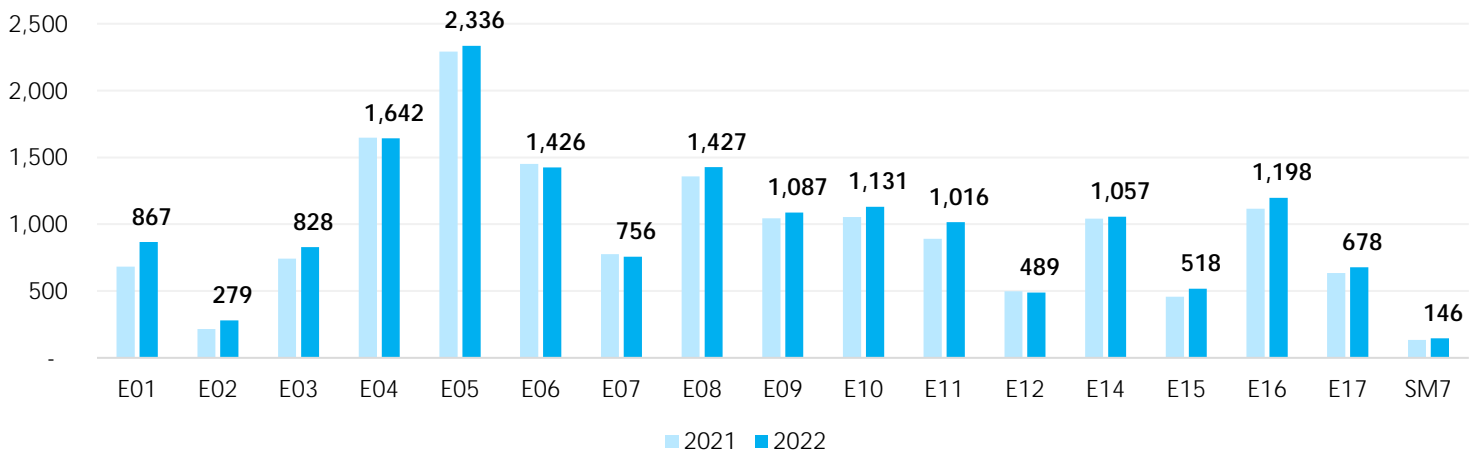


2022 Call Volume by NFIRS Incident Type Code & Engine

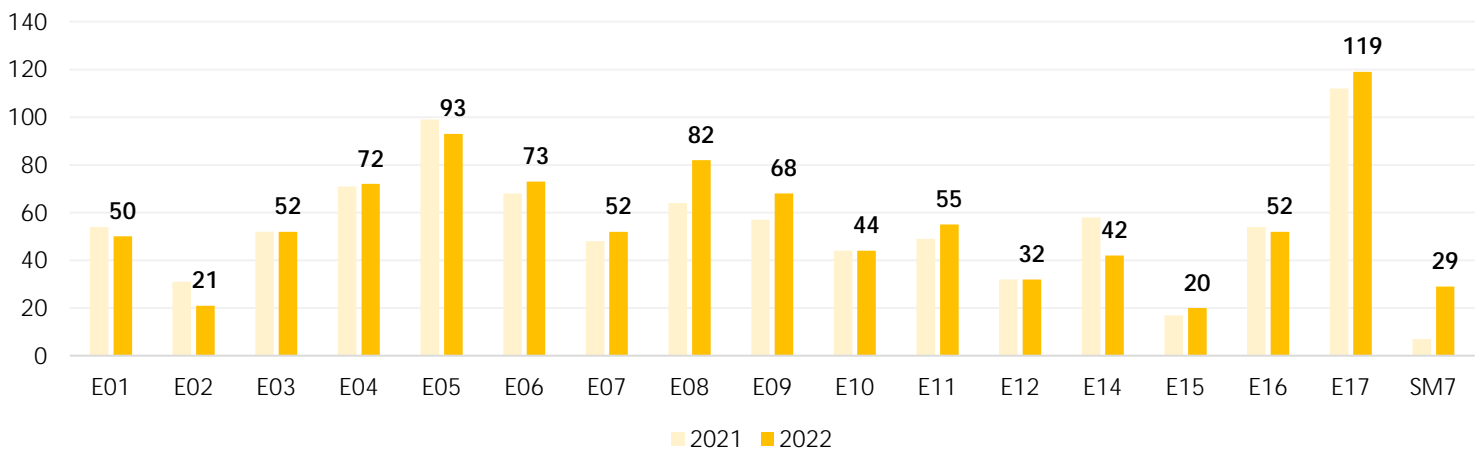
Fire Incidents - NFIRS 100s



EMS Incidents - NFIRS 300s

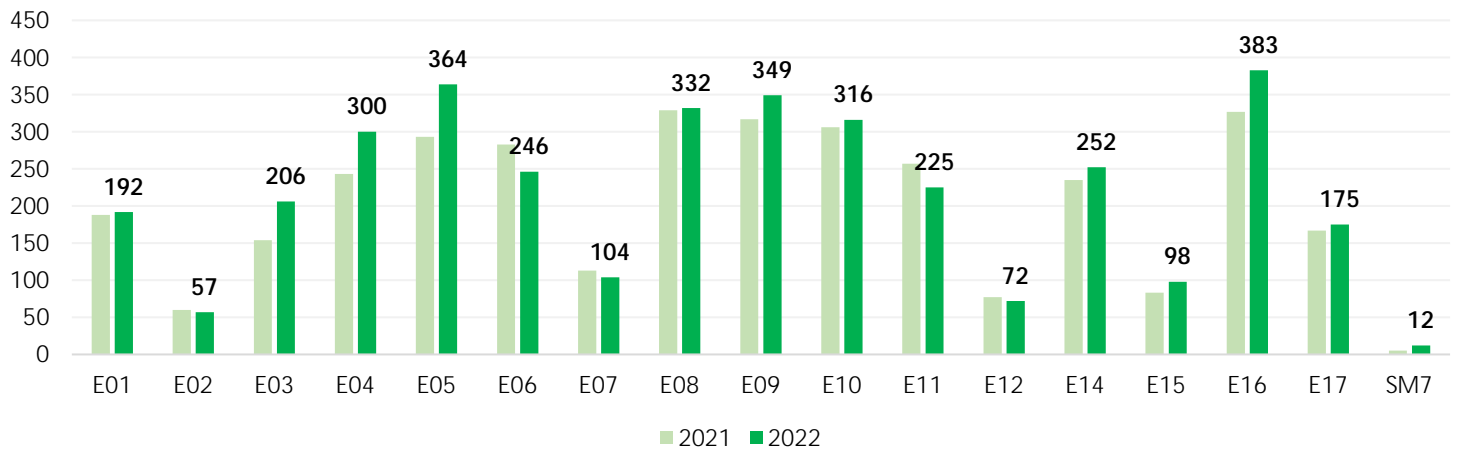


Hazmat Incidents - NFIRS 400s

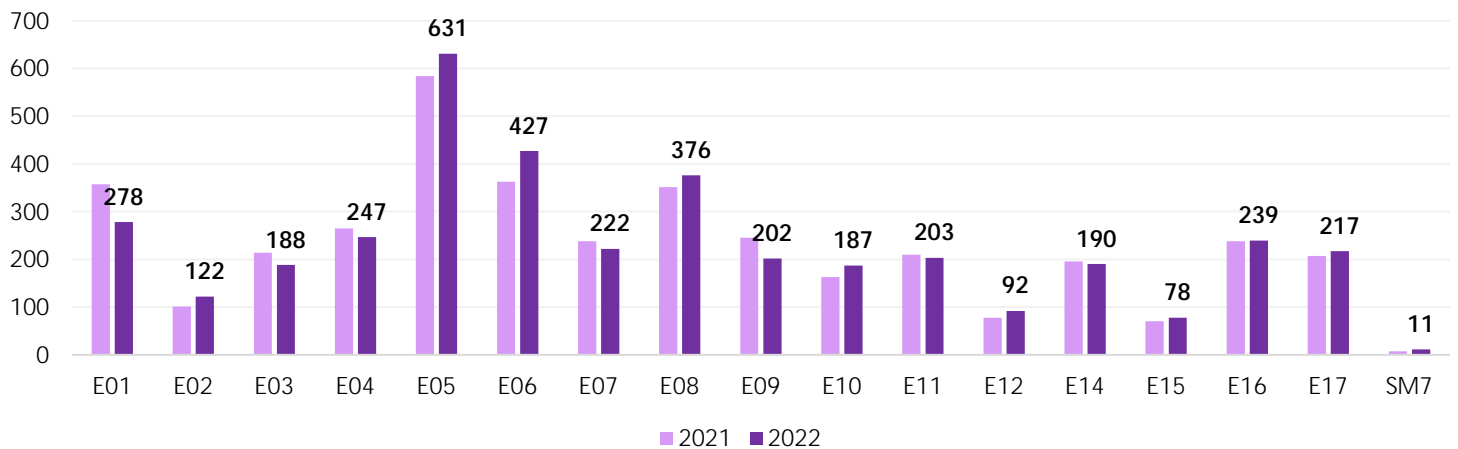


2022 Call Volume by NFIRS Incident Type Code & Engine

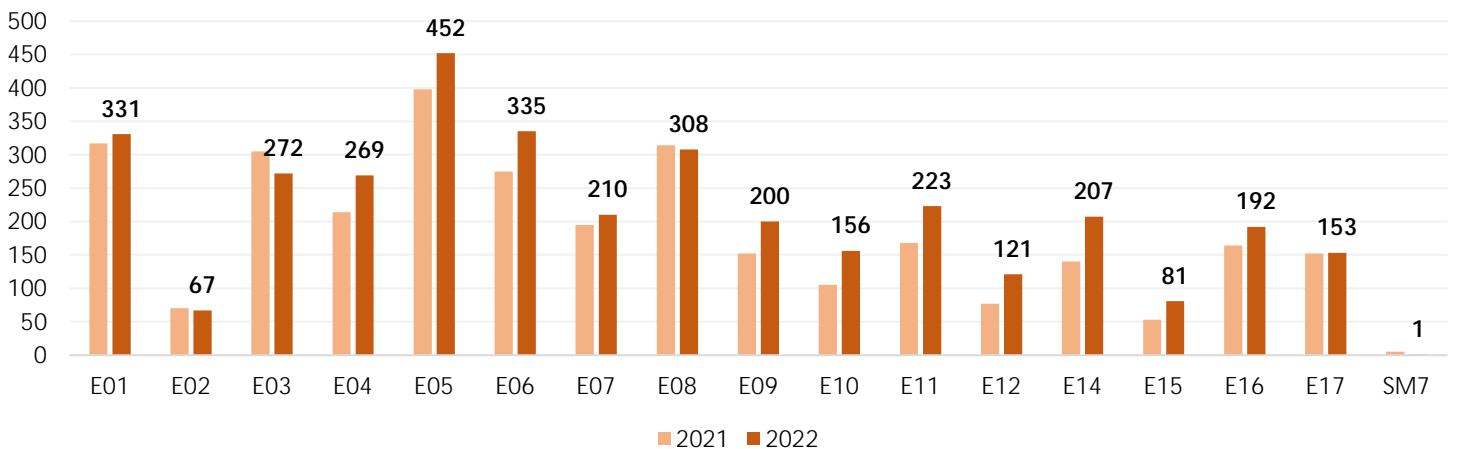
Service Call Incidents - NFIRS 500s



Good Intent Incidents - NFIRS 600s

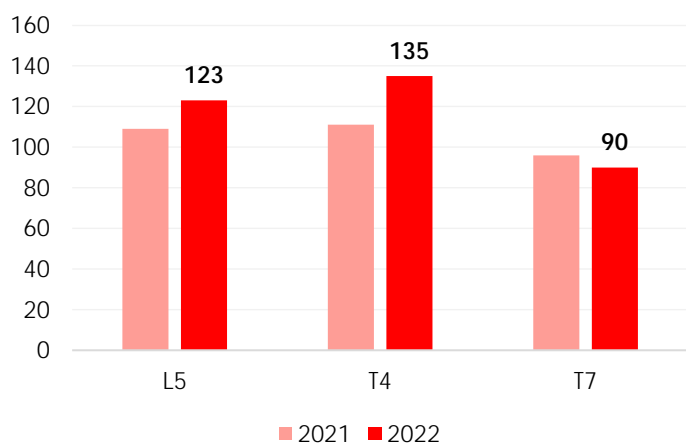


False Alarm Incidents - NFIRS 700s

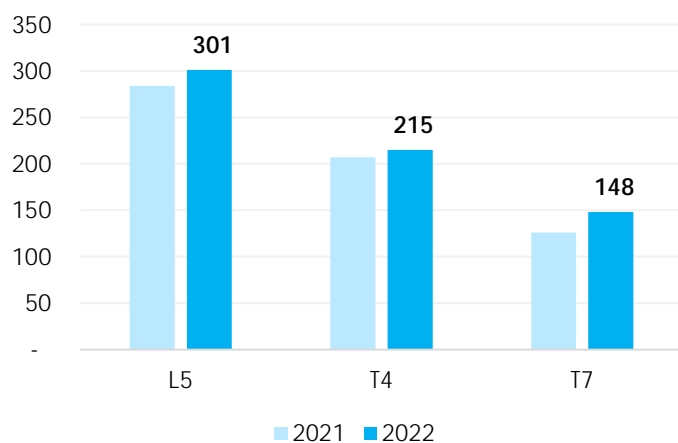


2022 Call Volume by NFIRS Incident Type Code & Truck

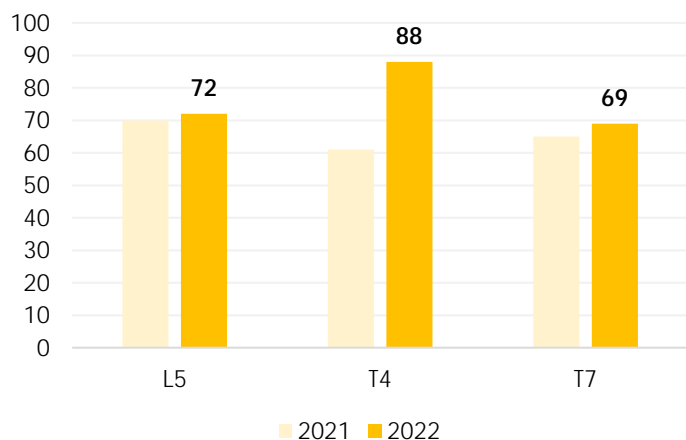
Fire Incidents - NFIRS 100s



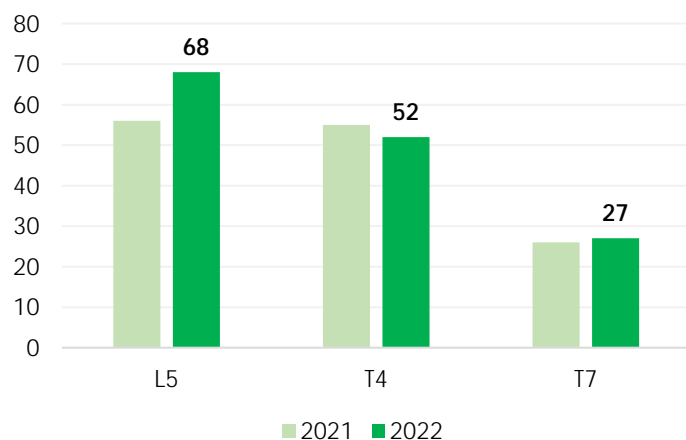
EMS Incidents - NFIRS 300s



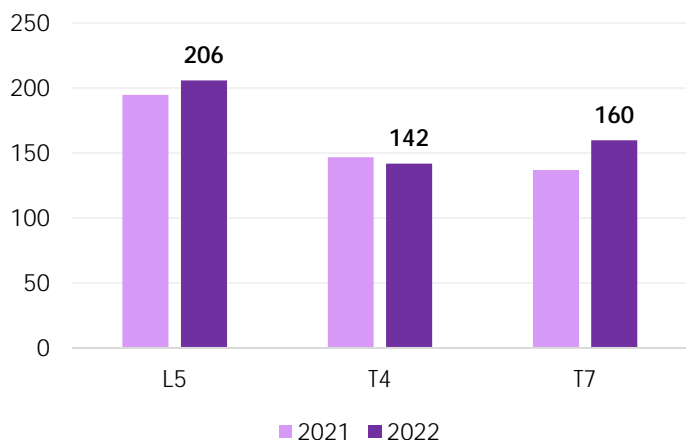
Hazmat Incidents - NFIRS 400s



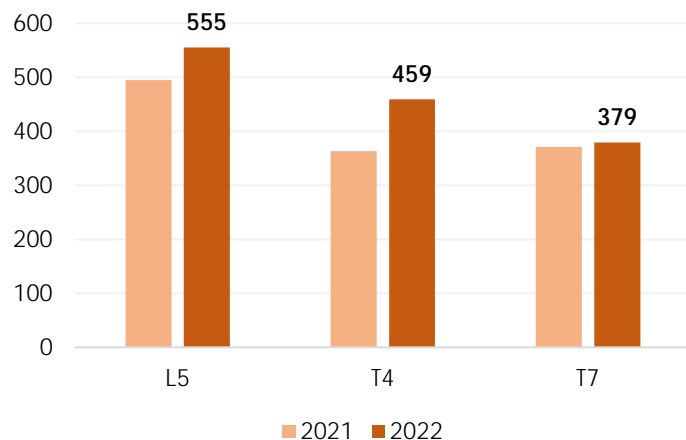
Service Call Incidents - NFIRS 500s



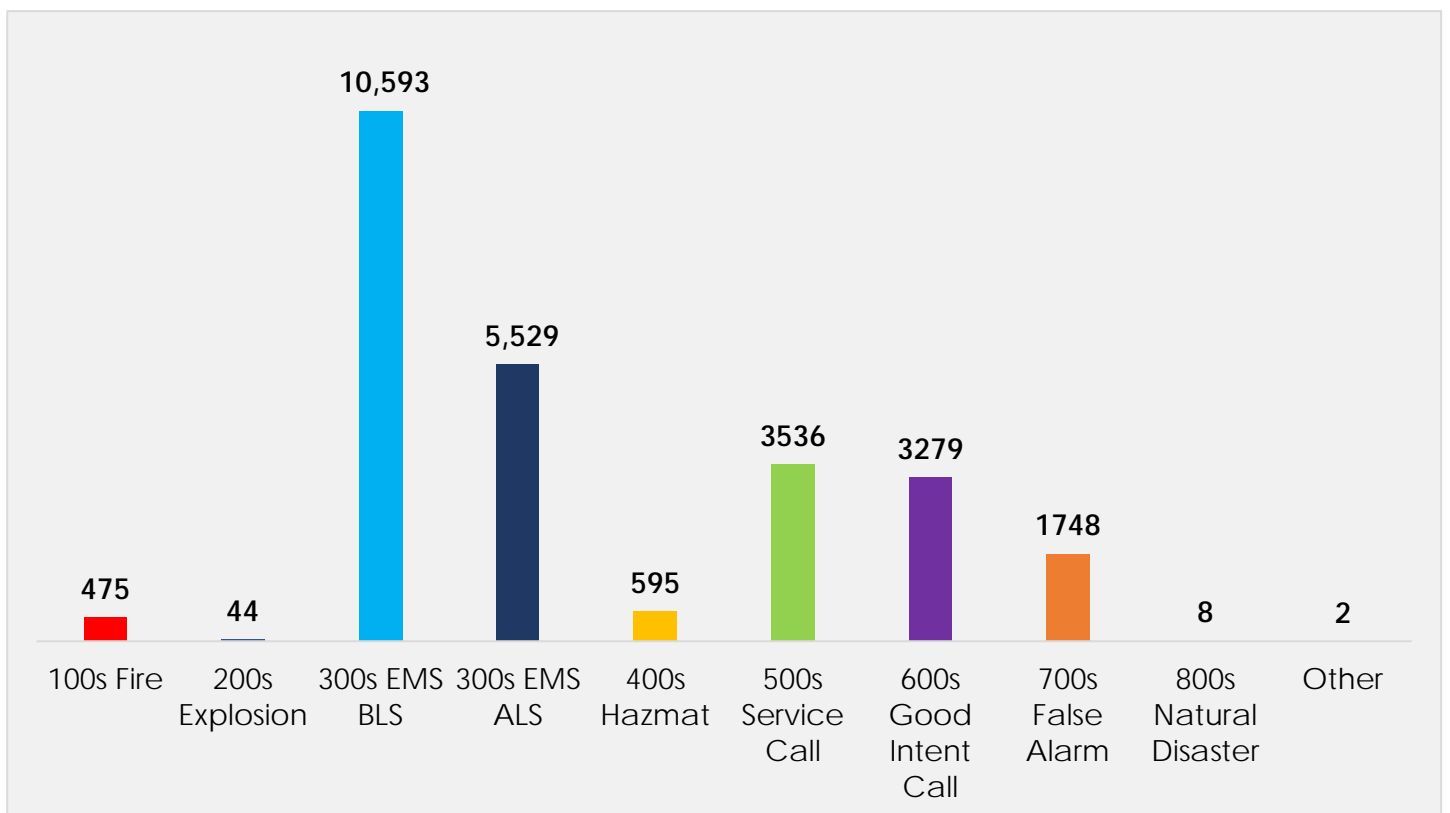
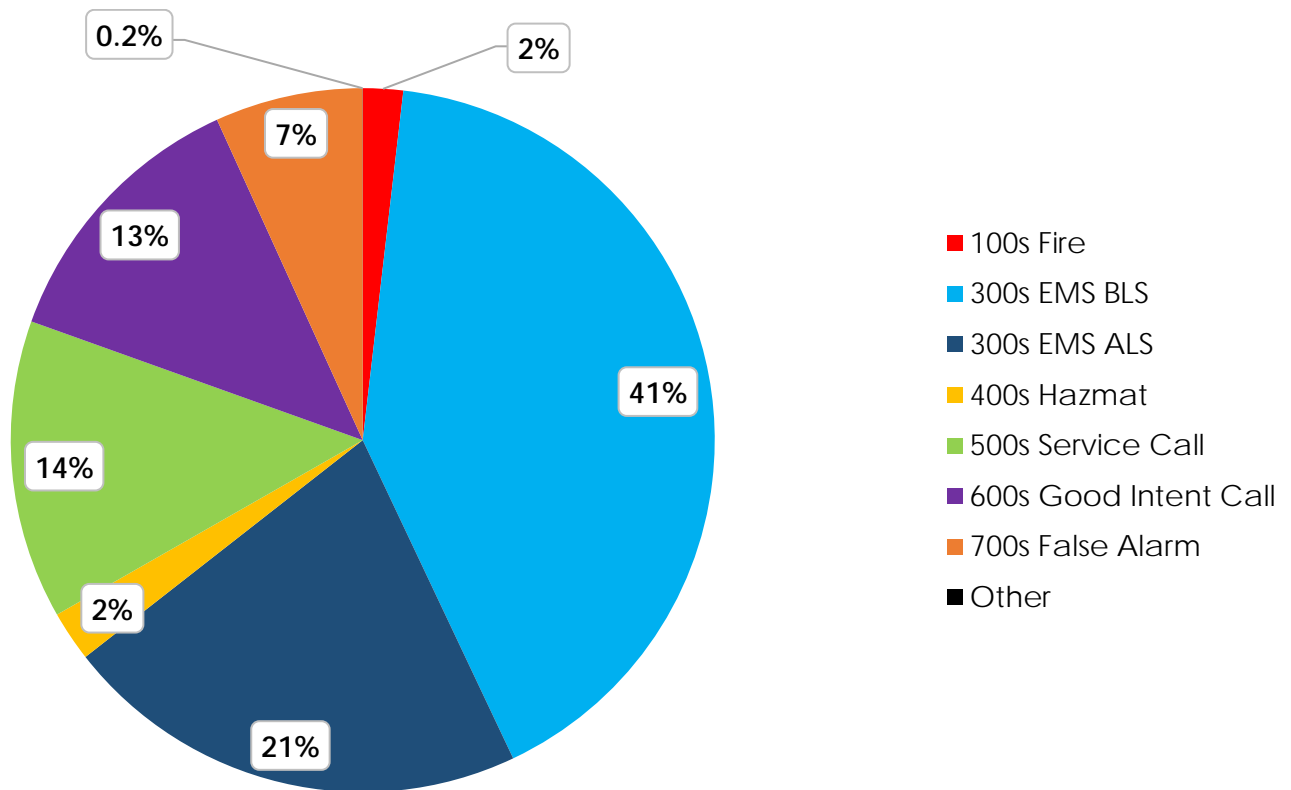
Good Intent Incidents - NFIRS 600s



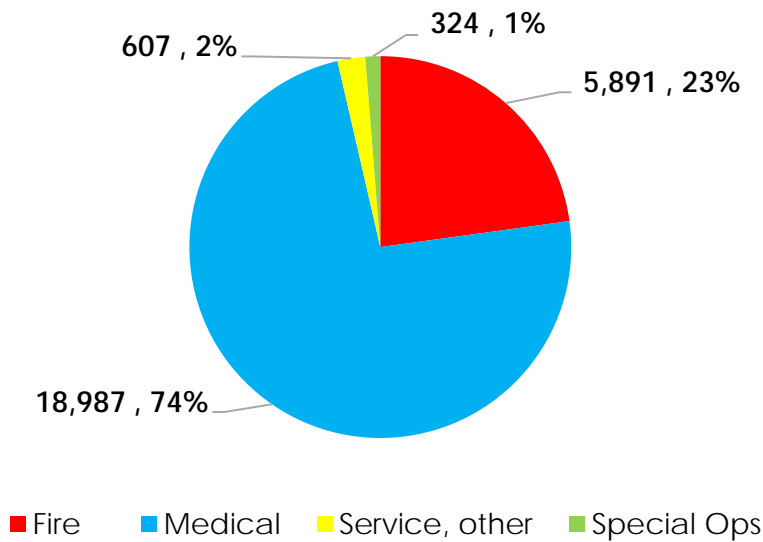
False Alarm Incidents - NFIRS 700s



2022 Call Volume by Type Code – Boise Response Area

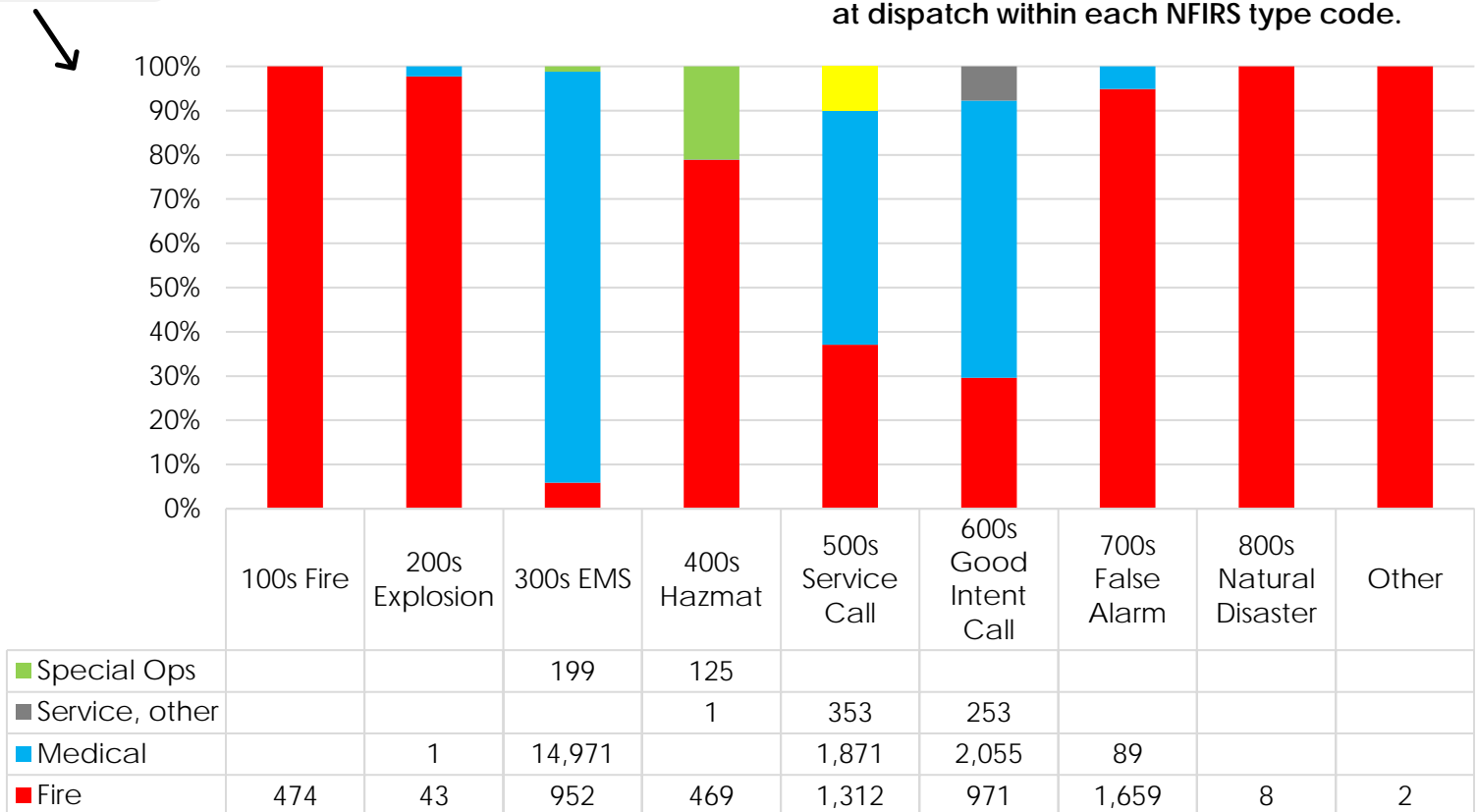


2022 Skills Needed at Dispatch – Boise Response Area



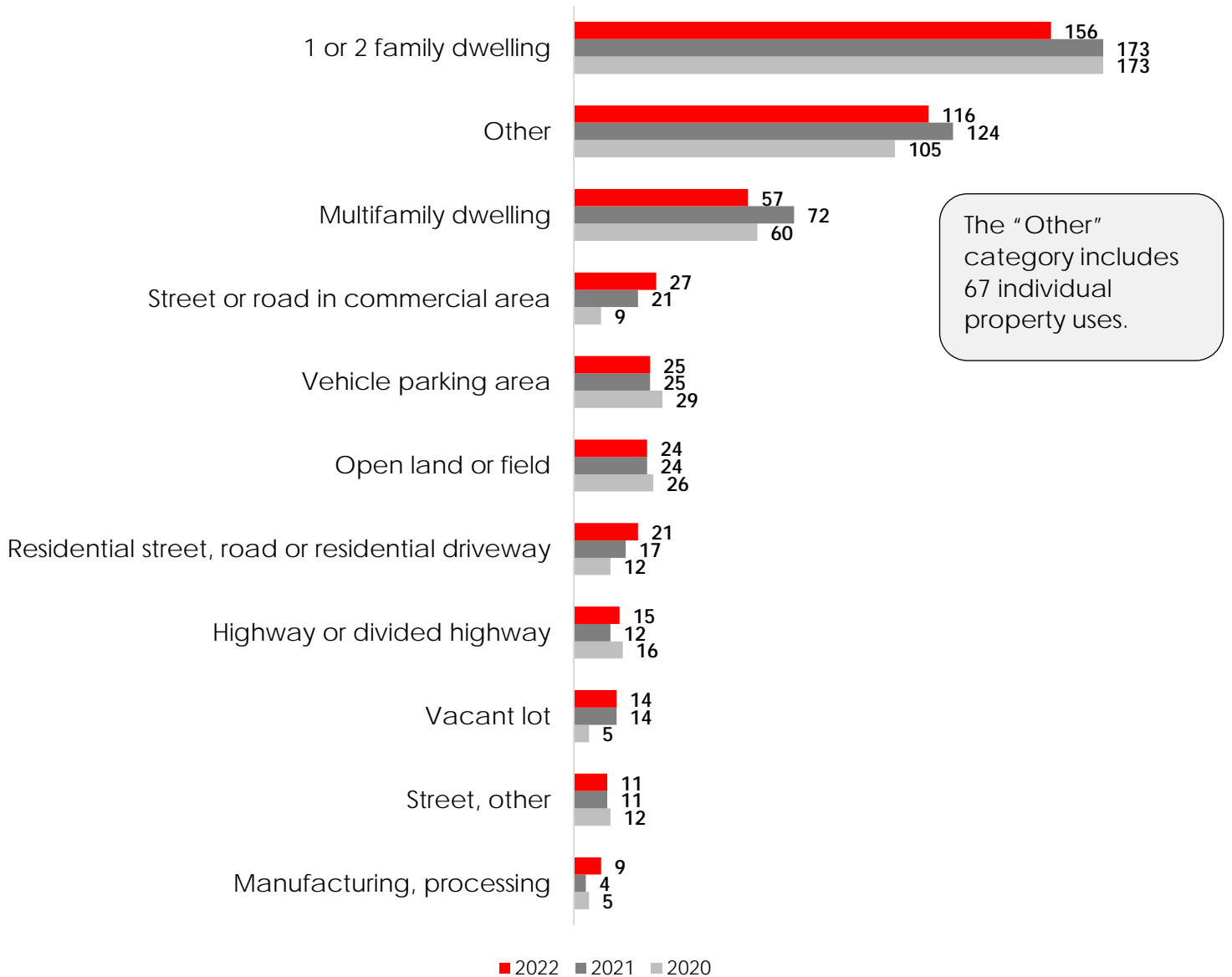
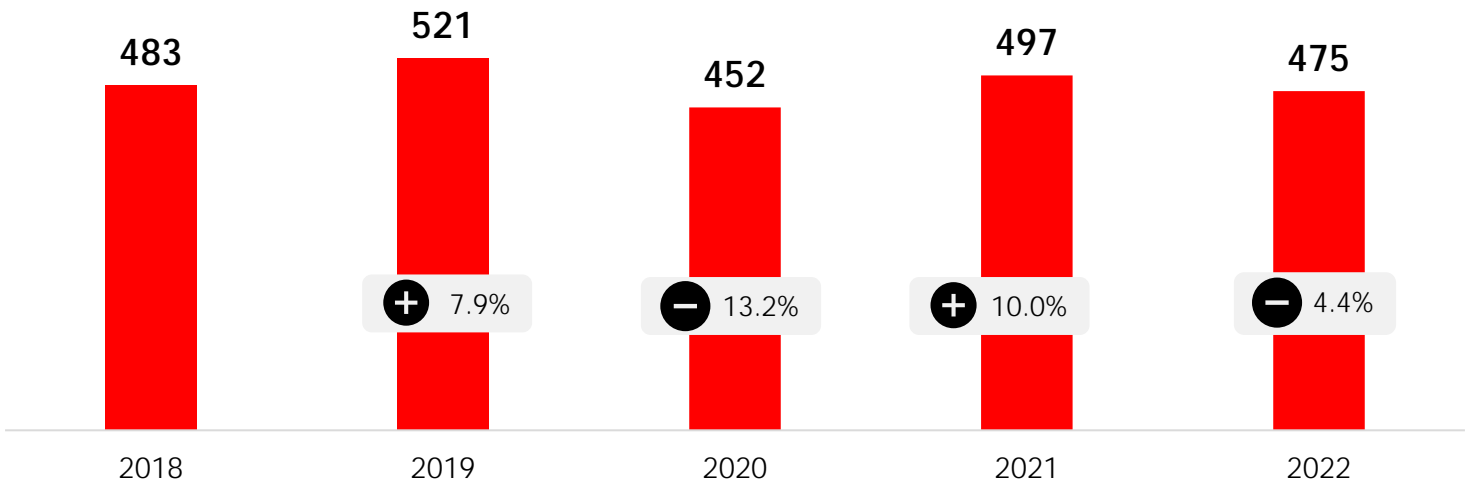
NFIRS incident type codes allow fire departments to retrospectively assess the nature of incidents each year. Based on NFIRS type codes fire incidents make up a small percentage of BFD's responses. However, in looking at the incident type description combined with the dispatched problem, the skills required at dispatch do not always match the skills utilized on scene. Or, for example, EMS was the most appropriate incident type, but the call required skills possessed by a firefighter (such as an extrication or swift water rescue). Ultimately, BFD must be prepared to respond to an incredible variety of hazards requiring a wide range of education and skills unique to firefighters. **This page breaks down the skills needed at dispatch within each NFIRS type code.**

Note 100% columns

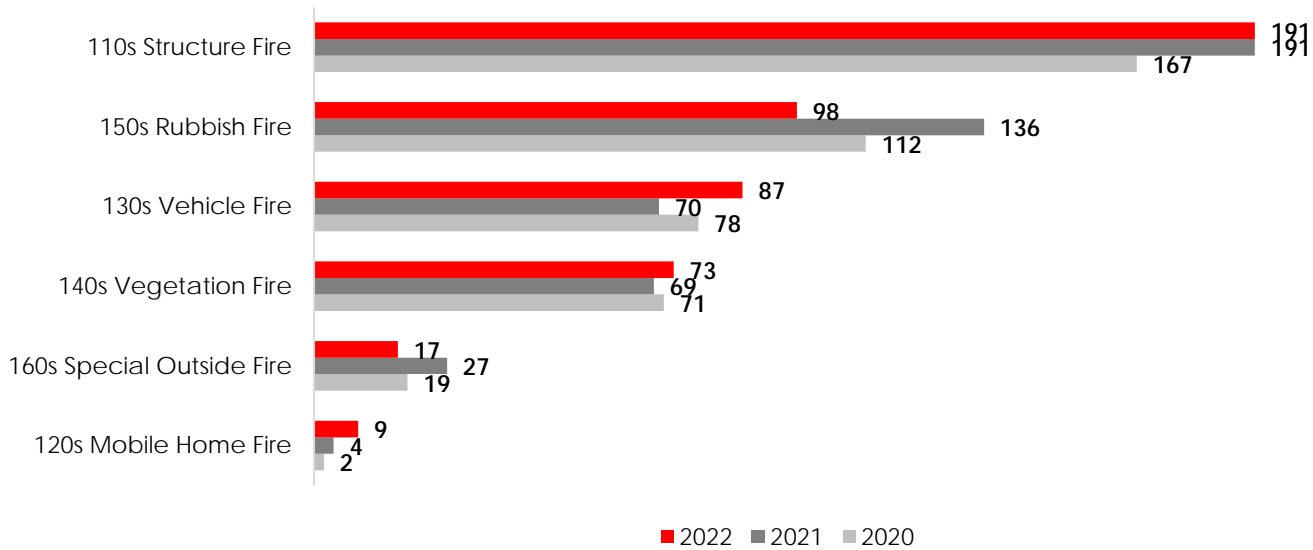


Through this lens, medical incidents continue to represent the majority of calls for service because as we know that is the highest need of our community and most communities. However, as shown in the bar chart above uniquely firefighter skills are needed 26% of the time regardless of the ultimate NFIRS call type assigned to the call.

NFIRS 100s (Fire) Incidents – Boise Response Area



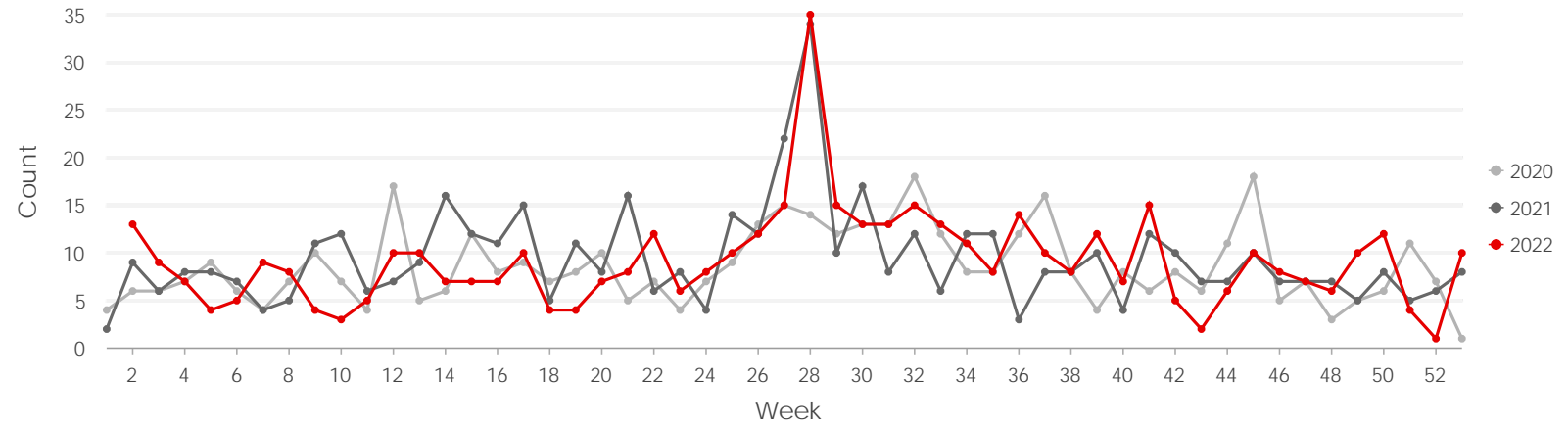
NFIRS 100s (Fire) Incidents – Boise Response Area



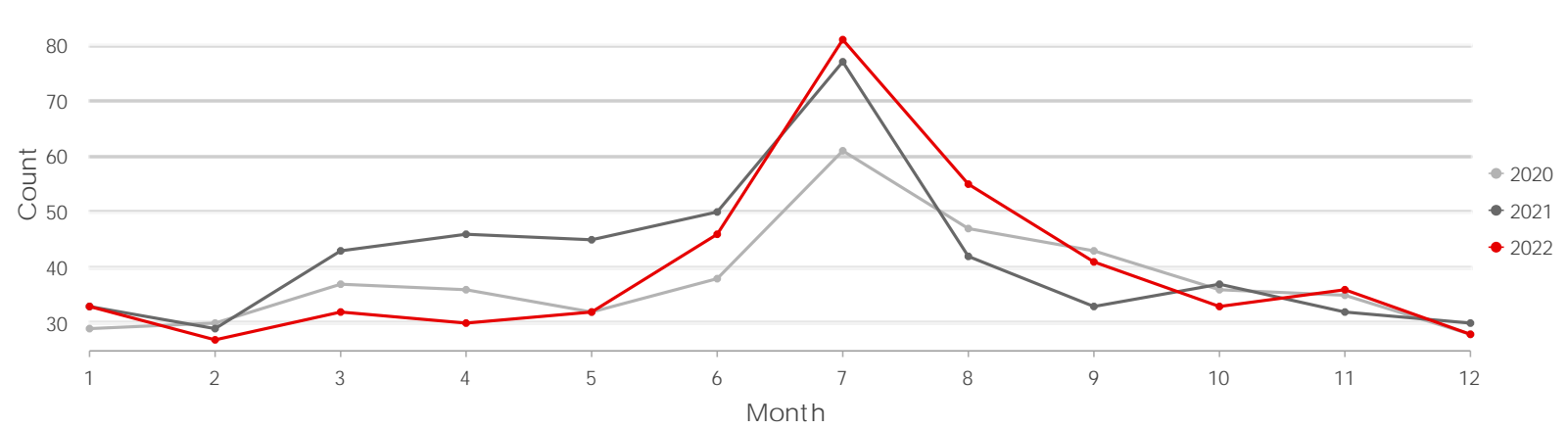
Fire Type Group	Incident Type Code	Incident Type Description	2020	2021	2022
Crop Fire	173	Cultivated trees or nursery stock fire	2	0	0
Mobile Home Fire	120	Fire in mobile prop. used as a fixed struc., other	0	0	1
Mobile Home Fire	121	Fire in mobile home used as fixed residence	1	2	3
Mobile Home Fire	122	Fire in motor home, camper, recreational vehicle	1	2	3
Mobile Home Fire	123	Fire in portable building, fixed location	0	0	2
Rubbish Fire	150	Outside rubbish fire, other	34	38	27
Rubbish Fire	151	Outside rubbish, trash or waste fire	49	63	41
Rubbish Fire	152	Garbage dump or sanitary landfill fire	2	0	0
Rubbish Fire	153	Construction or demolition landfill fire	0	3	3
Rubbish Fire	154	Dumpster or other outside trash receptacle fire	27	32	27
Special Outside Fire	160	Special outside fire, other	11	10	12
Special Outside Fire	161	Outside storage fire	1	3	3
Special Outside Fire	162	Outside equipment fire	6	14	2
Special Outside Fire	163	Outside gas or vapor combustion explosion	1	0	0
Structure Fire	111	Building fire	78	94	92
Structure Fire	112	Fires in structure other than in a building	10	8	10
Structure Fire	113	Cooking fire, confined to container	68	62	63
Structure Fire	114	Chimney or flue fire, confined to chimney or flue	2	4	4
Structure Fire	115	Incinerator overload or malfunction, fire confined	0	2	3
Structure Fire	116	Fuel burner/boiler malfunction, fire confined	1	3	5
Structure Fire	117	Commercial Compactor fire, confined to rubbish	1	0	0
Structure Fire	118	Trash or rubbish fire, contained	7	18	14
Vegetation Fire	140	Natural vegetation fire, other	21	18	14
Vegetation Fire	141	Forest, woods or wildland fire	1	2	2
Vegetation Fire	142	Brush or brush-and-grass mixture fire	19	21	23
Vegetation Fire	143	Grass fire	31	28	34
Vehicle Fire	130	Mobile property (vehicle) fire, other	5	8	4
Vehicle Fire	131	Passenger vehicle fire	60	52	69
Vehicle Fire	132	Road freight or transport vehicle fire	5	5	4
Vehicle Fire	134	Water vehicle fire	0	1	0
Vehicle Fire	135	Aircraft fire	2	1	0
Vehicle Fire	136	Self-propelled motor home or recreational vehicle	0	0	2
Vehicle Fire	137	Camper or recreational vehicle (RV) fire	2	2	6
Vehicle Fire	138	Off-road vehicle or heavy equipment fire	4	1	2

NFIRS 100s (Fire) Incidents – Boise Response Area

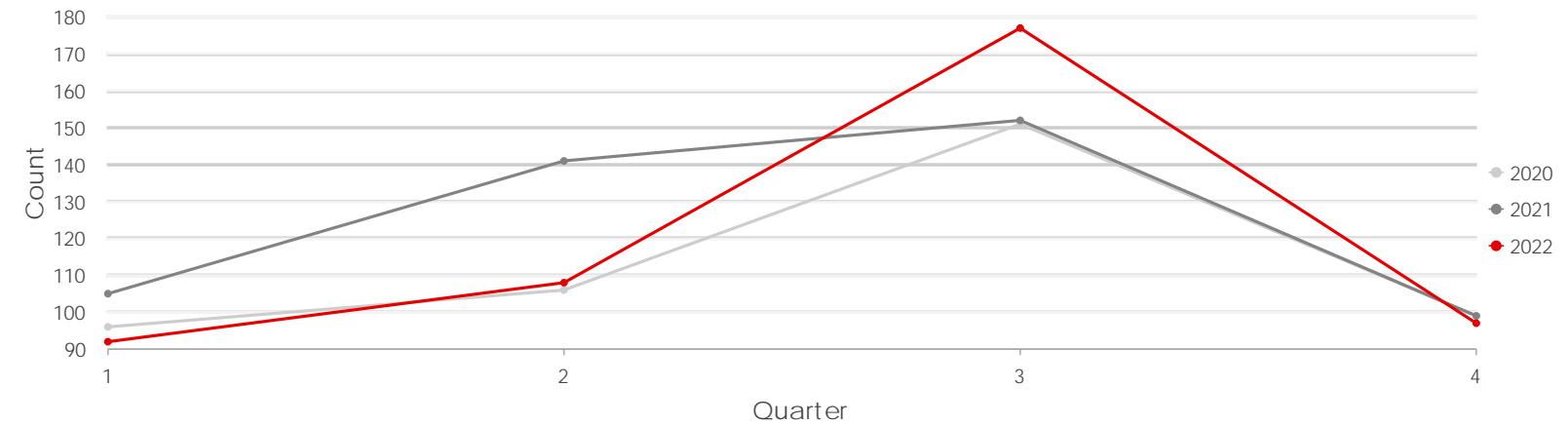
NFIRS 100 Fires by Week



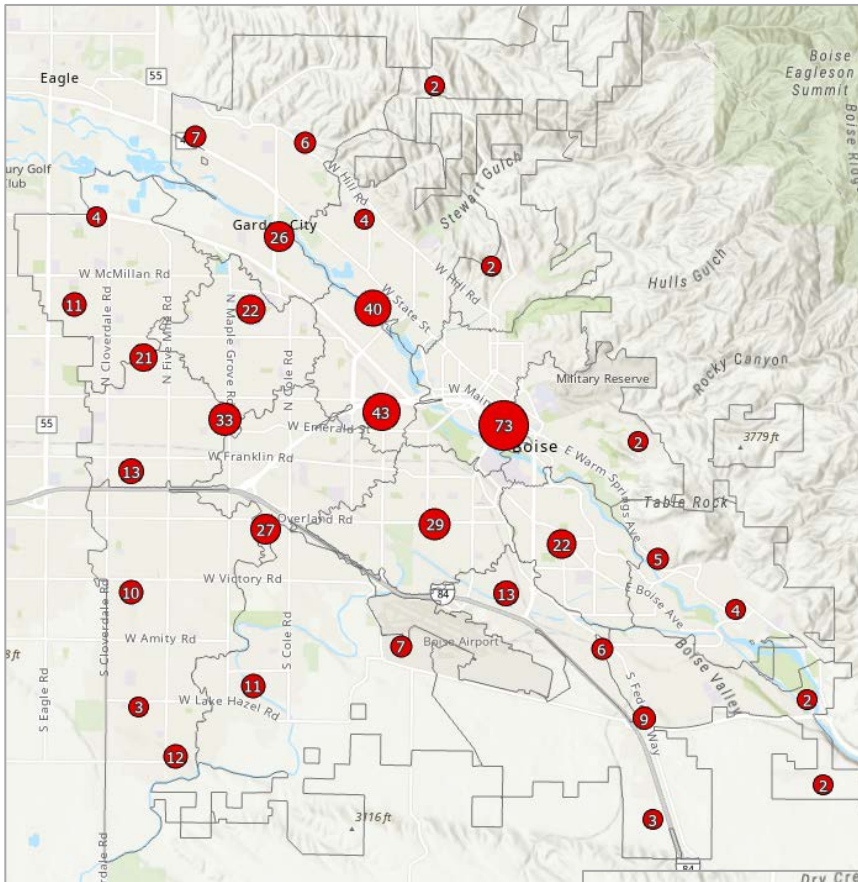
NFIRS 100 Fires by Month



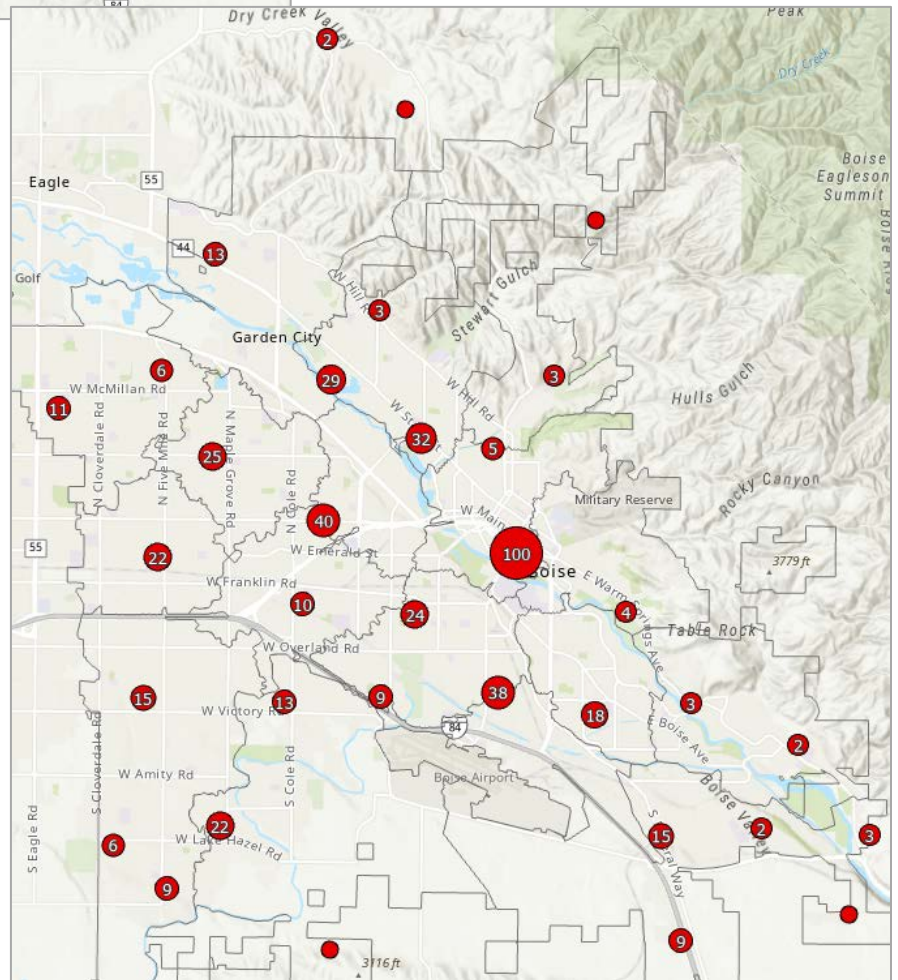
NFIRS 100 Fires by Quarter



NFIRS 100s (Fire) Incidents – Boise Response Area

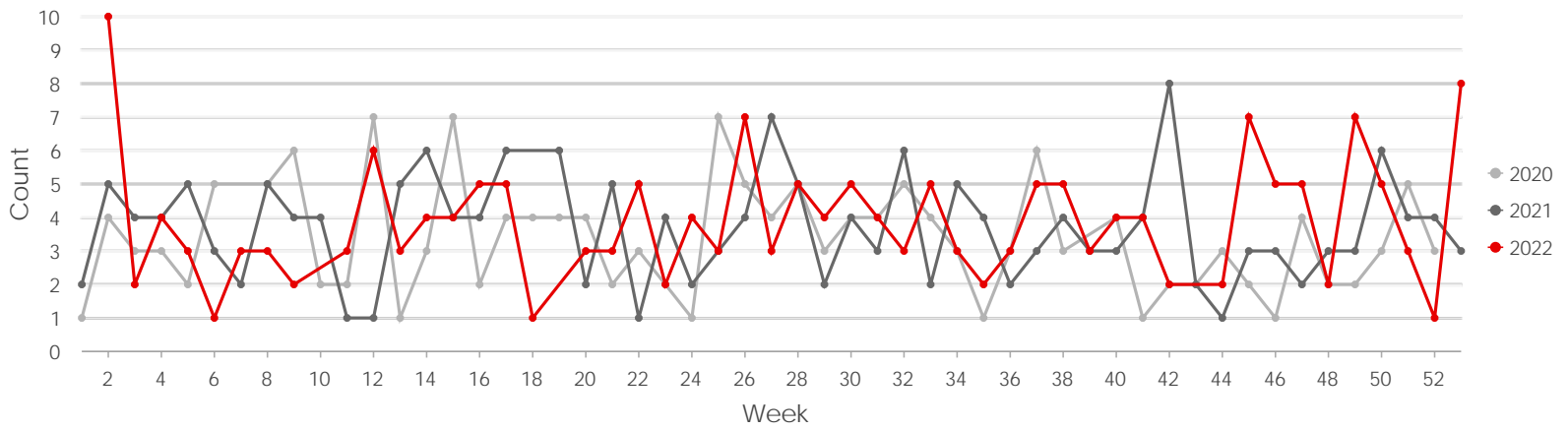


2022

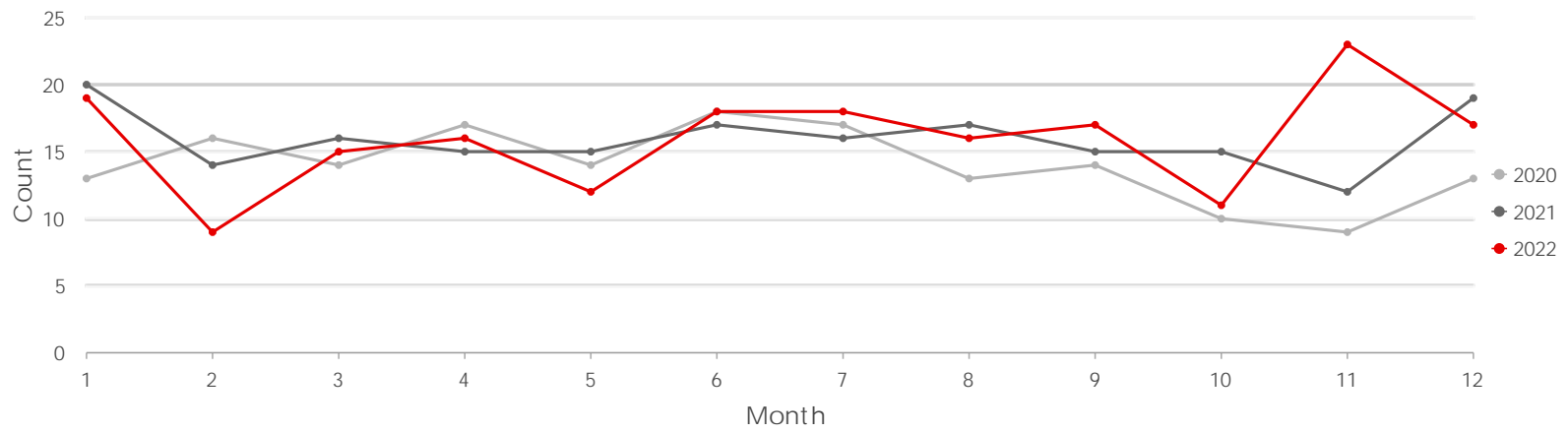


Structure Fires – Boise Response Area

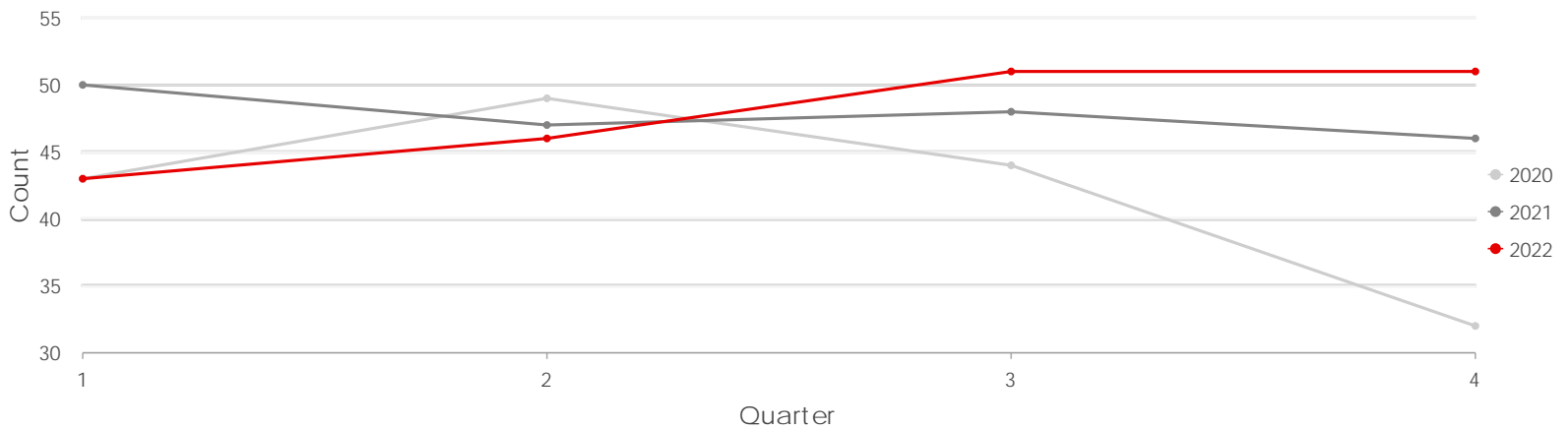
Structure Fires by Week



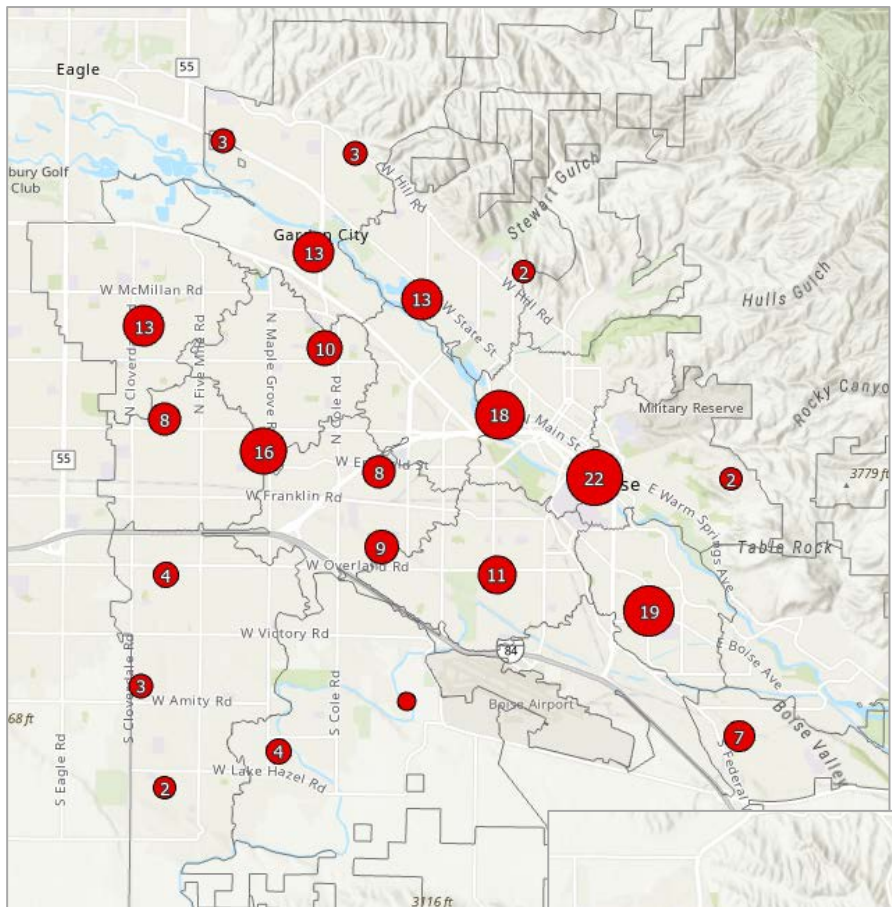
Structure Fires by Month



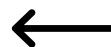
Structure Fires by Quarter



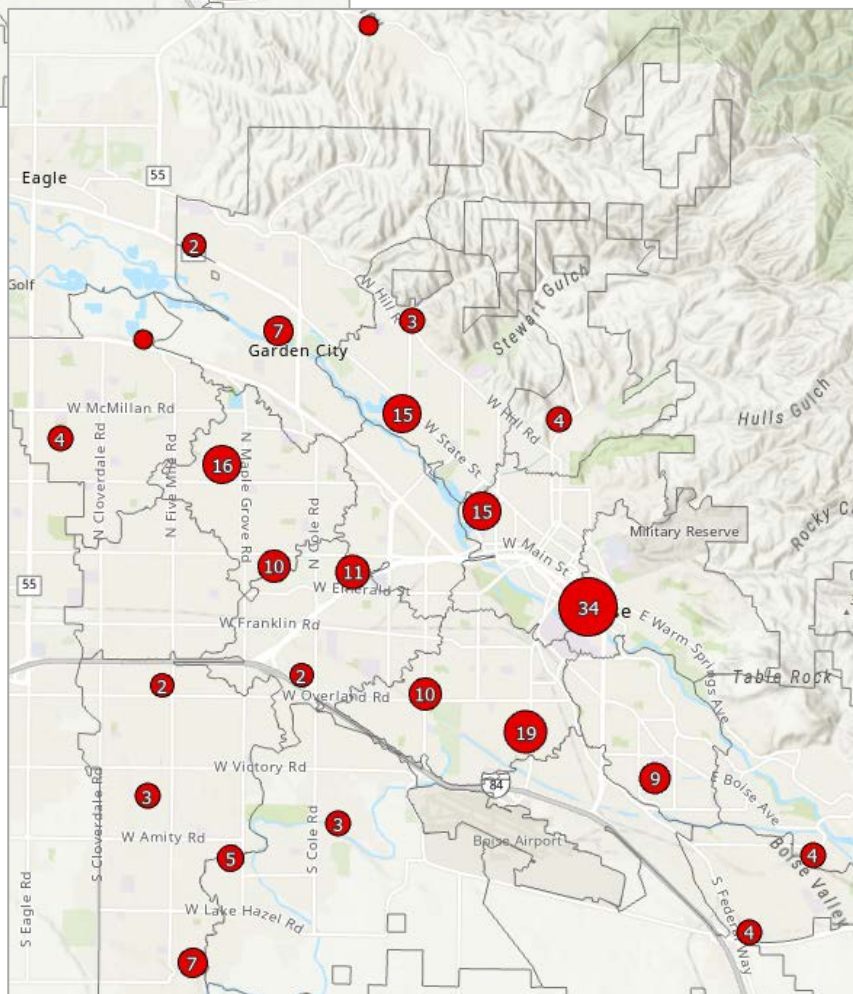
Structure Fires – Boise Response Area



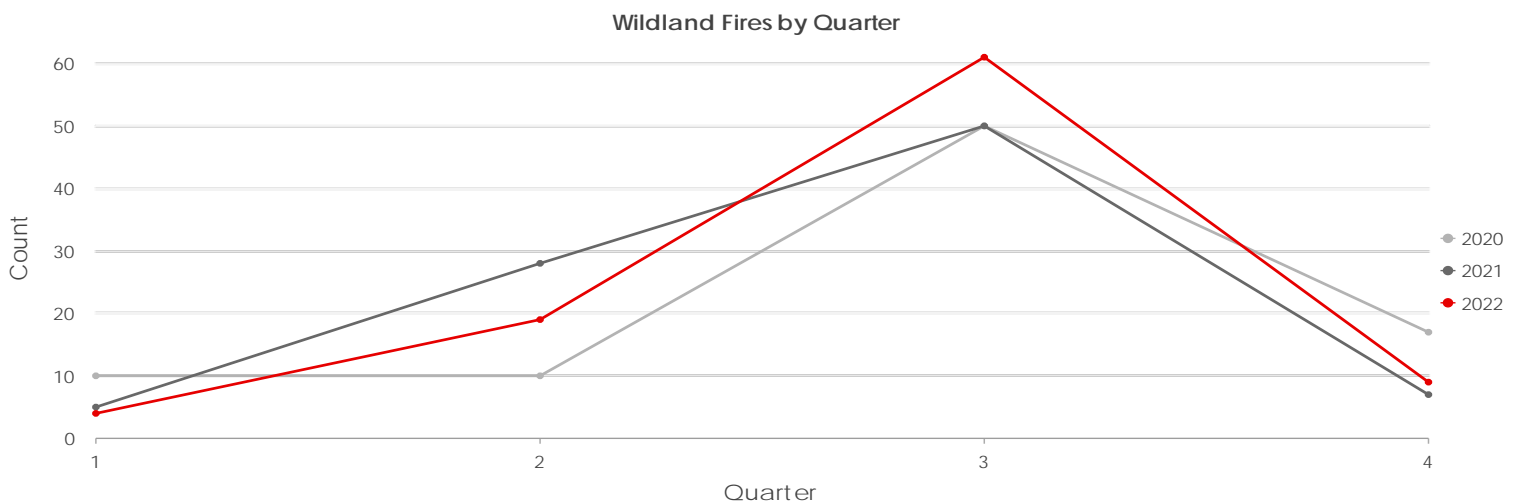
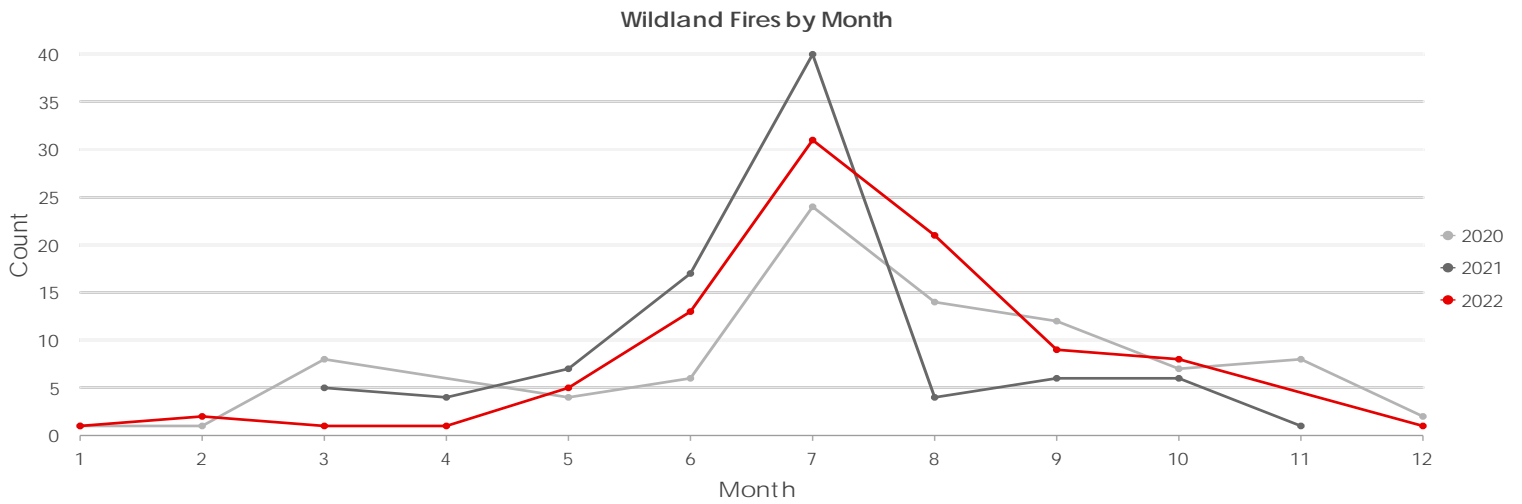
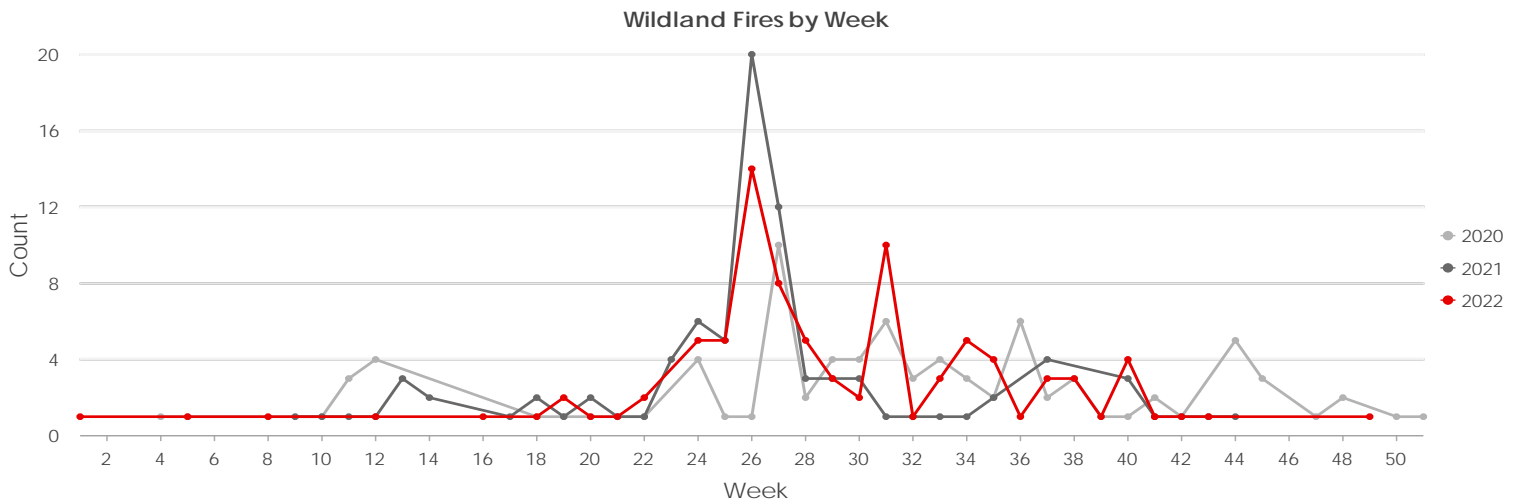
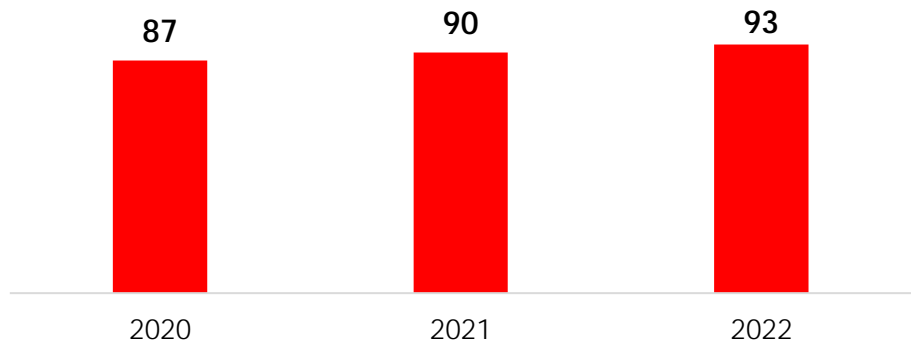
2021



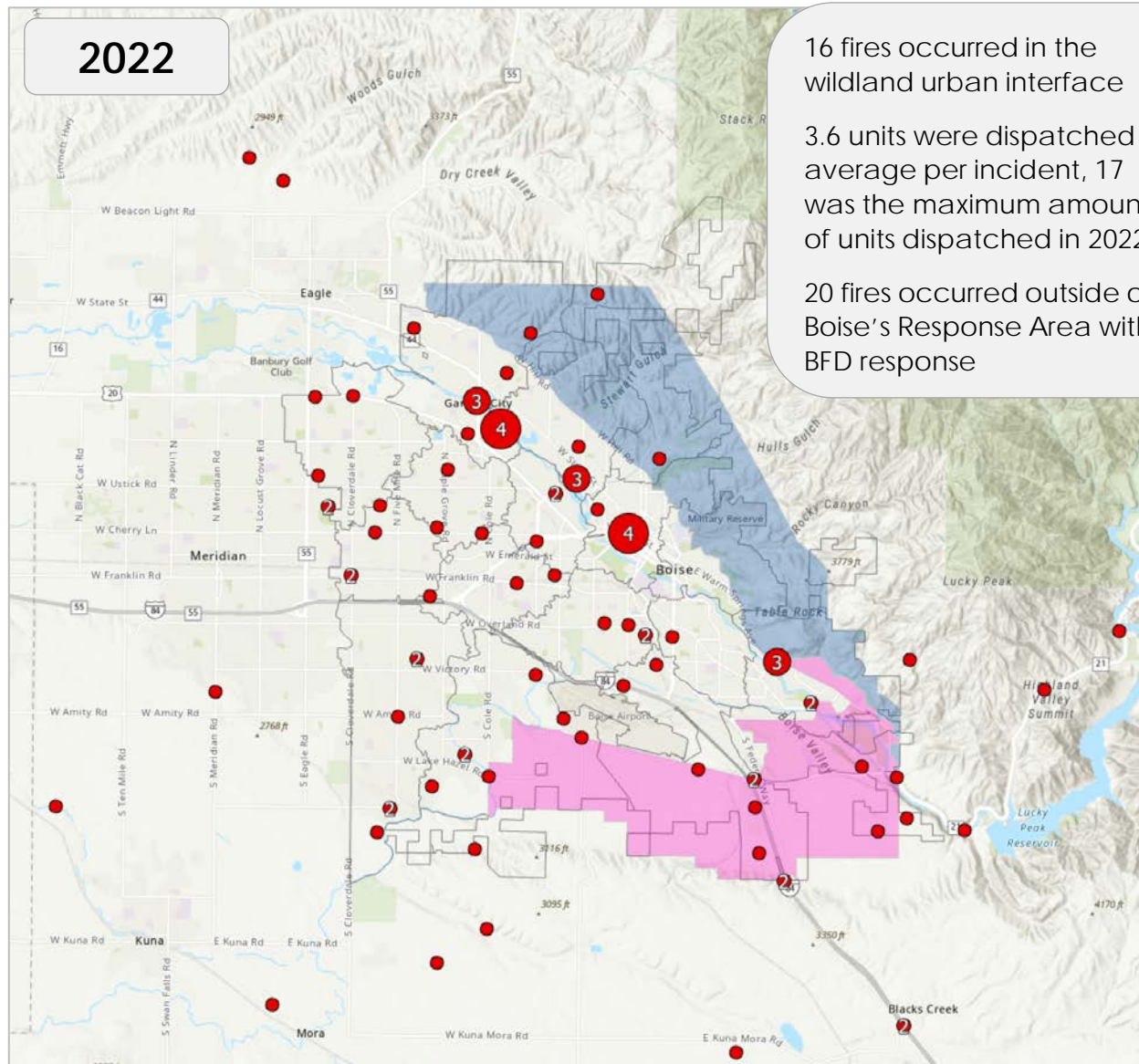
2022



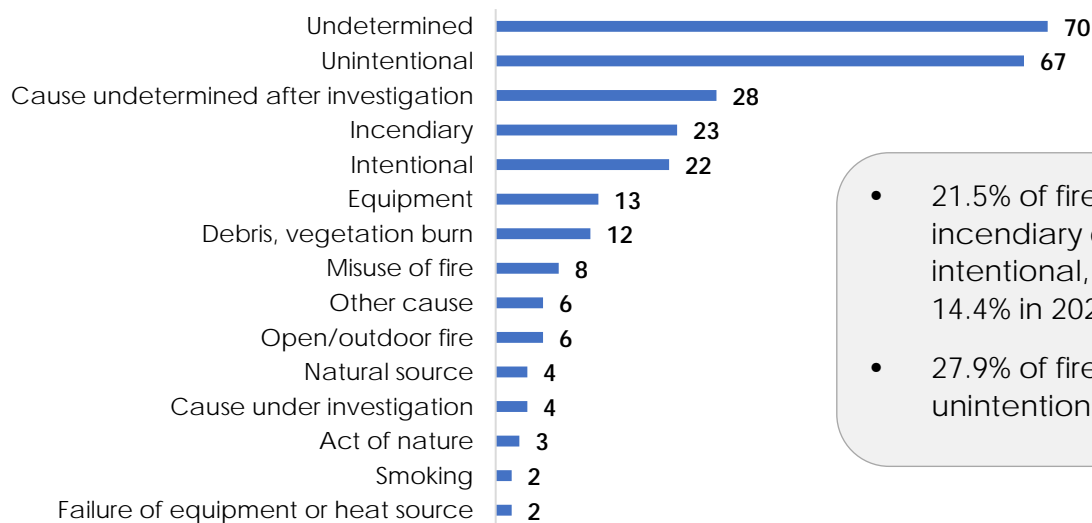
Wildland Fires – Boise Response Area or BFD Unit Responded



Wildland Fires – Boise Response Area or BFD Unit Responded

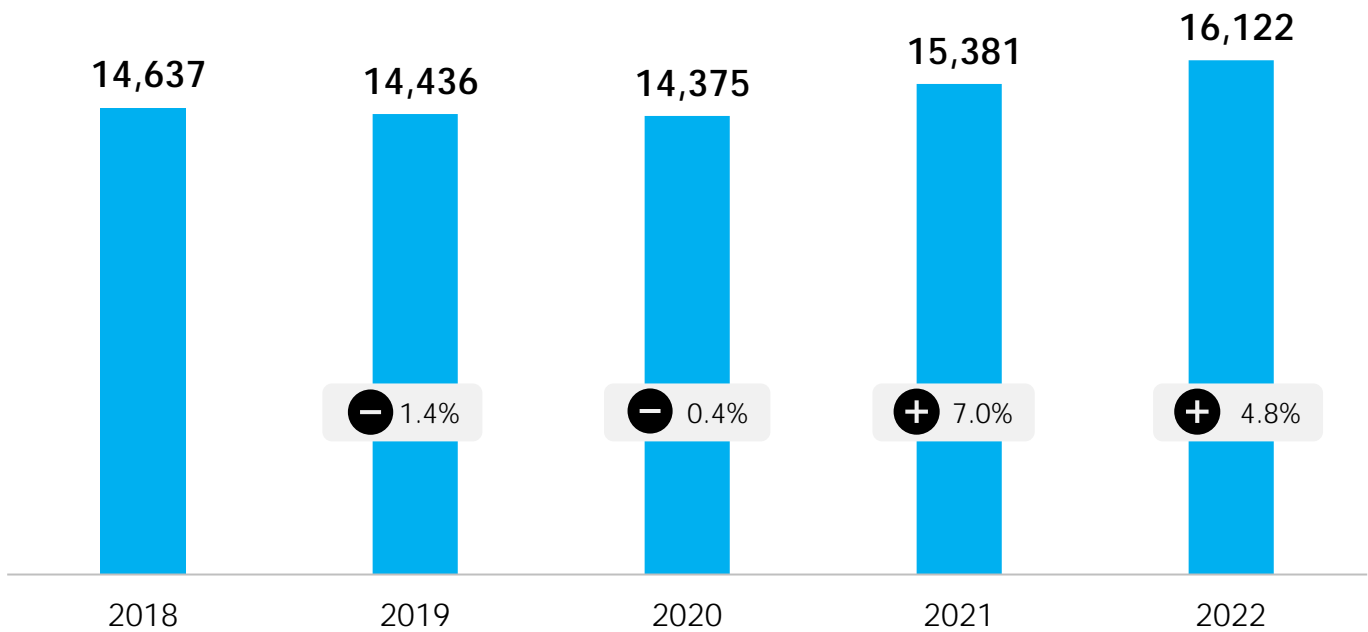


2022 Wildland Fire Cause

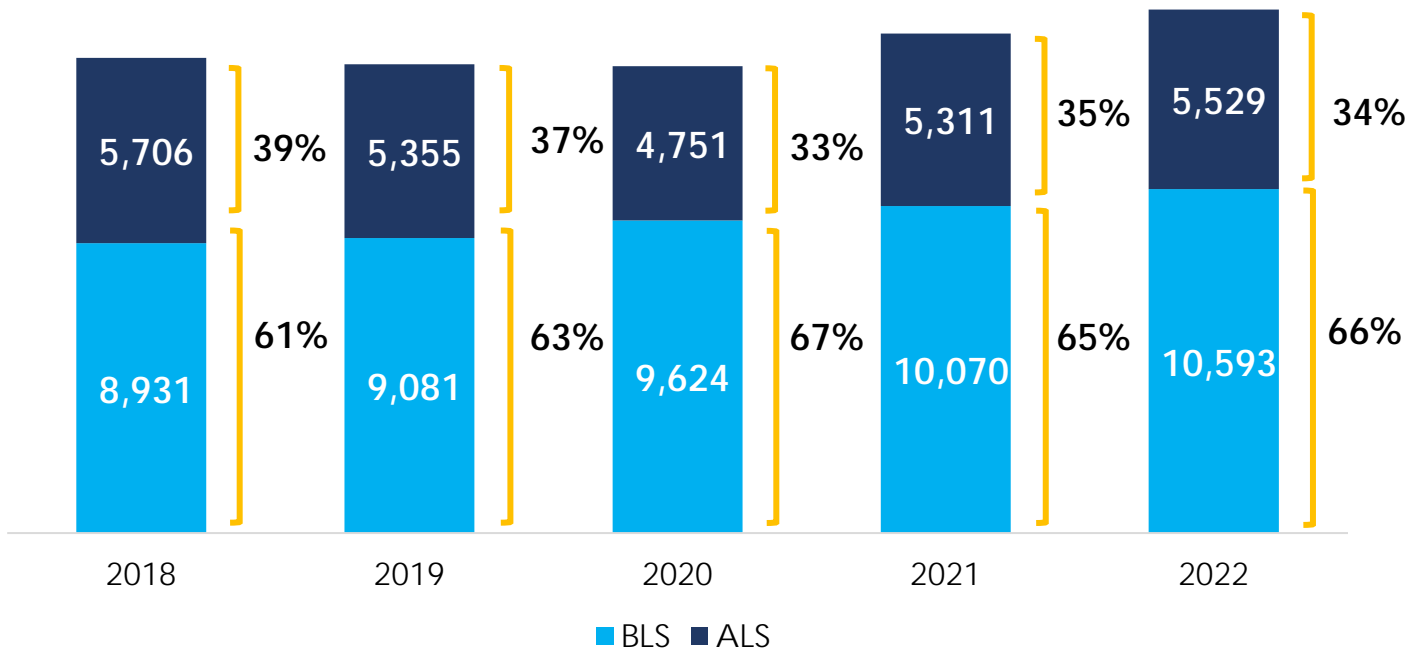


- 21.5% of fires were incendiary or intentional, up from 14.4% in 2021
- 27.9% of fires were unintentional

NFIRS 300s (EMS) Incidents – Boise Response Area

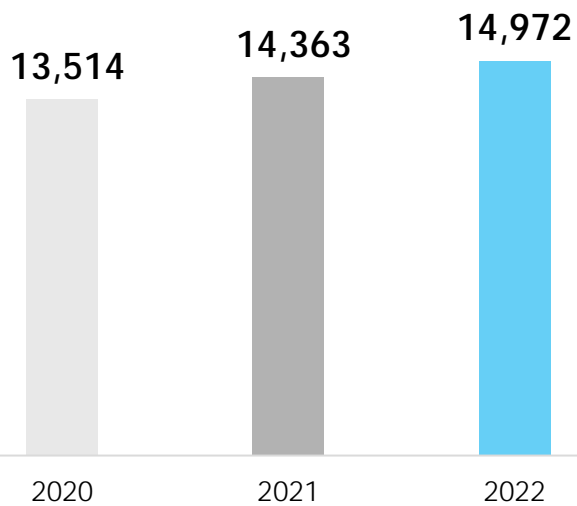


ALS vs. BLS Activity

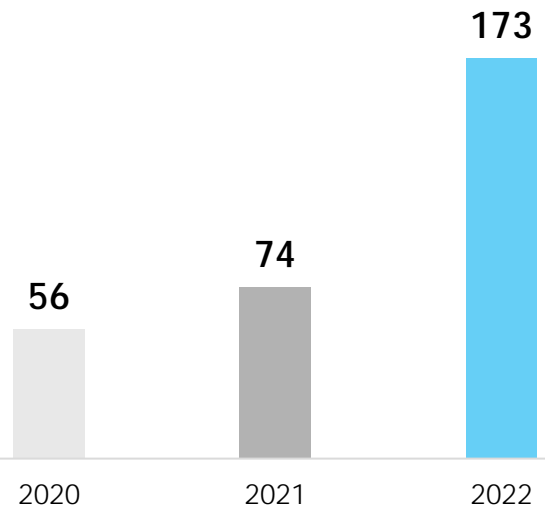


NFIRS 300s (EMS) Incidents – Boise Response Area

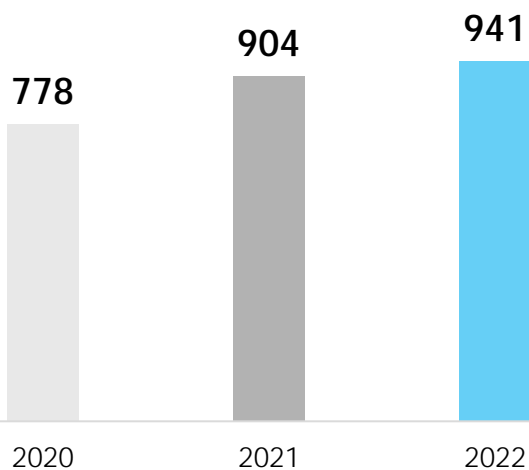
Medical Incidents - NFIRS 321



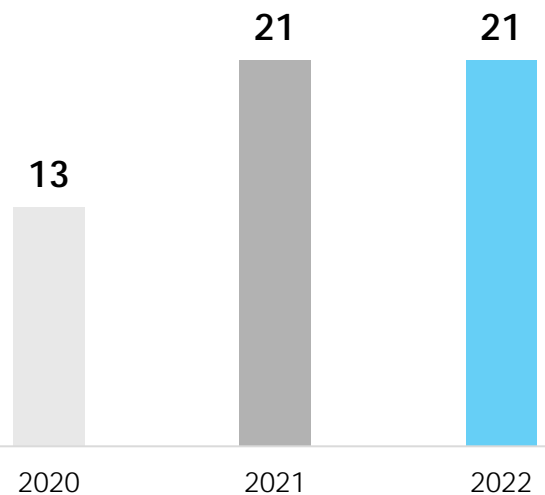
Rescues - NFIRS 300, 351, 353-381



Motor Vehicle Accidents - NFIRS 322-324



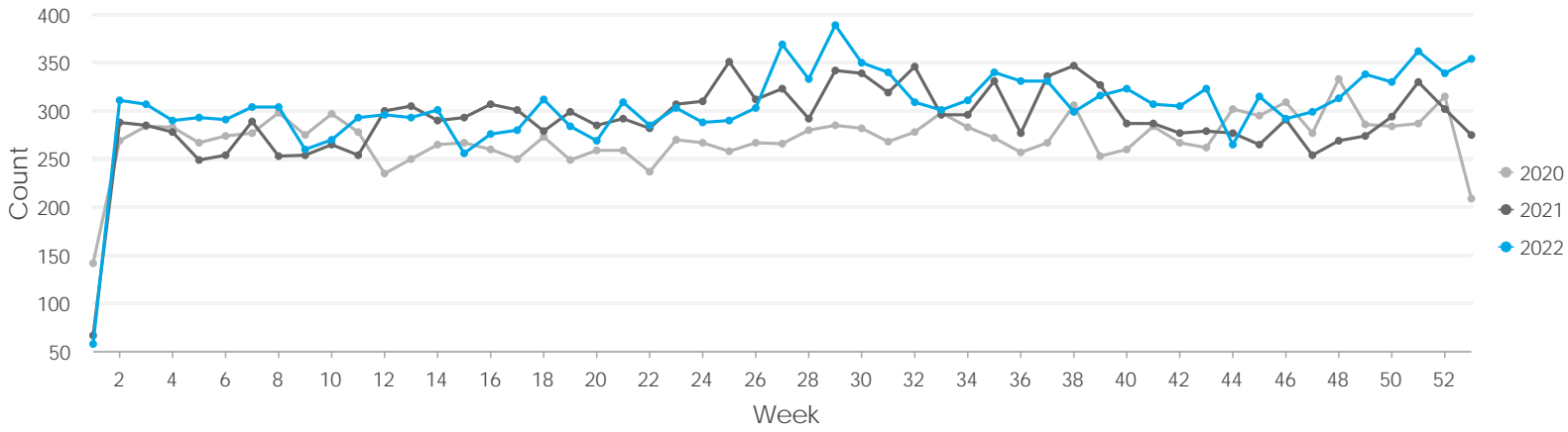
Extrication from Vehicles - NFIRS 352



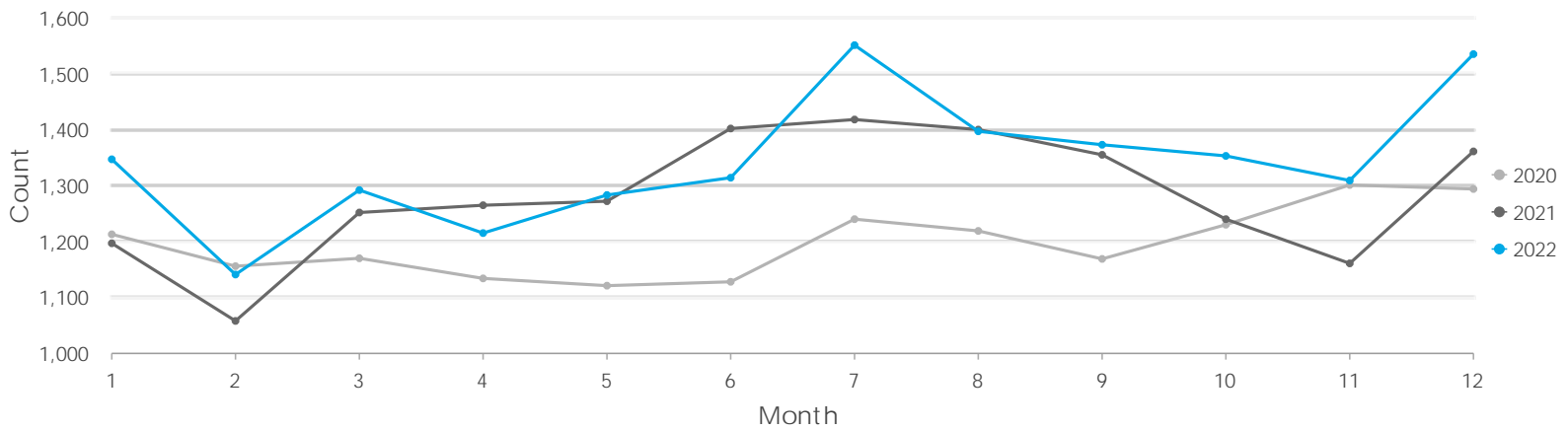
Type codes: 331, 341 & 342 not captured in charts

NFIRS 300s (EMS) Incidents – Boise Response Area

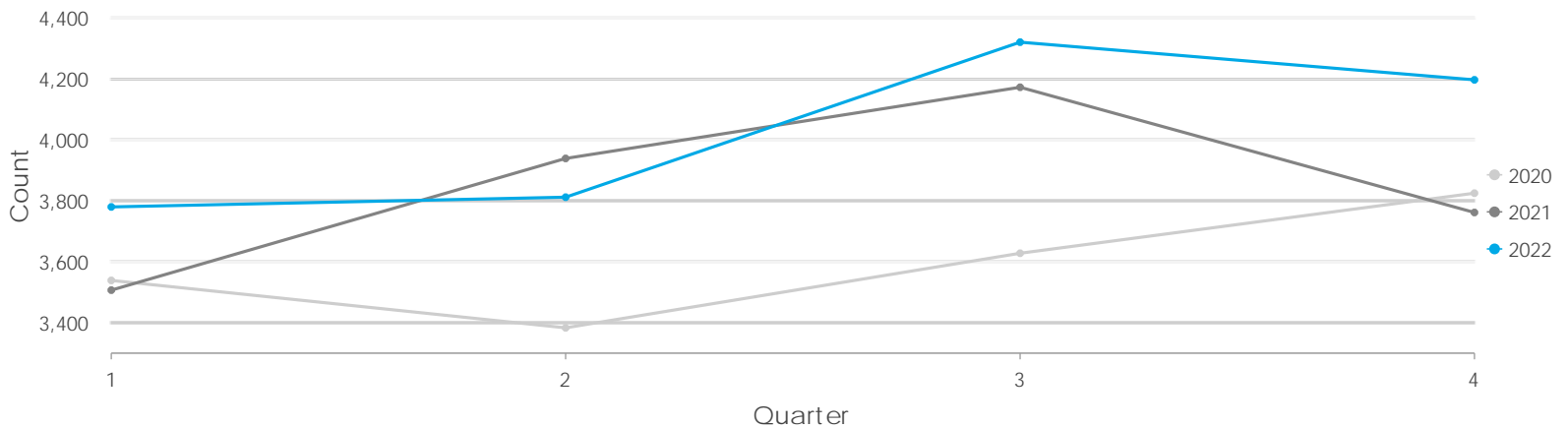
NFIRS 300 EMS Calls by Week



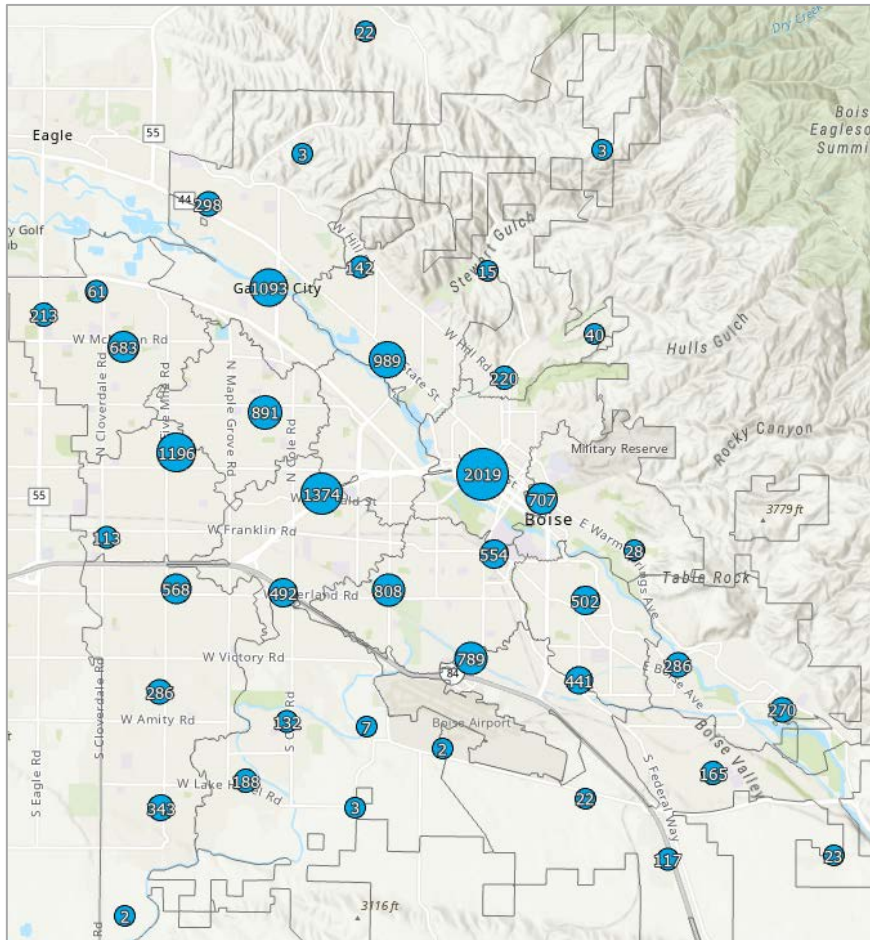
NFIRS 300 EMS Calls by Month



NFIRS 300 EMS Calls by Quarter



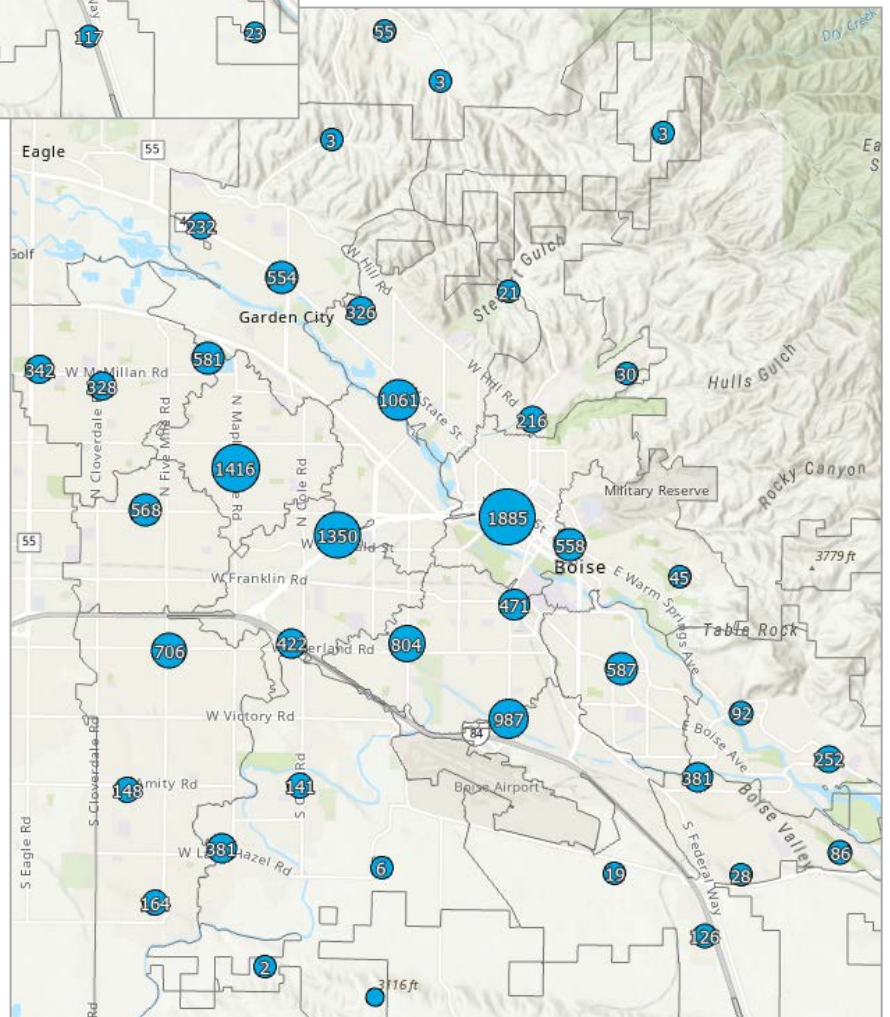
NFIRS 300s (EMS) Incidents – Boise Response Area



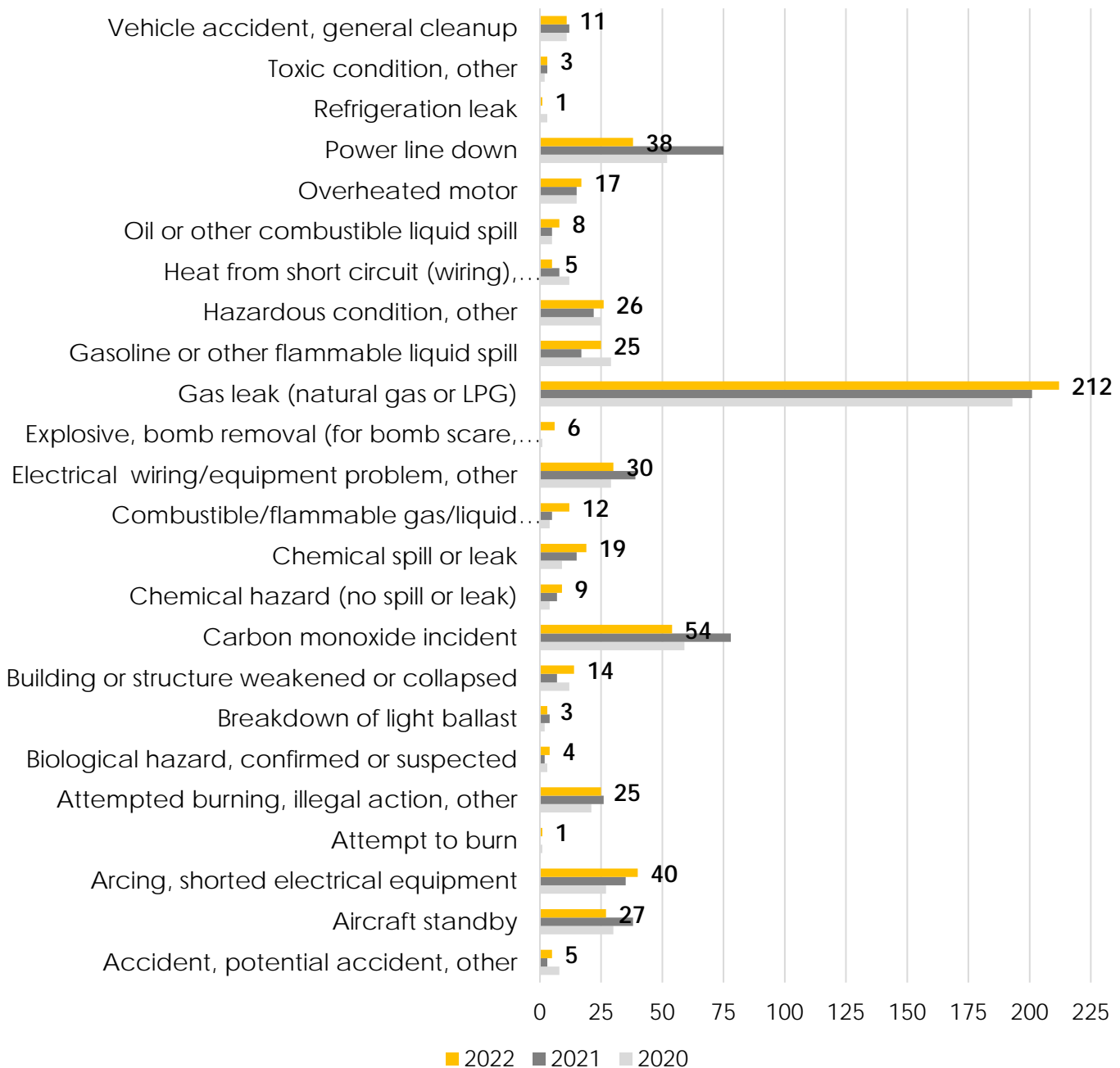
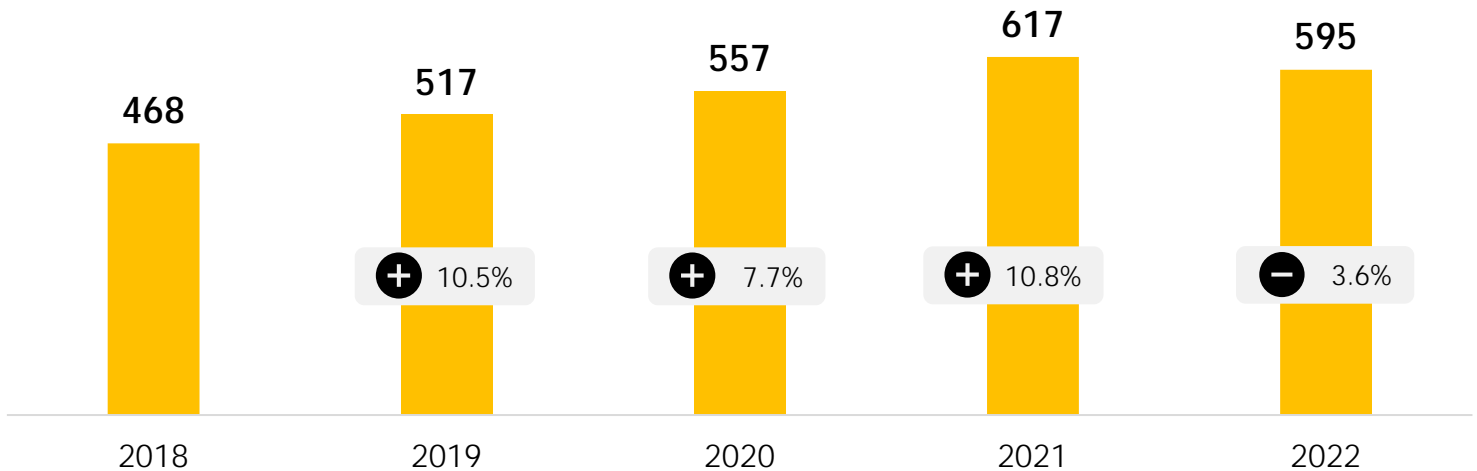
2021



2022

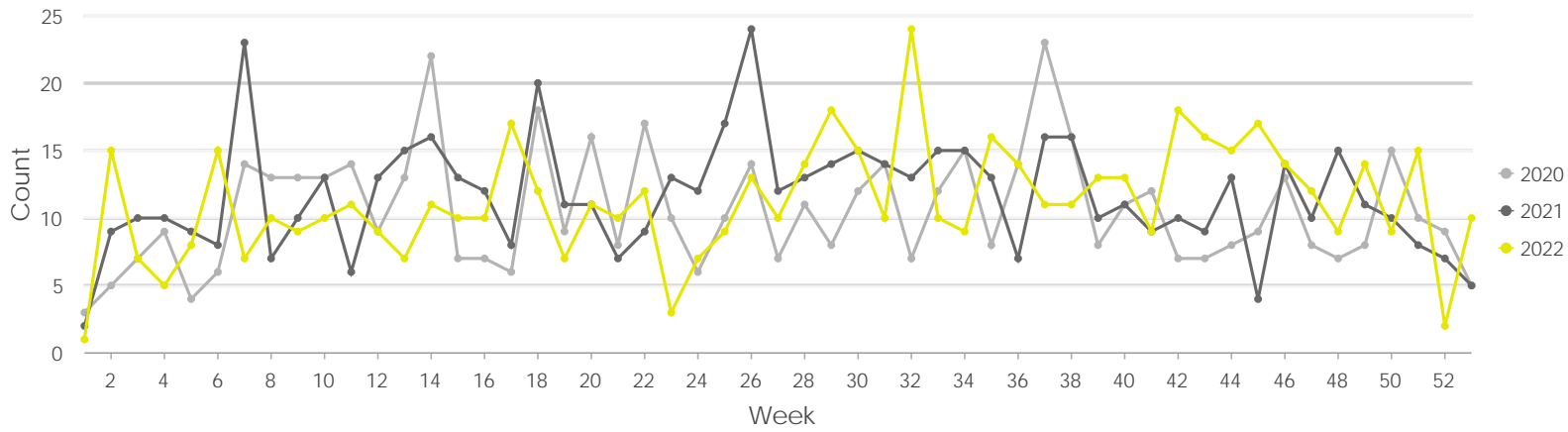


NFIRS 400s (Hazmat) Incidents – Boise Response Area

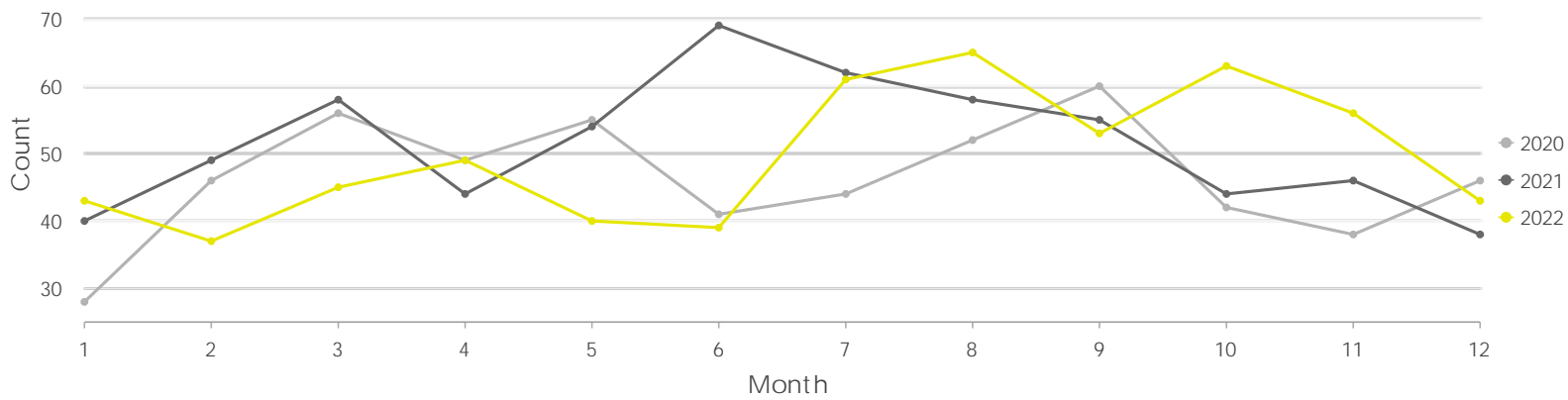


NFIRS 400s (Hazmat) Incidents – Boise Response Area

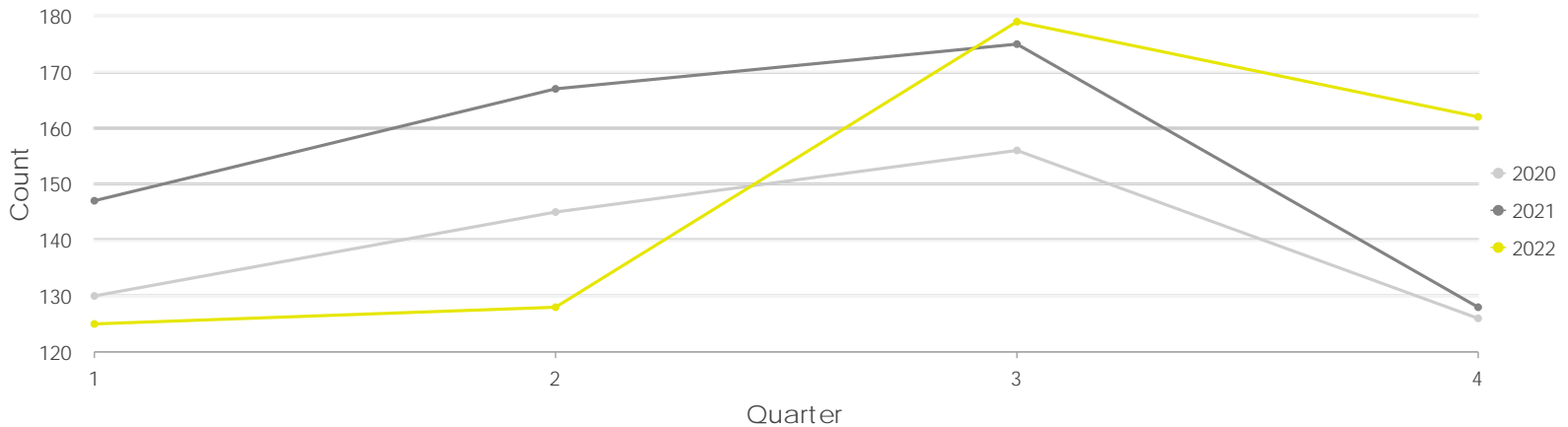
NFIRS 400 Hazmat Calls by Week



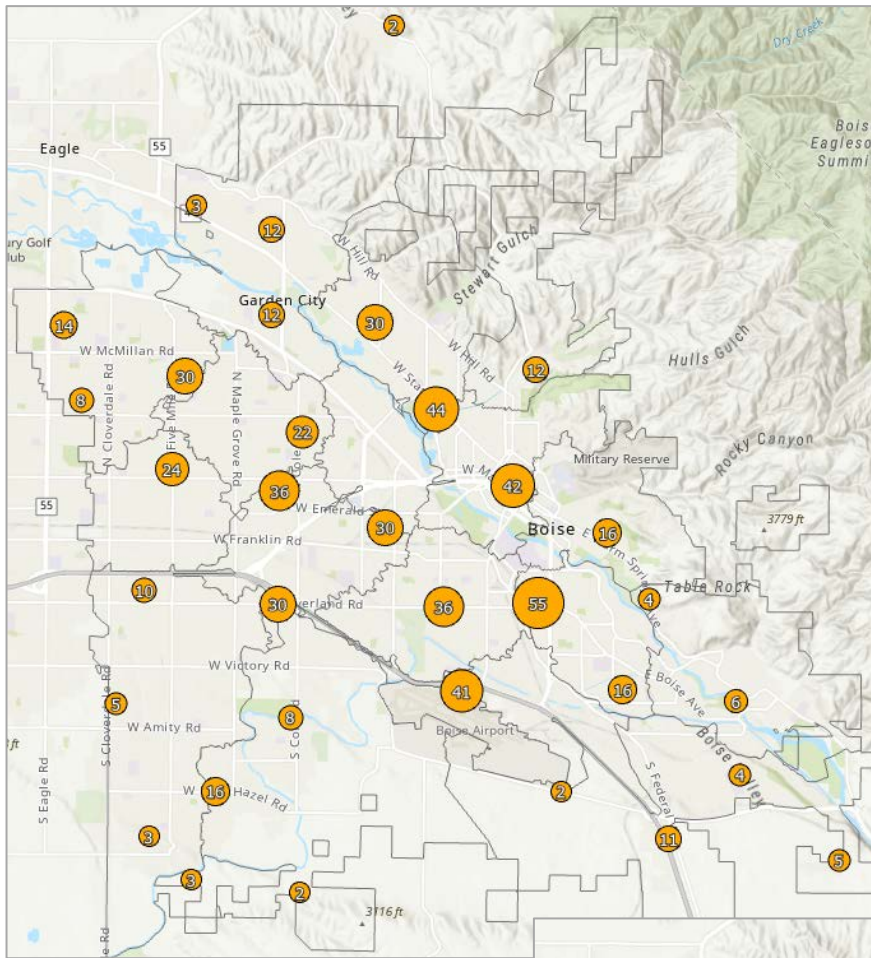
NFIRS 400 Hazmat Calls by Month



NFIRS 400 Hazmat Calls by Quarter



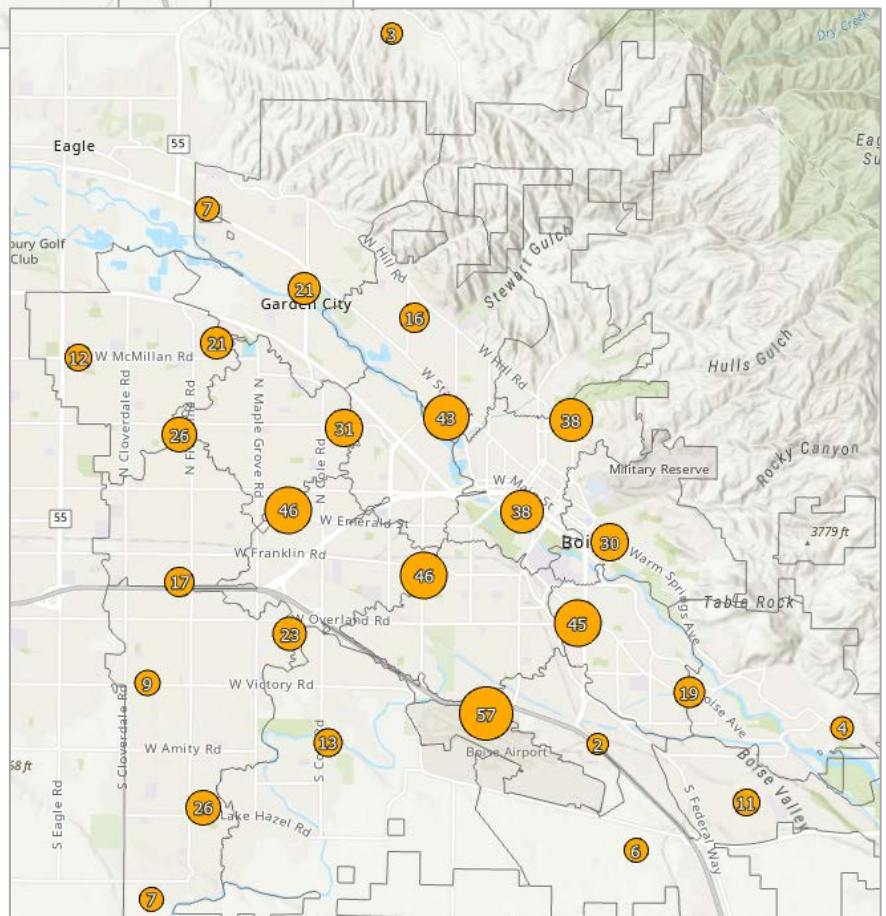
NFIRS 400s (Hazmat) Incidents – Boise Response Area



2021

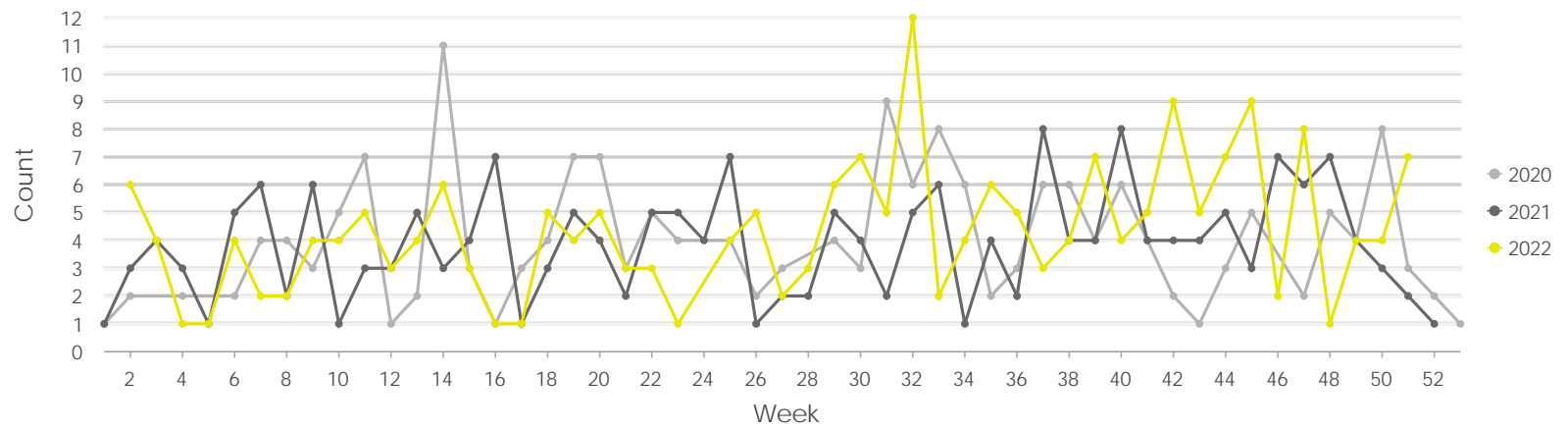


2022

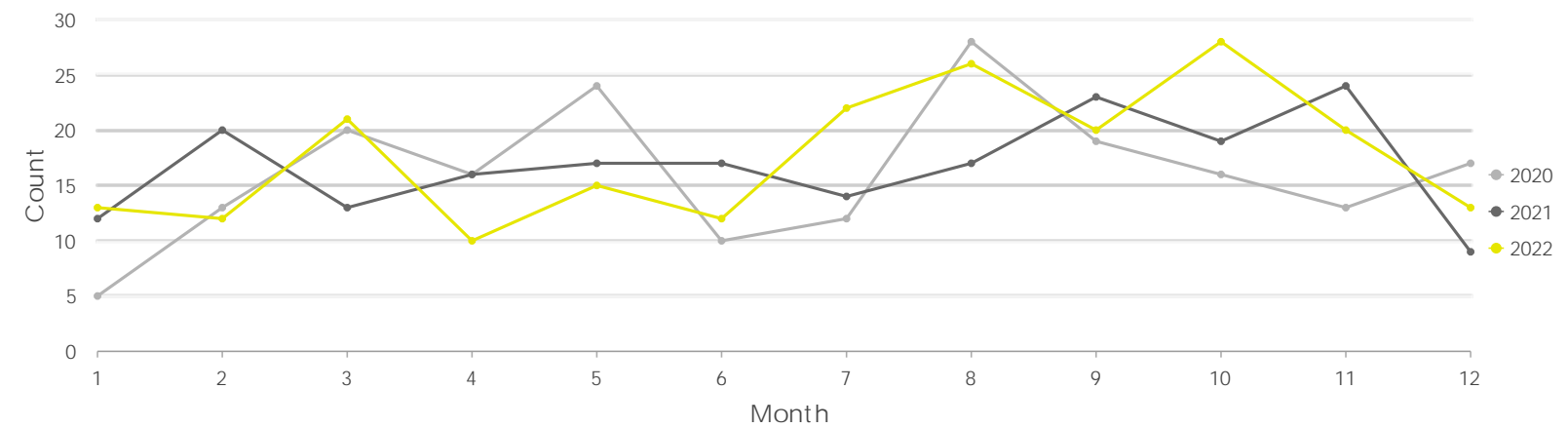


Gas Leaks – Boise Response Area

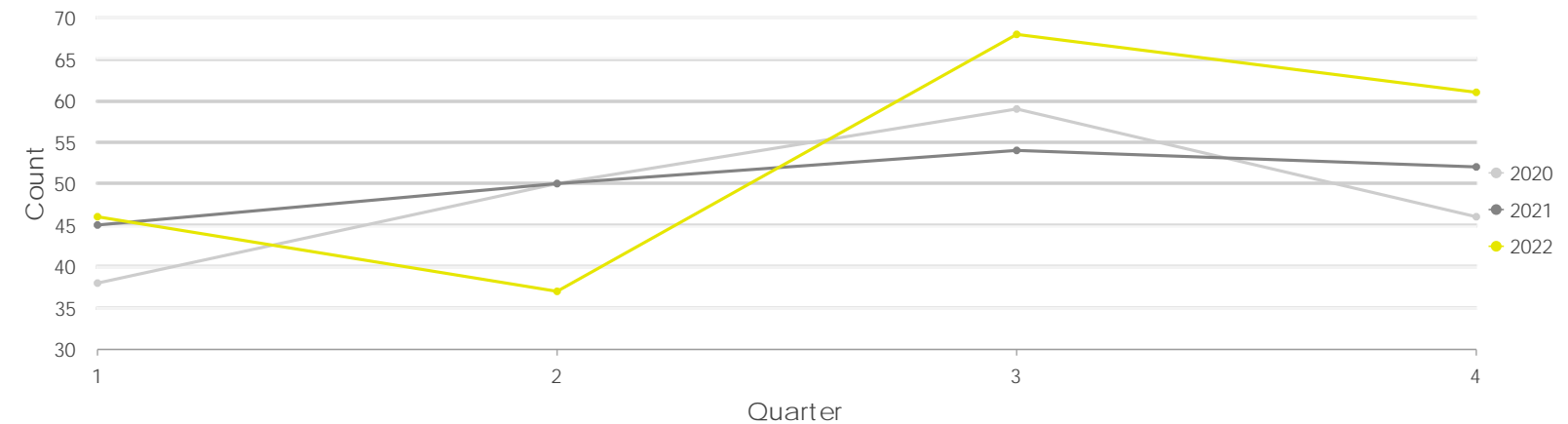
NFIRS 400 Hazmat Calls by Week



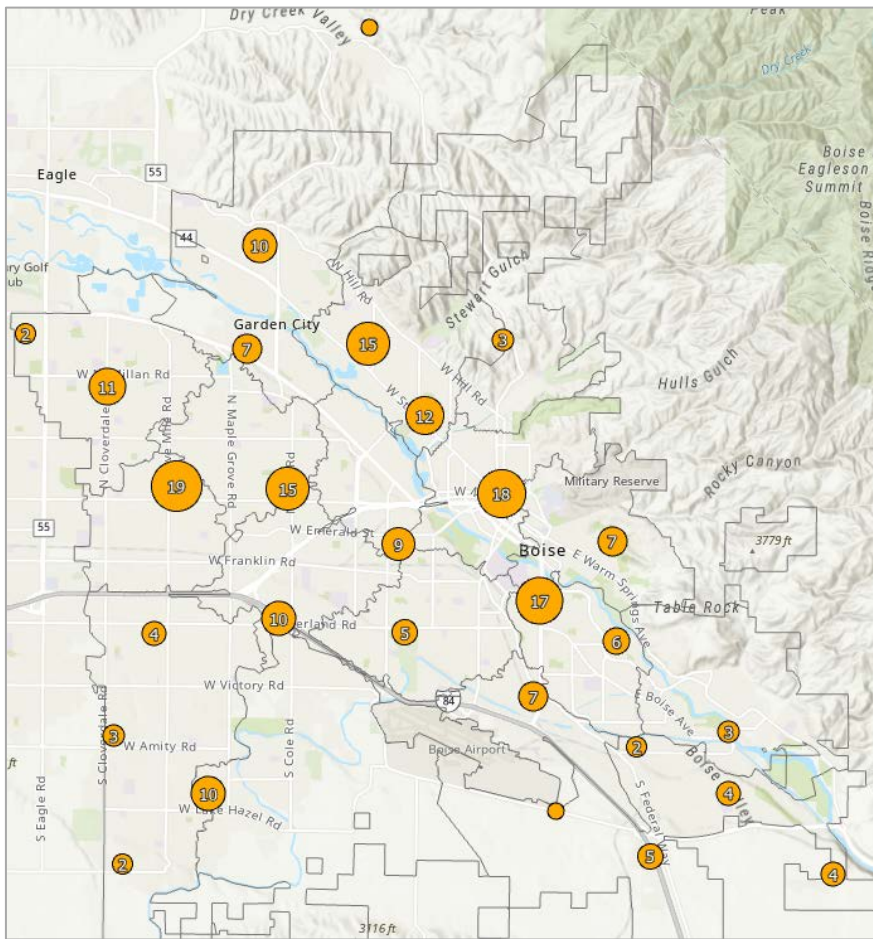
Gas Leaks by Month



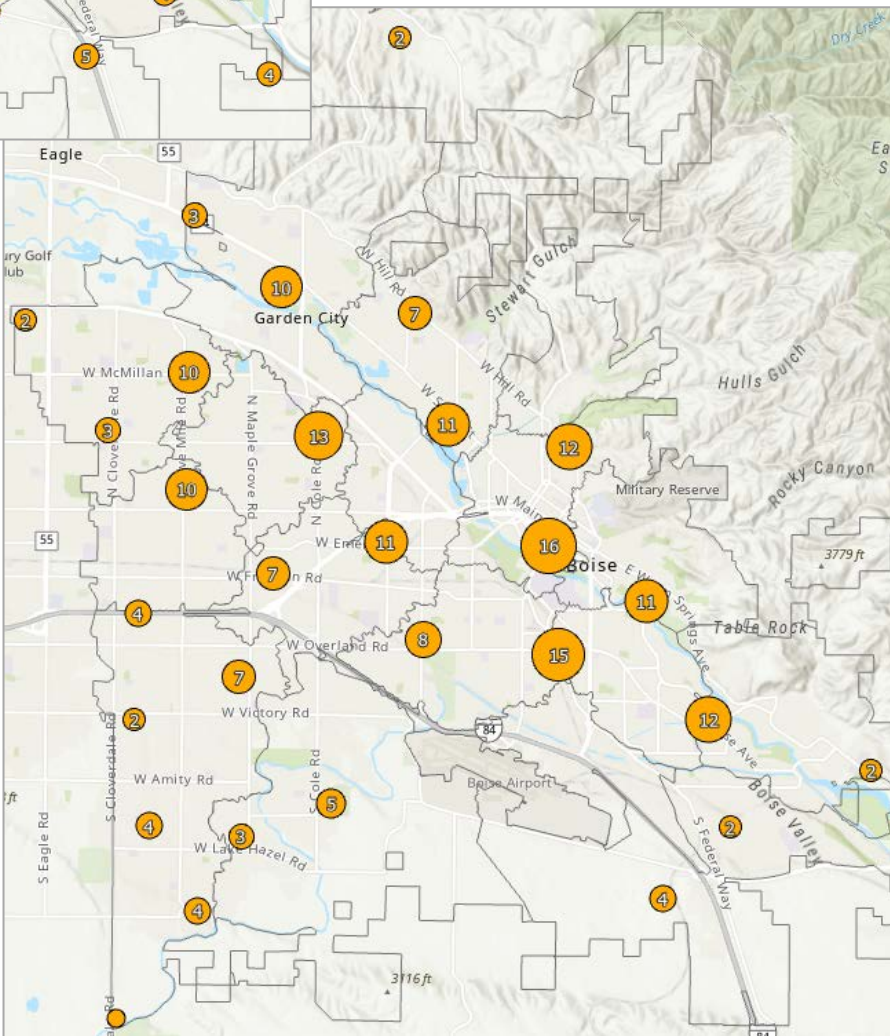
Gas Leaks by Quarter



Gas Leaks – Boise Response Area



2022

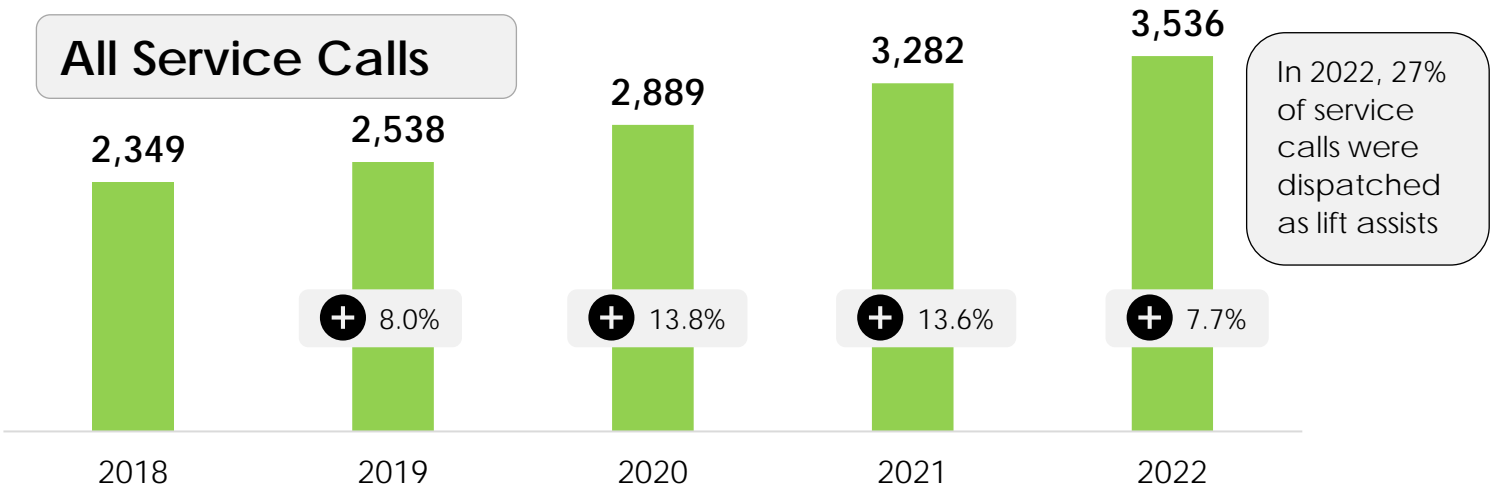


2021

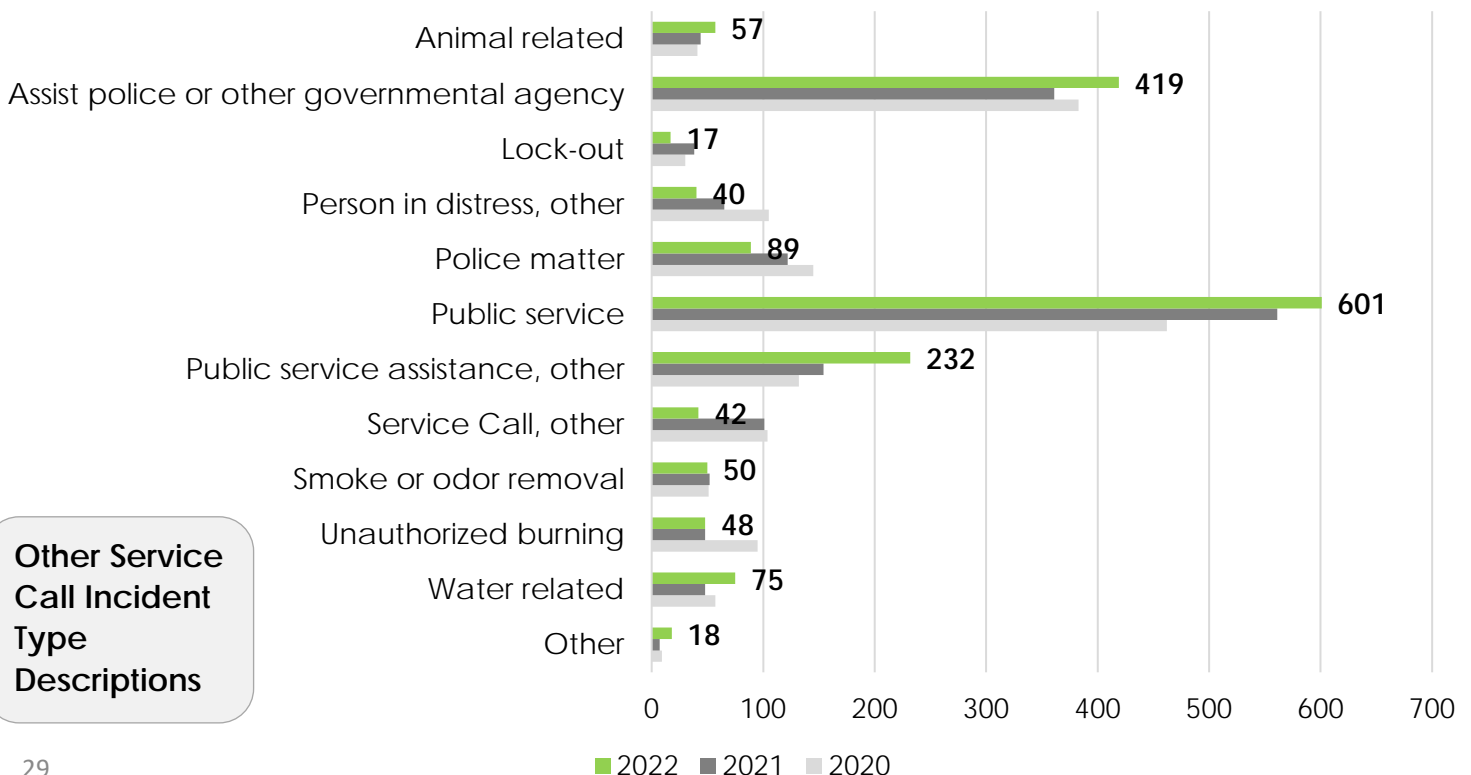
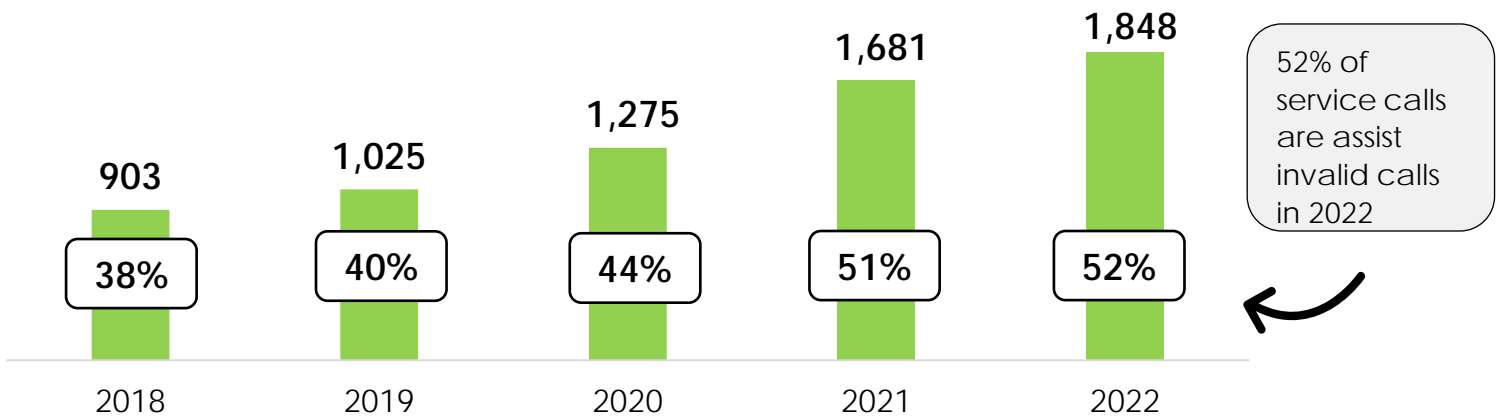


NFIRS 500s (Service) Incidents – Boise Response Area

All Service Calls

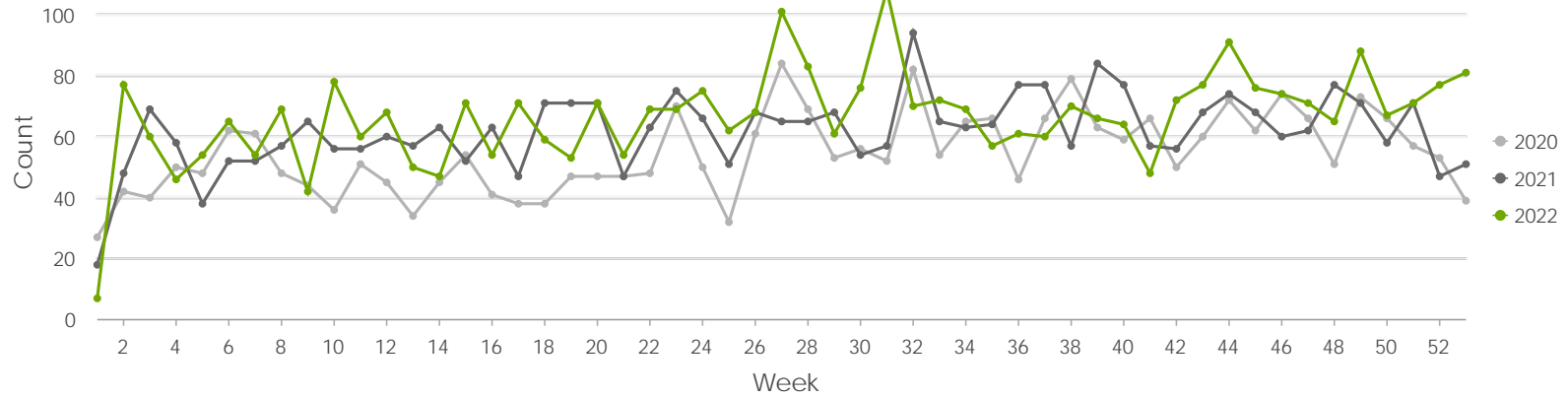


Service Call: Assist Invalid Calls

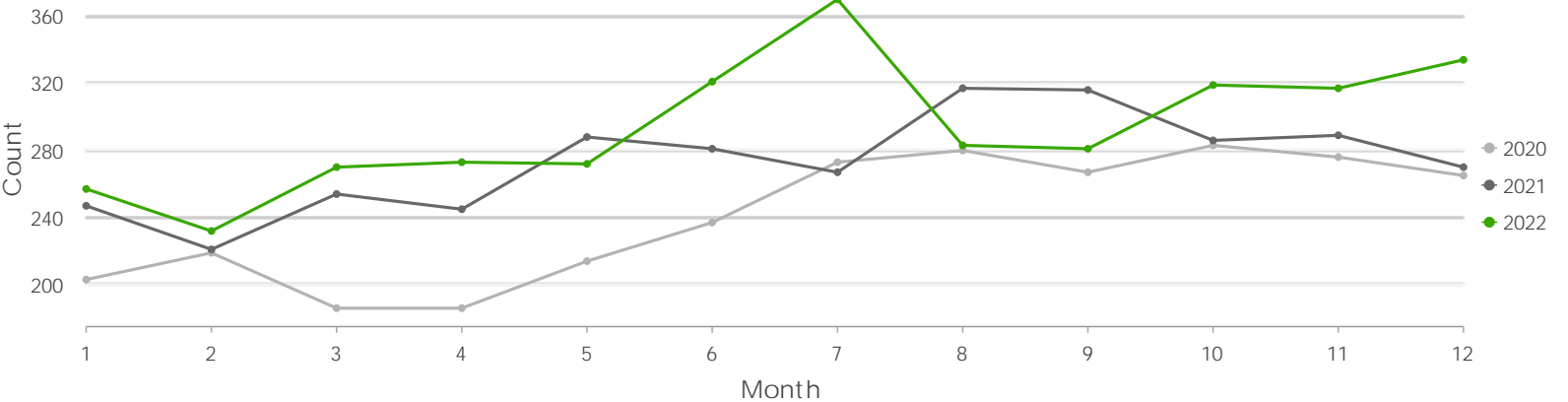


NFIRS 500s (Service) Incidents – Boise Response Area

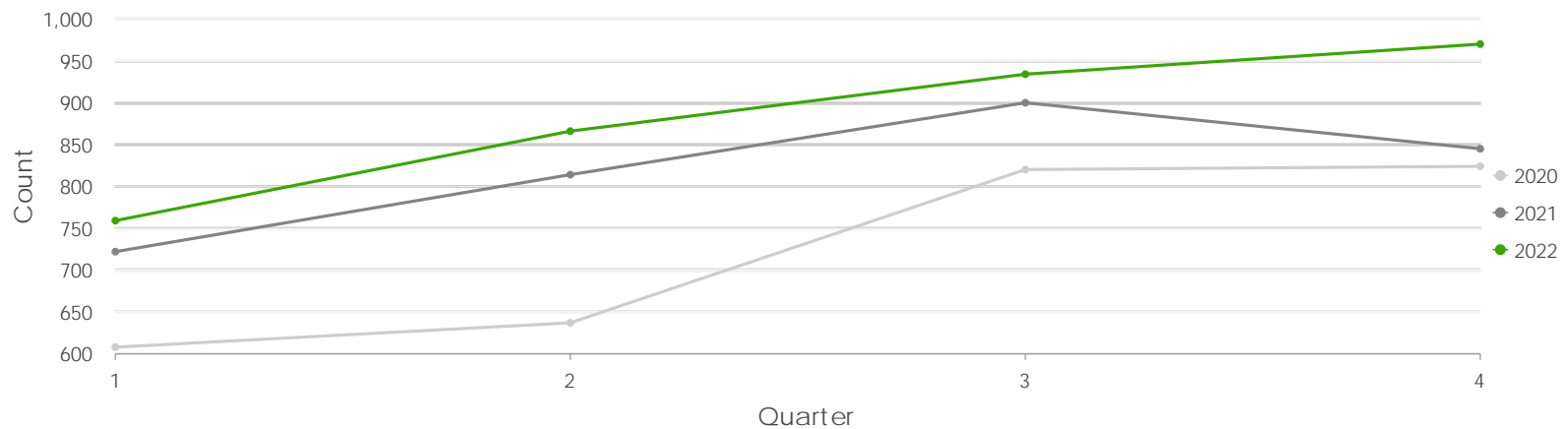
NFIRS 500 Service Calls by Week



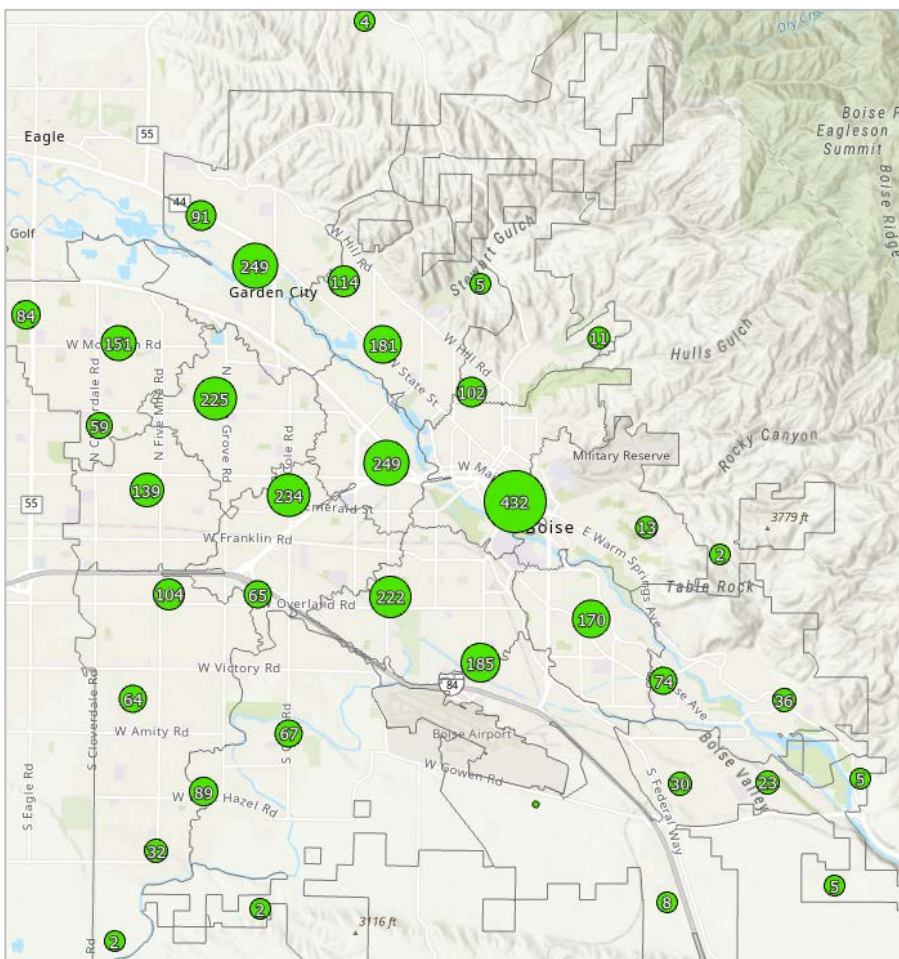
NFIRS 500 Service Calls by Month



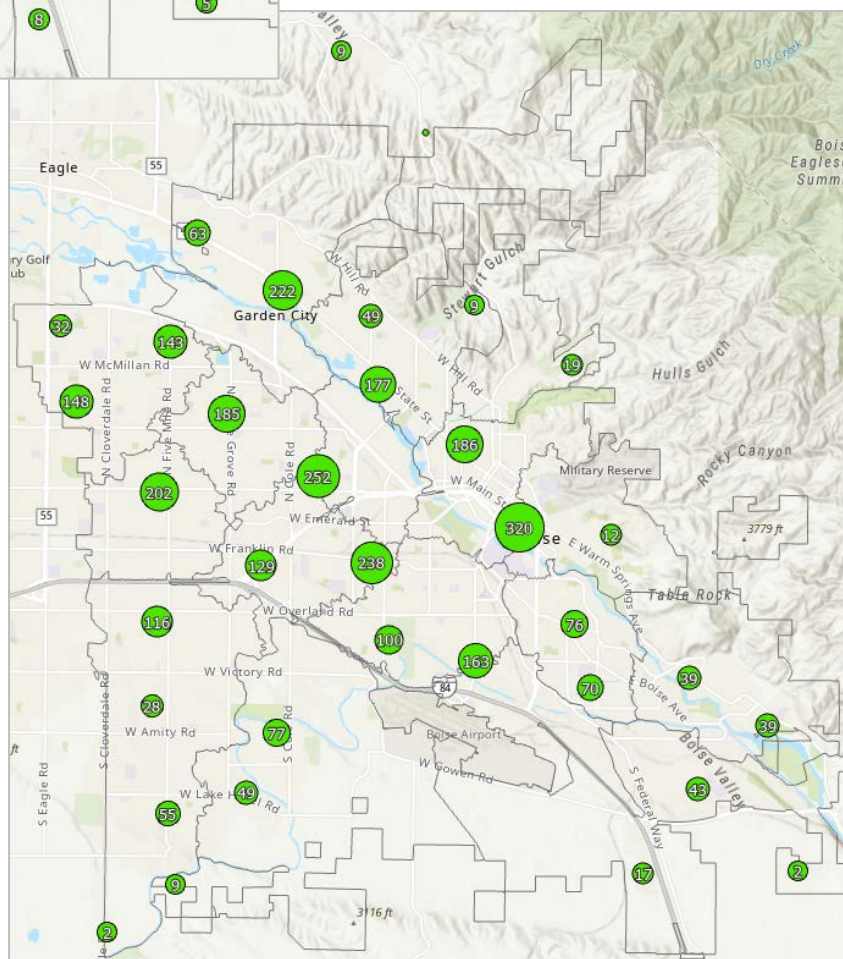
NFIRS 500 Service Calls by Quarter



NFIRS 500s (Service) Incidents – Boise Response Area



2022

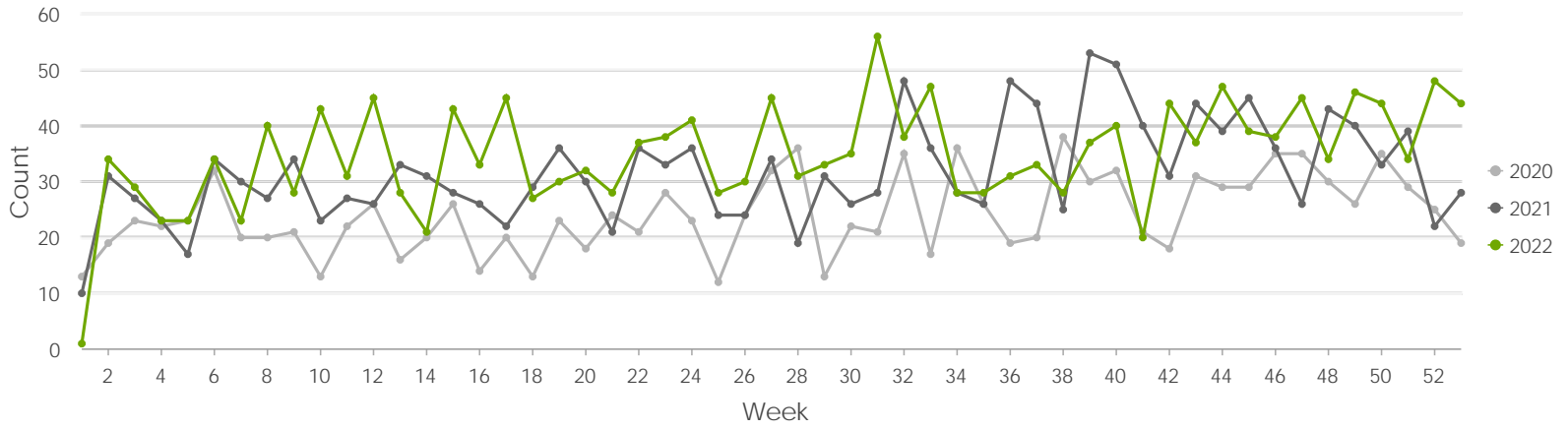


2021

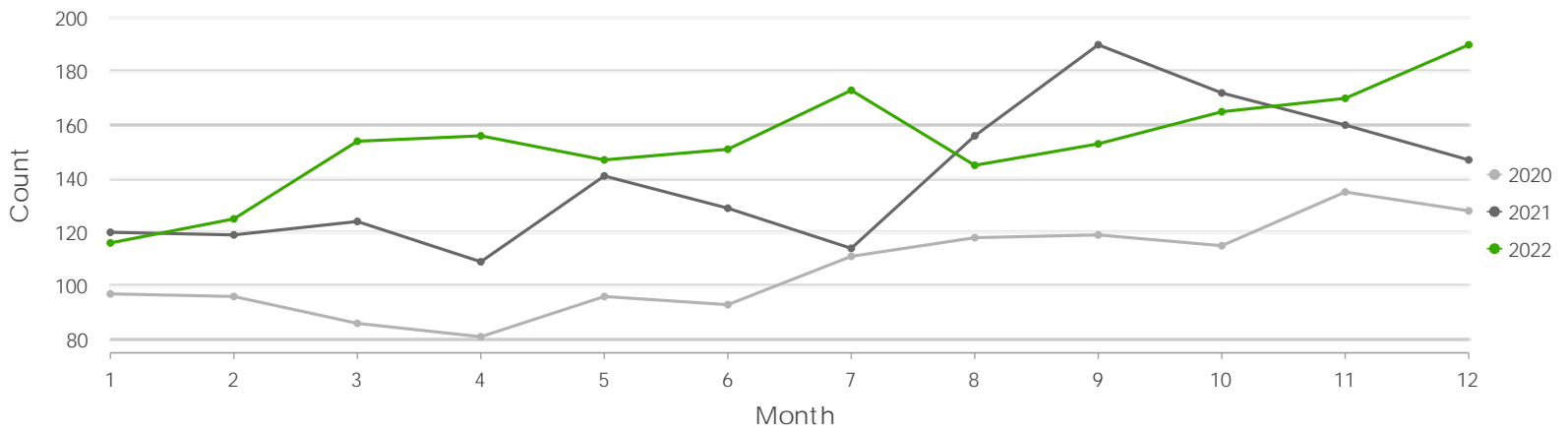


Assist Invalid Incidents – Boise Response Area

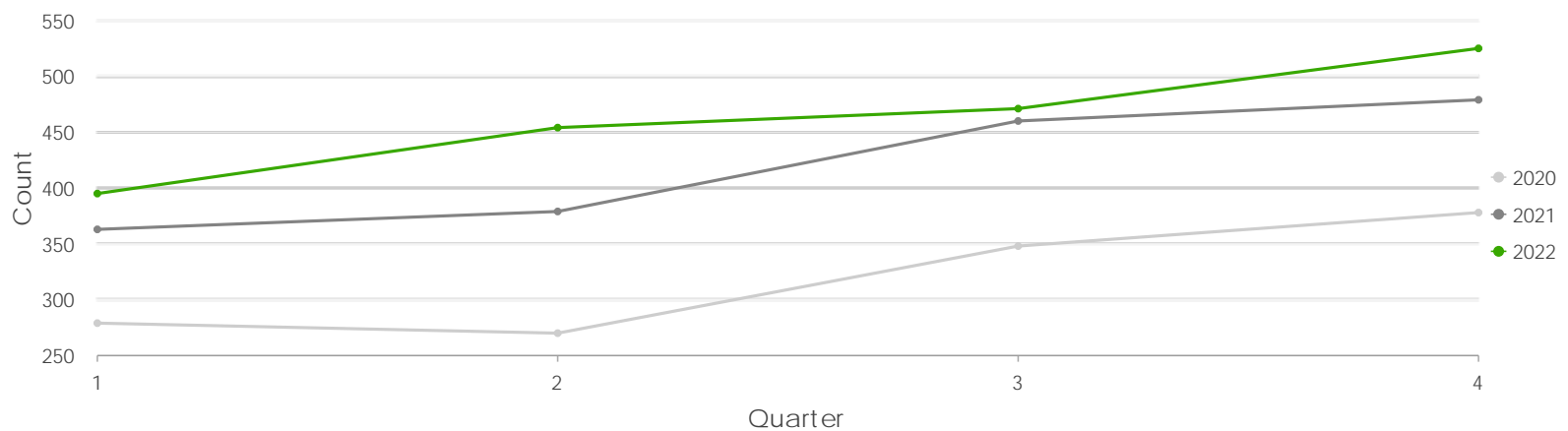
Assist Invalid Calls by Week



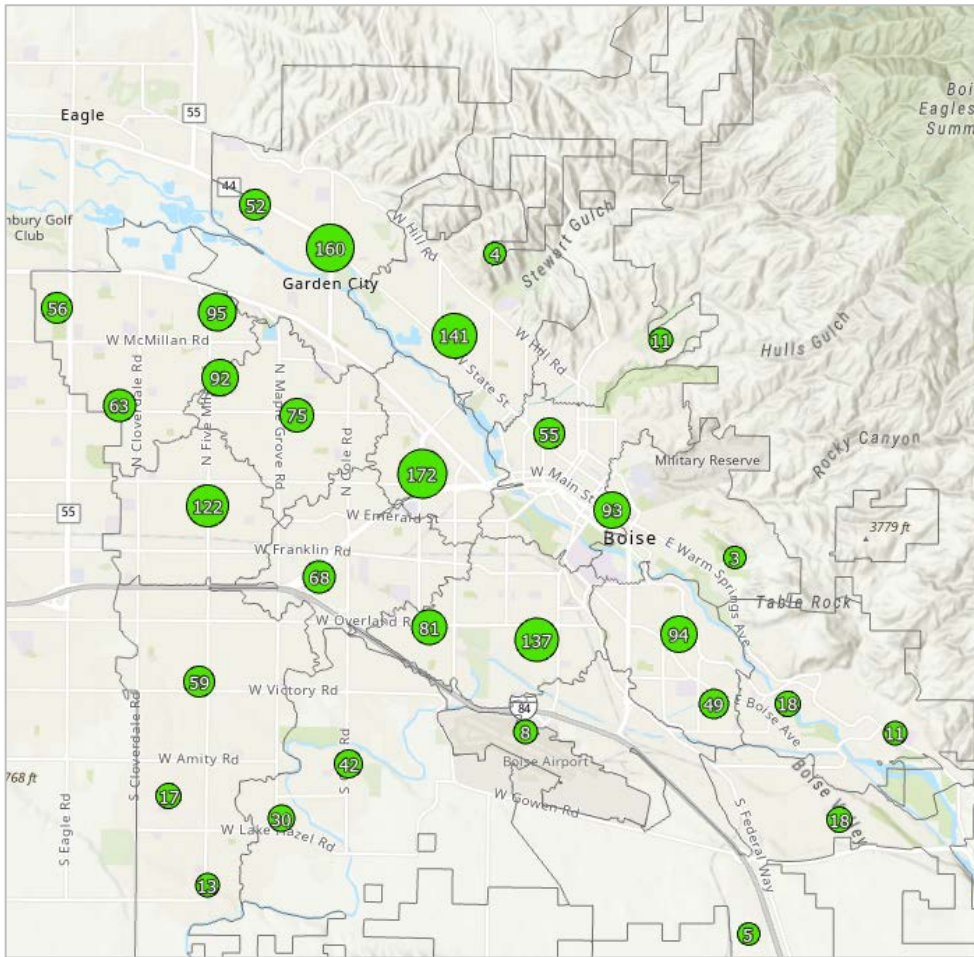
Assist Invalid Calls by Month



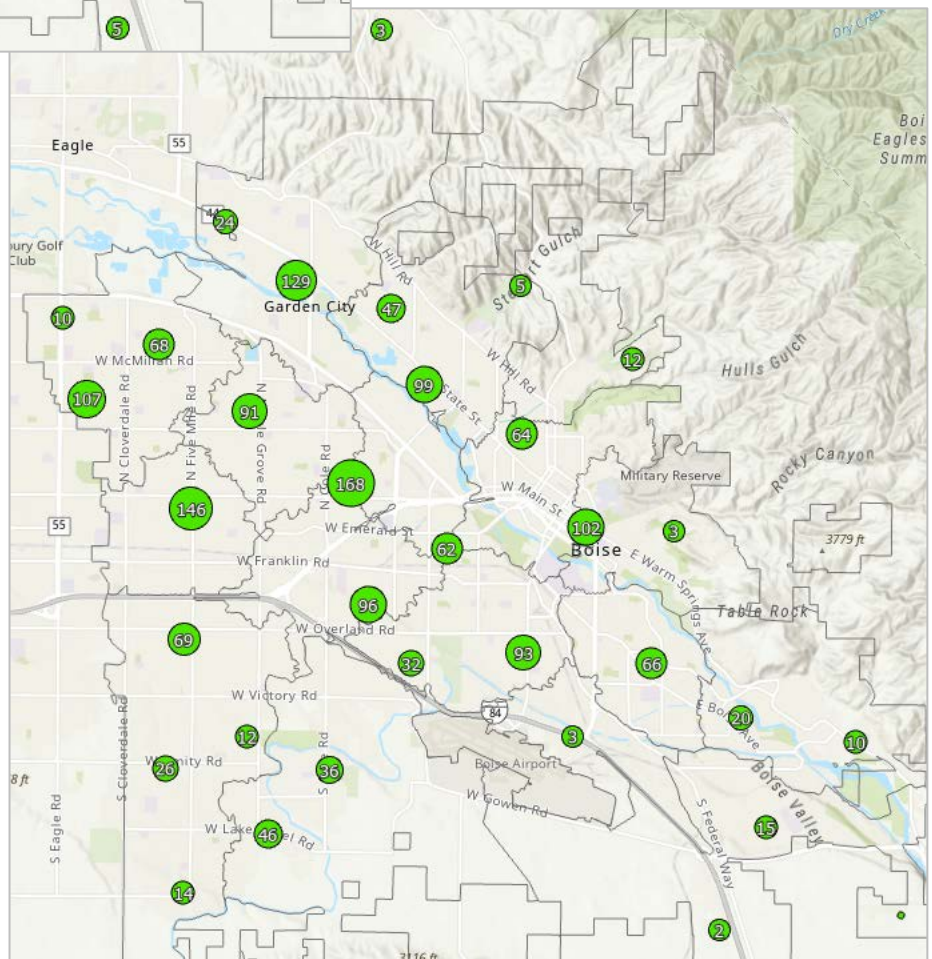
Assist Invalid Calls by Quarter



Assist Invalid Incidents – Boise Response Area



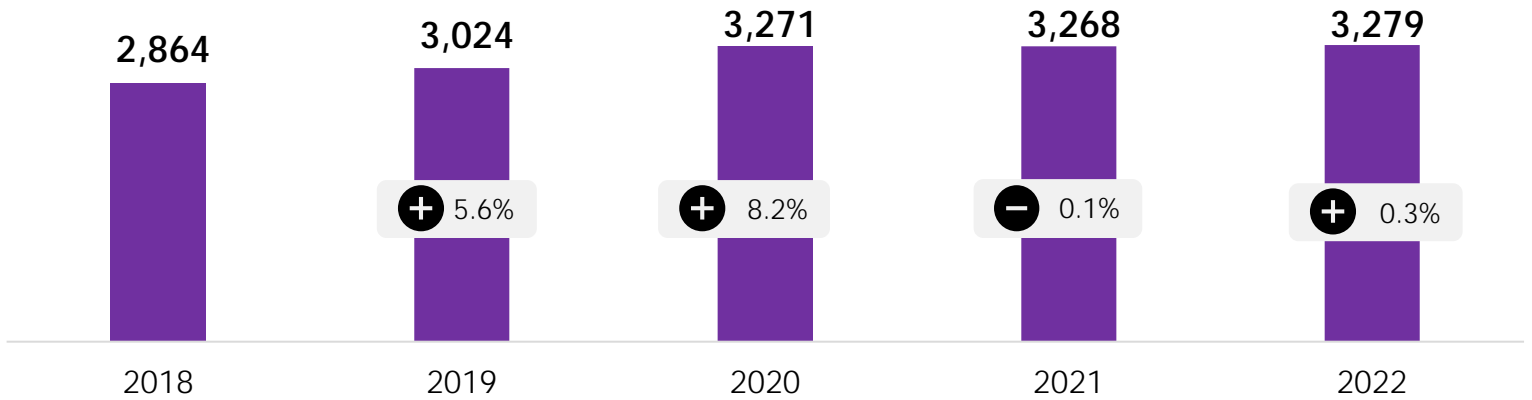
2022



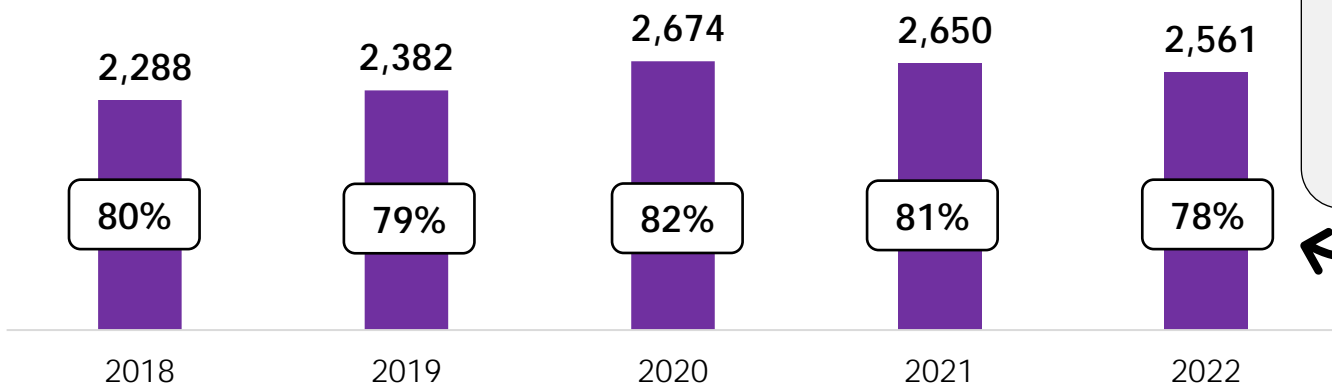
2021

NFIRS 600s (Good Intent) Incidents

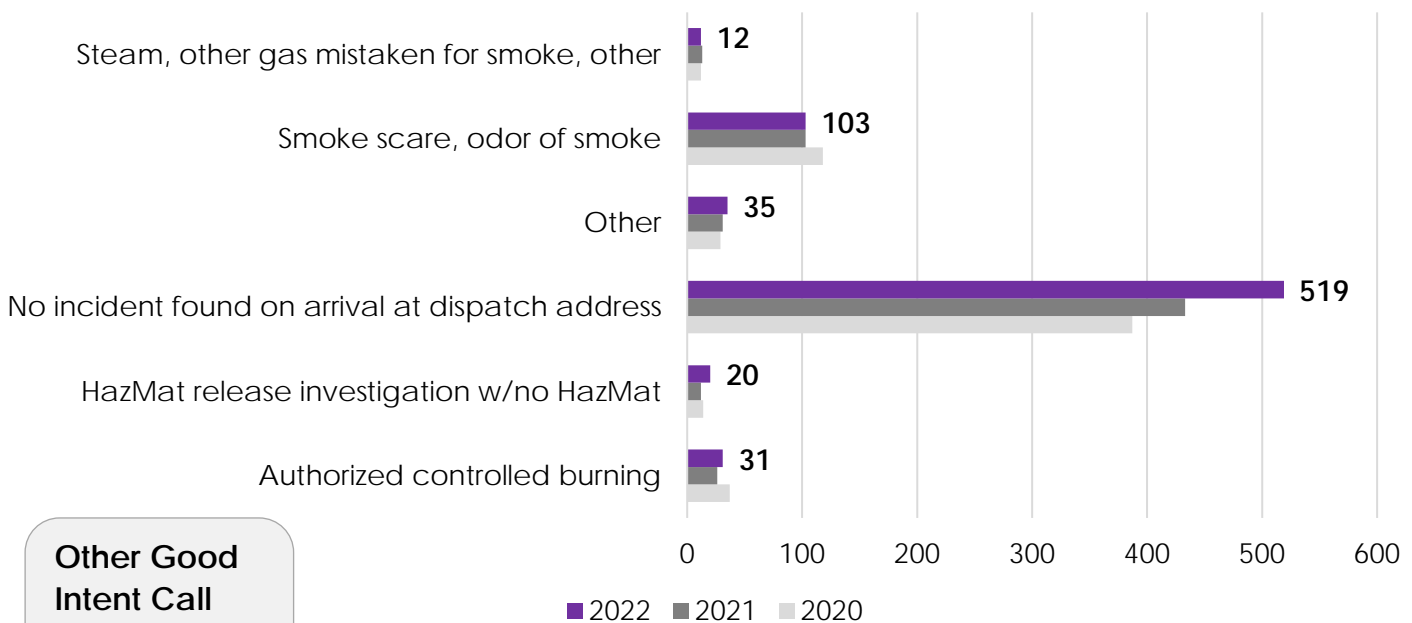
All Good Intent Calls



Good Intent Call: Canceled En Route Calls



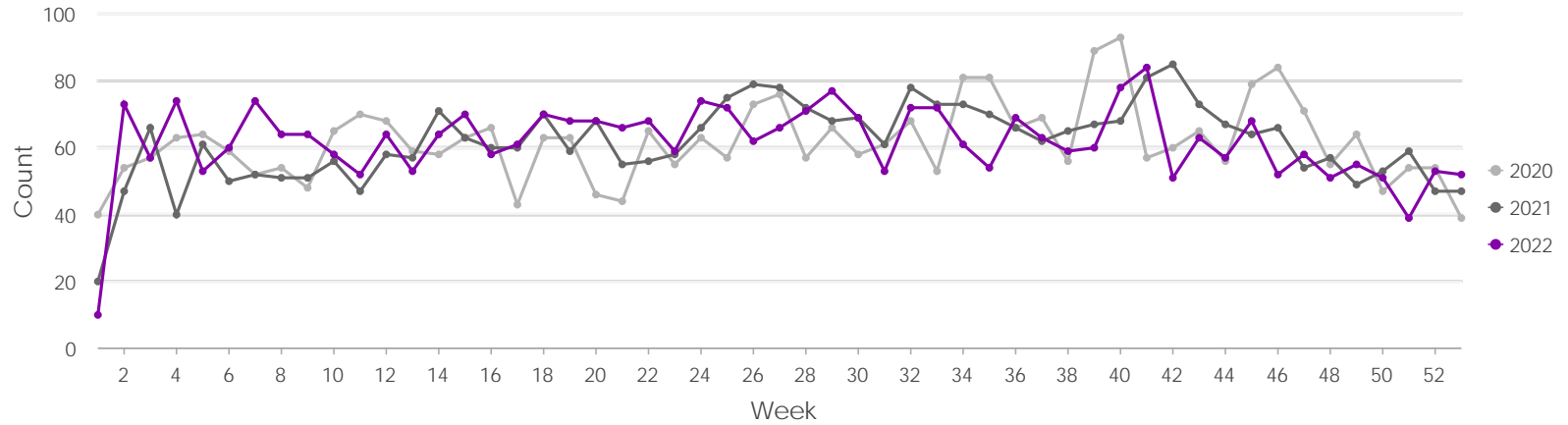
78% of good intent calls are canceled en route calls in 2022



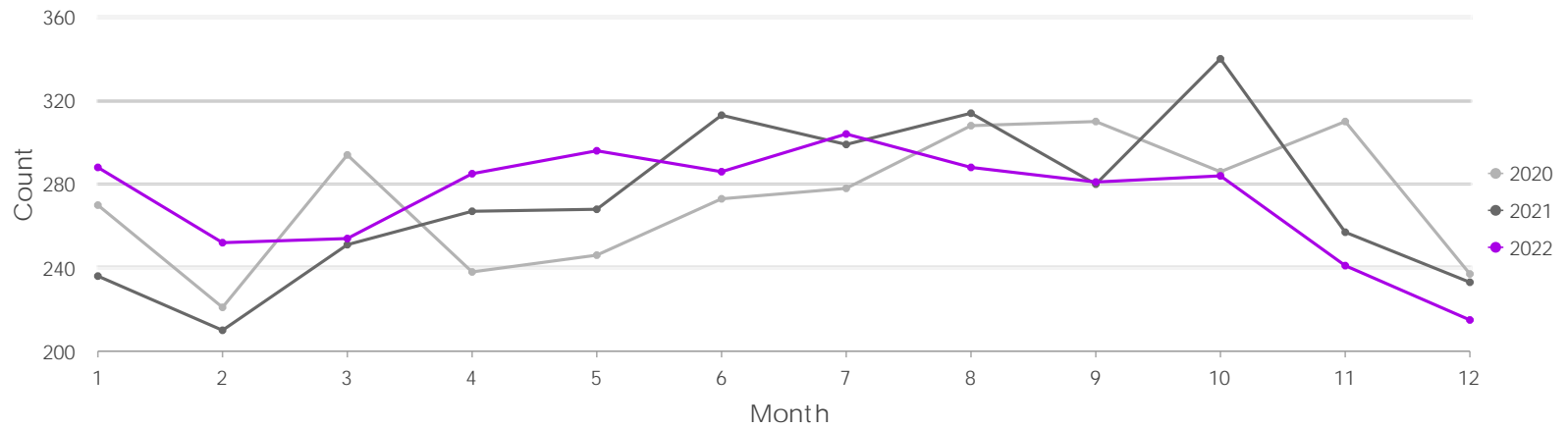
Other Good Intent Call Incident Type Descriptions

NFIRS 600s (Good Intent) Incidents – Boise Response Area

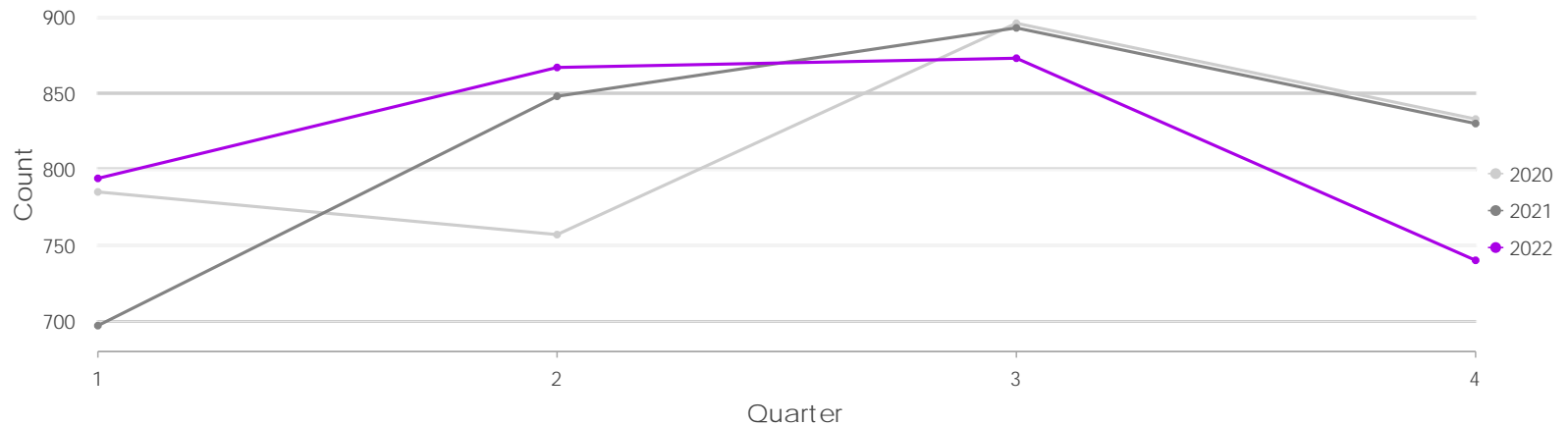
NFIRS 600 Good Intent Calls by Week



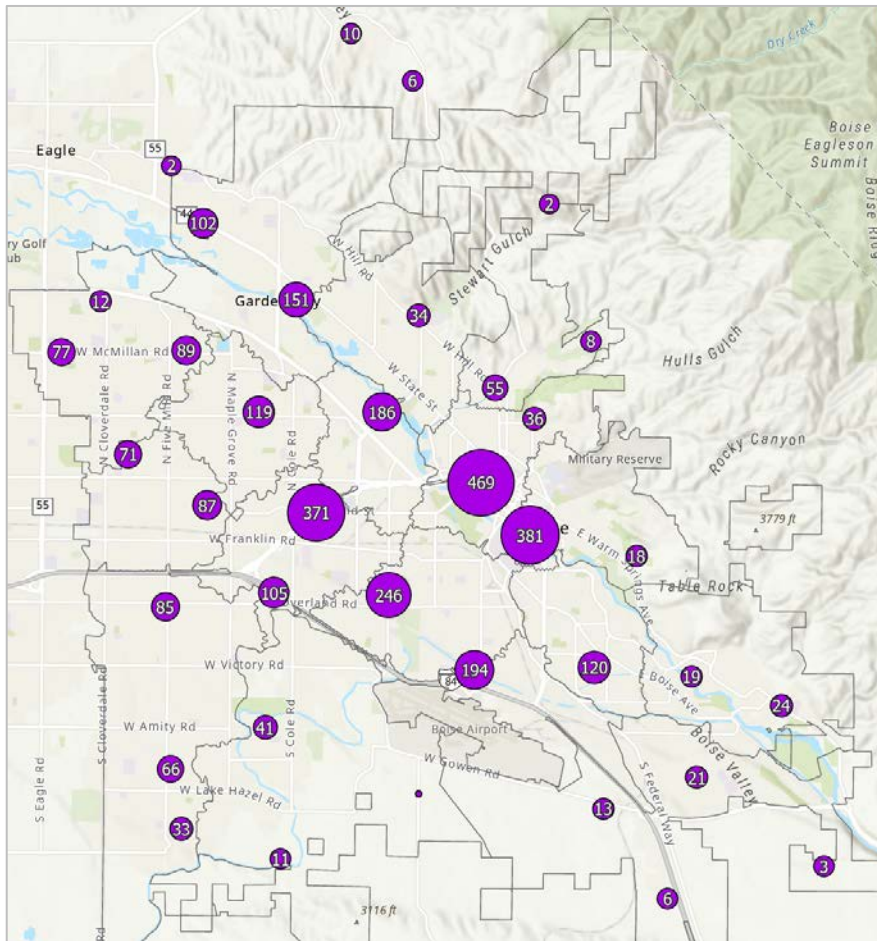
NFIRS 600 Good Intent Calls by Month



NFIRS 600 Good Intent Calls by Quarter



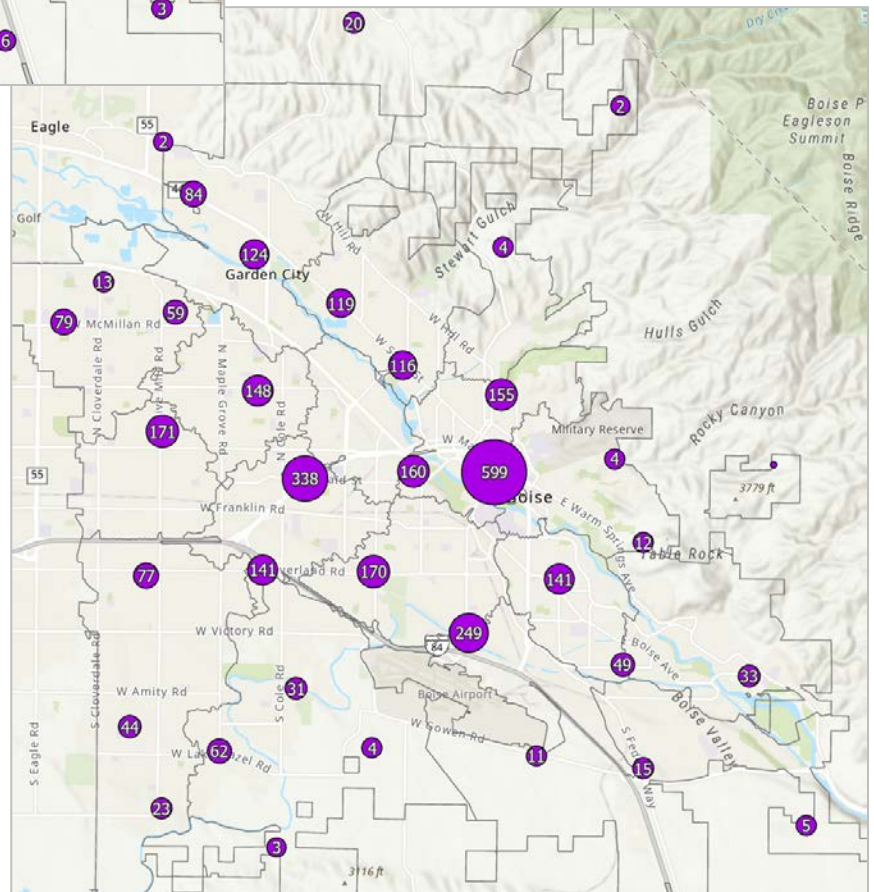
NFIRS 600s (Good Intent) Incidents – Boise Response Area



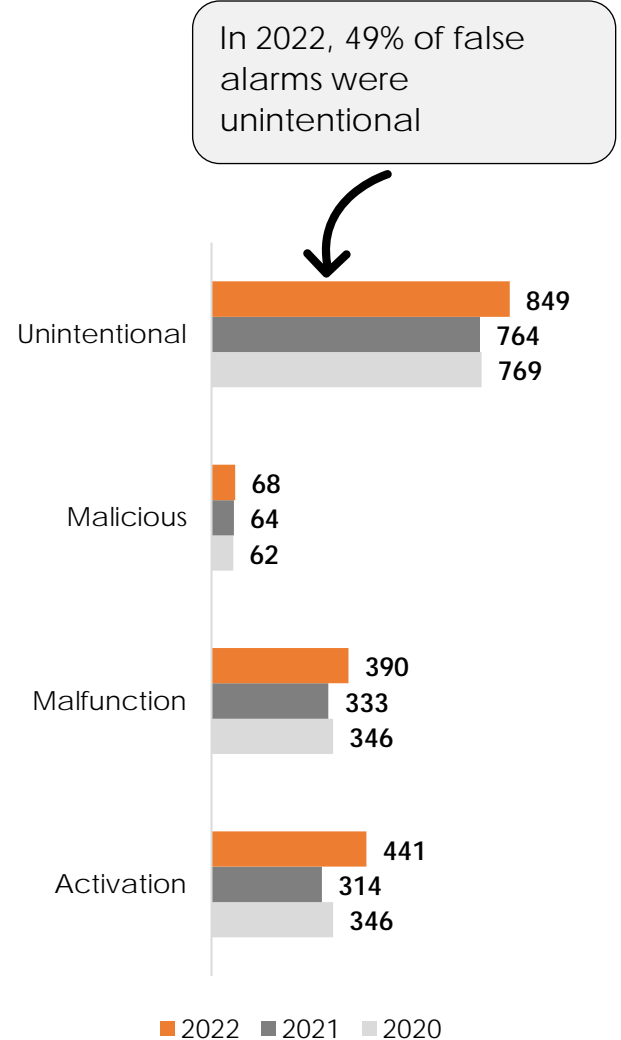
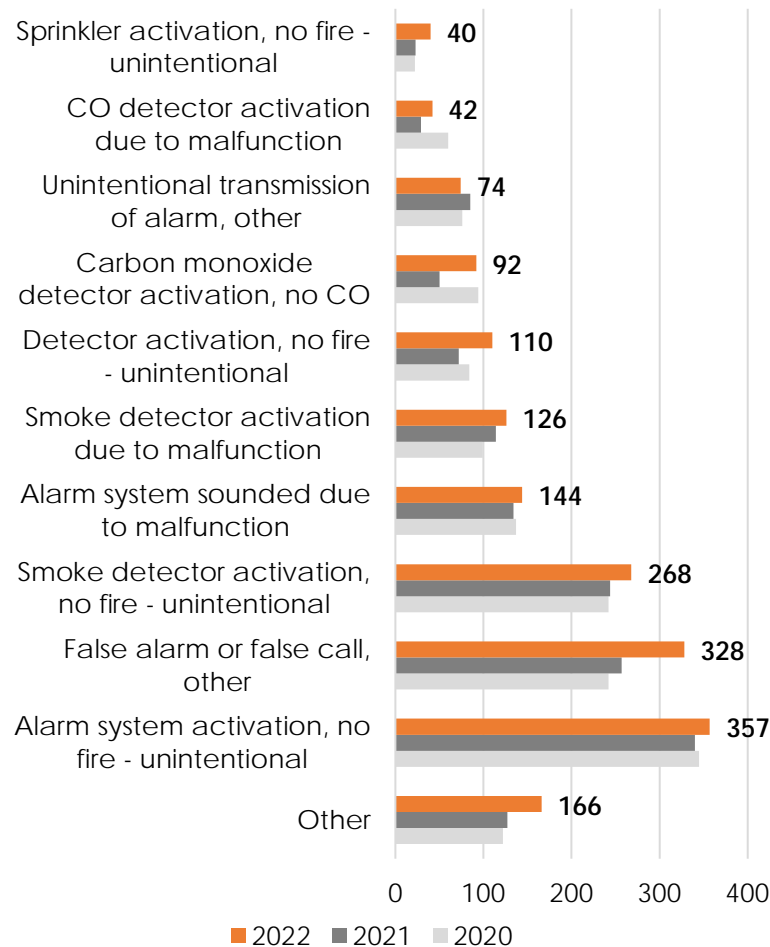
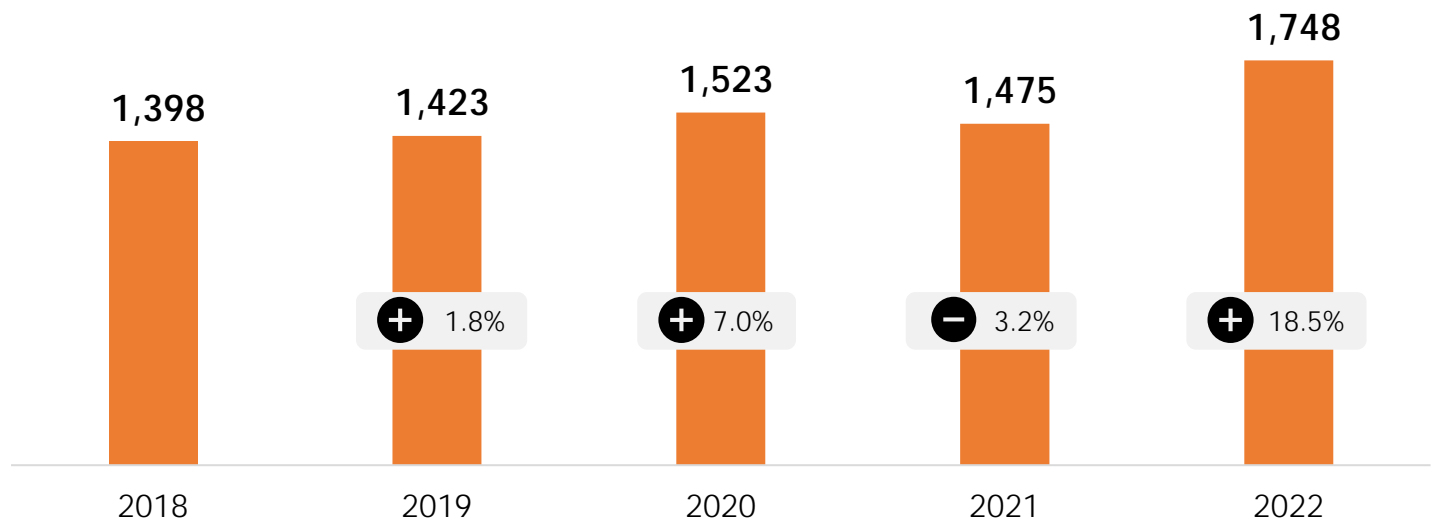
2021



2022



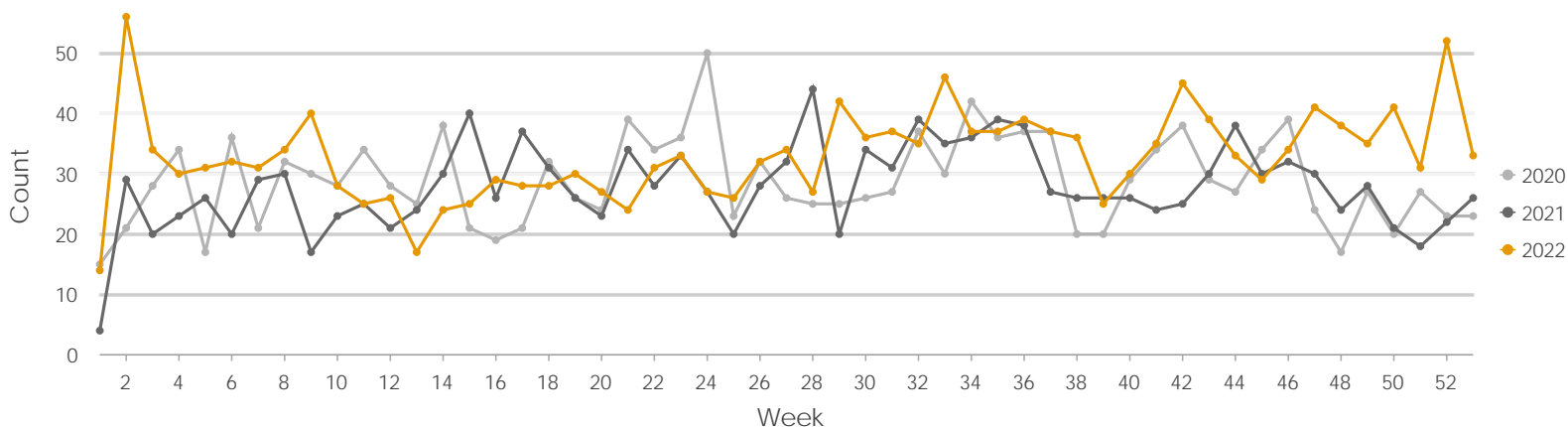
NFIRS 700s (False Alarm) Incidents – Boise Response Area



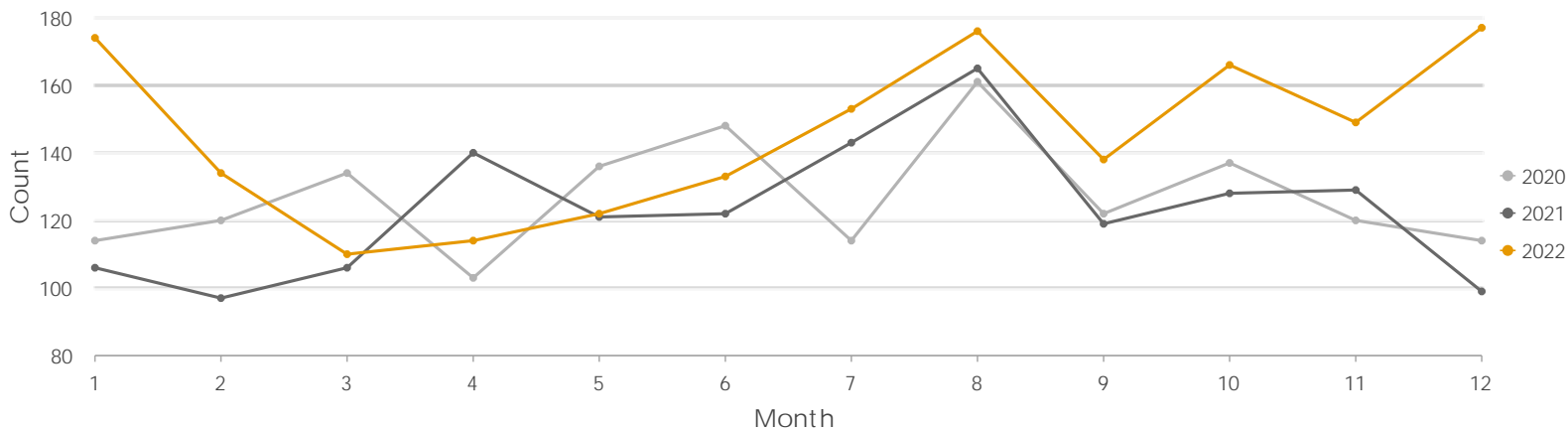
From 2018 to 2022 there was a 25% increase in false alarms

NFIRS 700s (False Alarm) Incidents – Boise Response Area

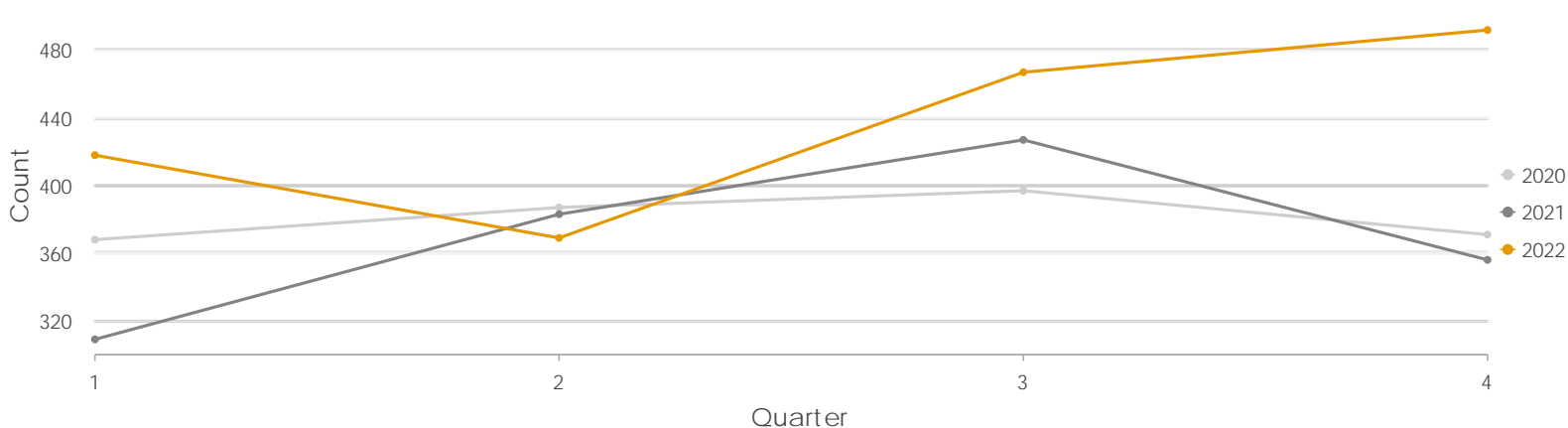
NFIRS 700 False Alarms by Week



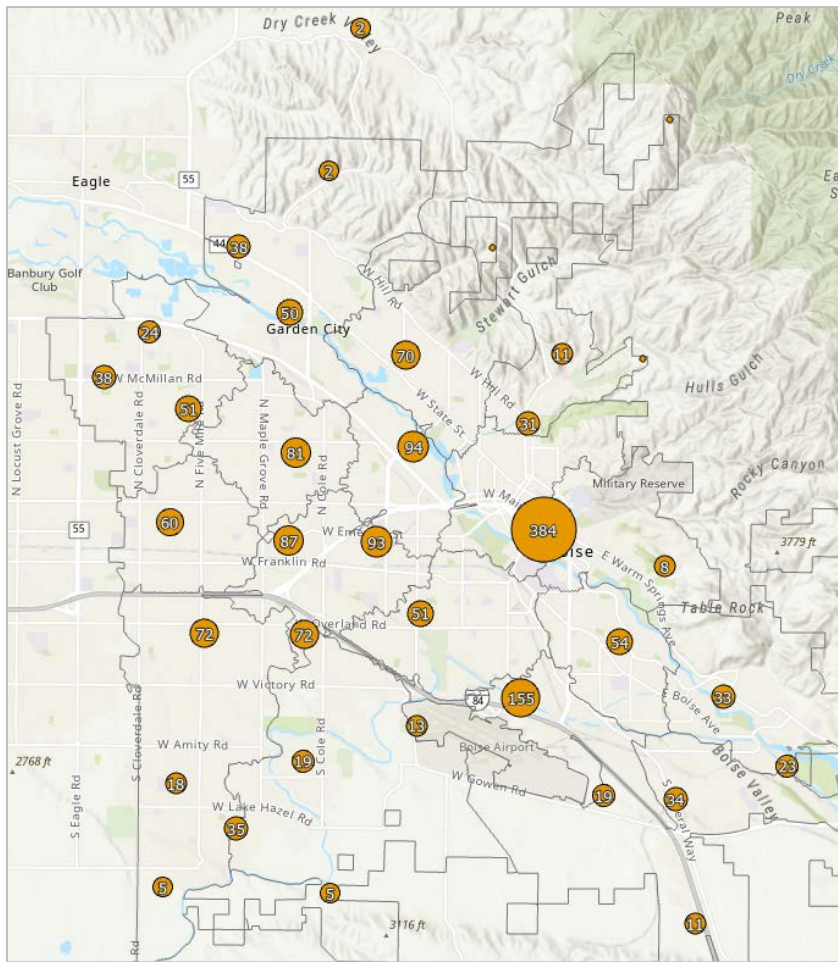
NFIRS 700 False Alarms by Month



NFIRS 700 False Alarms by Quarter

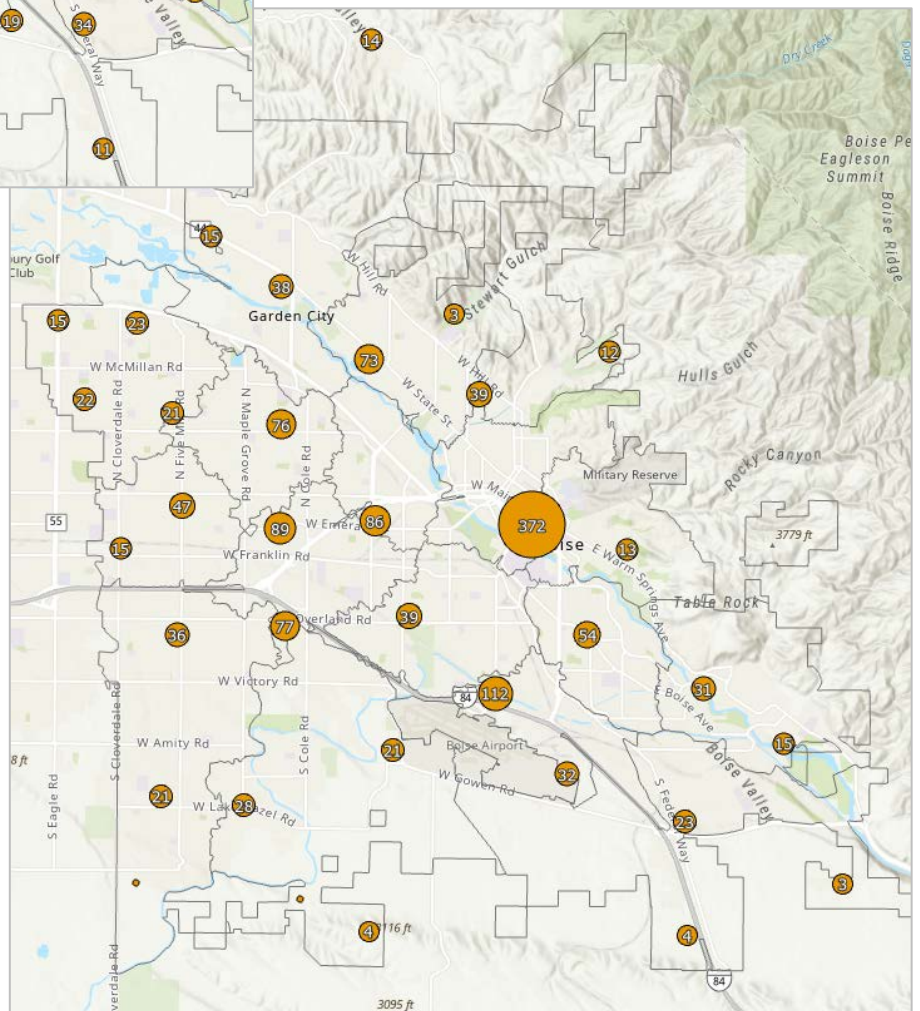


NFIRS 700s (False Alarm) Incidents – Boise Response Area



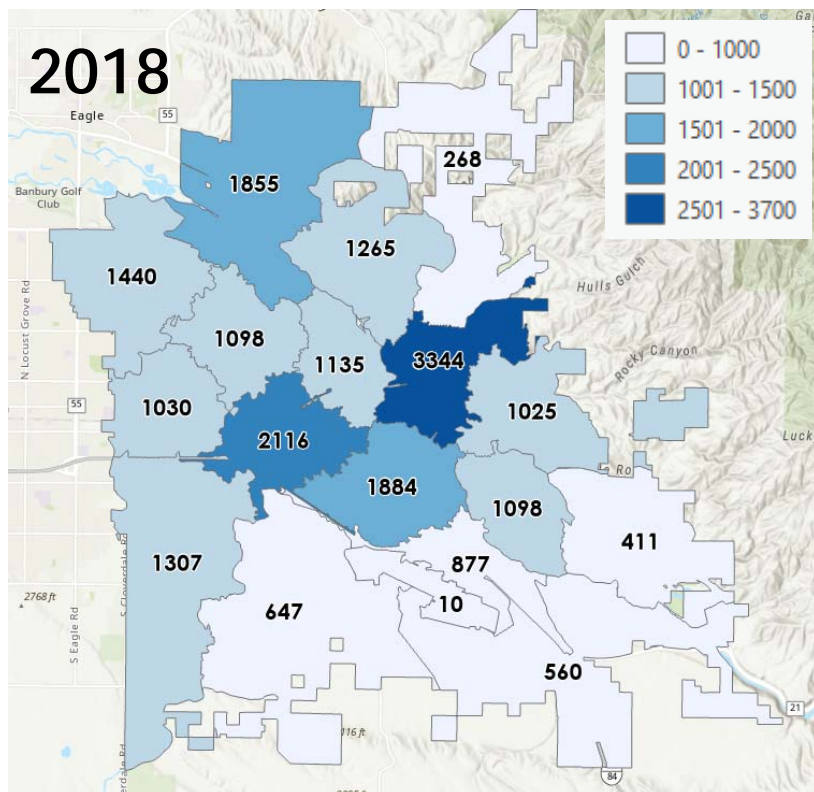
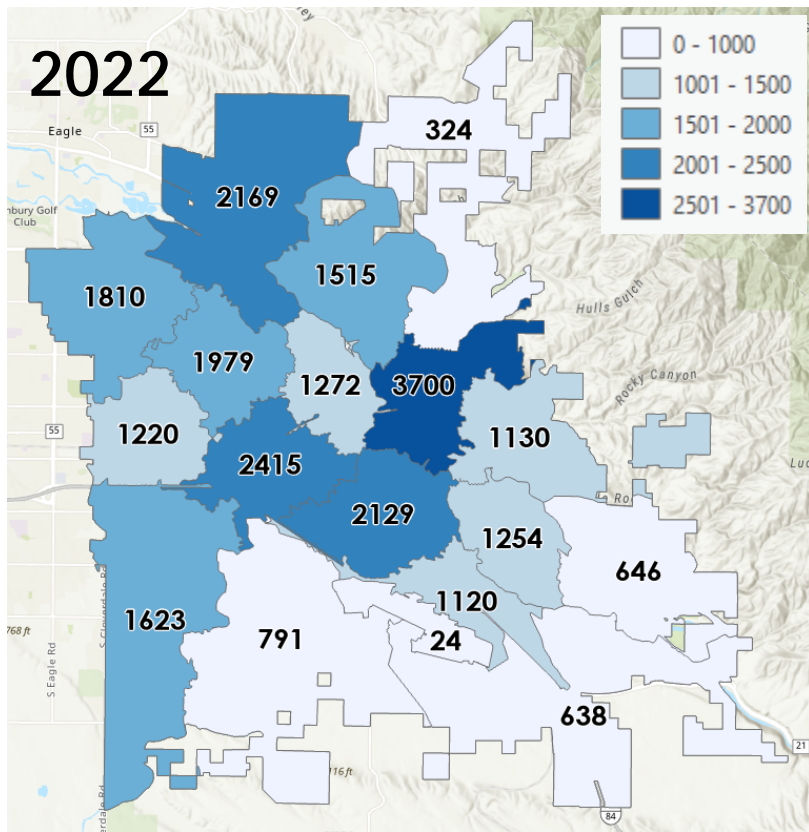
2022

2021

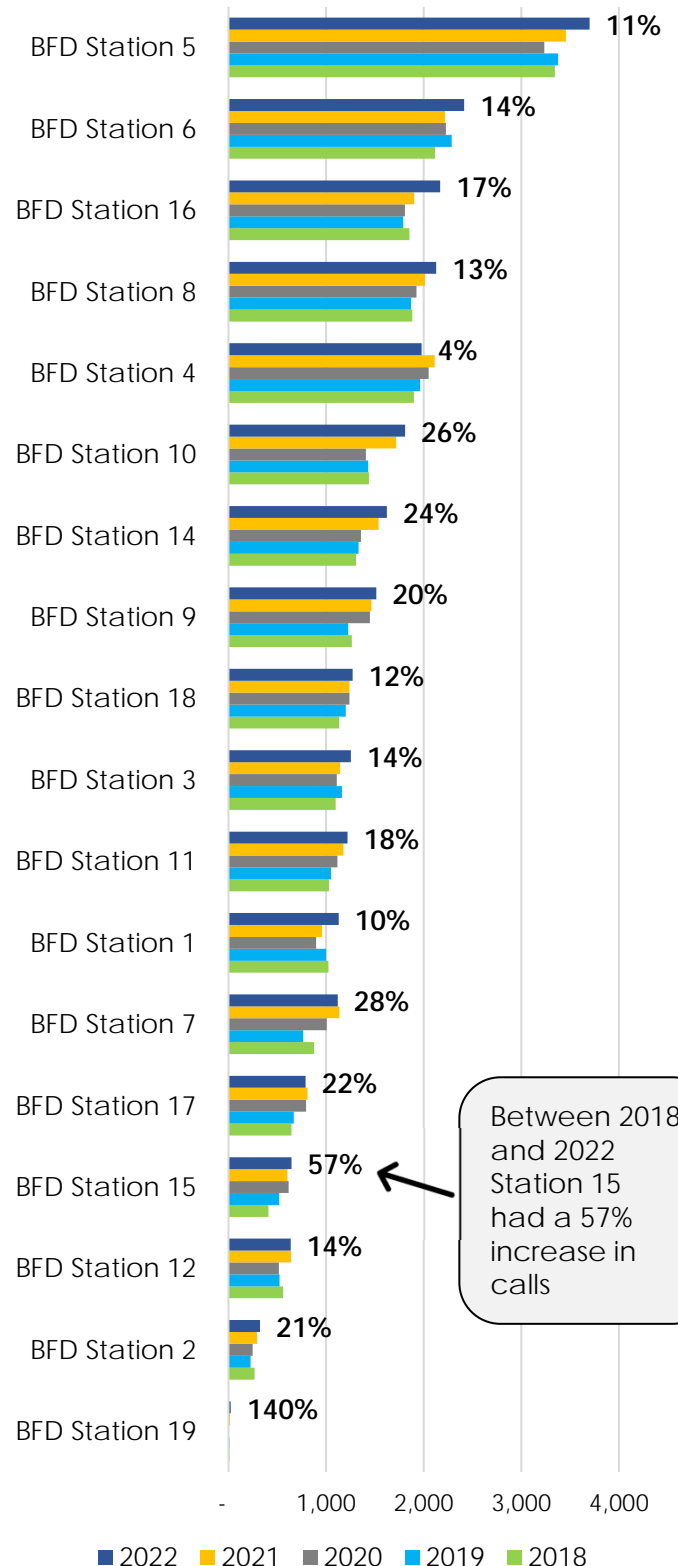


Call Volume by First Due Area

Between 2018 and 2022 the rank of stations by call volume has remained consistent. Every station's call volume has increased in those five years, some more than others. Notably station 15's call volume has increased by 57% and seven stations had an increase of 20% or more calls.



Incidents by First Due

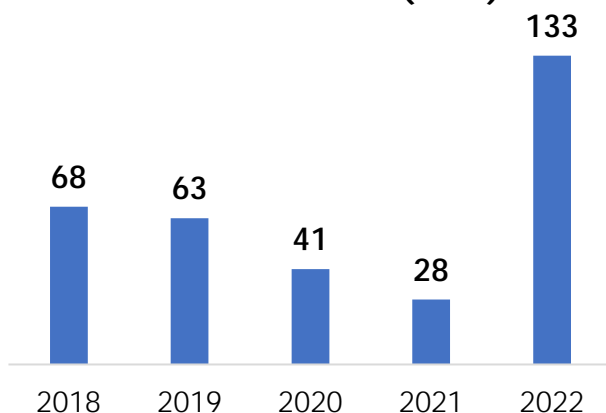


Specialty Teams

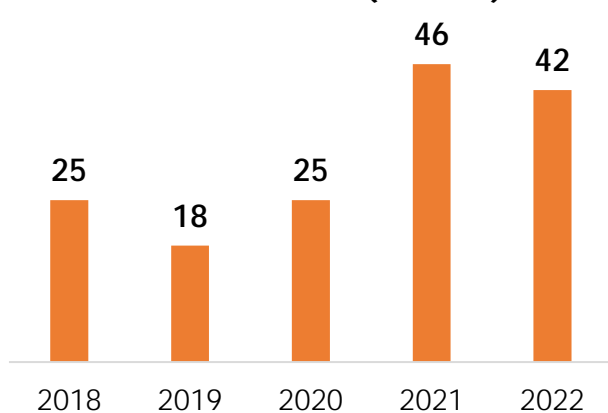
Specialty teams are defined by apparatus. The following charts compare responses in 2018 to 2022. Note apparatus SQ7 was replaced by TEC7 and is mostly unused. Calls for these apparatuses are counted together.

Dive boat calls have increased by over 100% from 2018 to 2022. This is due to the high flows observed in 2022 that allowed DV1 to be on the river more often, increased the number of incidents, particularly around the Broadway bridge abutments, and a more deliberate effort to get a run number for every rescue and assist on the river.

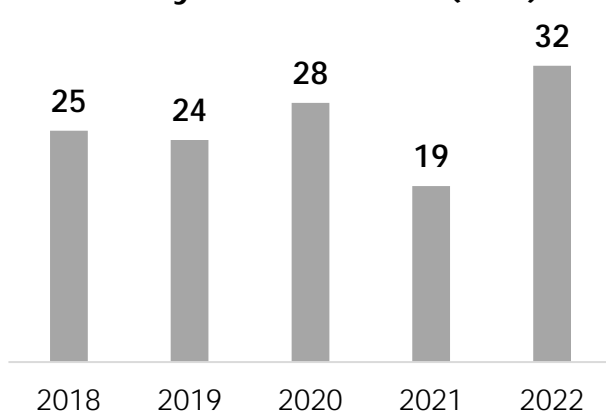
Dive Boat Calls (DV1)



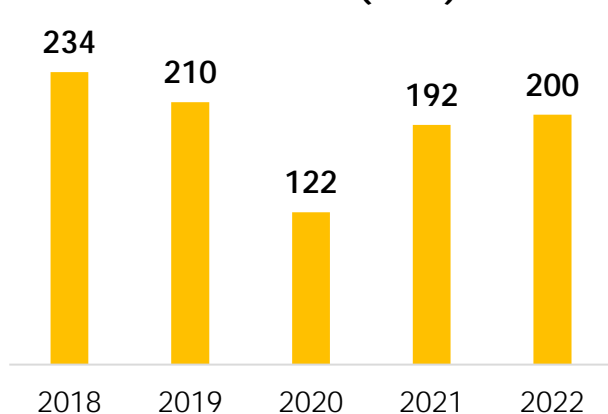
Hazmat Calls (HAZ17)



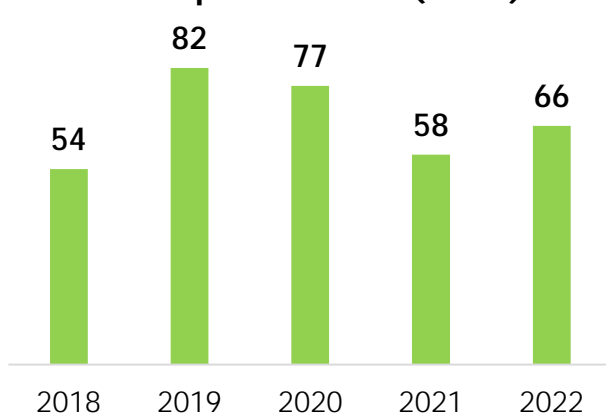
Heavy Rescue Calls (HR7)



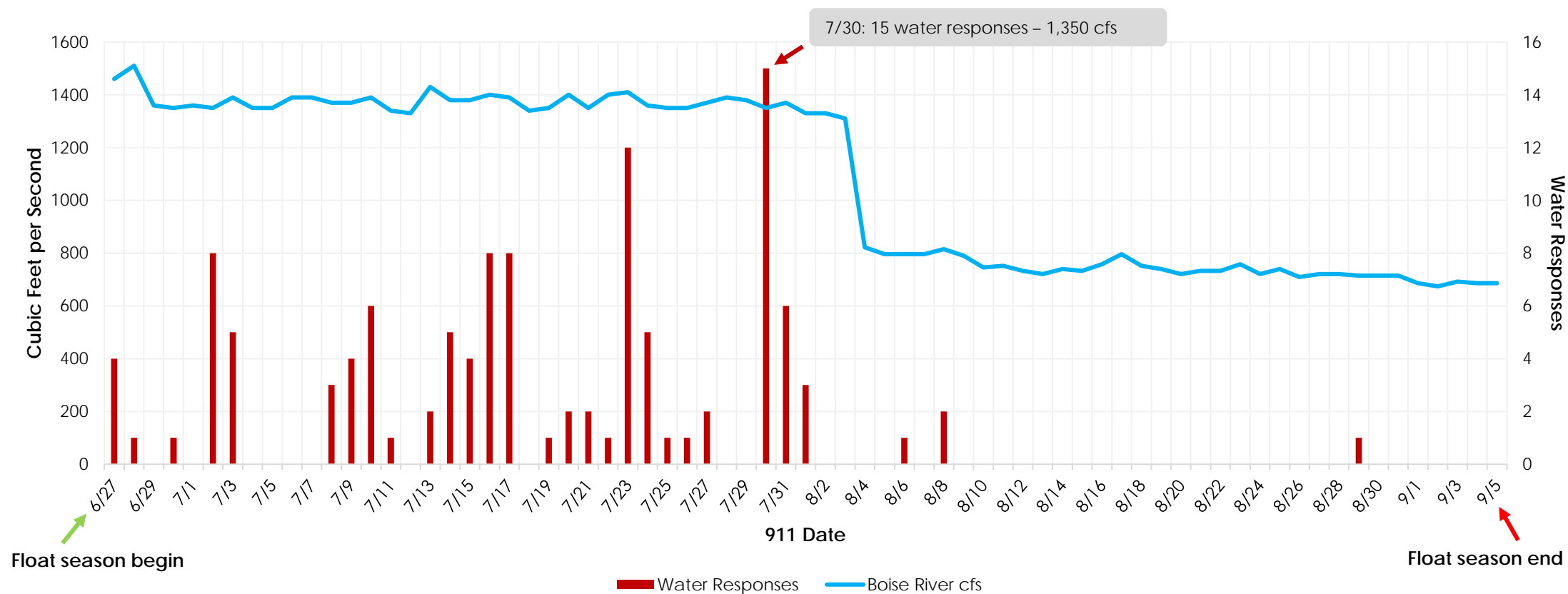
ARFF Calls (SM7)

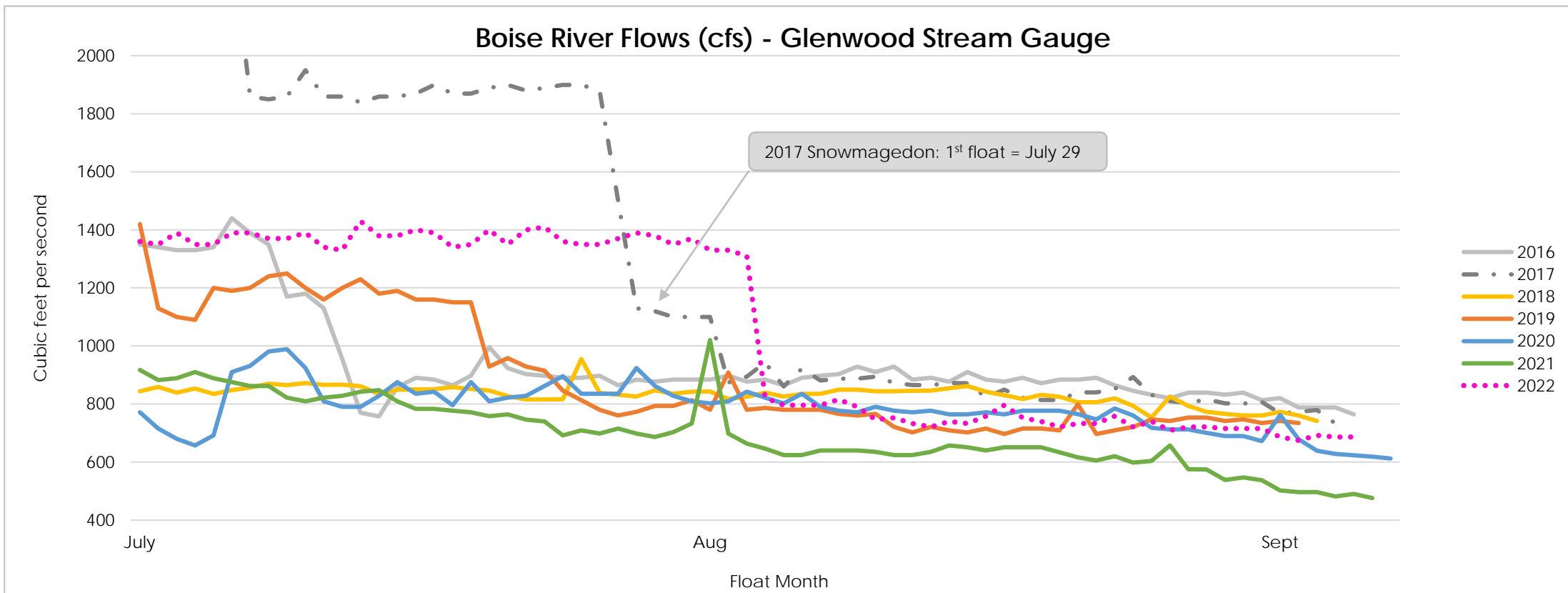


Pickup/UTV Calls (TEC7)



2022 Boise River Flows (cfs) vs. Boise River Water Responses



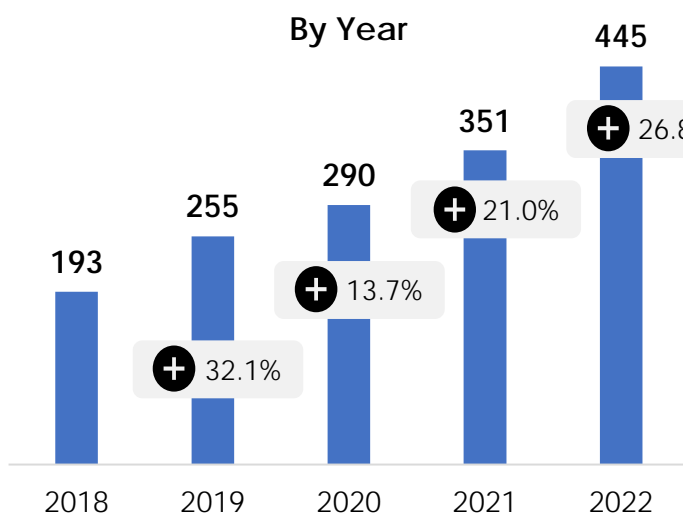


July 1 - Labor Day		
Float Year	# of Days > 1,200 cfs	Average CFS
2016	8	942
2017	27	1392
2018	0	831
2019	4	895
2020	0	784
2021	0	695
2022	34	1058

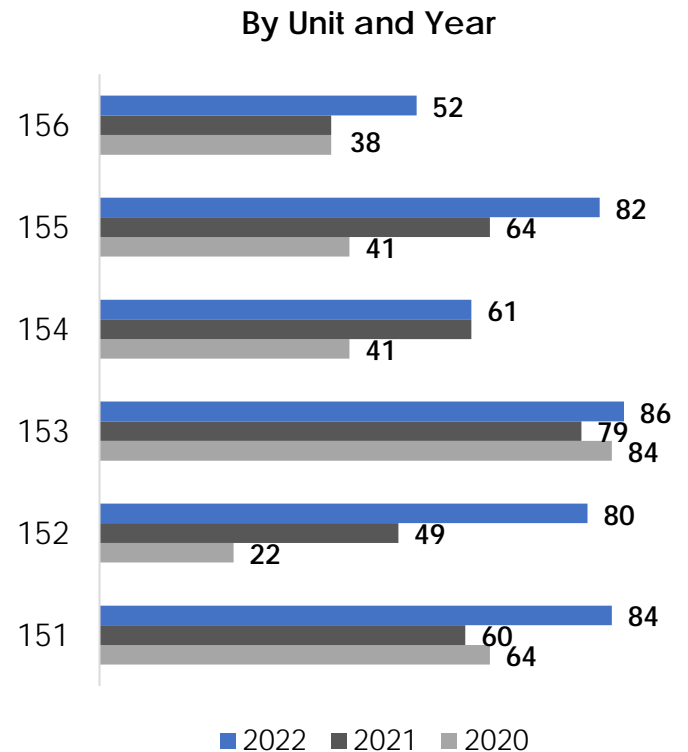
← 2017 float season began on July 29:
 Average cfs for float season = 870 cfs
 # of days > 1,200 cfs during float season = 0

Safety Officers

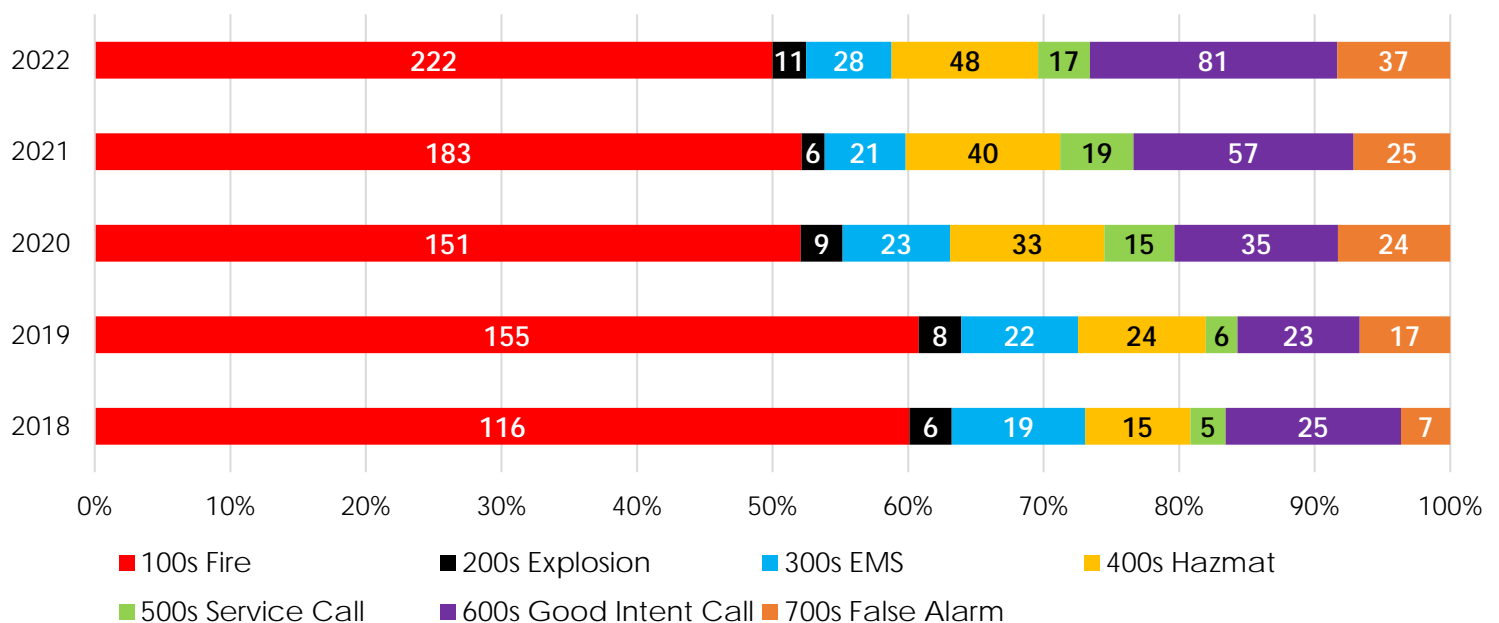
Boise Fire has 6 safety officers. They respond to a variety of calls from our Fire Training Center on 12142 Joplin Road during normal business hours and from their private residence outside of normal business hours.



Between 2018 and 2022 there has been a 130% increase in Safety Officer responses. From last year alone, there was a 27% increase.



By NFIRS Type Code Group



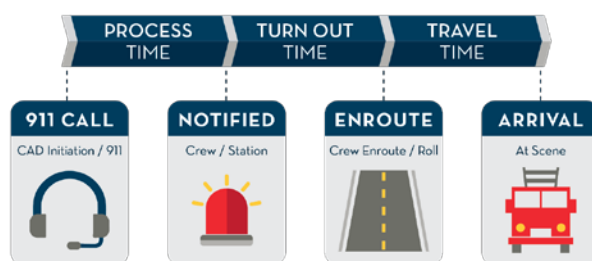
Times

It is an industry wide standard to measure turnout, travel and response times using 90th percentiles – **this means that 90 percent of incidents were reached by that time**. 90th percentiles are used by NFPA 1710 and ACCESS and are helpful when comparing ourselves to other agencies.

Times are calculated by using the CAD times for the **first arriving engine, truck, or fire command** (except for turnout times which do not require the unit to have arrived first) to the highest priority calls. **High priority calls or emergent calls are:**

- ✓ Fire, EMS, hazmat, and explosive incidents
- ✓ Priority code of P5 - Delta, P6 - DeltaPlus, or P7 - Echo
- ✓ Traveled to with lights and sirens

For 90th percentiles and averages provided in this report, negative response times and response times longer than 60 minutes are filtered out.



Total Emergent Incidents 2022 - All Jurisdictions									
Unit	A		B		C		Total Emergent Incidents	Total Incidents	% Emergent Incidents
	first arriving	not first	first arriving	not first	first arriving	not first			
E1	81	28	75	38	78	30	330	1,795	18%
E2	22	5	22	11	30	6	96	566	17%
E3	83	14	104	28	72	20	321	1,630	20%
E4	183	37	191	37	166	42	656	2,646	25%
E5	208	28	266	33	249	40	824	4,032	20%
E6	159	30	137	44	144	30	544	2,627	21%
E7	56	29	78	36	63	37	299	1,432	21%
E8	163	29	158	47	157	20	574	2,622	22%
E9	82	20	124	28	121	20	395	1,997	20%
E10	131	21	125	24	98	27	426	1,903	22%
E11	96	29	117	28	107	21	398	1,815	22%
E12	50	11	61	15	55	7	199	840	24%
E14	105	16	109	22	120	18	390	1,820	21%
E15	49	10	42	7	43	11	162	823	20%
E16	94	19	129	25	121	25	413	2,157	19%
E17	64	16	90	22	67	11	270	1,404	19%
L5	10	46	26	55	30	56	223	1,347	17%
T4	23	40	22	73	16	58	232	1,102	21%
T7	3	38	5	61	5	44	156	882	18%

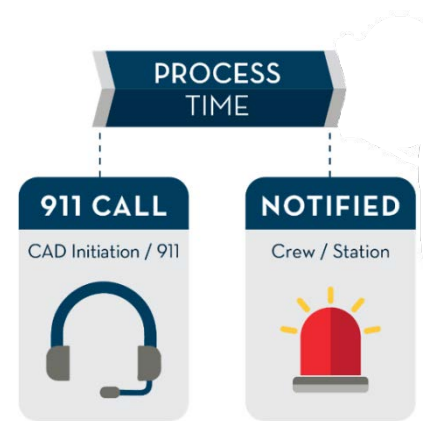
Call Processing Time – Boise Response Area

Call processing time is the time from the 911 call to department notification.

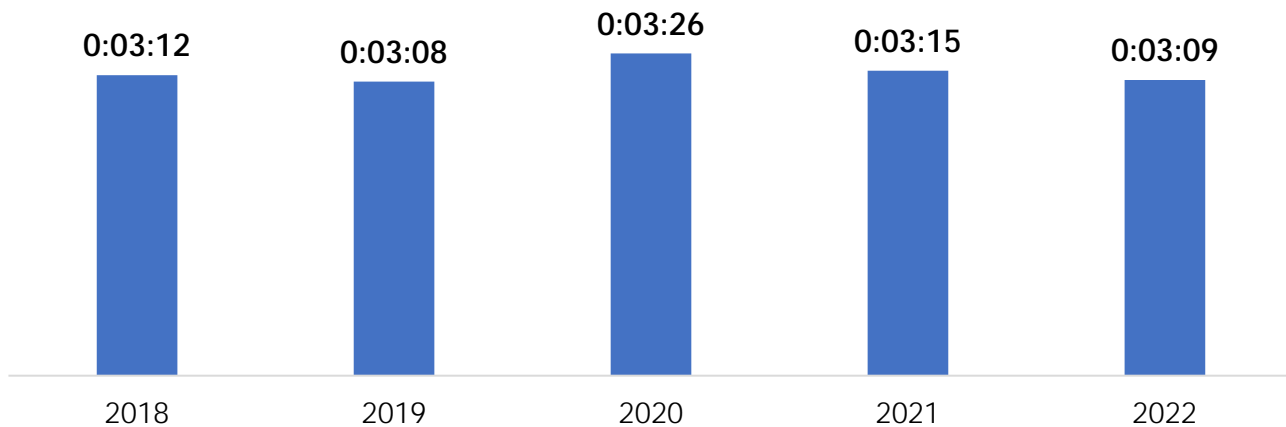
In 2022, a 90th percentile of 0:02:52 for emergent calls means 90% of calls were processed faster than 0:02:52.

Emergent call types for call processing time are defined by Fire, EMS, hazmat, and explosive incidents dispatched with Delta, DeltaPlus or Echo priority.

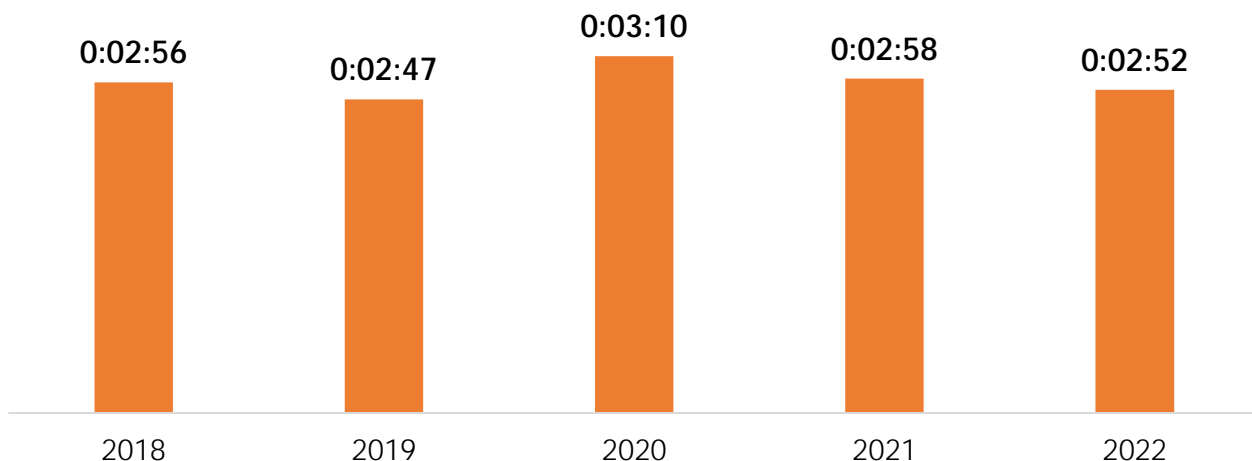
Call processing time is worth noting as it is part of Boise Fire Department's overall response time but is largely out of our control.



90th Percentile - All Calls

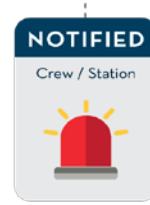


90th Percentile - Emergent Calls

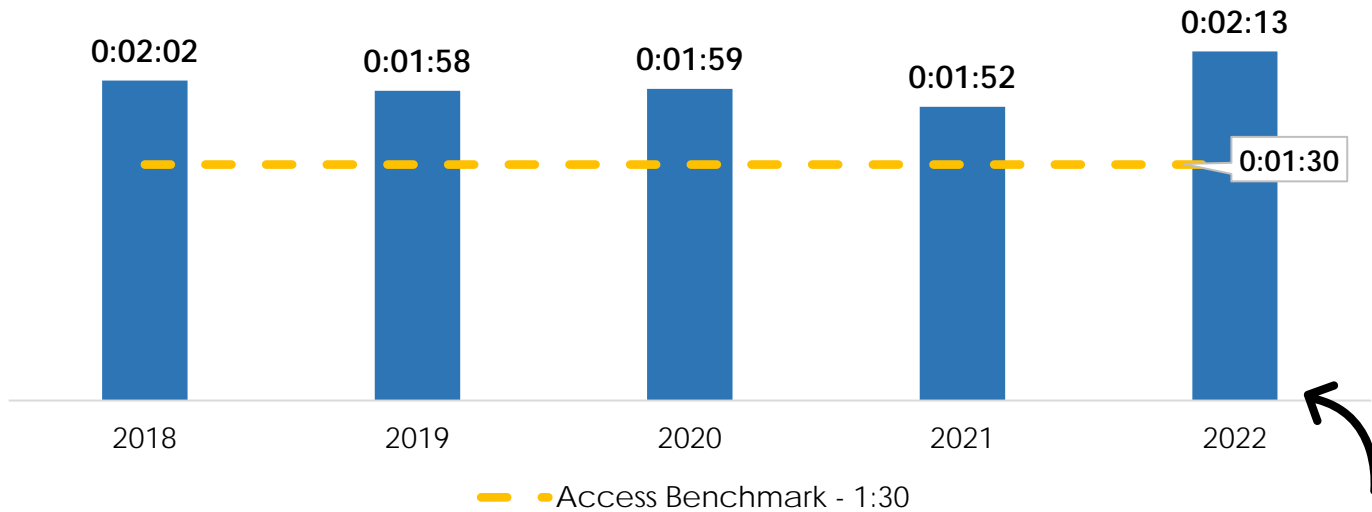


Department Turnout Time

Turnout time is the time from notification to when the apparatus is enroute. In 2022, **90% of the time, BFD turned out faster than 0:02:13 for all emergent calls for all calls regardless of the jurisdiction.**

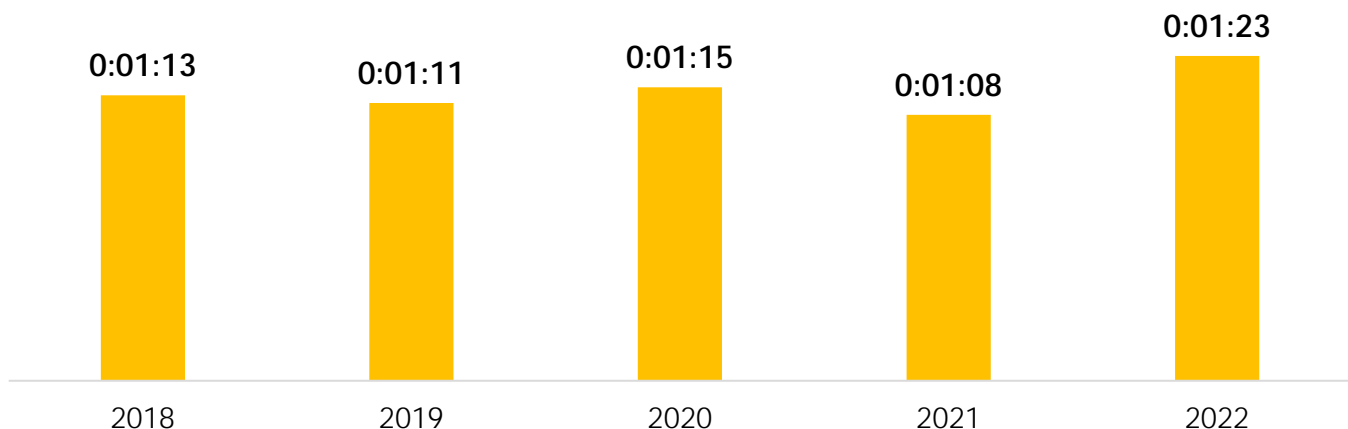


90th Percentile Turnout Times



On 5/20/2022 the call acknowledge button went live on the MDTs. An increase in turnout times was an expected outcome of this change. The following pages also document a decrease in travel time, as expected. Ultimately the call acknowledge button produces more accurate data.

Average Turnout Times



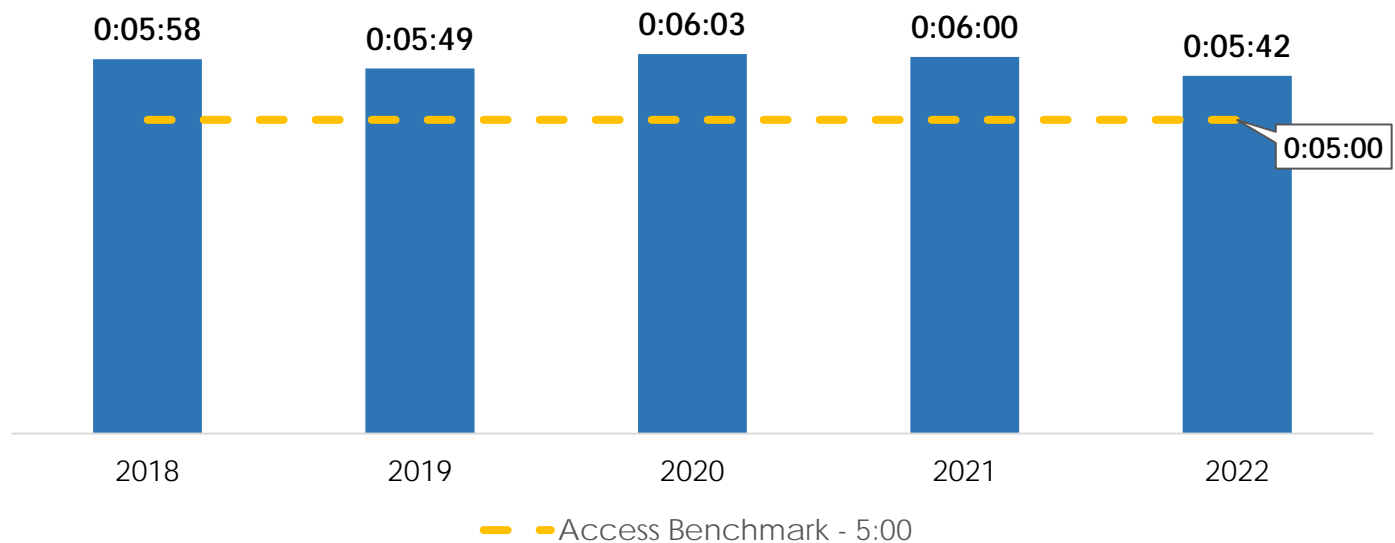
Averages should be used with caution and should not be used interchangeably with 90th percentiles. 90th percentiles are used by NFPA 1710 and ACCESS and are helpful when comparing ourselves to other agencies.

Department Travel Times – Boise City Limits

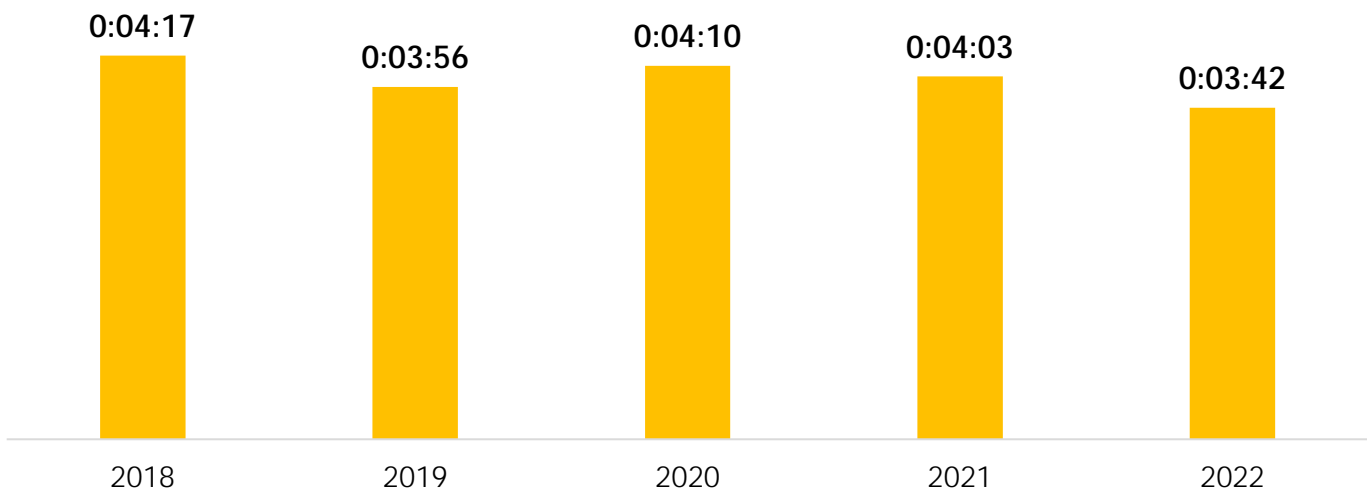
Travel time is the time from enroute to when the apparatus arrives on scene. In 2022, **90% of the time, BFD traveled faster than 0:05:42 within Boise City limits.**



90th Percentile Travel Times



Average Travel Times



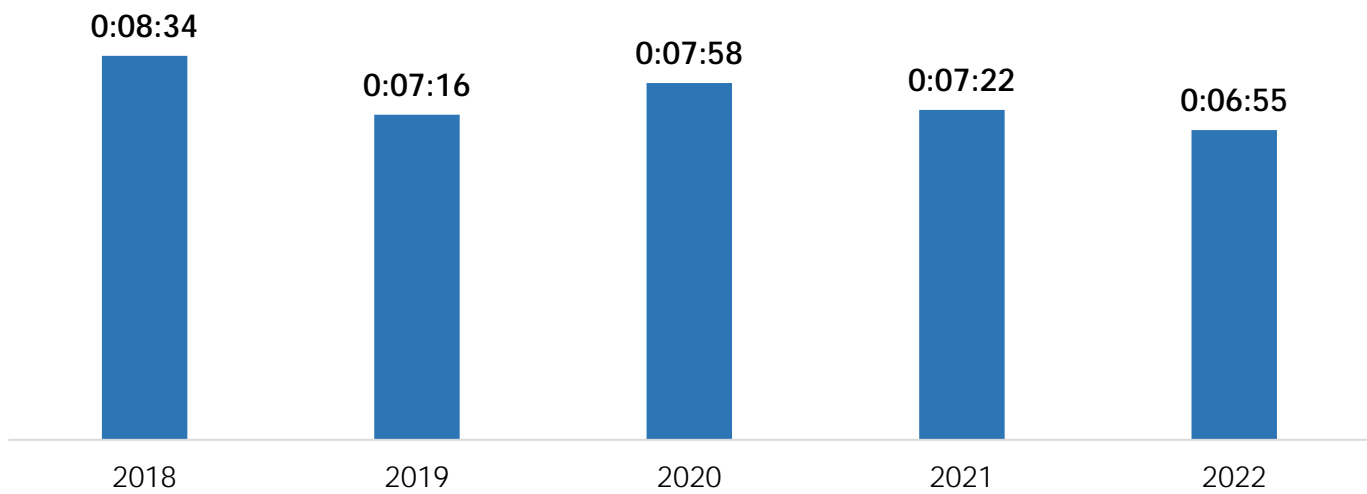
Averages should be used with caution and should not be used interchangeably with 90th percentiles. 90th percentiles are used by NFPA 1710 and ACCESS and are helpful when comparing ourselves to other agencies.

Department Travel Times – Contract Areas

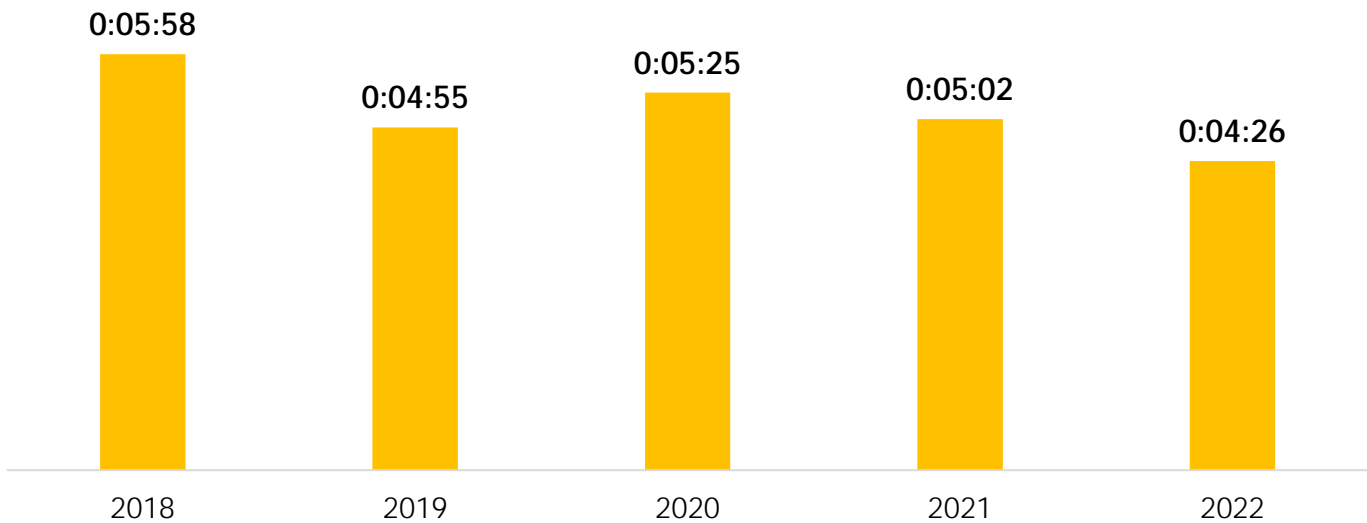
Travel time is the time from enroute to when the apparatus arrives on scene. In 2022, **90% of the time, BFD traveled faster than 0:06:55** within NACFR, Whitney, and Sunset districts.



90th Percentile Travel Times



Average Travel Times



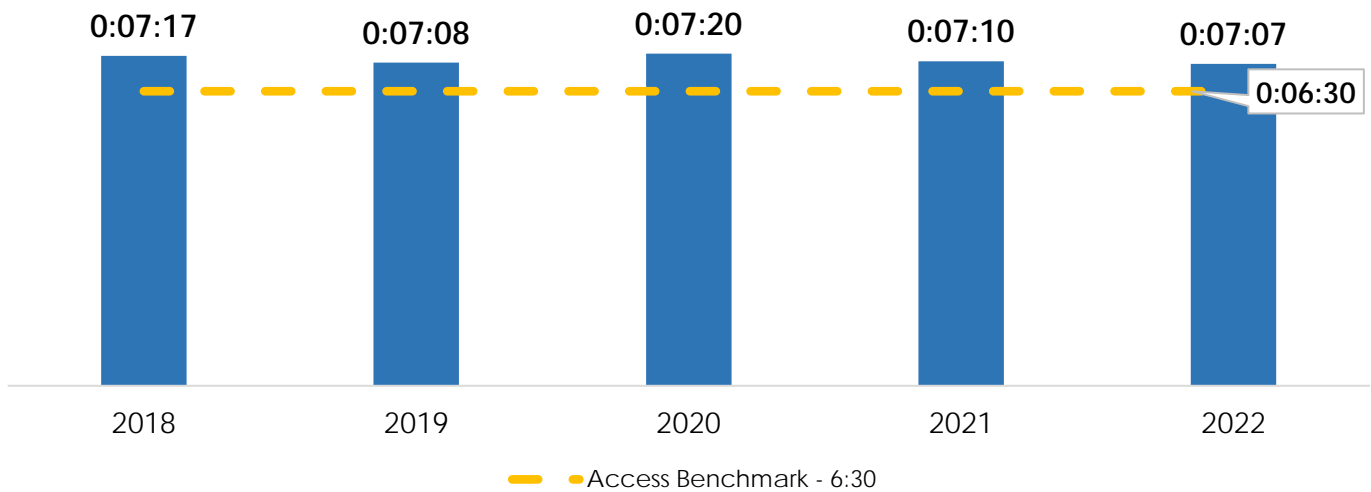
Averages should be used with caution and should not be used interchangeably with 90th percentiles. 90th percentiles are used by NFPA 1710 and ACCESS and are helpful when comparing ourselves to other agencies.

Department Response Times – Boise City Limits

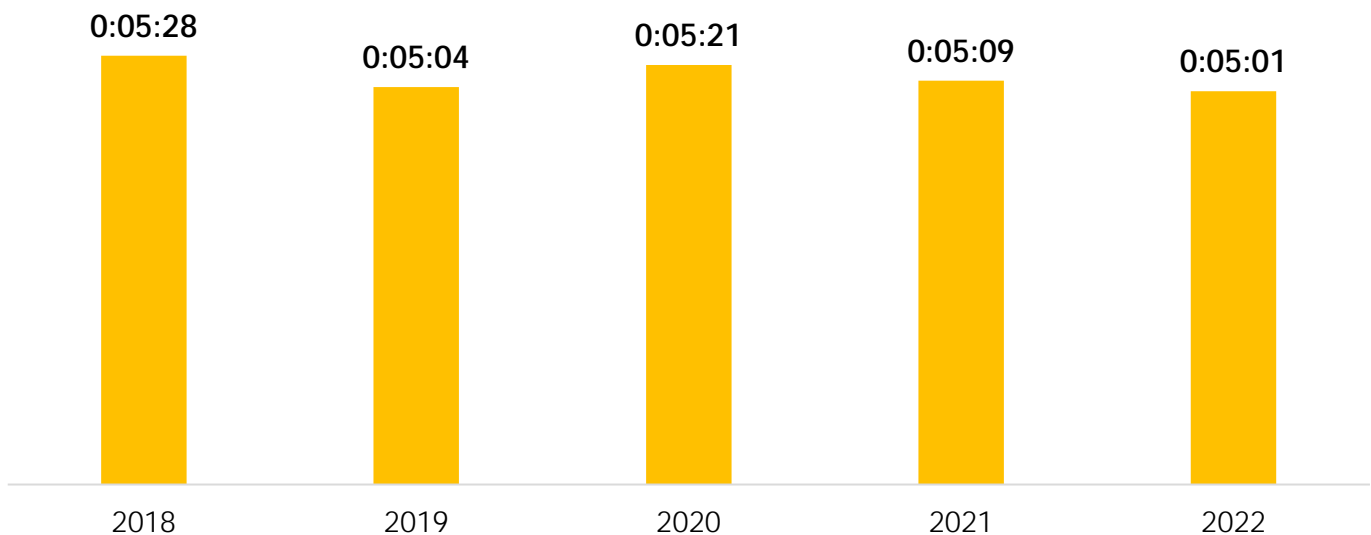
Response time is the time from notification to arrival on scene. In 2022, **90% of the time, BFD responded faster than 0:07:07 within Boise City limits.**



90th Percentile Response Times



Average Travel Times



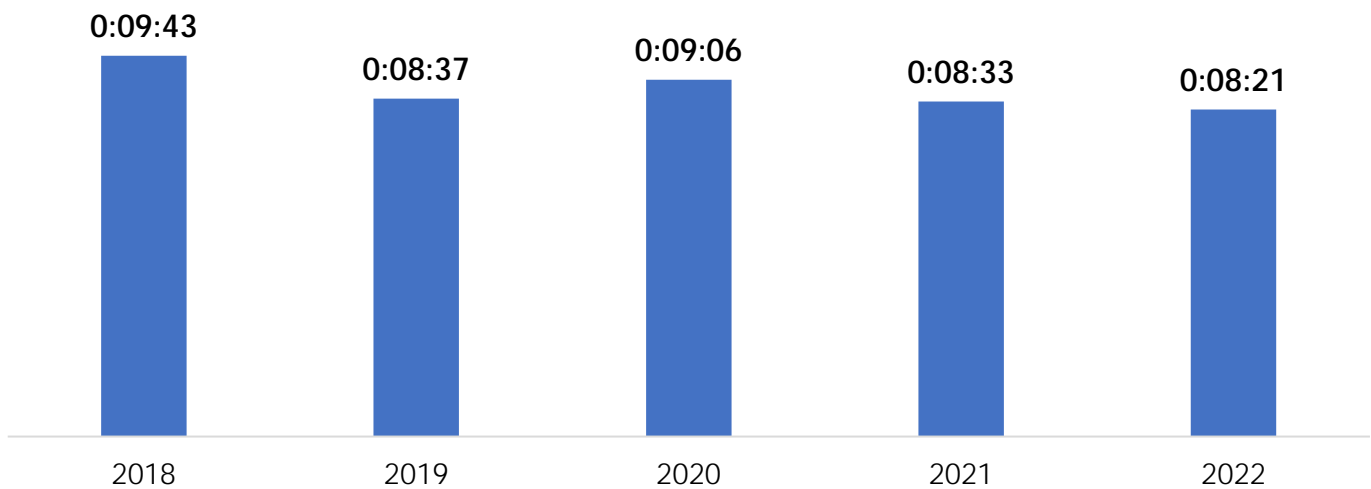
Averages should be used with caution and should not be used interchangeably with 90th percentiles. 90th percentiles are used by NFPA 1710 and ACCESS and are helpful when comparing ourselves to other agencies.

Department Response Times – Contract Areas

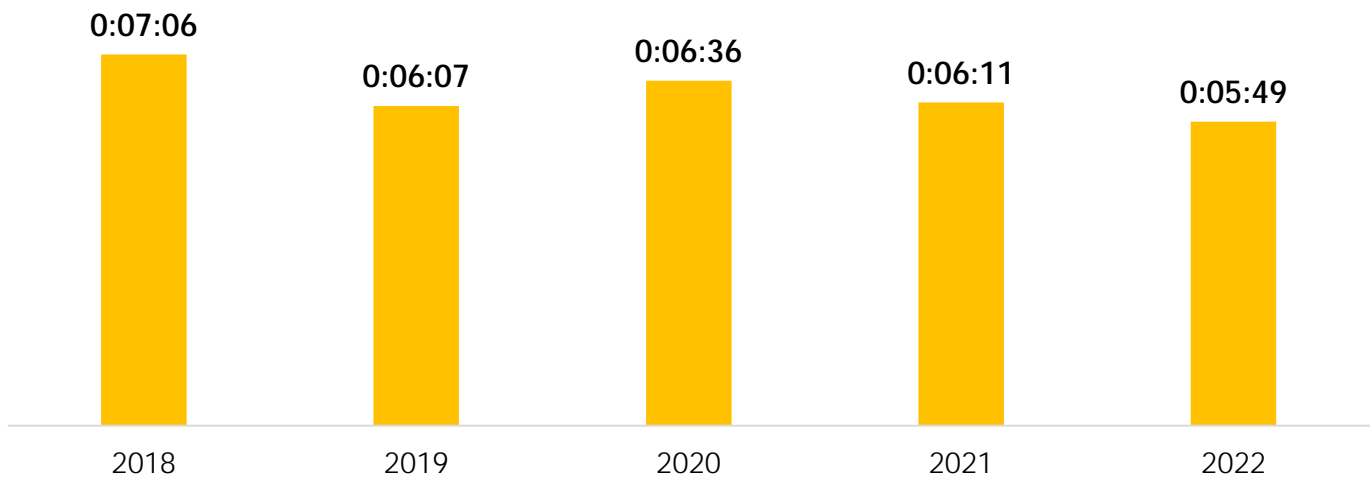
Response time is the time from notification to arrival on scene. In 2022, **90% of the time, BFD responded faster than 0:08:21 within NACFR, Whitney, and Sunset districts.**



90th Percentile Response Times



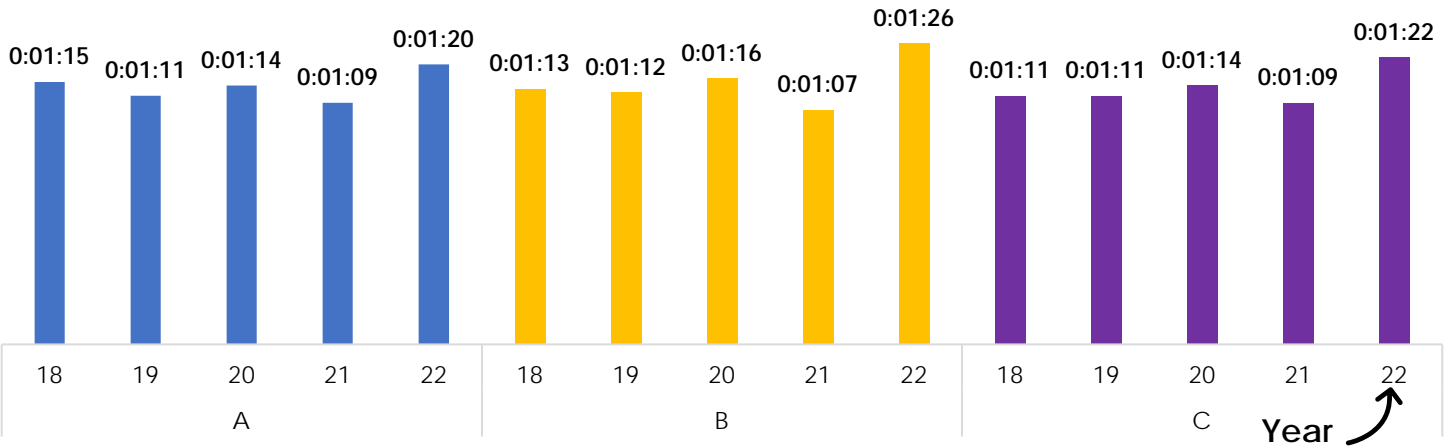
Average Response Times



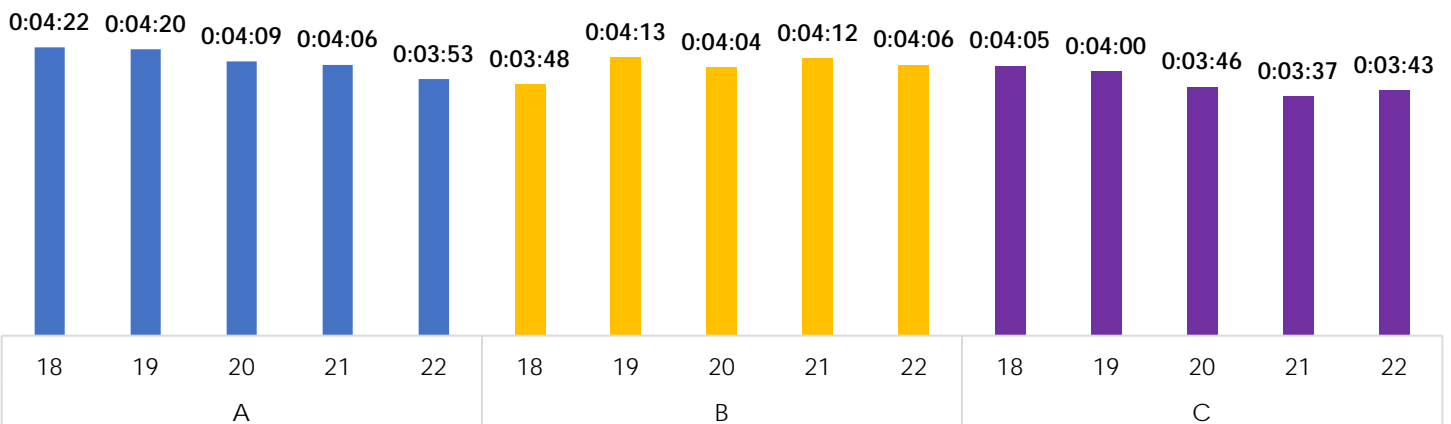
Averages should be used with caution and should not be used interchangeably with 90th percentiles. 90th percentiles are used by NFPA 1710 and ACCESS and are helpful when comparing ourselves to other agencies.

Average Times by Shift

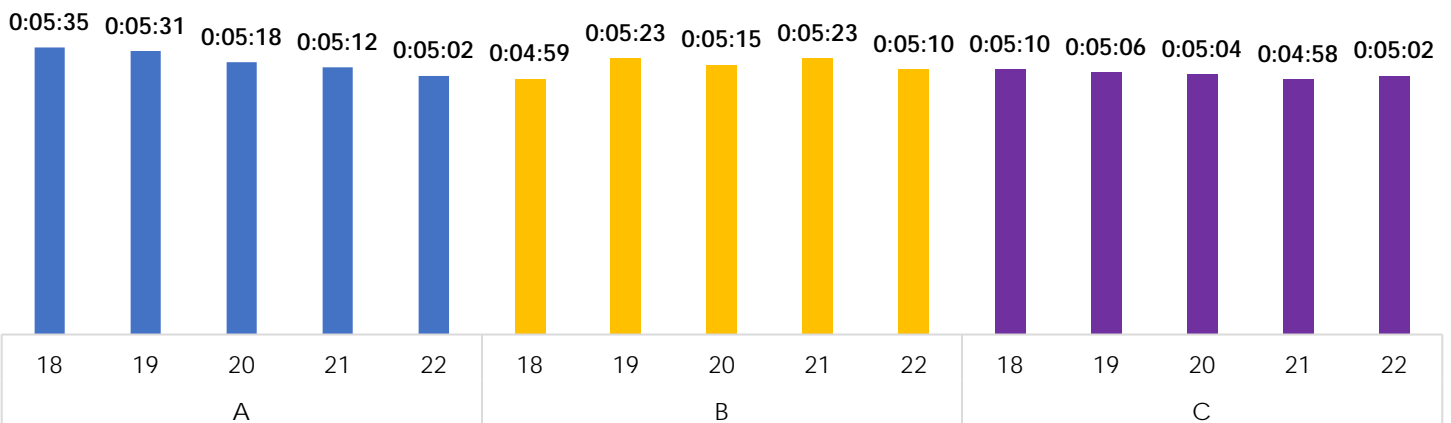
Turnout Time - All Jurisdictions



Travel - Boise City Limits



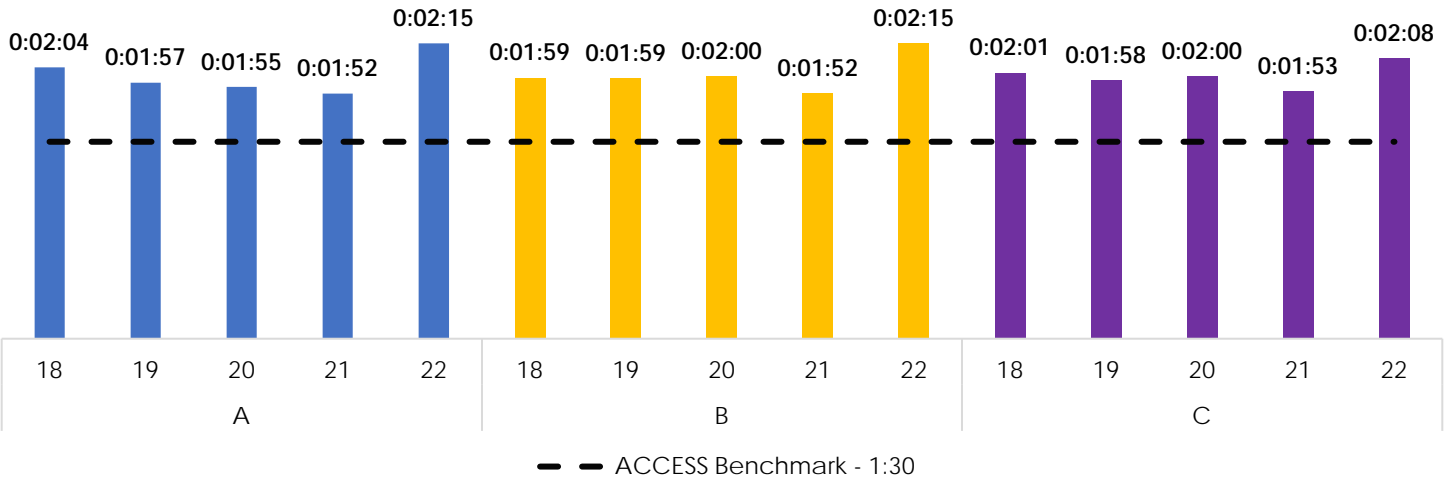
Response



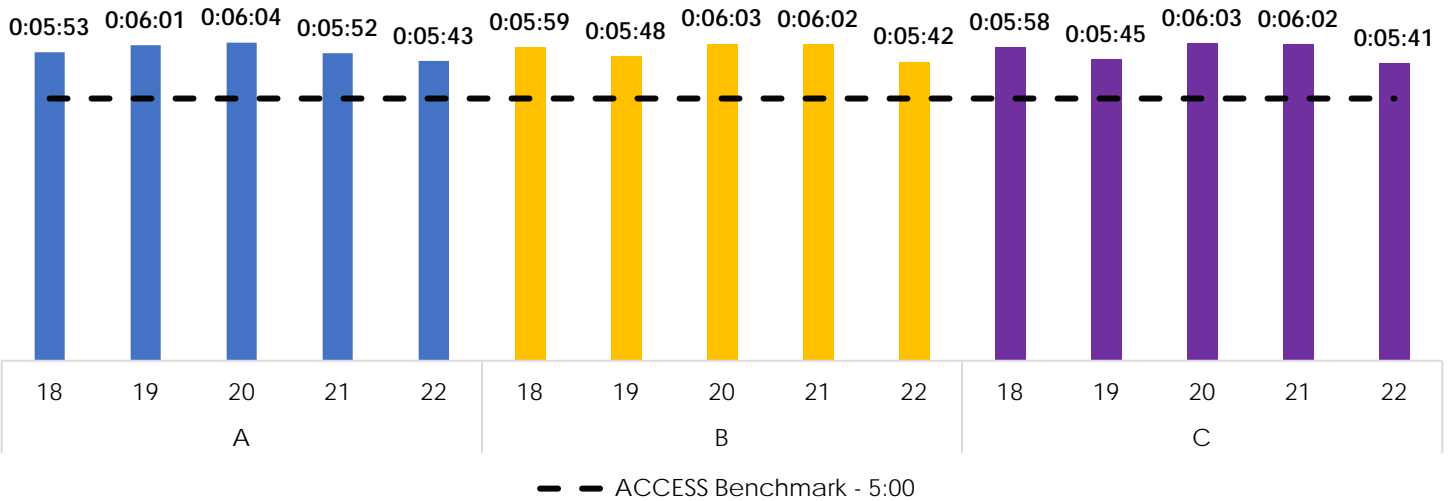
Averages should be used with caution and should not be used interchangeably with 90th percentiles. 90th percentiles are used by NFPA 1710 and ACCESS and are helpful when comparing ourselves to other agencies.

90th Percentile Times by Shift

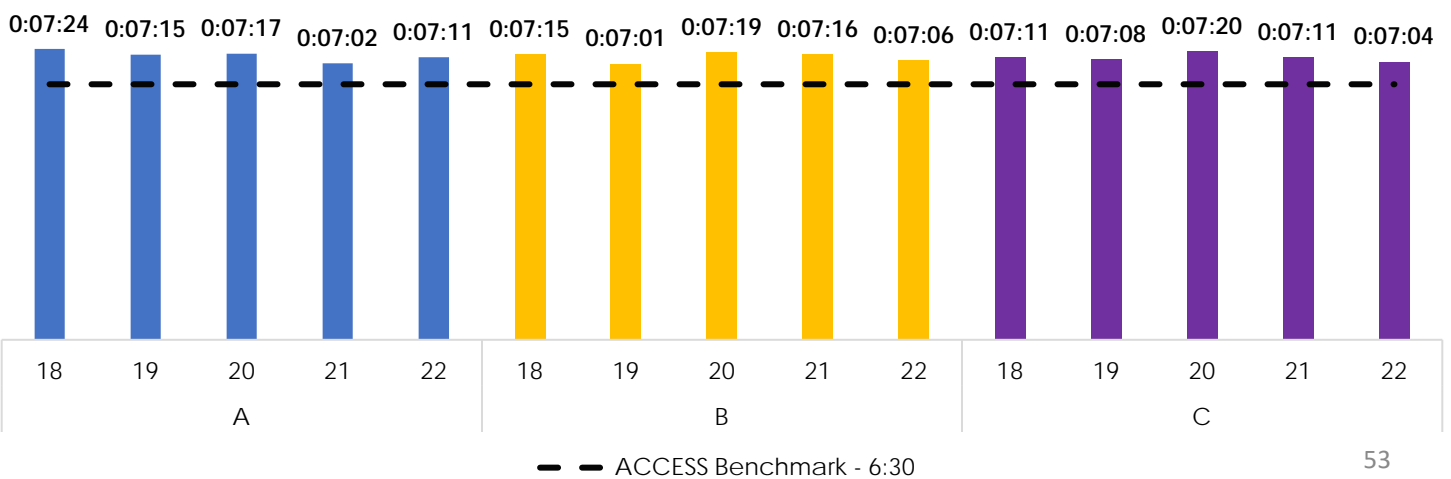
Turnout Time - All Jurisdictions



Travel Time - Boise City Limits

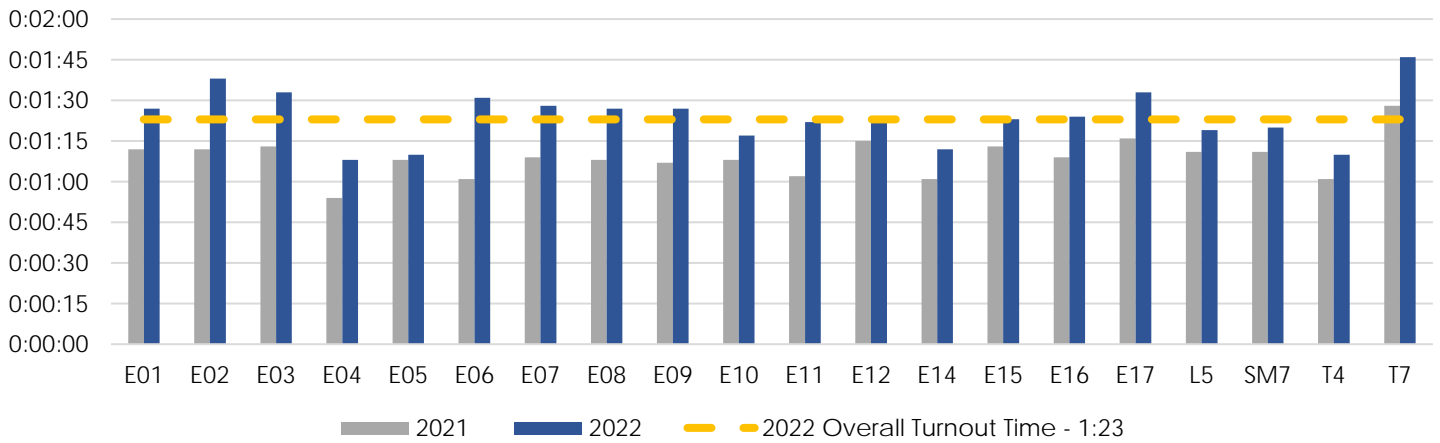


Response Times - Boise City Limits

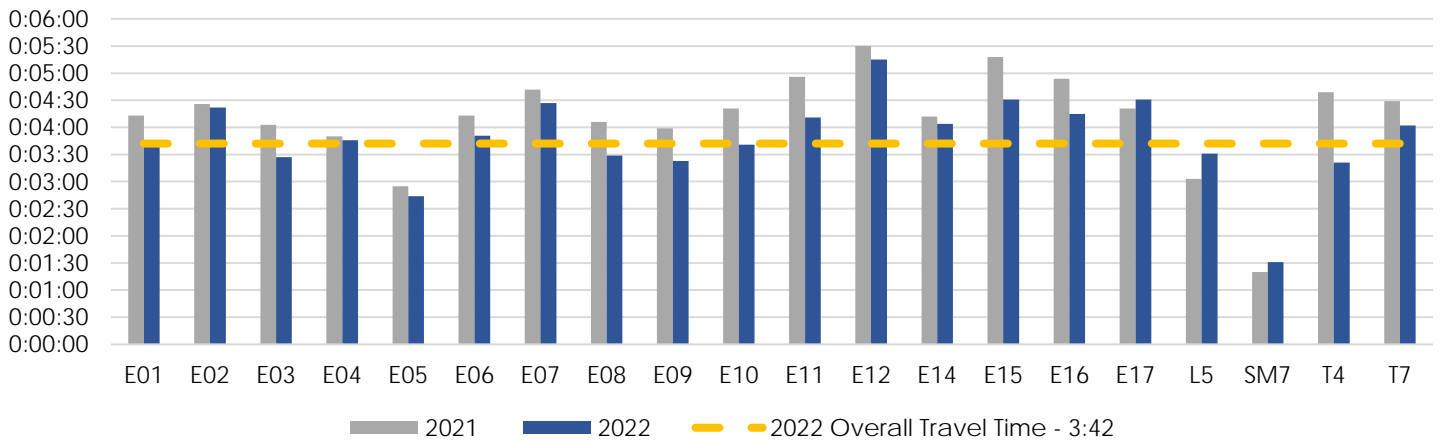


Average Times by Unit

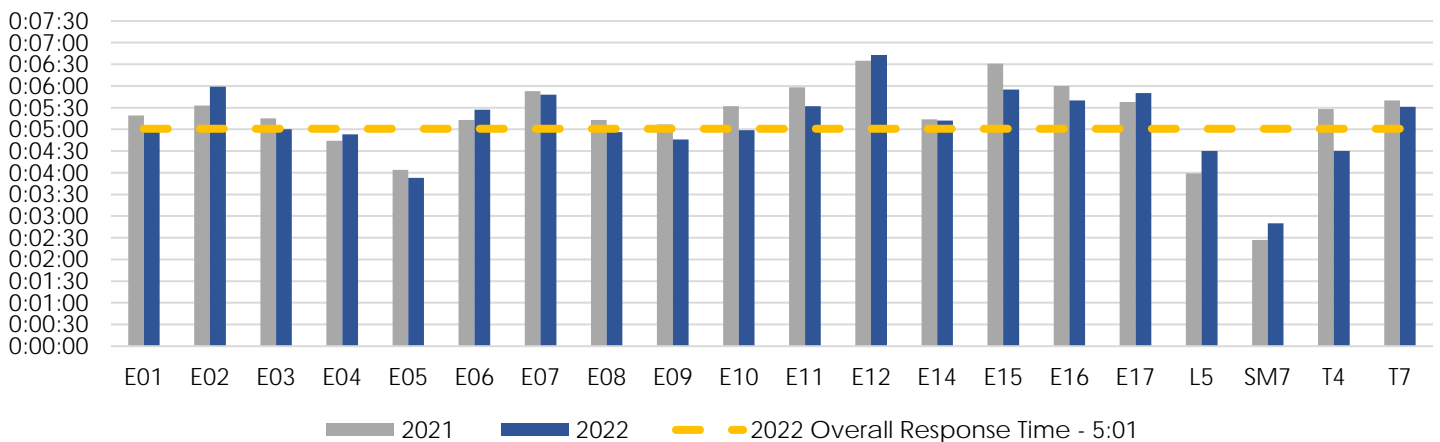
Turnout Time - All Jurisdictions



Travel Time - Boise City Limits



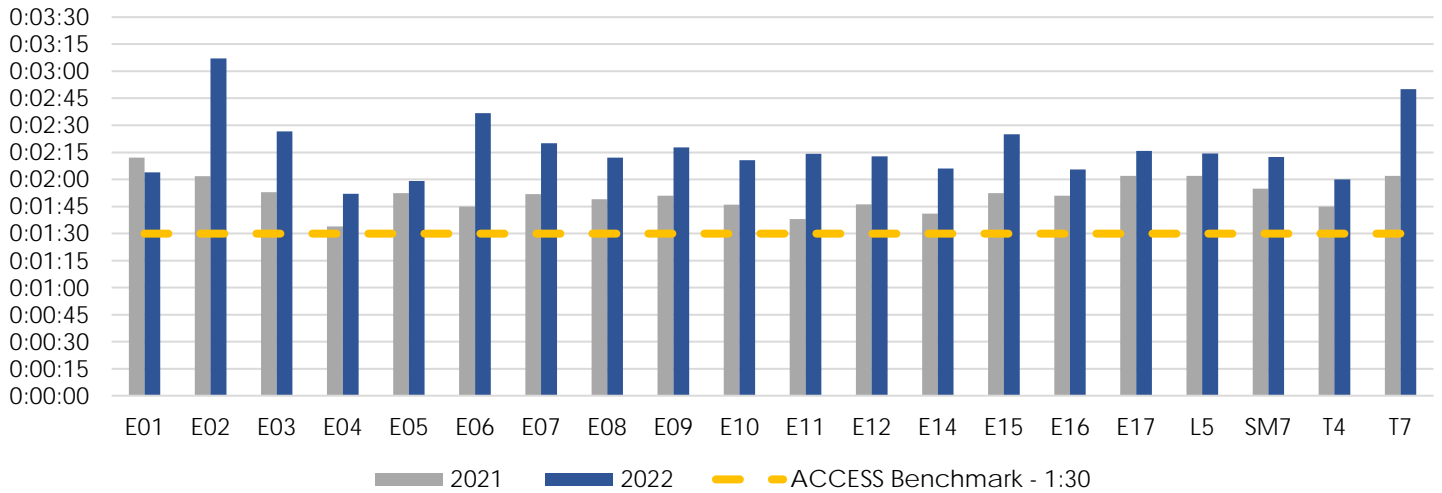
Response Time - Boise City Limits



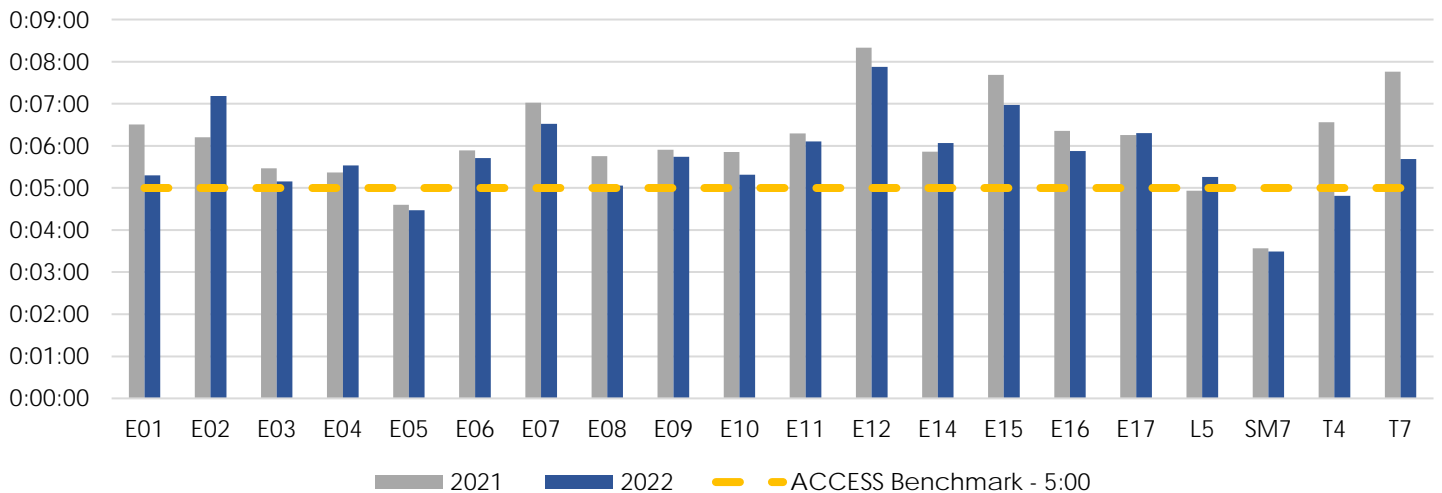
Averages should be used with caution and should not be used interchangeably with 90th percentiles. 90th percentiles are used by NFPA 1710 and ACCESS and are helpful when comparing ourselves to other agencies.

90th Percentile Times by Unit

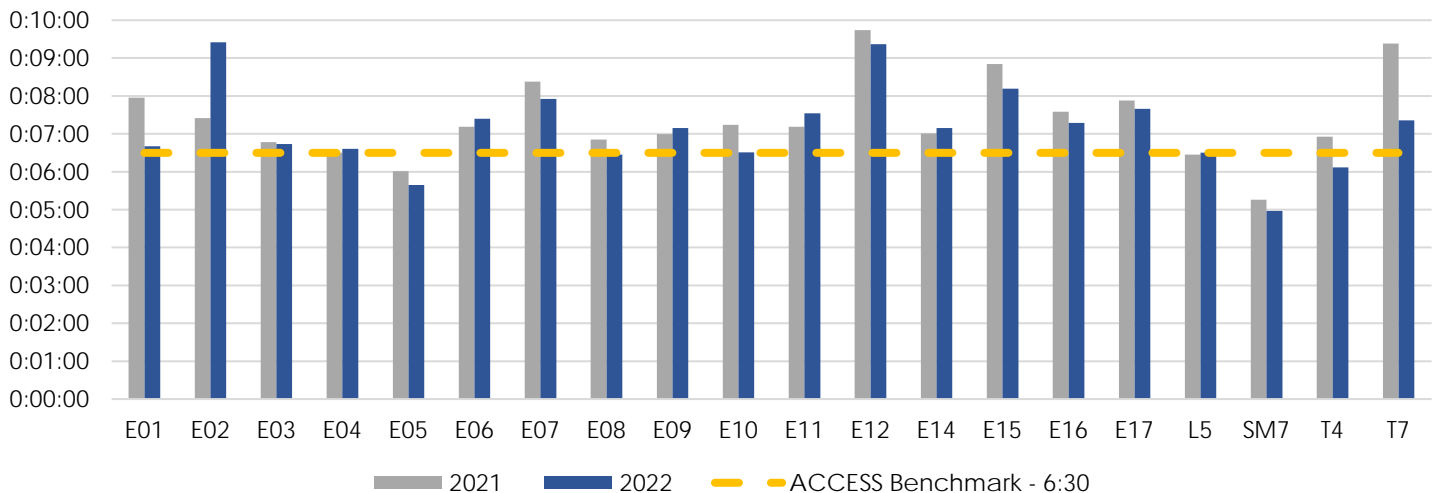
Turnout Time - All Jurisdictions



Travel Times - Boise City Limits

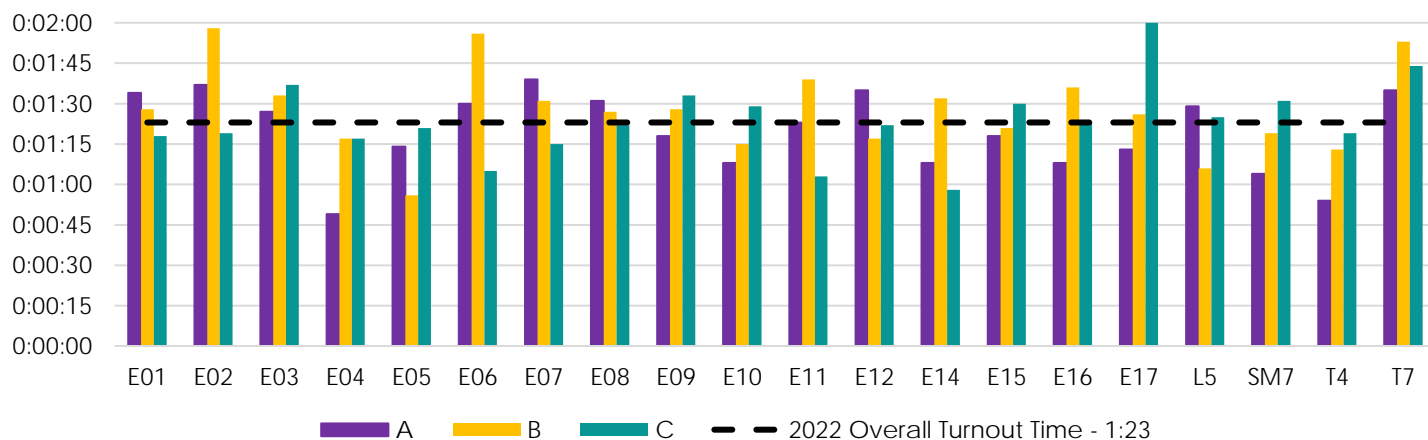


Response Time - Boise City Limits

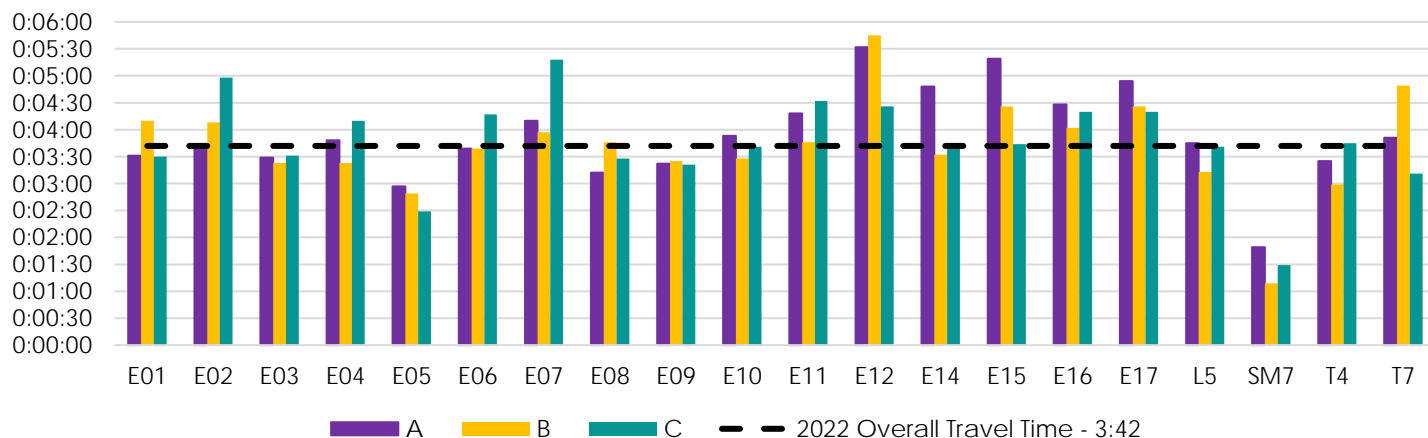


2022 Average Times by Unit & Shift

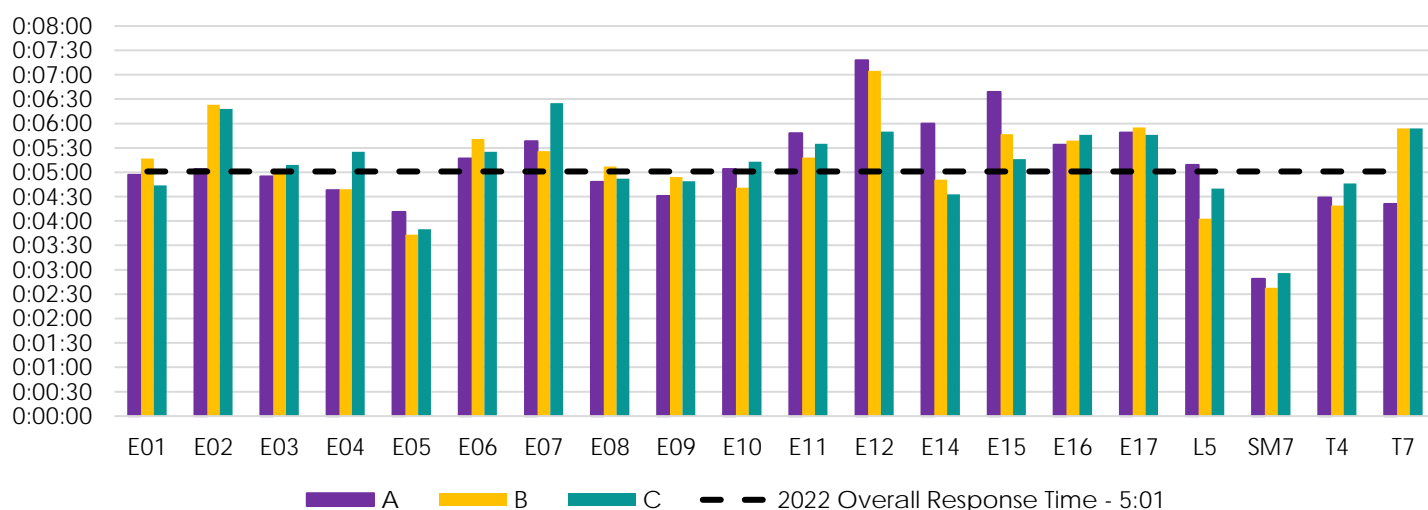
Turnout Time - All Jurisdictions



Travel Time - Boise City Limits



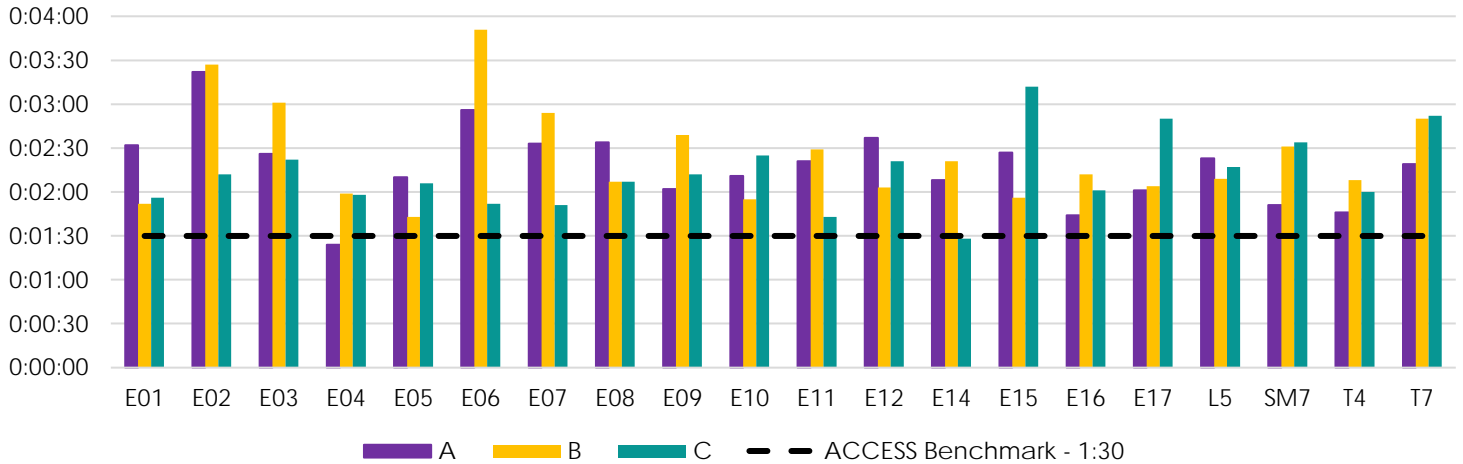
Response Time - Boise City Limits



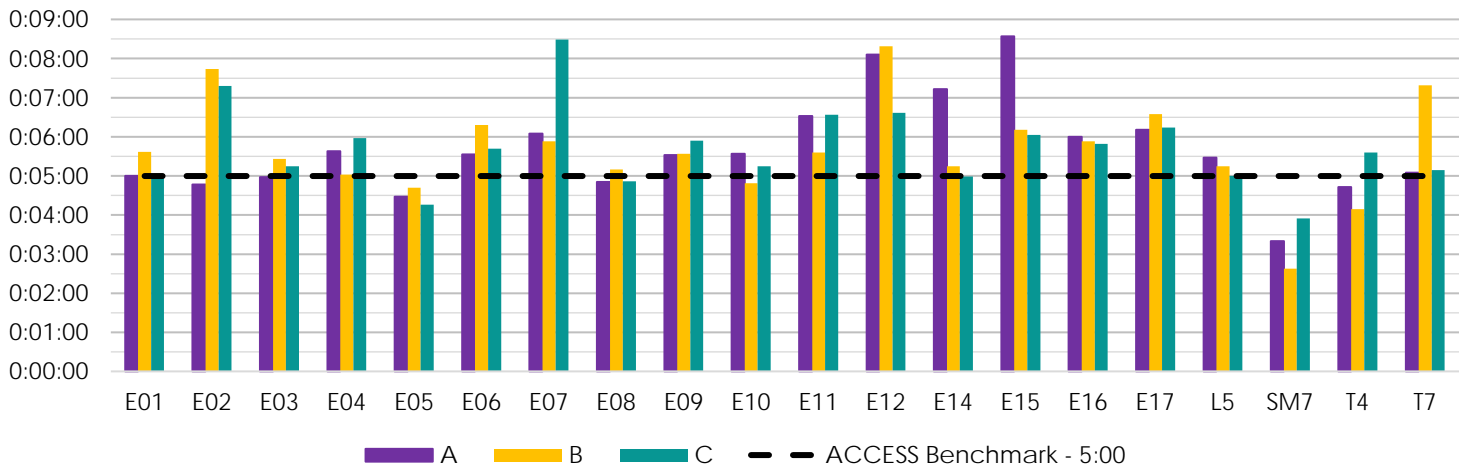
Averages should be used with caution and should not be used interchangeably with 90th percentiles. 90th percentiles are used by NFPA 1710 and ACCESS and are helpful when comparing ourselves to other agencies.

2022 90th Percentile Times by Unit & Shift

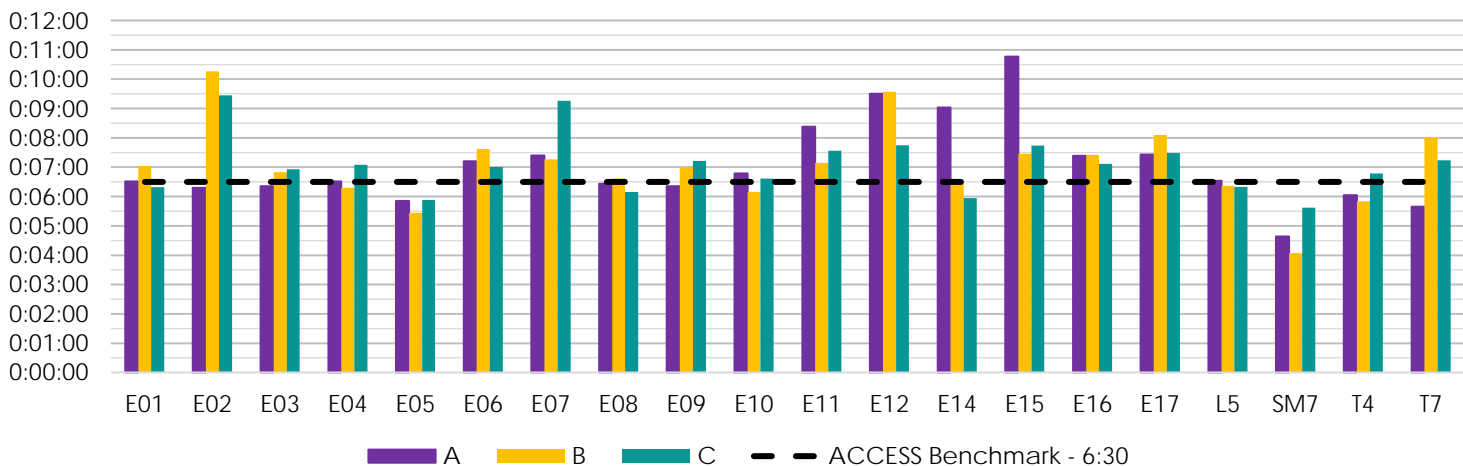
Turnout Time - All Jurisdictions



Travel Time - Boise City Limits



Response Time - Boise City Limits



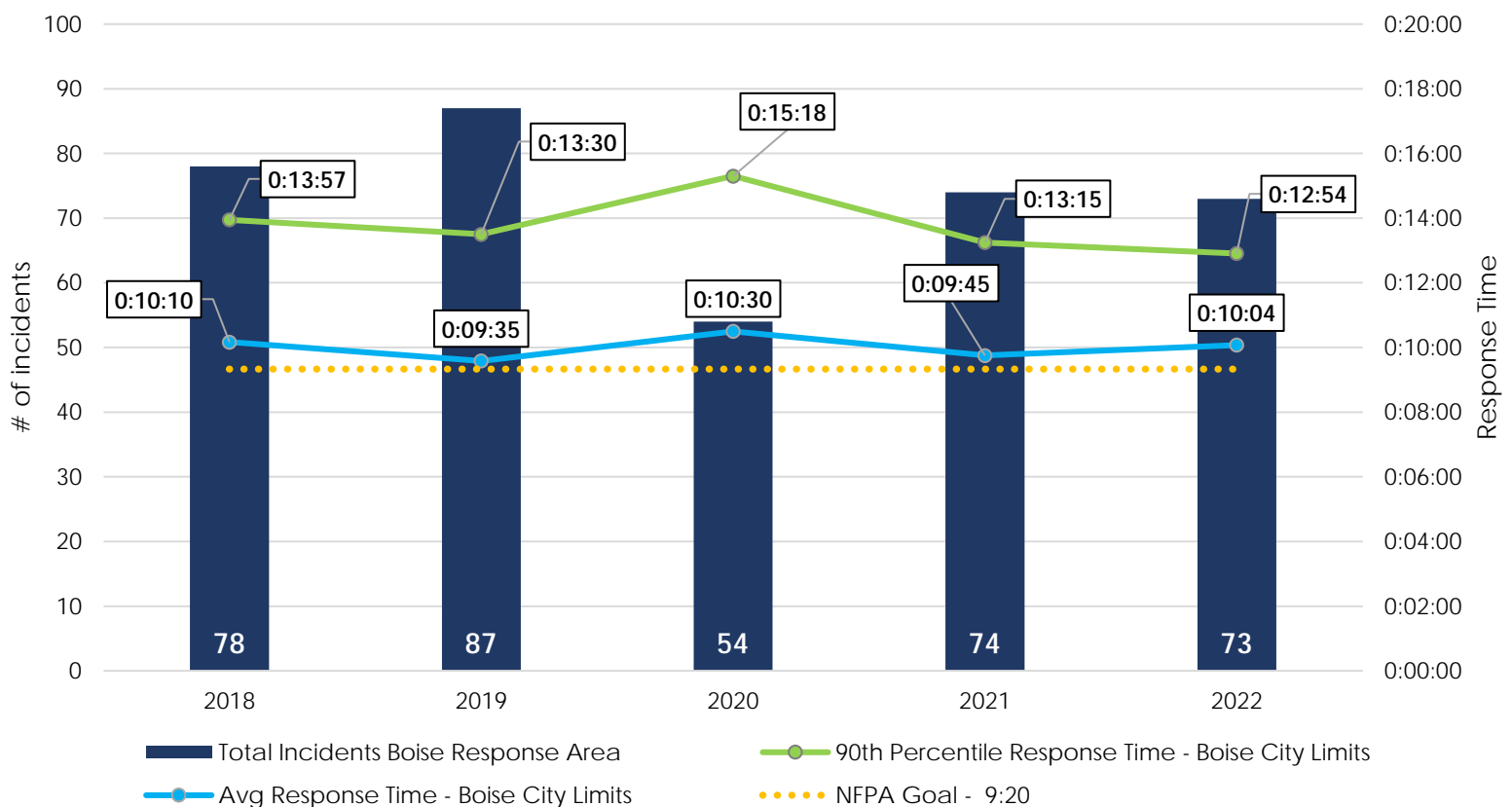
Effective Response Force

The Effective Response Force (ERF) is the number of people and apparatus that are necessary for initial attack on a structure fire. Boise Fire has determined its ERF is three engines, one truck, one battalion chief, and one safety officer.

In calculating the 90th percentile for the Department's ERF arrival time, only structure fire incidents that meet the following criteria are included.

- ✓ Incident type codes: 111, 121, 122, 123, 120.
- ✓ priority code of P5 - Delta, P6 - DeltaPlus, or P7 - Echo
- ✓ traveled to with lights and sirens (not upgraded or downgraded)

Response times for ERF incidents that meet these criteria are calculated from when dispatch notifies the first unit to when the fifth apparatus arrives on scene. The safety officer's response time is not included.



ERF incidents with response times greater than 60 minutes were not considered for response time calculations.

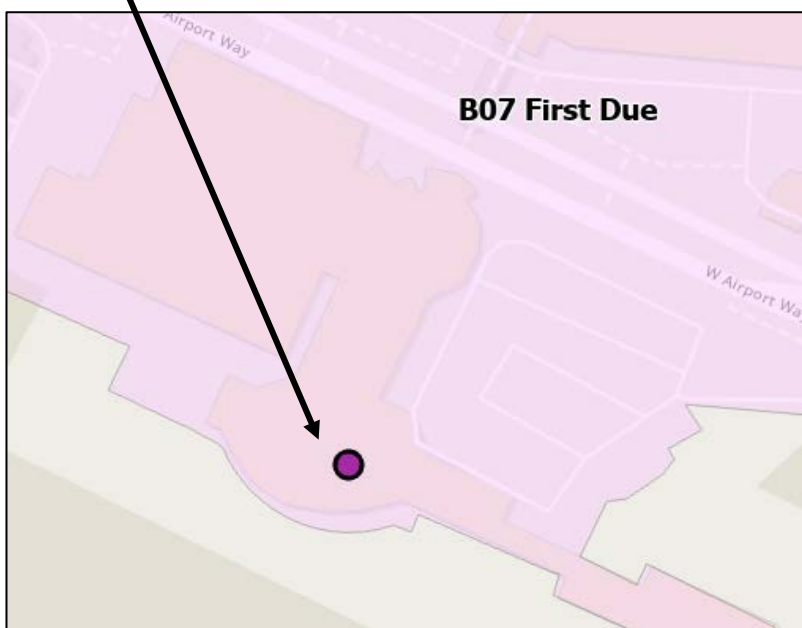
Response Reliability

Response reliability is the **probability that the engine that is first due in an area will arrive first to incidents in that area**. It is a measure of availability and busyness of engine companies. Response reliability was calculated for all incidents and emergent incidents.

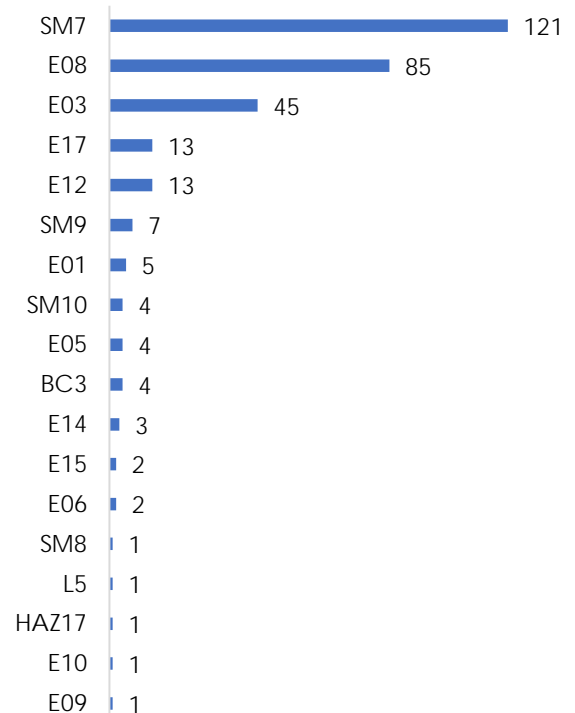
Response Reliability 2022								
First Due Area	All Incidents	Arrives First	Response Reliability	Change from Previous Year	% Difference 2022 - 2021	Emergent Incidents	Arrives First	Response Reliability Emergent Calls
BFD Station 2	284	255	89.8%	▲	0.1%	112	100	89.3%
BFD Station 15	604	530	87.7%	▼	-2.3%	318	271	85.2%
BFD Station 12	582	497	85.4%	▲	1.5%	323	273	84.5%
BFD Station 9	1,370	1,146	83.6%	▲	1.3%	669	552	82.5%
BFD Station 17	700	585	83.6%	▼	-1.3%	342	280	81.9%
BFD Station 4	1,820	1,517	83.4%	▲	0.5%	994	842	84.7%
BFD Station 5	3,250	2,651	81.6%	▼	-1.5%	1,575	1,287	81.7%
BFD Station 3	1,121	911	81.3%	▼	-1.9%	551	424	77.0%
BFD Station 8	1,884	1,517	80.5%	▲	1.2%	957	763	79.7%
BFD Station 10	1,660	1,289	77.7%	▲	1.0%	776	580	74.7%
BFD Station 11	1,117	856	76.6%	▼	-2.0%	590	458	77.6%
BFD Station 14	1,467	1,091	74.4%	▼	-2.7%	767	540	70.4%
BFD Station 1	970	717	73.9%	▼	-2.2%	463	338	73.0%
BFD Station 16	1,936	1,399	72.3%	▲	0.1%	888	602	67.8%
BFD Station 7	975	662	67.9%	▼	-3.5%	510	313	61.4%
BFD Station 6	2,015	1,049	52.1%	▼	-9.2%	1,115	567	50.9%
Total	21,755	16,672	76.6%	▼	-1.6%	10,950	8,190	74.8%

Engine 6's crew responded from Station 18 from 9/24/2021 to 5/23/2022, which affected their response reliability. June through December of 2022 Engine 6 had an 79.8% response reliability.

Smokey Units arrived at 3201 W Airport Way 133 times in 2022. This may not be the exact location of the incident since the general airport address was used to dispatch the call, but does impact Station 7's response reliability.

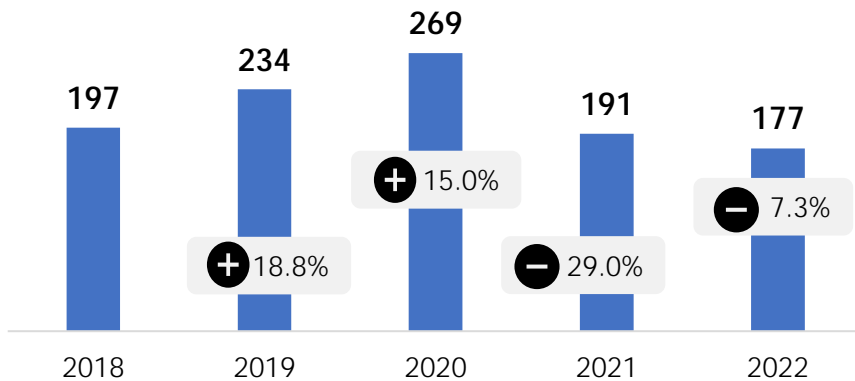


First to Arrive in Station 7 First Due



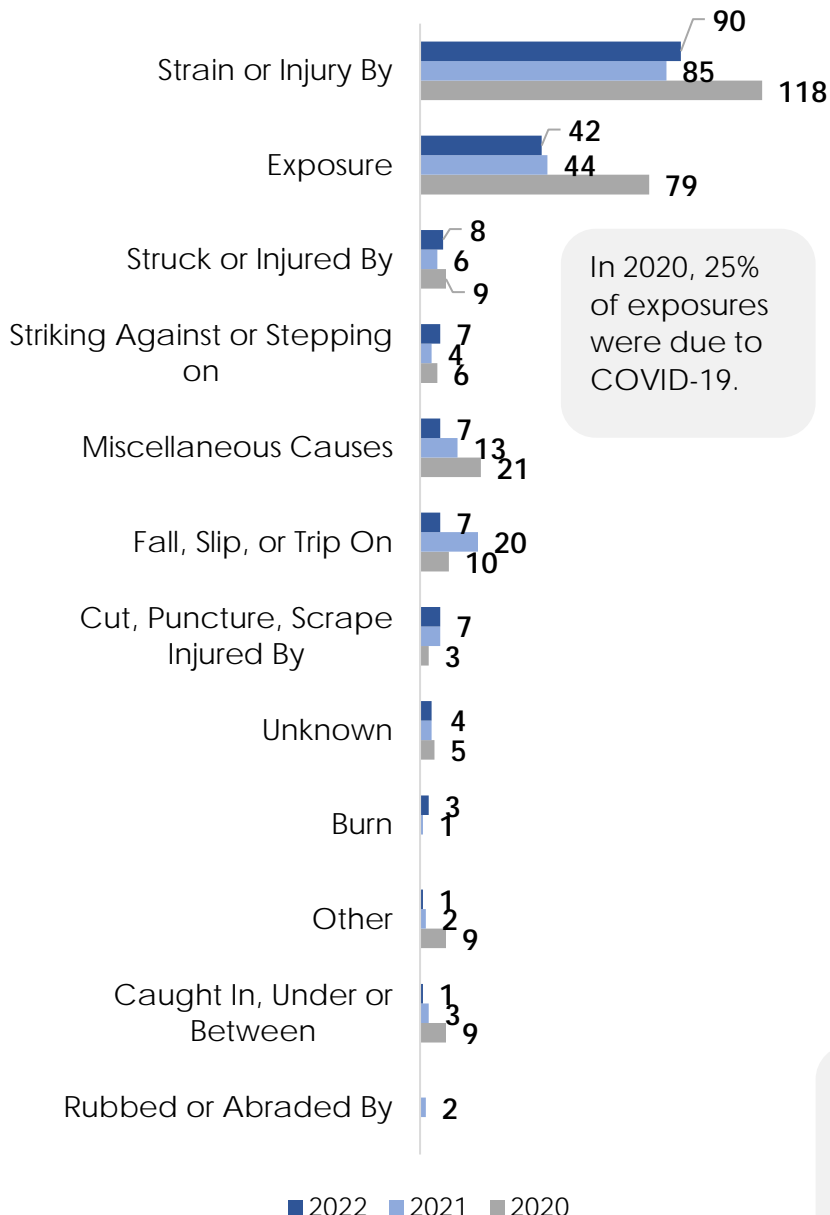
Firefighter Casualties

Total Works Compensation (FS02)

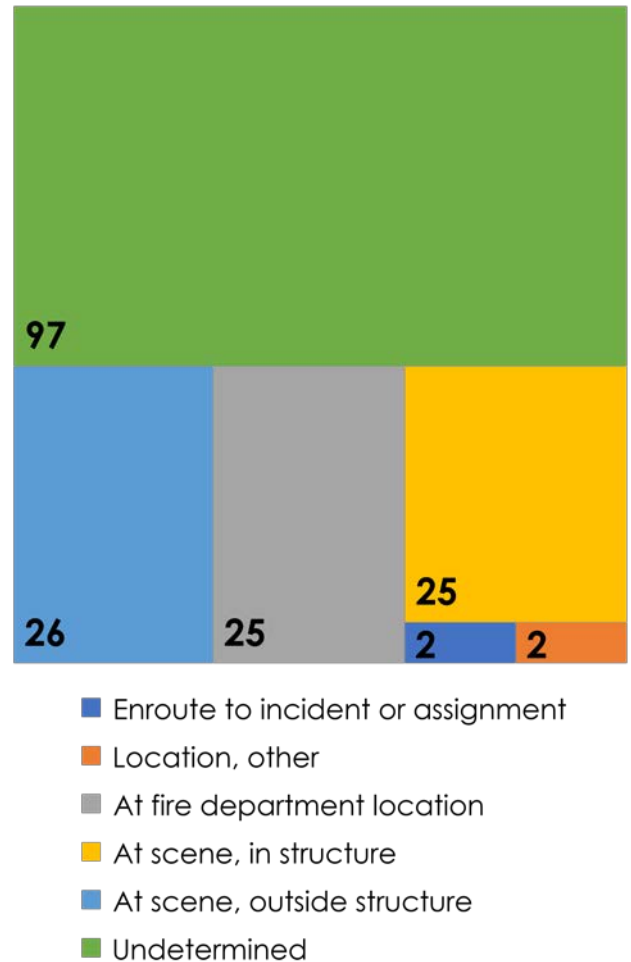


The following data was pulled from the worker's compensation (FS02) database, except for where the injury occurred which is only available in ESO. When an injury occurs, an FS02 should be completed and a casualty should be added to the ESO record. BFD began entering casualty data into ESO more consistently in 2021.

Cause of Injury (FS02)



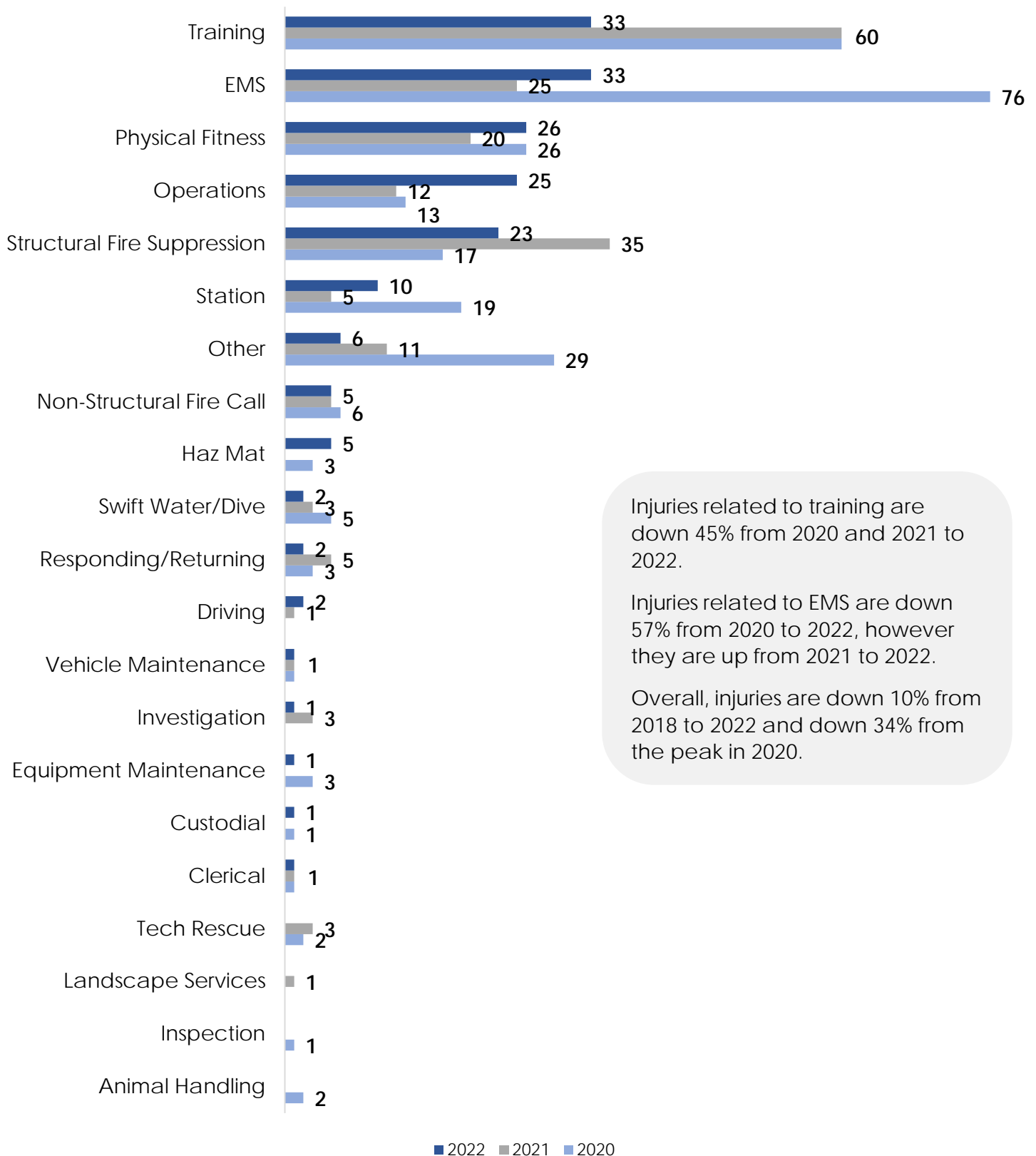
2022 - Where Injury Occurred (ESO)



Fields in the ESO Casualty module can not be made mandatory. Consistently filling out as many fields as possible will assist in data analysis.

Firefighter Casualties

Firefighter Activity at Time of Injury (FS02)



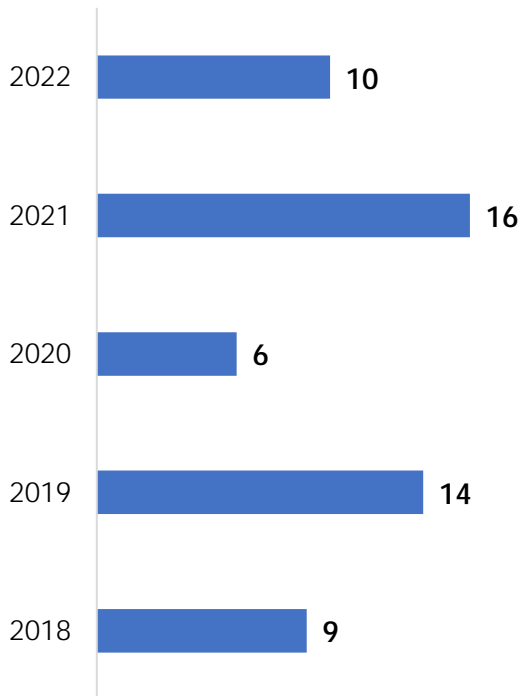
Injuries related to training are down 45% from 2020 and 2021 to 2022.

Injuries related to EMS are down 57% from 2020 to 2022, however they are up from 2021 to 2022.

Overall, injuries are down 10% from 2018 to 2022 and down 34% from the peak in 2020.

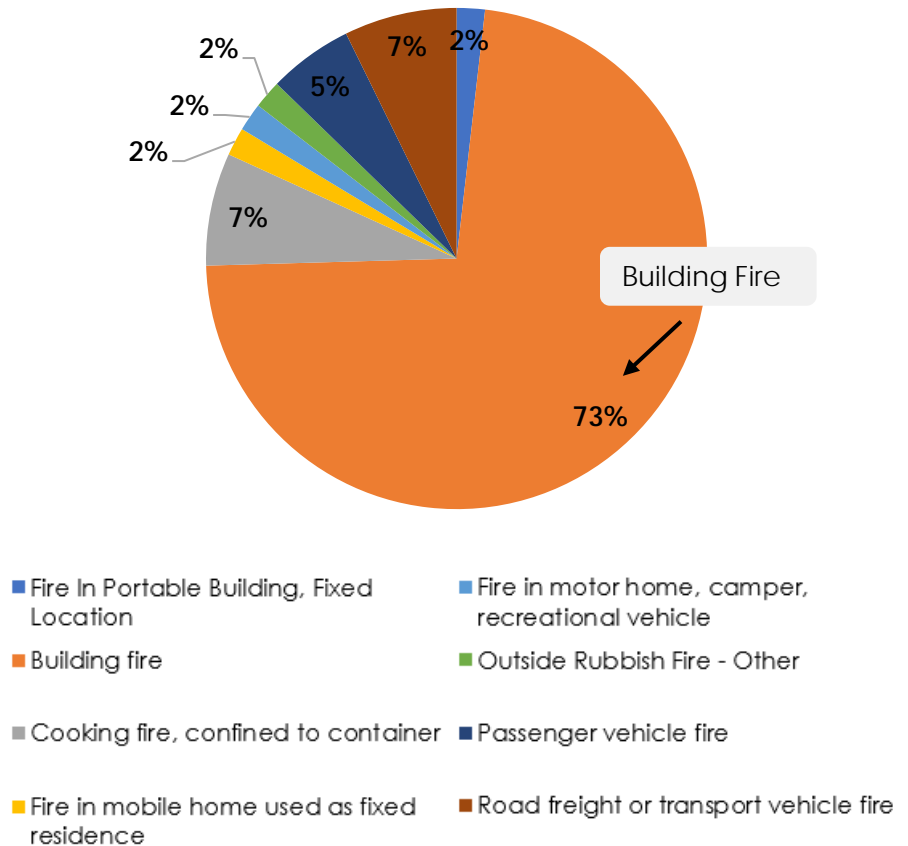
Civilian Casualties

Total Civilian Injuries



On average civilian injuries occur on 0.05% of calls.

2018 – 2022 Civilian Casualty by Incident Type



Civilian Injuries by Severity

